Electrical Wiring Diagram

IS 200

GXE 10 Series
Jan., 1999

FOREWORD

This wiring diagram manual has been prepared to provide information on the electrical system of the IS 200.

Applicable models: GXE10 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.
• LEXUS IS 200 Repair Manual Volume 1 Volume 2	 RM684E1 RM684E2
• LEXUS IS 200 New Car Features	NCF165E

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.

English
Français
Español
Deutsch

IS 200
ELECTRICAL WIRING DIAGRAM

(English)	Section No.	Page
INTRODUCTION	A	4
HOW TO USE THIS MANUAL	B	5
TROUBLESHOOTING	C	14
ABBREVIATIONS	D	19
GLOSSARY OF TERMS AND SYMBOLS	E	20
RELAY LOCATIONS	F	76
ELECTRICAL WIRING ROUTING	G	96
SYSTEM CIRCUITS	H	132
GROUND POINT	I	464
POWER SOURCE (Current Flow Chart)	J	476
CONNECTOR LIST	K	486
PART NUMBER OF CONNECTORS	M	514
OVERALL ELECTRICAL WIRING DIAGRAM	N	518

English

Français

SCHEMA DE CABLAGE ELECTRIQUE DE LA IS 200

(Français)	*N° de section*	*Page*
INTRODUCTION	*A*	*22*
COMMENT UTILISER CE MANUEL	*B*	*23*
DEPANNAGE	*C*	*32*
ABREVIATIONS	*D*	*37*
GLOSSAIRE DES TERMES ET SYMBOLES	*E*	*38*
EMPLACEMENTS DES RELAIS	*F*	*76*
ACHEMINEMENT DES FILS ELECTRIQUES	*G*	*96*
CIRCUITS DU SYSTEME	*H*	*134*
POINT DE MISE A LA TERRE	*I*	*464*
SOURCE D'ALIMENTATION (Schéma du Courant)	*J*	*476*
LISTE DE CONNECTEUR	*K*	*486*
INFORMATIONS SUR LE CONNECTEUR	*L*	*496*
REFERENCE DES CONNECTEURS	*M*	*514*
SCHEMA GENERAL DE CABLAGE ELECTRIQUE	*N*	*520*

This manual consists of the following 14 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	CONNECTOR INFORMATION	Indicates the reference page (See Page) showing the part name corresponding to the part number, and the installation position of the part in the vehicle. (For French, Spanish, German manuals only)
M	PART NUMBER OF CONNECTORS	Indicates the part number of the connectors used in this manual.
N	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.)

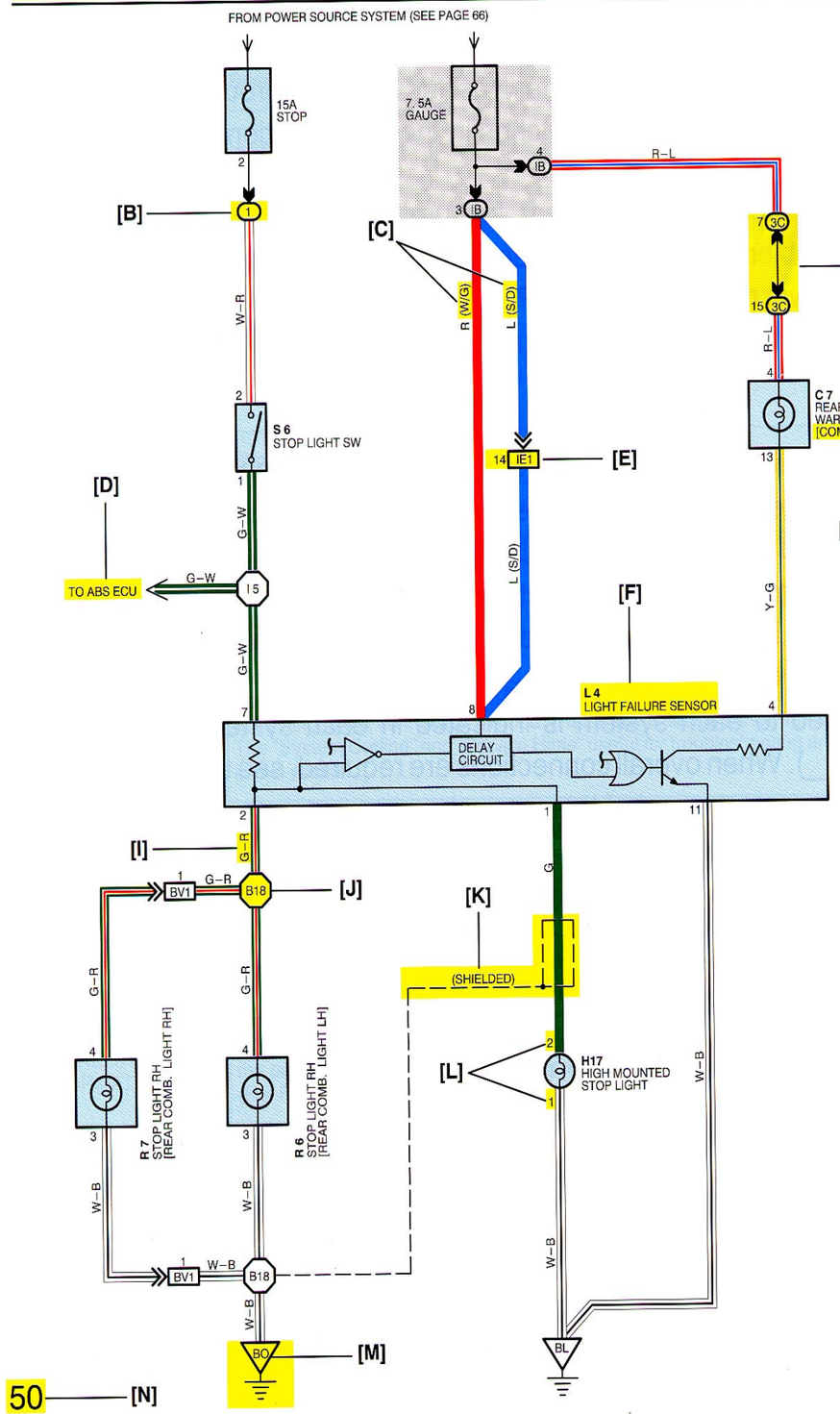
When troubleshooting any problem, first understand the operation of the circuit where the problem was detected (see System Circuit section), the power source supplying power to that circuit (see Power Source section), and the ground points (see Ground Point section). See the System Outline to understand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

[A]

STOP LIGHT

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



[A] : System Title

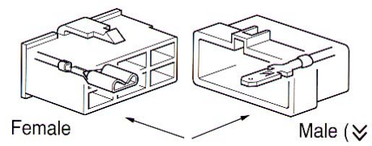
[B] : Indicates a Relay Block. No shading is used and only the Relay Block No. is shown to distinguish it from the J/B

Example: (1) Indicates Relay Block No.1

[C] : ( ) 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.



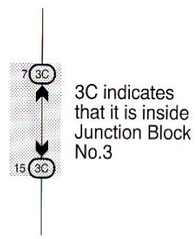
The first letter of the code for each wiring harness and wiring harness connector(s) indicates the component's location, e.g, "E" for the Engine Compartment, "I" for the Instrument Panel and Surrounding area, and "B" for the Body and Surrounding area.

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

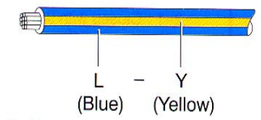
[I] : Indicates the wiring color.

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				

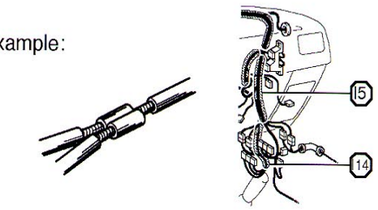
The first letter indicates the basic wire color and the second letter indicates the color of the stripe.

Example: L - Y



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

Example:

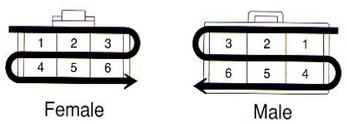


The Location of splice Point I 5 is indicated by the shaded section.

[K] : Indicates a shielded cable.

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

Example:



[M] : 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.

[N] : Page No.

B HOW TO USE THIS MANUAL

English

[O]

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.

[P]

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

[Q] ○ : PARTS LOCATION

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

[R] ▭ : RELAY BLOCKS

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

[S] ▭ : 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 Left Side)

[T] □ : 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 Compartment Left)

[U] ▽ : GROUND POINTS

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

[V] ⬡ : 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

English

[O] : Explains the system outline.

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

[Q] : 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

[R] : 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.

[S] : 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.

[T] : 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.

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

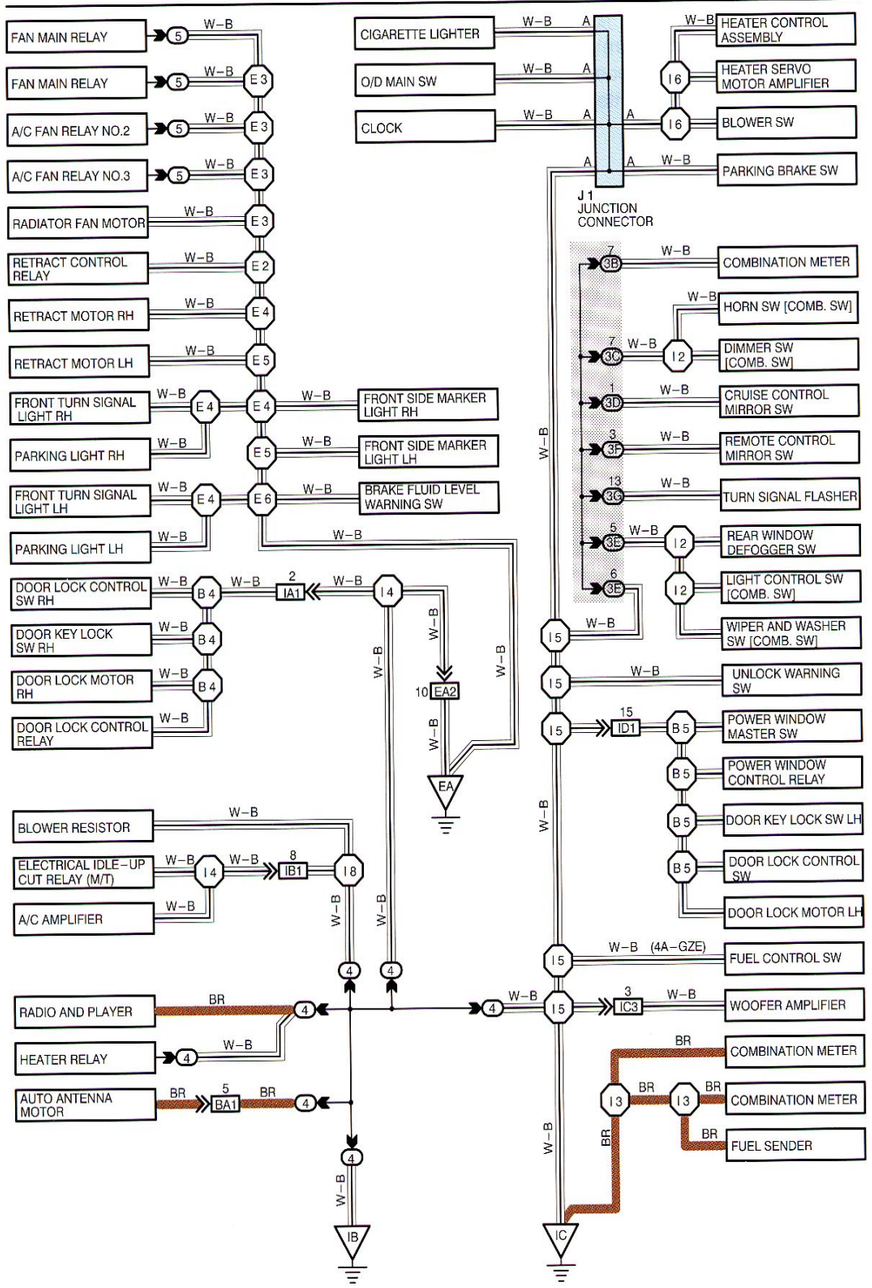
Example : Ground point "BO" is described on page 50 of this manual and is installed on the back panel center.

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

I GROUND POINT

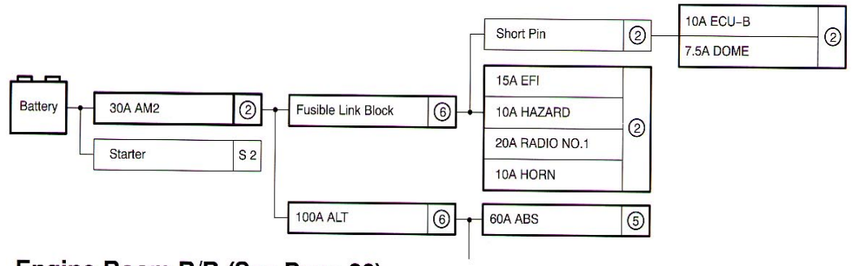


* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the SYSTEM CIRCUITS SECTION.

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)

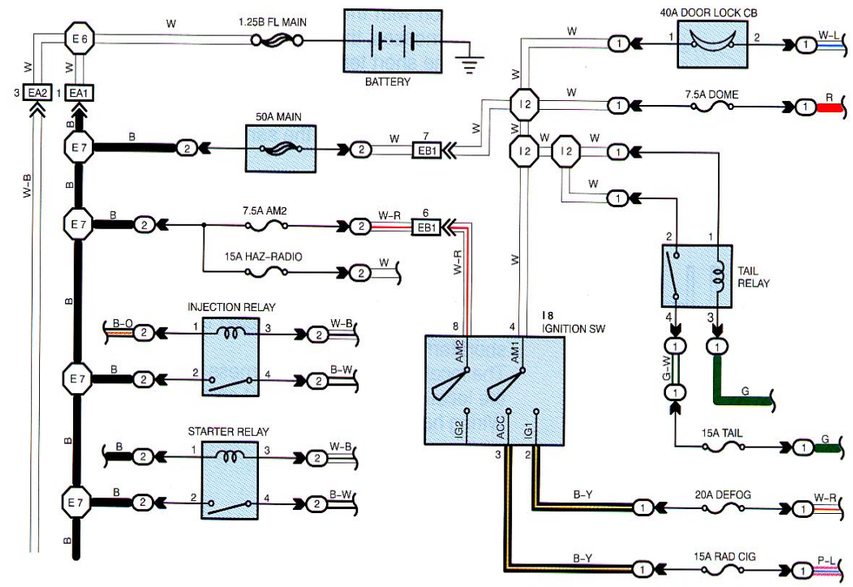
The chart below shows the route by which current flows from the battery to each electrical source (Fusible Link, Circuit Breaker, Fuse, etc.) and other parts.



Engine Room R/B (See Page 20)

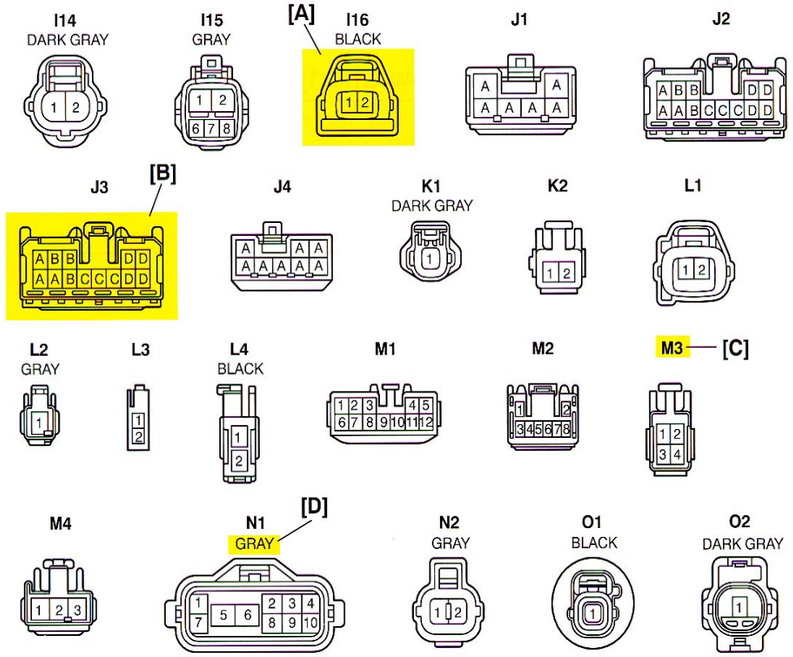
Fuse		System	Page
20A	STOP	ABS	194
		ABS and Traction Control	187
		Cruise Control	180
		Electronically Controlled Transmission and A/T Indicator	166
		Multiplex Communication System	210
10A	DOME	Cigarette Lighter and Clock	214
		Combination Meter	230
		Headlight	112
		Interior Light	122
		Key Reminder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

POWER SOURCE



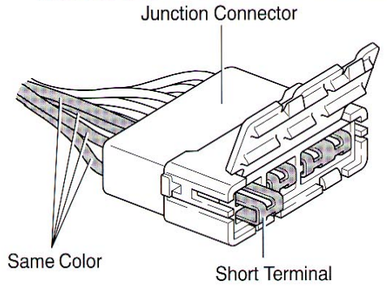
* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the SYSTEM CIRCUITS SECTION.

K CONNECTOR LIST

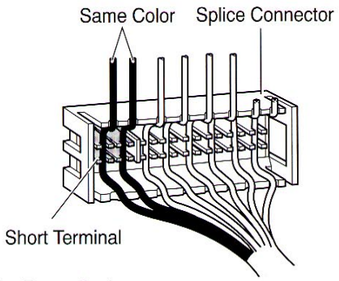


[A] : Indicates connector to be connected to a part. (The numeral indicates the pin No.)

[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.



In this manual, the type of splice connector shown in the illustration on the left is used at splice points.
Each wire harness is connected to the other positions within the short terminal group.
The location of the wiring harness within the group is not fixed, so the locations may be different on another vehicle.
Wiring harnesses from the same group share 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.

M PART NUMBER OF CONNECTORS

Code	Part Name	Part Number
A 1	A/C Ambient Temp. Sensor	90980-11070
A 2	A/C Condenser Fan Motor	90980-11237
A 3	A/C Condenser Fan Relay	90980-10940
A 4	A/C Triple Pressure SW (A/C Dual and Single Pressure SW)	90980-10943
[A]	A/T Oil Temp. Sensor [B]	909 [C] 413
A 6	ABS Actuator	90980-11151
A 7	ABS Actuator	90980-11009
A 8	ABS Speed Sensor Front LH	90980-10941
A 9	ABS Speed Sensor Front RH	90980-11002
A10	Airbag Sensor Front LH	90980-11856
A11	Airbag Sensor Front RH	
A12		90980-11194
		90980-11...

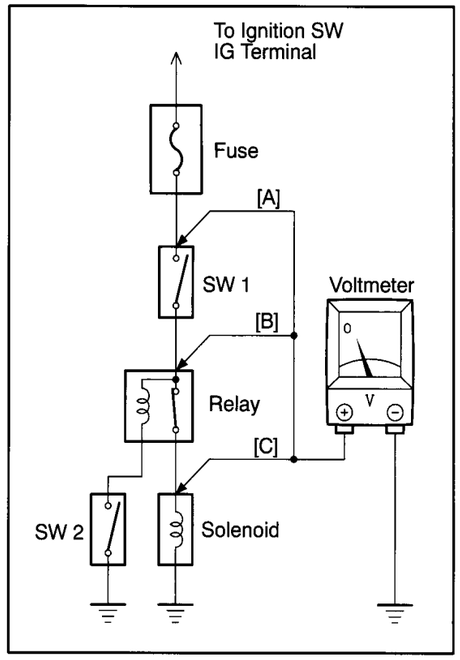
Code	Part Name	Part Number
D 4	Diode (Door Courtesy Light)	90980-11608
D 5	Diode (Key Off Operation)	90980-10962
D 6	Diode (Luggage Compartment Light)	90980-11608
D 7	Door Lock Control Relay	90980-10848
D 8	Door Courtesy Light LH	90980-11148
D 9	Door Courtesy Light RH	
D10	Door Courtesy SW LH	90980-11097
D11	Door Courtesy SW RH	
D12	Door Courtesy SW Front LH	90980-11156
D13	Door Courtesy SW Front RH	
D14	Door Courtesy SW Rear LH	
D15	Door Courtesy SW Rear RH	
D16	...d Unlock SW LH	90980-11170
	...RH	

[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. In case of ordering a connector or terminal with wire, please confirm in advance if there is supply for it using "Parts Catalog News" (published by Parts Engineering Administration Dept.).

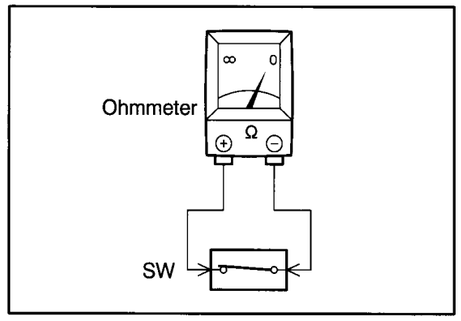


VOLTAGE CHECK

(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)

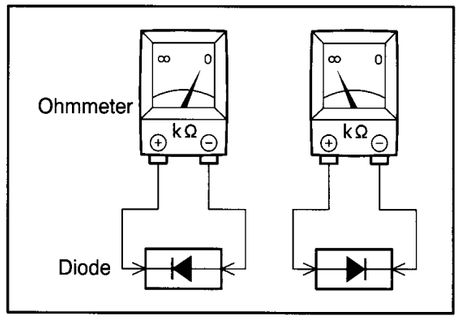
(b) Using a voltmeter, connect the negative lead to a good ground point or negative battery terminal, and the positive lead to the connector or component terminal.
This check can be done with a test light instead of a voltmeter.



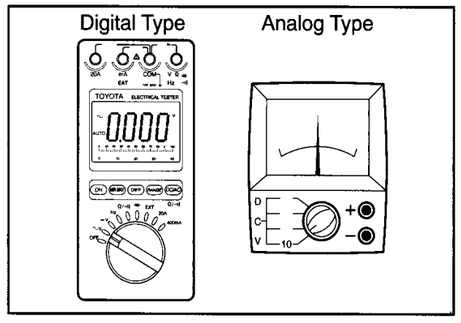
CONTINUITY AND RESISTANCE CHECK

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

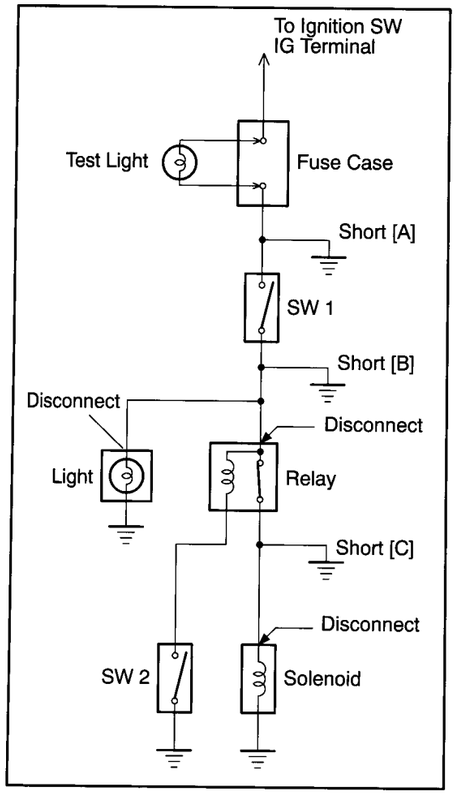
(b) Contact the two leads of an ohmmeter to each of the check points.



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

(a) Remove the blown fuse and disconnect all loads of the fuse.

(b) Connect a test light in place of the fuse.

(c) Establish conditions in which the test light comes on.

Example:
[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)

(d) Disconnect and reconnect the connectors while watching the test light.
The short lies between the connector where the test light stays lit and the connector where the light goes out.

(e) Find the exact location of the short by lightly shaking the problem wire along the body.

CAUTION:

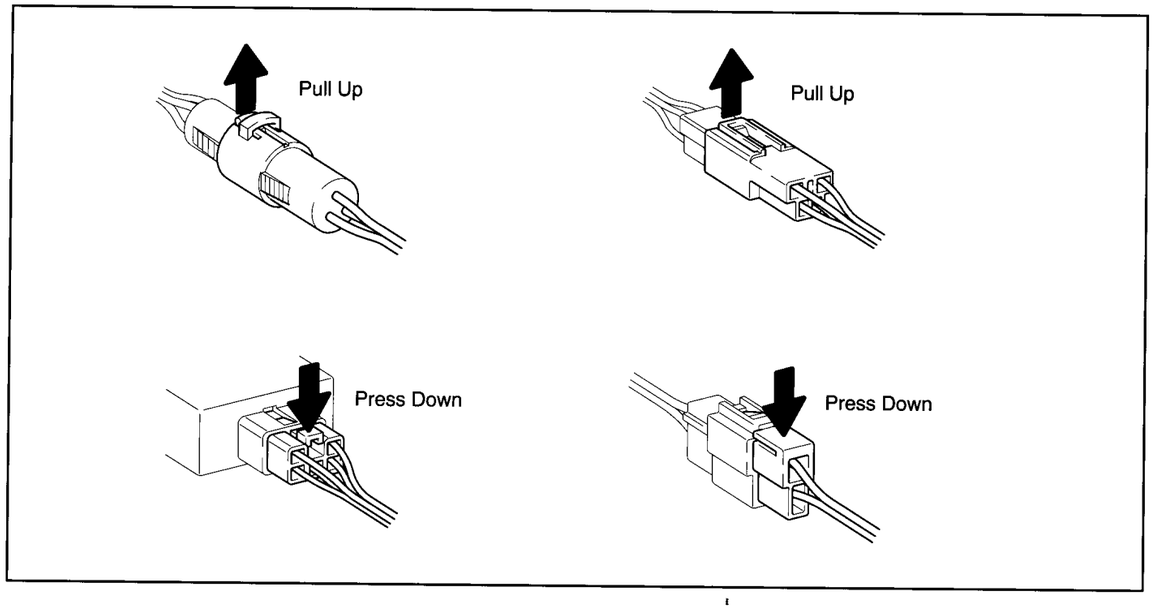
(a) Do not open the cover or the case of the ECU unless absolutely necessary. (If the IC terminals are touched, the IC may be destroyed by static electricity.)

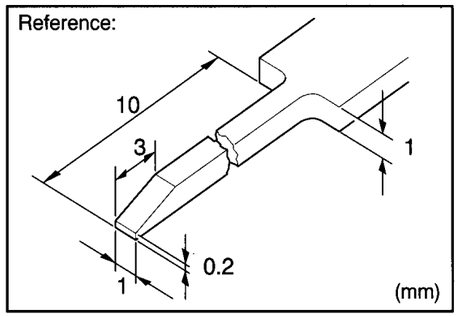
(b) When replacing the internal mechanism (ECU part) of the digital meter, be careful that no part of your body or clothing comes in contact with the terminals of leads from the IC, etc. of the replacement part (spare part).

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.



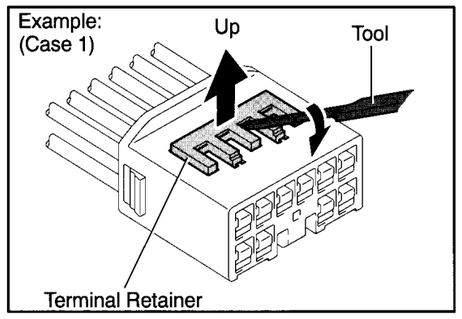


HOW TO REPLACE TERMINAL (with terminal retainer or secondary locking device)

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.

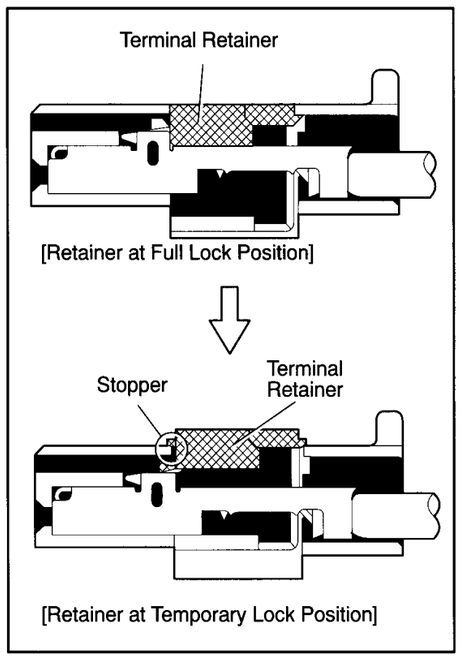
NOTICE:
Do not remove the terminal retainer from connector body.

[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.

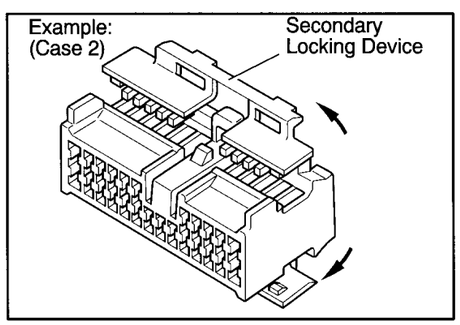
"Case 1"

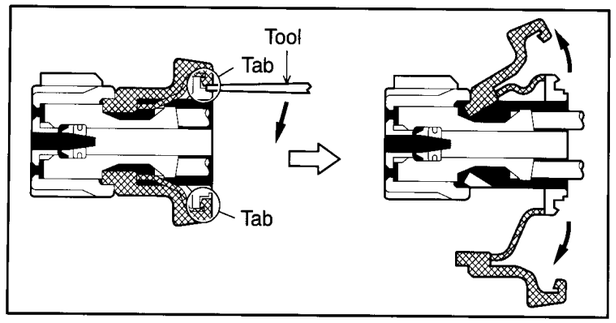
Raise the terminal retainer up to the temporary lock position.

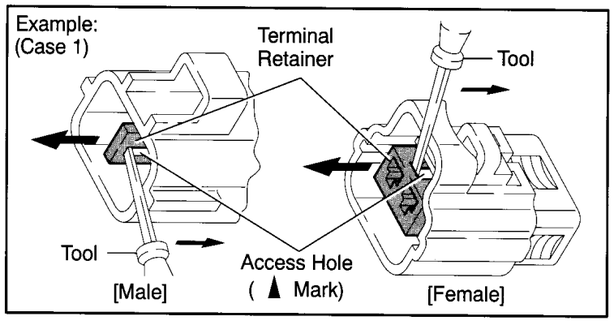


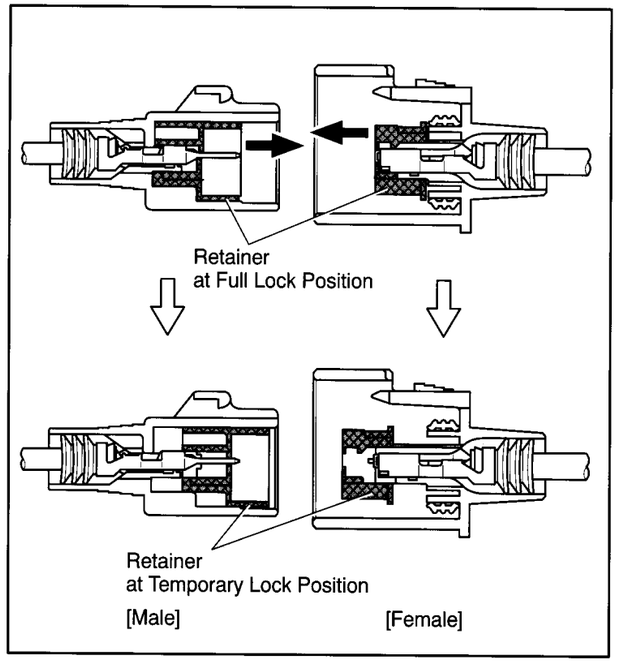
"Case 2"

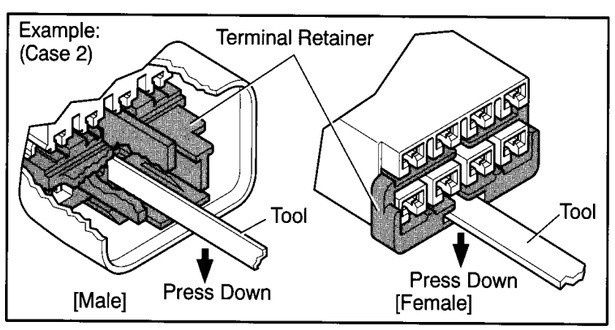
Open the secondary locking device.











[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"

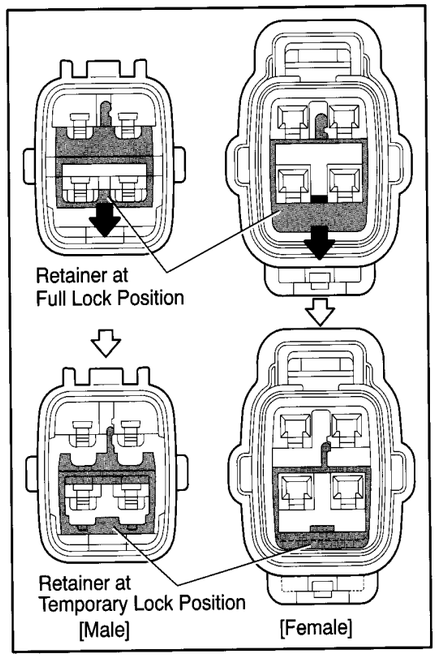
Type where terminal retainer is pulled up to the temporary lock position (Pull Type).

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

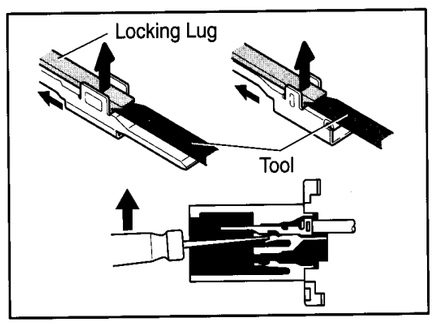
HINT : The needle insertion position varies according to the connector's shape (Number of terminals etc.), so check the position before inserting it.

"Case 2"

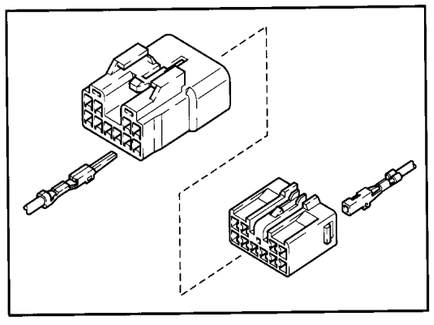
Type which cannot be pulled as far as Power Lock insert the tool straight into the access hole of terminal retainer as shown.



Push the terminal retainer down to the temporary lock position.



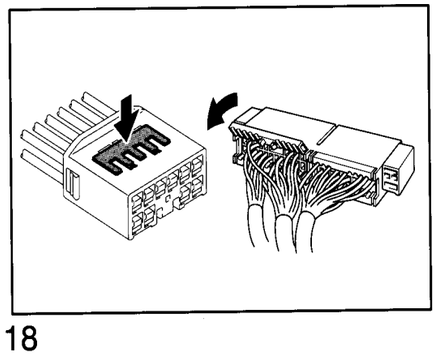
(c) Release the locking lug from terminal and pull the terminal out from rear.



4. INSTALL TERMINAL TO CONNECTOR

(a) Insert the terminal.

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



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

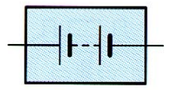
5. CONNECT CONNECTOR

ABBREVIATIONS

The following abbreviations are used in this manual.

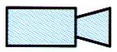
ABS	=	Anti-Lock Brake System
A/C	=	Air Conditioner
ACIS	=	Acoustic Control Induction System
A/T	=	Automatic Transmission
COMB.	=	Combination
DLC3	=	Data Link Connector 3
ECT	=	Electronically Controlled Transmission
ECU	=	Electronic Control Unit
EFI	=	Electronic Fuel Injection
ESA	=	Electronic Spark Advance
ETCS-i	=	Electronic Throttle Control System-intelligent
EVAP	=	Evaporative Emission
IC	=	Integrated Circuit
J/B	=	Junction Block
LH	=	Left-Hand
LHD	=	Left-Hand Drive
MPX	=	Multiplex
M/T	=	Manual Transmission
O/D	=	Overdrive
R/B	=	Relay Block
RH	=	Right-Hand
RHD	=	Right-Hand Drive
SRS	=	Supplemental Restraint System
SW	=	Switch
TEMP.	=	Temperature
TRC	=	Traction Control
VSC	=	Vehicle Stability Control
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.



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

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

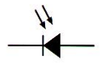


CIGARETTE LIGHTER
An electric resistance heating element.

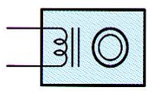
CIRCUIT BREAKER
Basically a reusable fuse, a circuit breaker will heat and open if too much current flows through it. Some units automatically reset when cool, others must be manually reset.

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

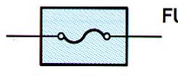
DIODE, ZENER
A diode which allows current flow in one direction but blocks reverse flow only up to a specific voltage. Above that potential, it passes the excess voltage. This acts as a simple voltage regulator.



PHOTODIODE
The photodiode is a semiconductor which controls the current flow according to the amount of light.



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



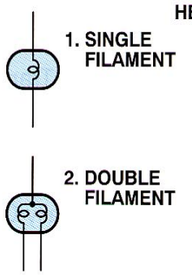
FUSE
A thin metal strip which burns through when too much current flows through it, thereby stopping current flow and protecting a circuit from damage.

(for Medium Current Fuse)

FUSIBLE LINK
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.

(for High Current Fuse or Fusible Link)

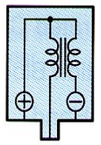
GROUND
The point at which wiring attaches to the Body, thereby providing a return path for an electrical circuit; without a ground, current cannot flow.



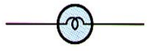
HEADLIGHTS
Current flow causes a headlight filament to heat up and emit light. A headlight may have either a single (1) filament or a double (2) filament

1. SINGLE FILAMENT
2. DOUBLE FILAMENT

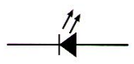
HORN
An electric device which sounds a loud audible signal.



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



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

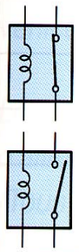


LED (LIGHT EMITTING DIODE)
Upon current flow, these diodes emit light without producing the heat of a comparable light.

METER, ANALOG
Current flow activates a magnetic coil which causes a needle to move, thereby providing a relative display against a background calibration.

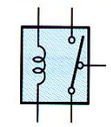
METER, DIGITAL
Current flow activates one or many LED's, LCD's, or fluorescent displays, which provide a relative or digital display.

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



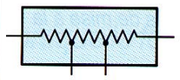
RELAY
Basically, an electrically operated switch which may be normally closed (1) or open (2). Current flow through a small coil creates a magnetic field which either opens or closes an attached switch.

1. NORMALLY CLOSED
2. NORMALLY OPEN



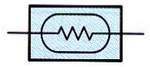
RELAY, DOUBLE THROW
A relay which passes current through one set of contacts or the other.

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



RESISTOR, TAPPED
A resistor which supplies two or more different non adjustable resistance values.

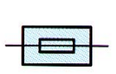
RESISTOR, VARIABLE or RHEOSTAT
A controllable resistor with a variable rate of resistance.
Also called a potentiometer or rheostat.



SENSOR (Thermistor)
A resistor which varies its resistance with temperature.

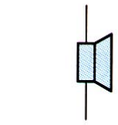
(Reed Switch Type)

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

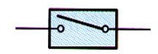


SHORT PIN
Used to provide an unbroken connection within a junction block.

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



SPEAKER
An electromechanical device which creates sound waves from current flow.

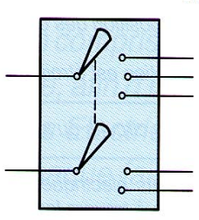


SWITCH, MANUAL

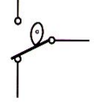
1. NORMALLY OPEN
2. NORMALLY CLOSED

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

SWITCH, DOUBLE THROW
A switch which continuously passes current through one set of contacts or the other.



SWITCH, IGNITION
A key operated switch with several positions which allows various circuits, particularly the primary ignition circuit, to become operational.



SWITCH, WIPER PARK
Automatically returns wipers to the stop position when the wiper switch is turned off.

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

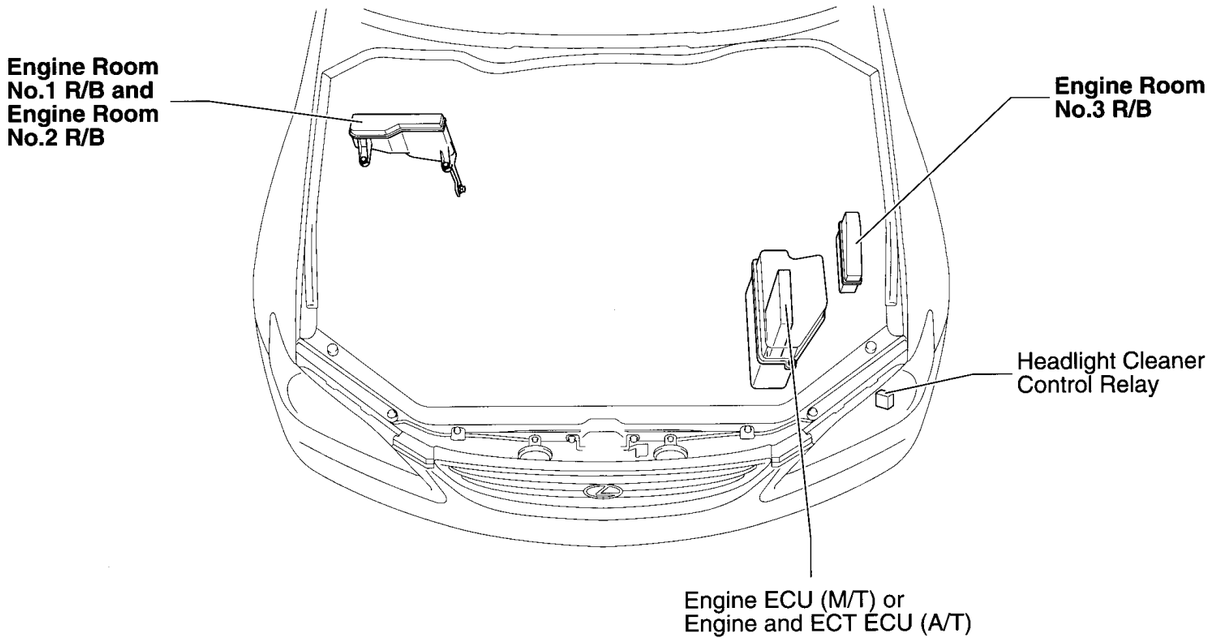
WIRES

(1) NOT CONNECTED

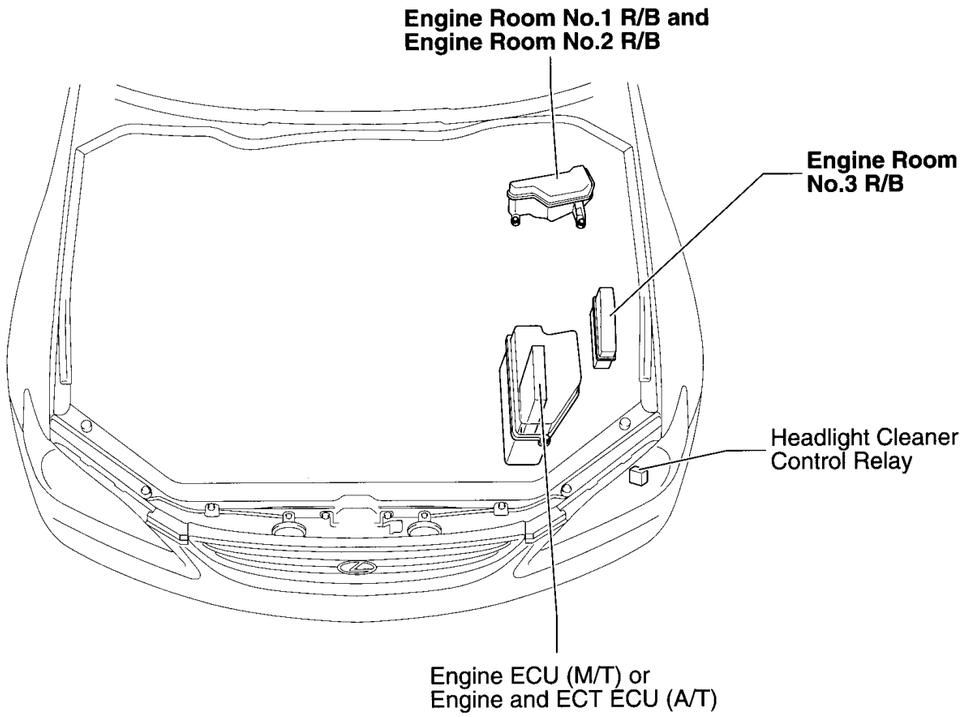
(2) SPLICED

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.

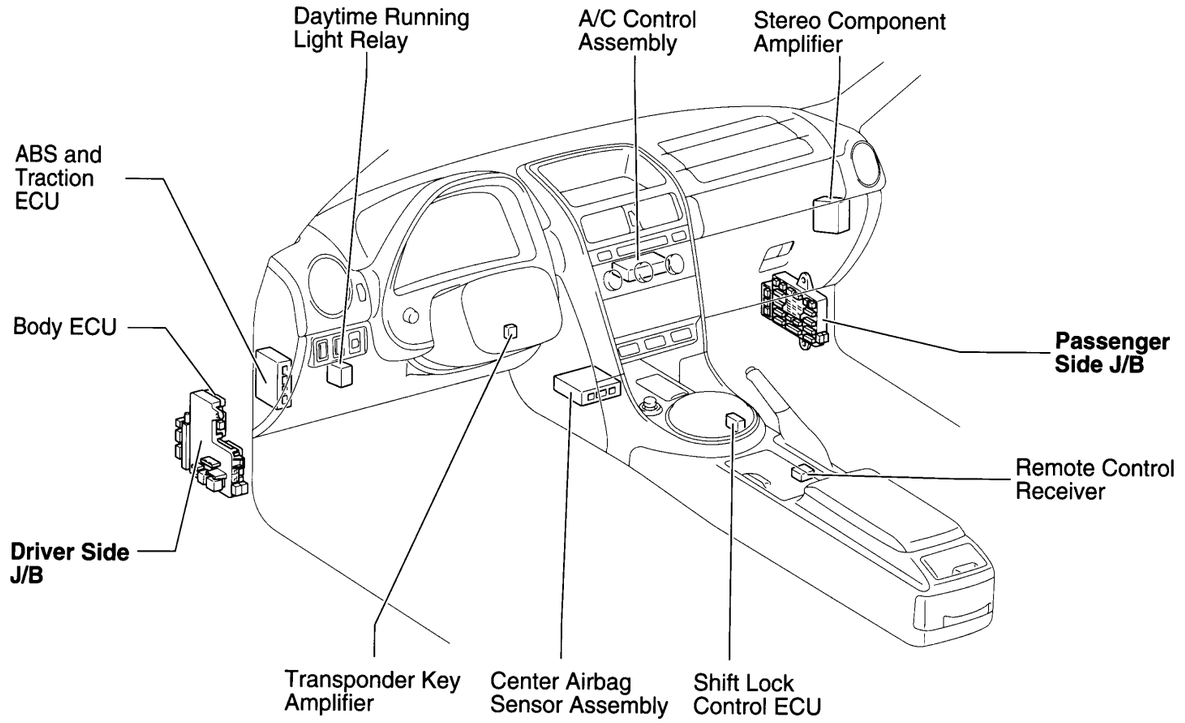
[Engine Compartment]
(LHD)



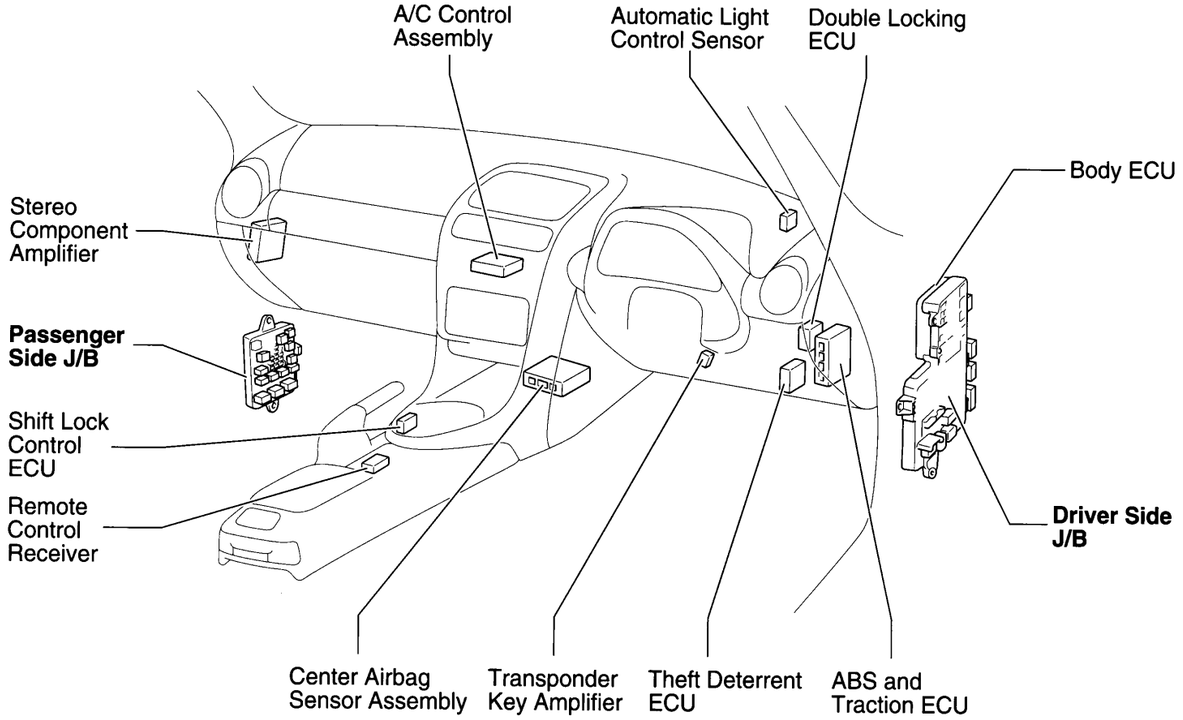
(RHD)



[Instrument Panel]
(LHD)

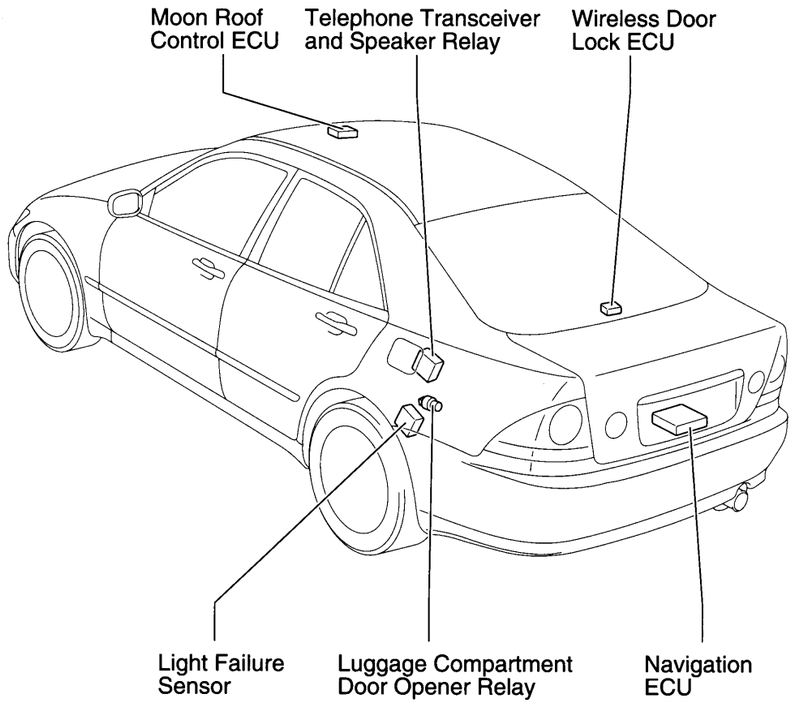


(RHD)



F RELAY LOCATIONS

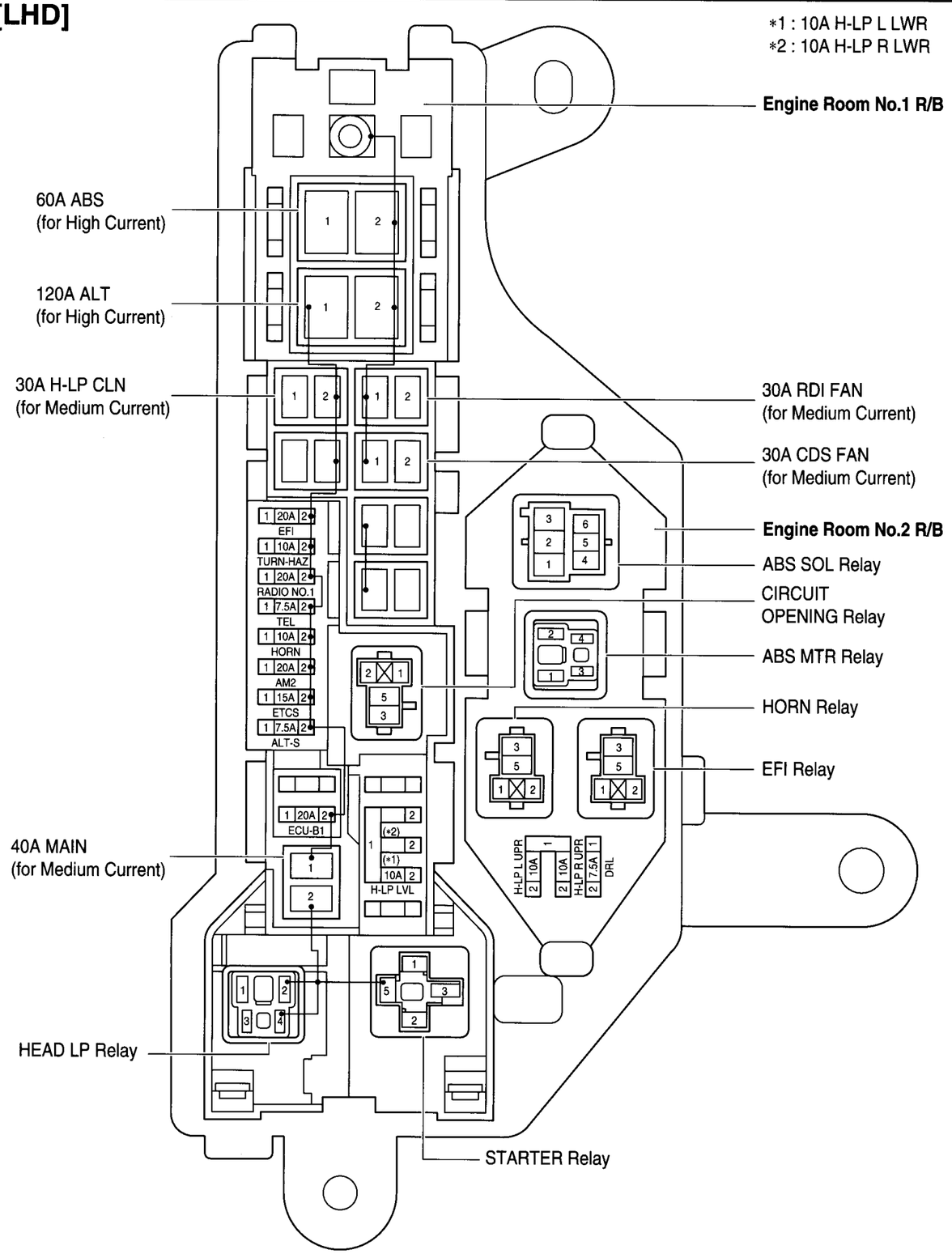
[Body]



F RELAY LOCATIONS

① : Engine Room No.1 R/B	Engine Compartment Right (See Page 76)
② : Engine Room No.2 R/B	

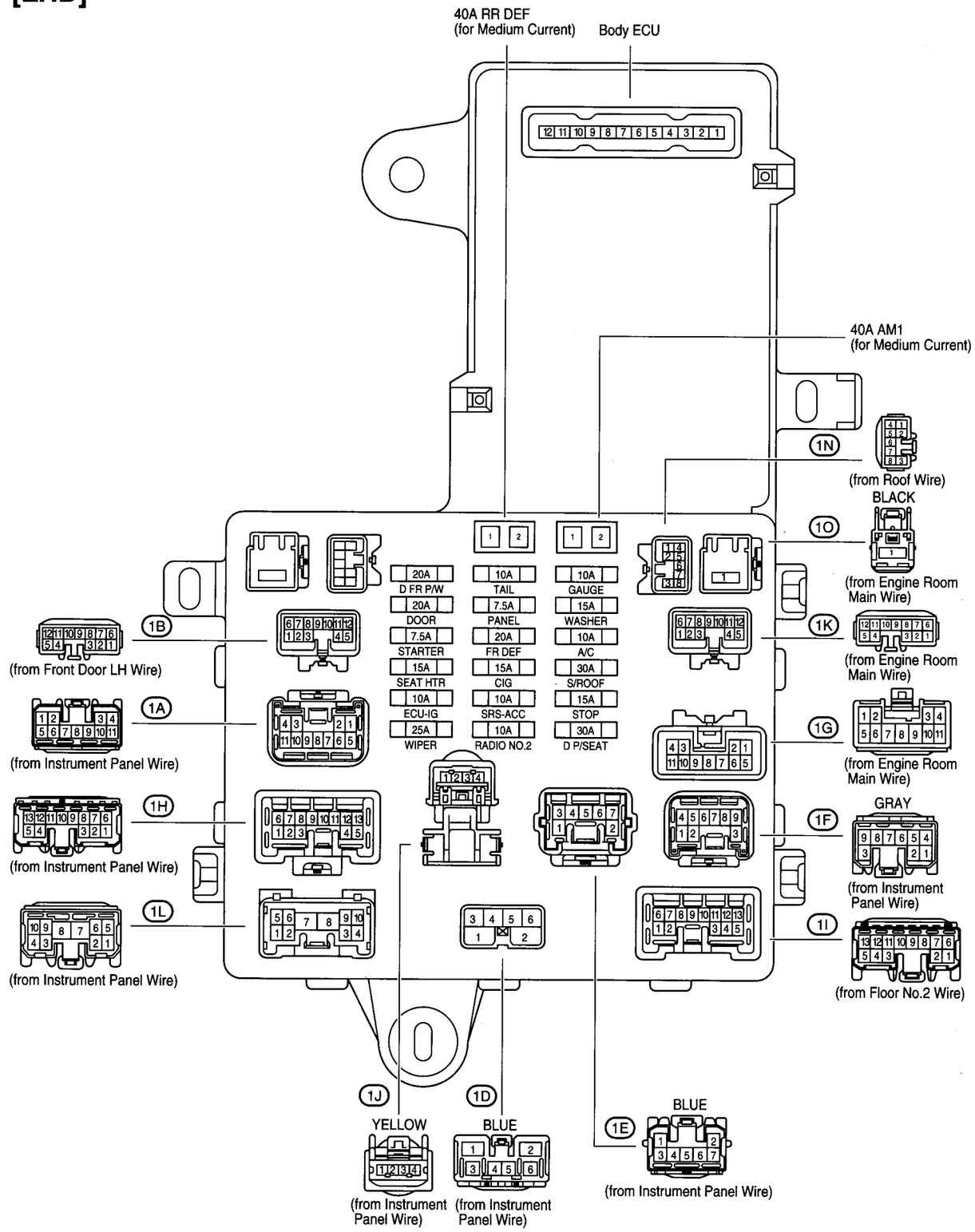
[LHD]



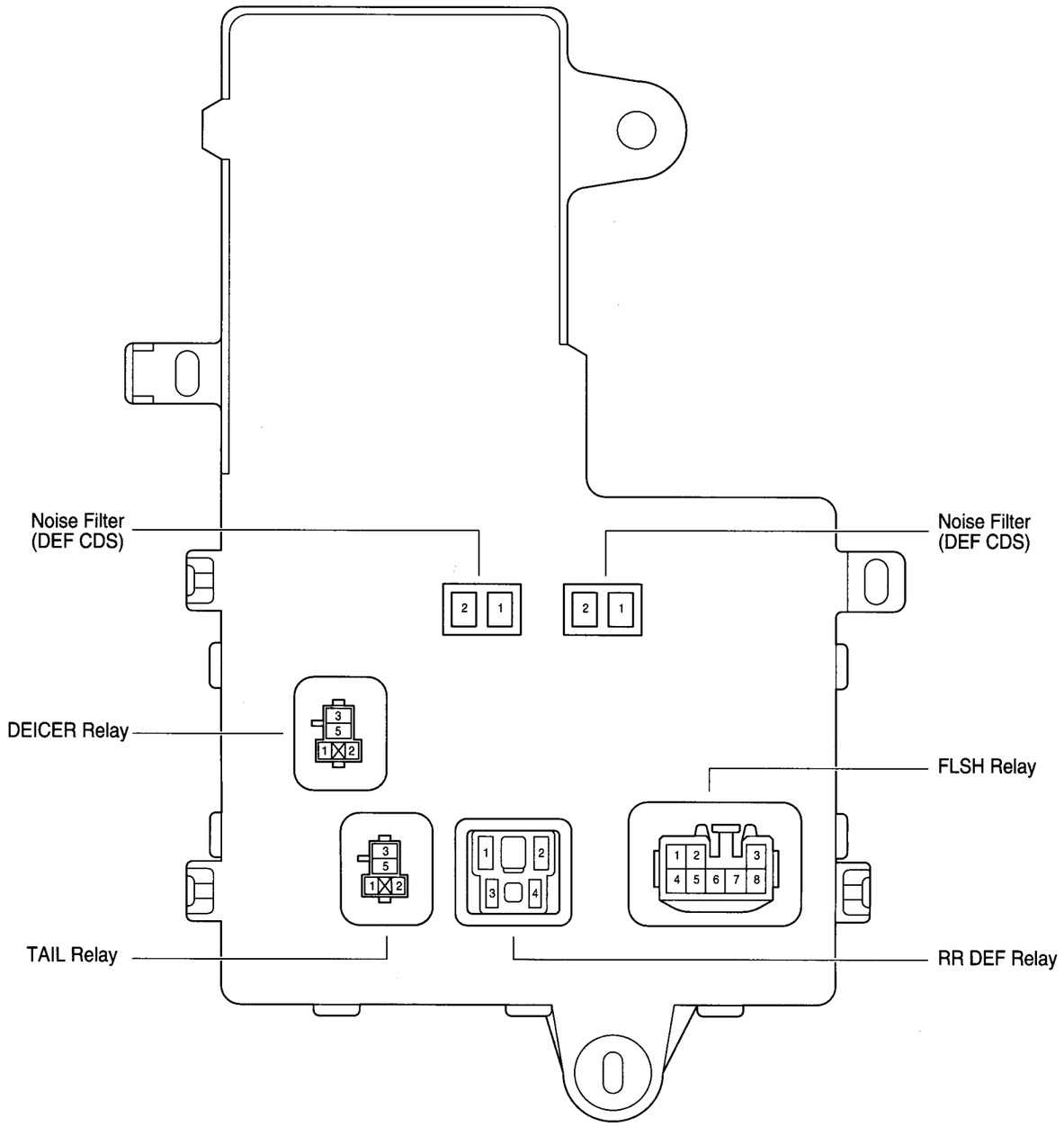
F RELAY LOCATIONS

: Driver Side J/B	Left Kick Panel (See Page 77)

[LHD]

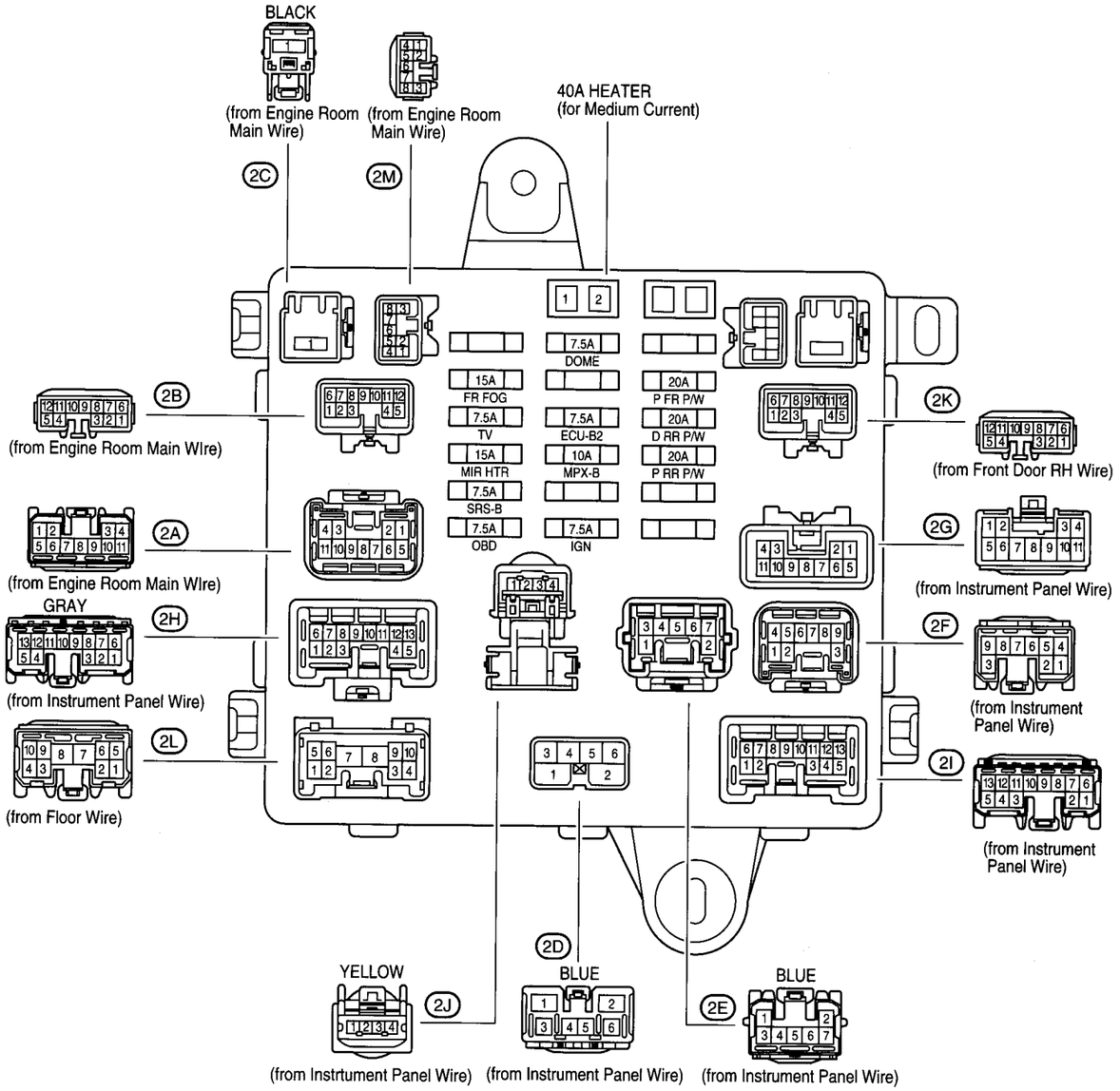


(Inner Circuit : See Page 86)

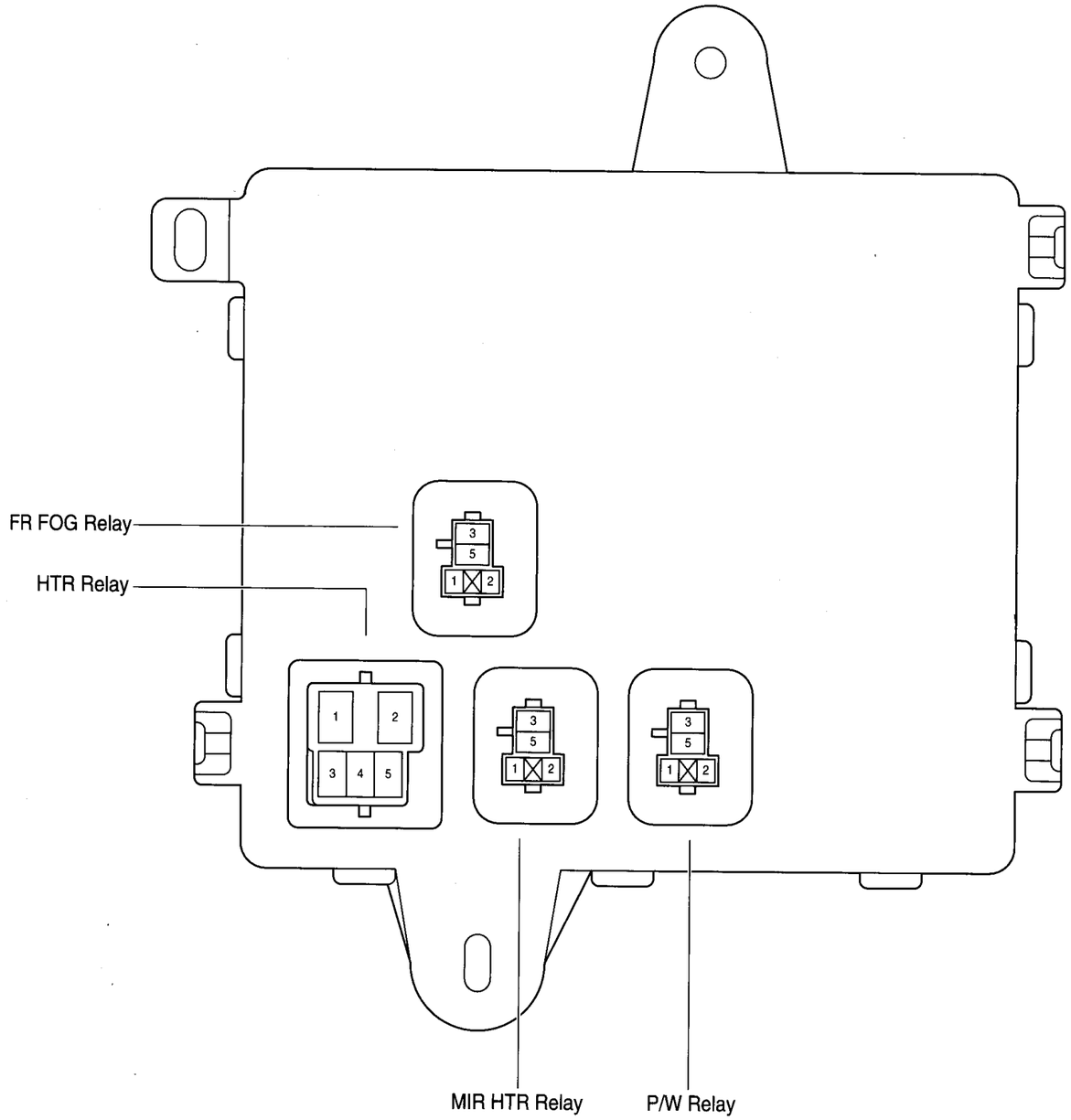


: Passenger Side J/B | Right Kick Panel (See Page 77)

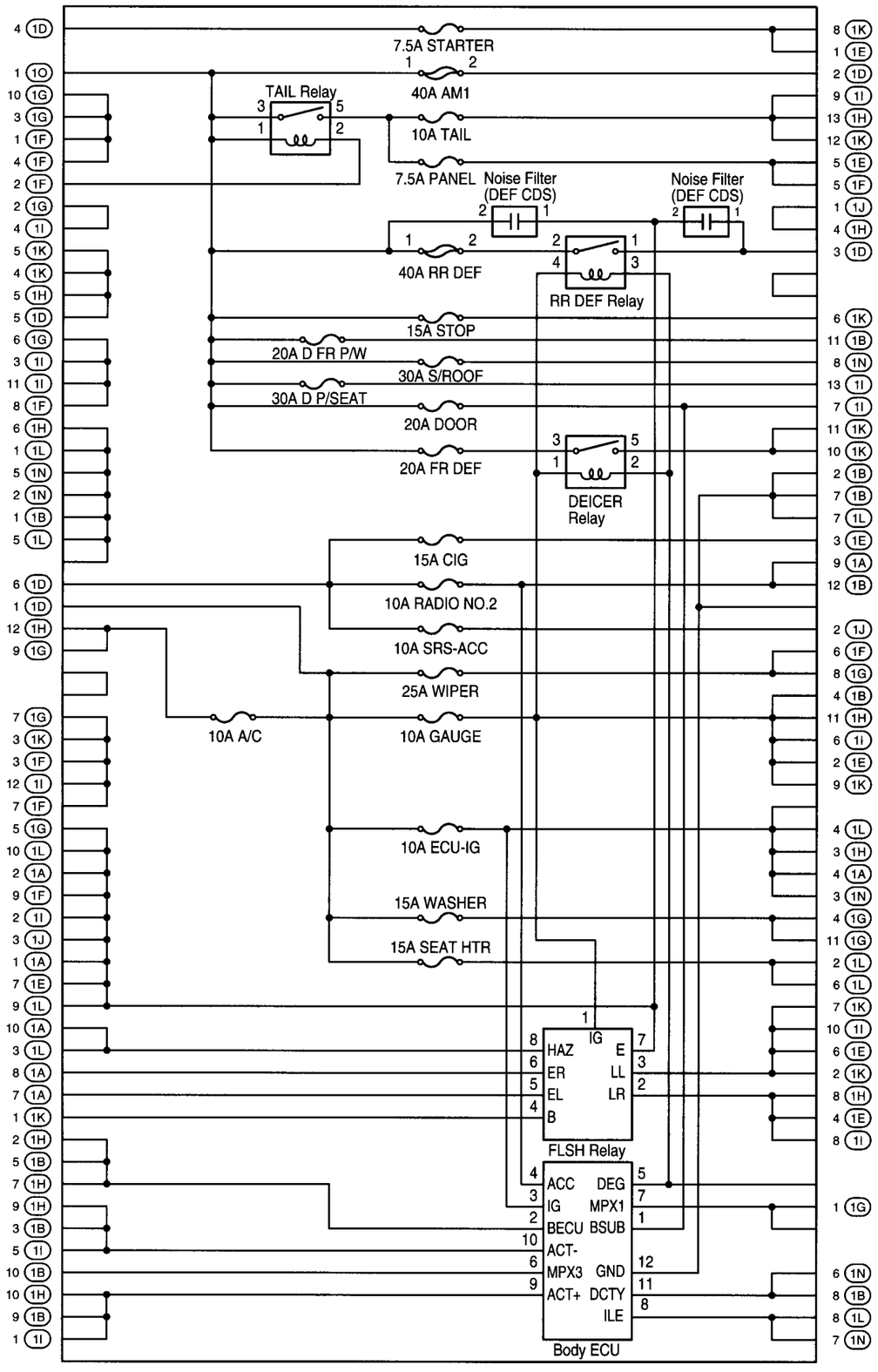
[LHD]



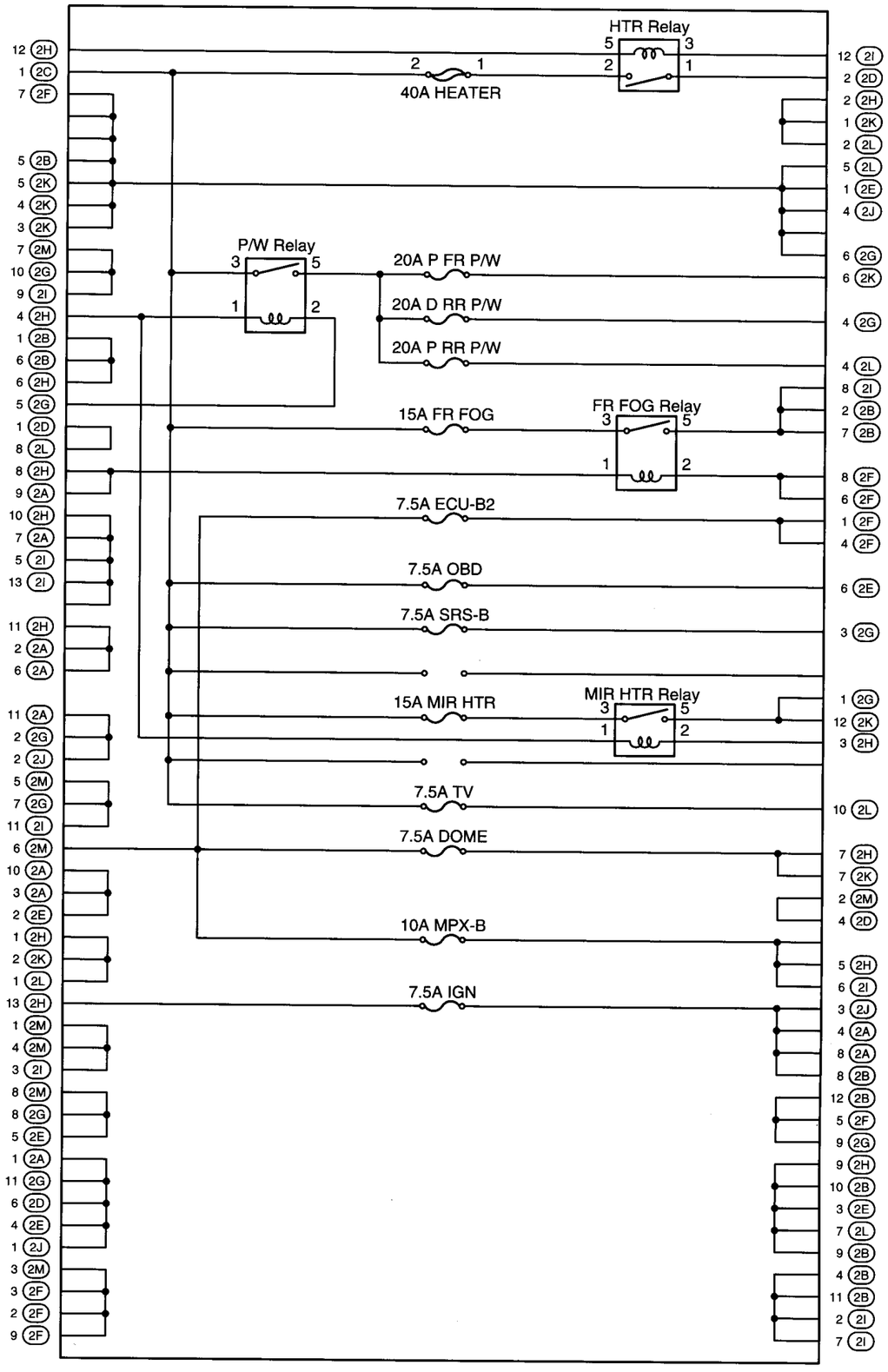
(Inner Circuit : See Page 87)



[Driver Side J/B Inner Circuit]

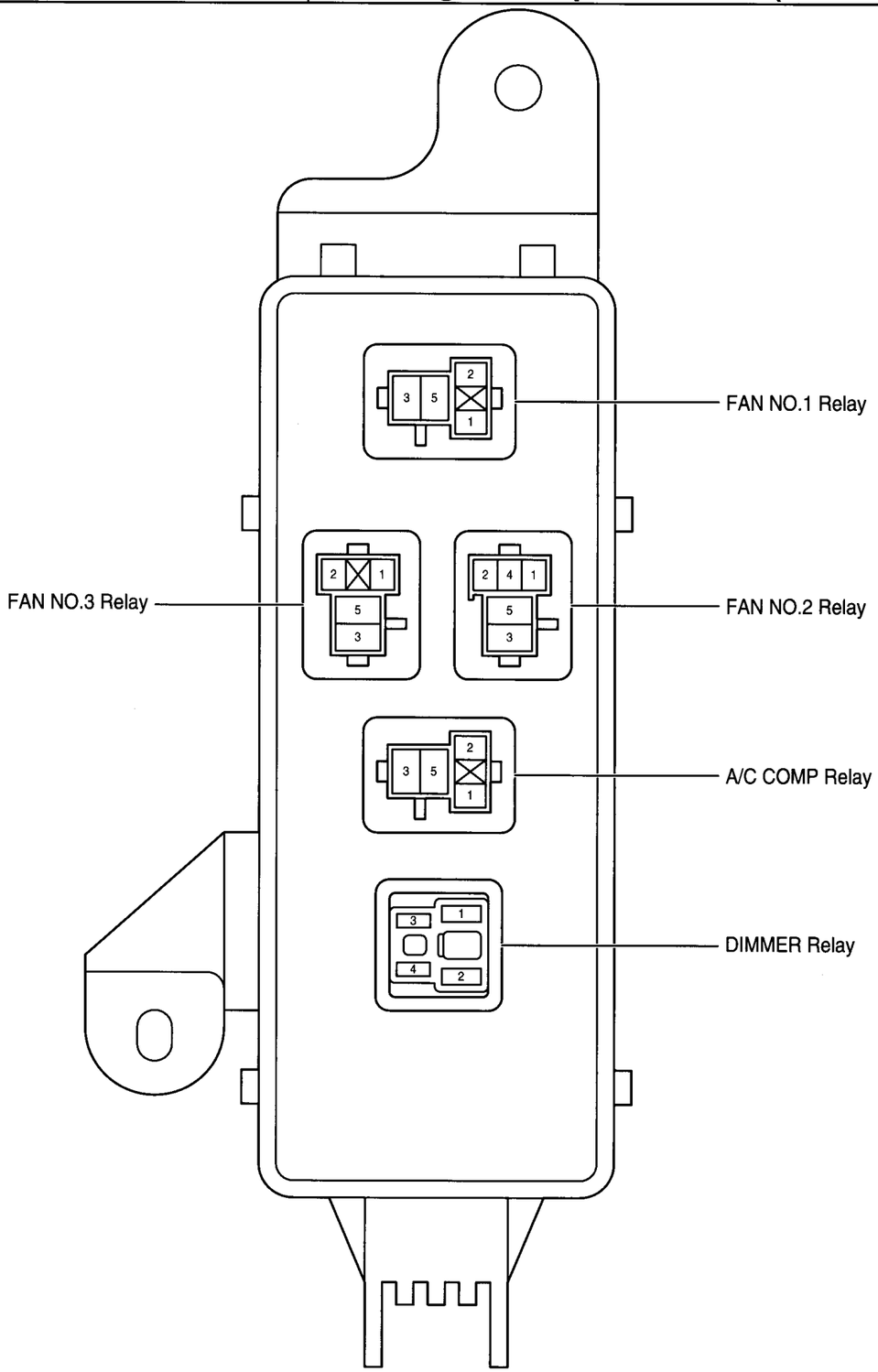


[Passenger Side J/B Inner Circuit]



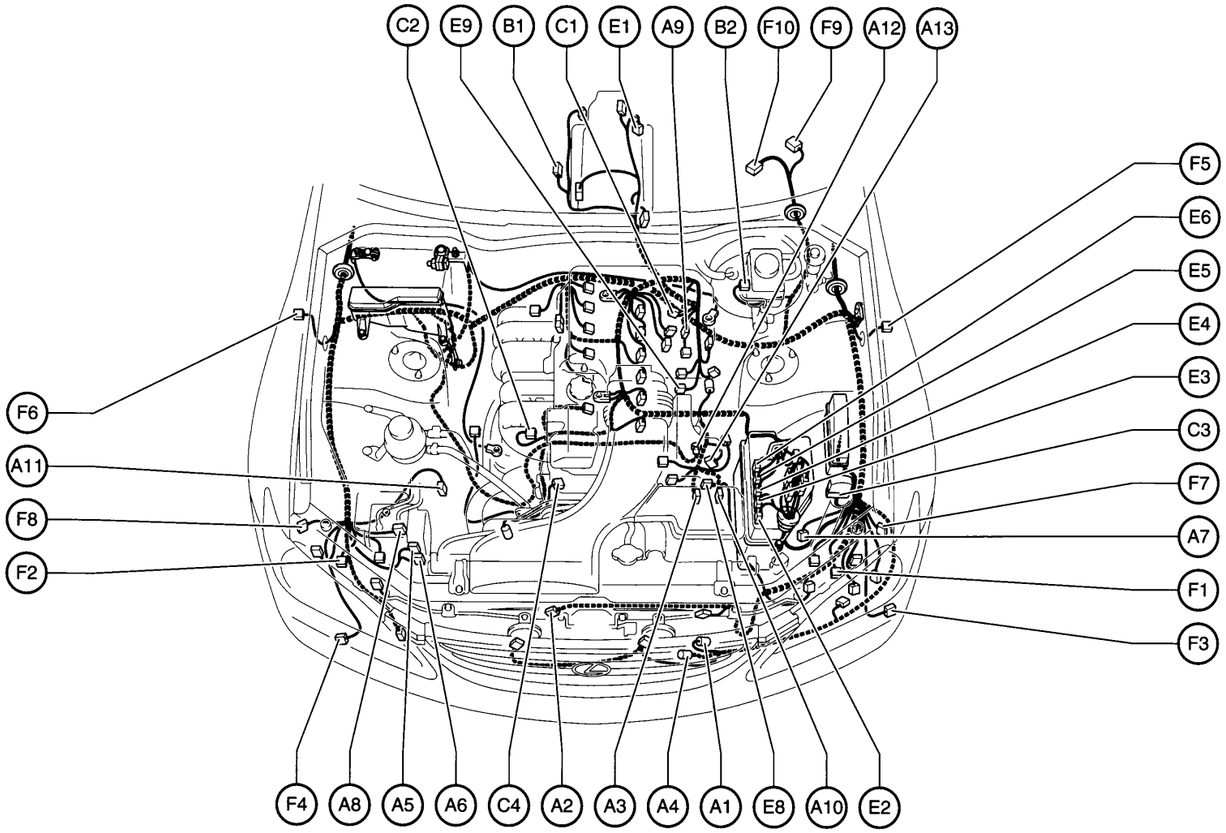
F RELAY LOCATIONS

① : Engine Room No.3 R/B	LHD: Engine Compartment Right (See Page 76)
	RHD: Engine Compartment Left (See Page 76)



Position of Parts in Engine Compartment

[LHD]



A 1 A/C Ambient Temp. Sensor
A 2 A/C Condenser Fan Motor
A 3 A/C Magnetic Clutch
A 4 A/C Triple Pressure SW
(A/C Dual and Single Pressure SW)
A 5 ABS and Traction Actuator
A 6 ABS and Traction Actuator
A 7 ABS Speed Sensor Front LH
A 8 ABS Speed Sensor Front RH
A 9 Accel Position Sensor
A10 Airbag Sensor Front LH
A11 Airbag Sensor Front RH
A12 Alternator
A13 Alternator

B 1 Back-Up Light SW
B 2 Brake Fluid Level Warning SW

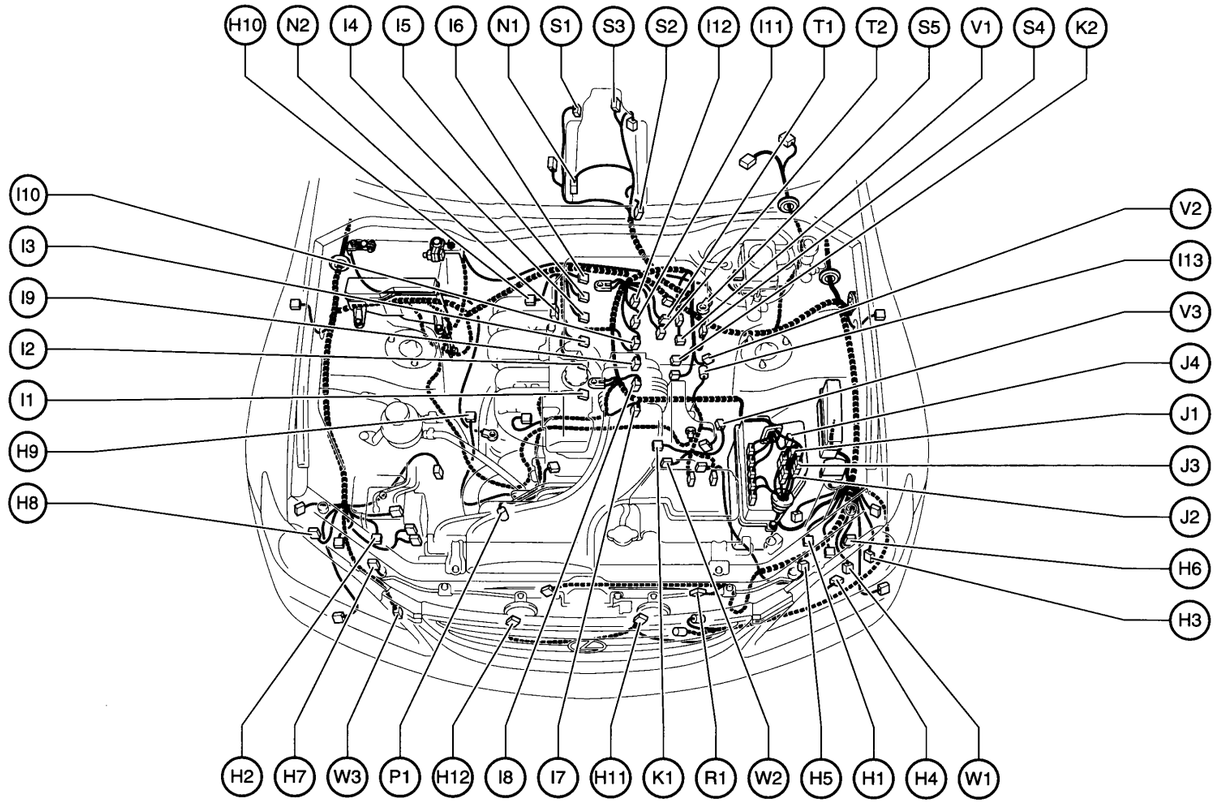
C 1 Camshaft Position Sensor
C 2 Camshaft Timing Oil Control Valve
C 3 Check Connector
C 4 Crankshaft Position Sensor

E 1 ECT Solenoid
E 2 Engine ECU (M/T) or Engine and ECT ECU (A/T)
E 3 Engine ECU (M/T) or Engine and ECT ECU (A/T)
E 4 Engine and ECT ECU
E 5 Engine ECU (M/T) or Engine and ECT ECU (A/T)
E 6 Engine ECU (M/T) or Engine and ECT ECU (A/T)
E 8 Engine Oil Level Sensor
E 9 Engine Oil Pressure SW

F 1 Front Clearance Light LH
F 2 Front Clearance Light RH
F 3 Front Fog Light LH
F 4 Front Fog Light RH
F 5 Front Side Turn Signal Light LH
F 6 Front Side Turn Signal Light RH
F 7 Front Turn Signal Light LH
F 8 Front Turn Signal Light RH
F 9 Front Window Deicer
F10 Front Wiper Motor

Position of Parts in Engine Compartment

[LHD]



H 1 Headlight Beam Level Control Actuator LH
H 2 Headlight Beam Level Control Actuator RH
H 3 Headlight Cleaner Control Relay
H 4 Headlight Cleaner Motor
H 5 Headlight LH (High)
H 6 Headlight LH (Low)
H 7 Headlight RH (High)
H 8 Headlight RH (Low)
H 9 Heated Oxygen Sensor (Bank 1 Sensor 1)
H10 Heated Oxygen Sensor (Bank 2 Sensor 1)
H11 Horn LH
H12 Horn RH

I 1 Ignition Coil and Igniter No.1
I 2 Ignition Coil and Igniter No.2
I 3 Ignition Coil and Igniter No.3
I 4 Ignition Coil and Igniter No.4
I 5 Ignition Coil and Igniter No.5
I 6 Ignition Coil and Igniter No.6
I 7 Injector No.1
I 8 Injector No.2
I 9 Injector No.3
I 10 Injector No.4
I 11 Injector No.5
I 12 Injector No.6
I 13 Intake Air Temp. Sensor

J 1 Junction Connector
J 2 Junction Connector
J 3 Junction Connector
J 4 Junction Connector

K 1 Knock Sensor 1
K 2 Knock Sensor 2

N 1 Neutral Start SW
N 2 Noise Filter (Ignition)

P 1 Power Steering Oil Pressure SW

R 1 Radiator Fan Motor

S 1 Speed Sensor (Combination Meter)
S 2 Speed Sensor (Transmission Input)
S 3 Speed Sensor (Transmission Output)
S 4 Starter
S 5 Starter

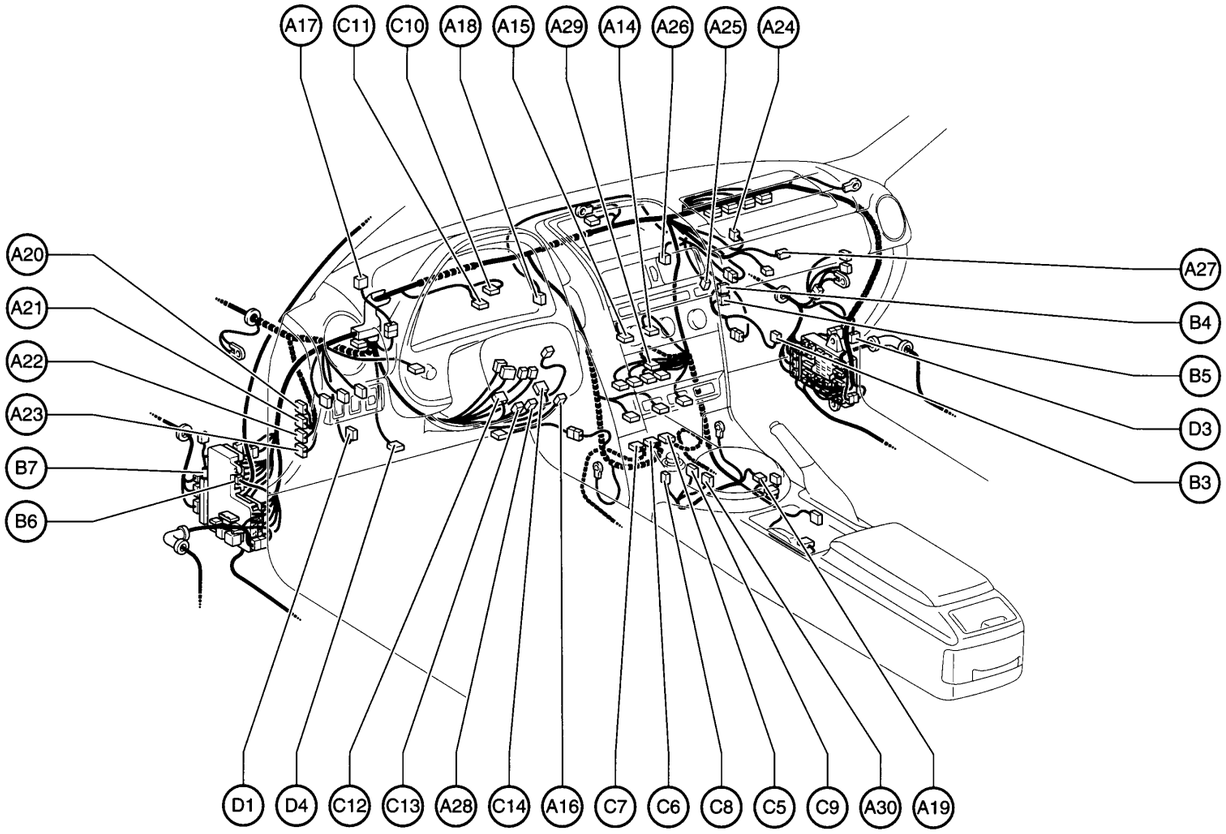
T 1 Throttle Control Motor
T 2 Throttle Position Sensor

V 1 Vacuum Sensor
V 2 VSV (ACIS)
V 3 VSV (EVAP)

W 1 Washer Motor
W 2 Water Temp. Sensor
W 3 Water Temp. SW

Position of Parts in Instrument Panel

[LHD]



A14 A/C Control Assembly
A15 A/C Control Assembly
A16 A/C Room Temp. Sensor
A17 A/C Solar Sensor
A18 A/C Thermistor
A19 A/T Shift Position Illumination
A20 ABS and Traction ECU
A21 ABS and Traction ECU
A22 ABS and Traction ECU
A23 ABS and Traction ECU
A24 Air Inlet Control Servo Motor
A25 Air Mix Control Servo Motor
A26 Air Vent Mode Control Servo Motor
A27 Airbag Squib (Front Passenger Airbag Assembly)
A28 Airbag Squib (Steering Wheel Pad)
A29 Antenna Amplifier
A30 Ashtray Illumination

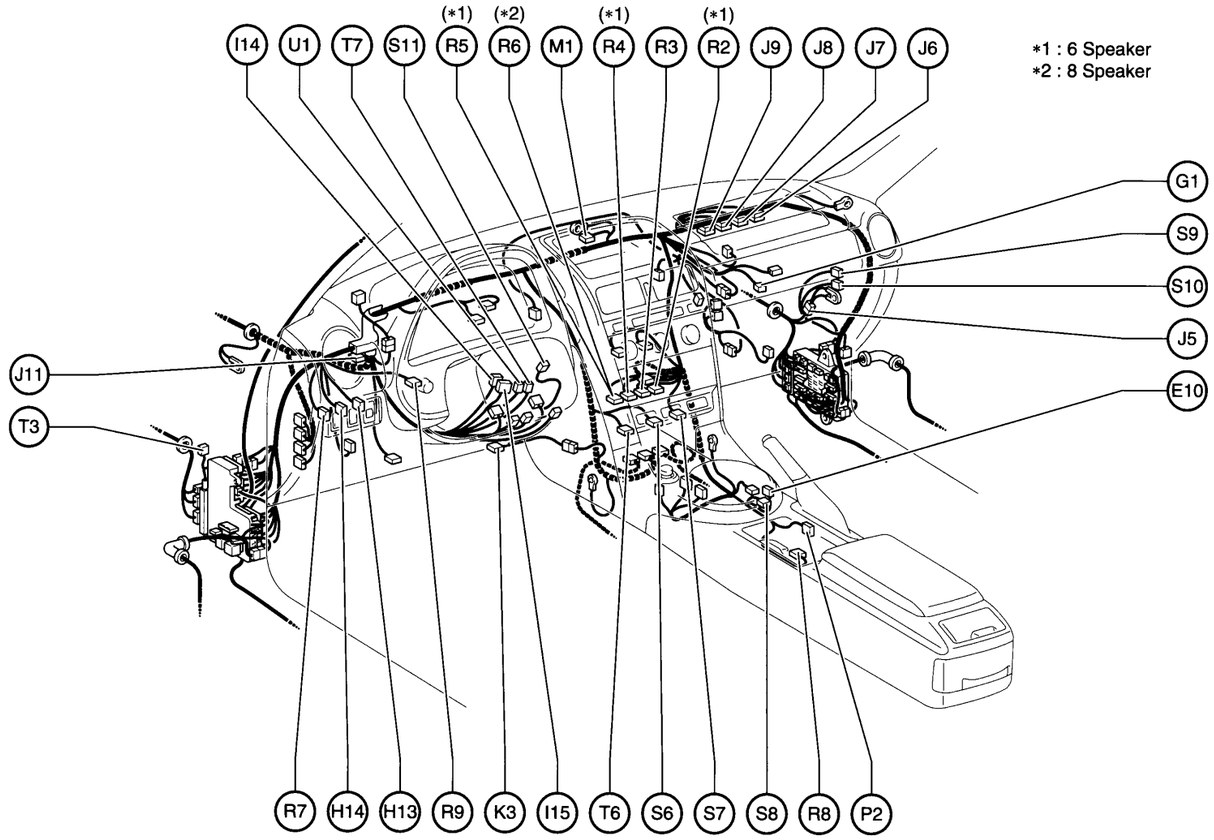
B 3 Blower Motor
B 4 Blower Motor Controller
B 5 Blower Motor Controller
B 6 Body ECU
B 7 Body ECU

C 5 Center Airbag Sensor Assembly
C 6 Center Airbag Sensor Assembly
C 7 Center Airbag Sensor Assembly
C 8 Cigarette Lighter
C 9 Cigarette Lighter Illumination
C10 Combination Meter
C11 Combination Meter
C12 Combination SW
C13 Combination SW
C14 Combination SW

D 1 Daytime Running Light Relay
D 3 Diode (A/C)
D 4 DLC3

Position of Parts in Instrument Panel

[LHD]



E10 ECT Pattern Select SW

G 1 Glove Box Light

H13 Headlight Beam Level Control SW
H14 Headlight Cleaner SW

I 14 Ignition Key Cylinder Light
I 15 Ignition SW

J 5 Junction Connector
J 6 Junction Connector
J 7 Junction Connector
J 8 Junction Connector
J 9 Junction Connector
J 11 Junction Connector

K 3 Kick Down SW

M 1 Multi-Display

P 2 Parking Brake SW

R 2 Radio and Player
R 3 Radio and Player
R 4 Radio and Player
R 5 Radio and Player
R 6 Radio and Player
R 7 Rear Fog Light SW
R 8 Remote Control Receiver
R 9 Rheostat

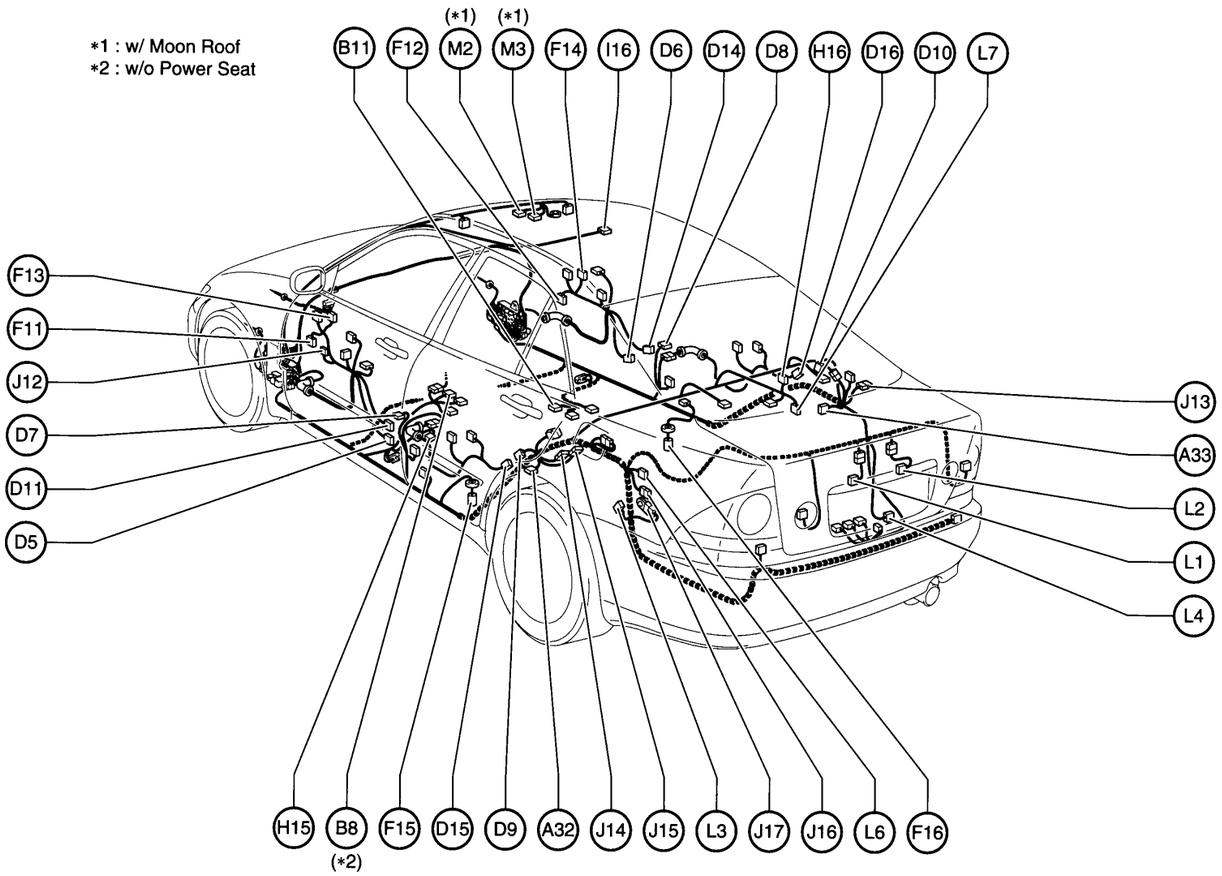
S 6 Seat Heater SW (Driver's Seat)
S 7 Seat Heater SW (Passenger's Seat)
S 8 Shift Lock Control ECU
S 9 Stereo Component Amplifier
S10 Stereo Component Amplifier
S11 Stop Light SW

T 3 Telephone Microphone
T 6 Traction Cut SW (A/T), Traction Cut SW and Snow SW (M/T)
T 7 Transponder Key Amplifier

U 1 Unlock Warning SW and Key Interlock Solenoid

Position of Parts in Body

[LHD]



A32 ABS Speed Sensor Rear LH
A33 ABS Speed Sensor Rear RH

B 8 Buckle SW LH
B 11 Buckle SW RH and Seat Belt Warning Occupant Detection Sensor

D 5 Door Courtesy Light Front LH
D 6 Door Courtesy Light Front RH
D 7 Door Courtesy SW Front LH
D 8 Door Courtesy SW Front RH
D 9 Door Courtesy SW Rear LH
D 10 Door Courtesy SW Rear RH
D 11 Door Lock Motor,Door Key Lock and Unlock SW and Door Lock Detection SW Front LH
D 14 Door Lock Motor and Door Lock Detection SW Front RH
D 15 Door Lock Motor and Door Lock Detection SW Rear LH
D 16 Door Lock Motor and Door Lock Detection SW Rear RH

F 11 Front Door Speaker LH
F 12 Front Door Speaker RH
F 13 Front Door Tweeter Speaker LH
F 14 Front Door Tweeter Speaker RH
F 15 Fuel Pump and Sender
F 16 Fuel Sender (Sub)

H15 Heated Oxygen Sensor (Bank 1 Sensor 2)
H16 High Mounted Stop Light

I 16 Interior Light

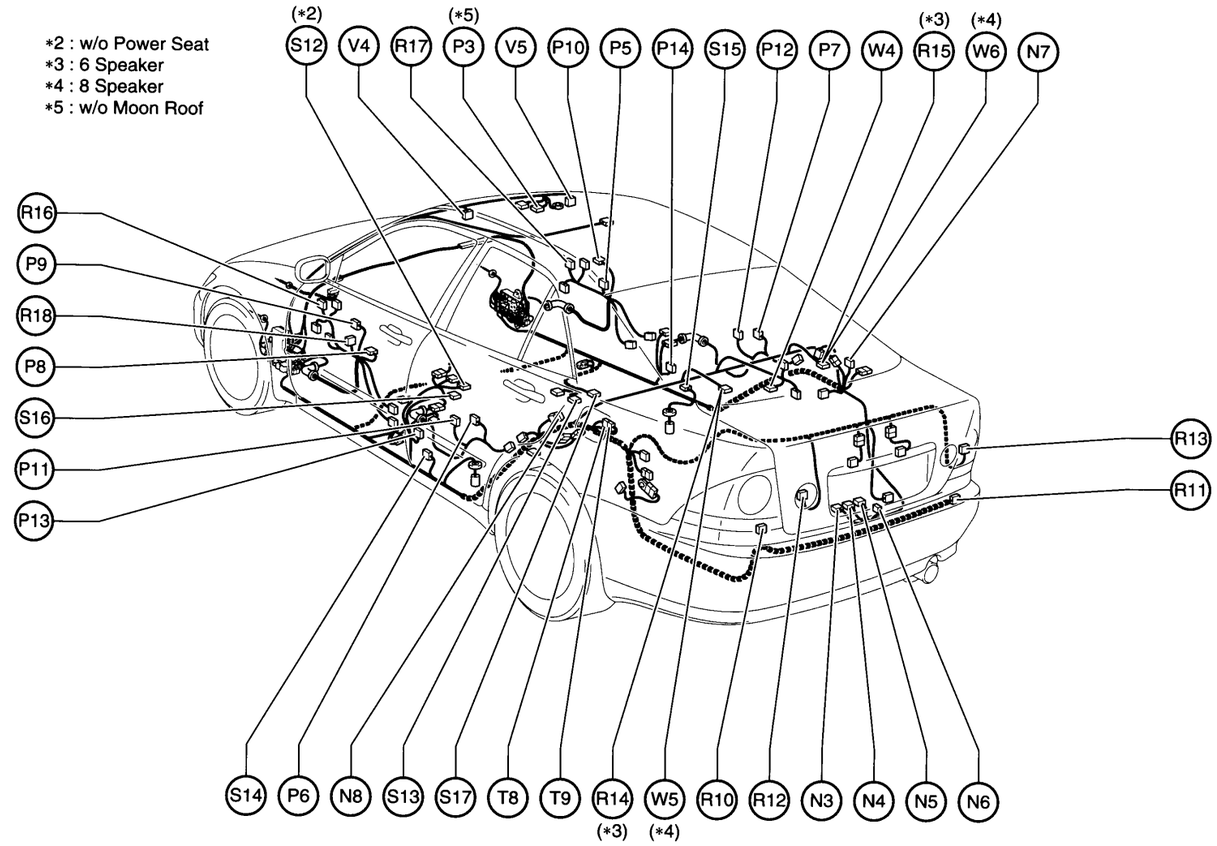
J 12 Junction Connector
J 13 Junction Connector
J 14 Junction Connector
J 15 Junction Connector
J 16 Junction Connector
J 17 Junction Connector

L 1 License Plate Light LH
L 2 License Plate Light RH
L 3 Light Failure Sensor
L 4 Luggage Compartment Door Courtesy SW and Opener Motor
L 6 Luggage Compartment Door Opener Relay
L 7 Luggage Compartment Light

M 2 Moon Roof Control ECU
M 3 Moon Roof Control SW and Personal Light

Position of Parts in Body

[LHD]



N 3 Navigation ECU
N 4 Navigation ECU
N 5 Navigation ECU
N 6 Navigation ECU
N 7 Noise Filter (Rear Window Defogger)
N 8 Noise Filter (Stop Light)

P 3 Personal Light
P 5 Power Window Control SW Front RH
P 6 Power Window Control SW Rear LH
P 7 Power Window Control SW Rear RH
P 8 Power Window Master SW
P 9 Power Window Motor Front LH
P 10 Power Window Motor Front RH
P 11 Power Window Motor Rear LH
P 12 Power Window Motor Rear RH
P 13 Pretensioner LH
P 14 Pretensioner RH

R10 Rear Combination Light LH
R11 Rear Combination Light RH
R12 Rear Fog Light LH
R13 Rear Fog Light RH
R14 Rear Speaker LH
R15 Rear Speaker RH
R16 Remote Control Mirror LH
R17 Remote Control Mirror RH
R18 Remote Control Mirror SW

S 12 Seat Heater (Driver's Seat)
S 13 Seat Heater (Passenger's Seat)
S 14 Side Airbag Sensor LH
S 15 Side Airbag Sensor RH
S 16 Side Airbag Squib LH
S 17 Side Airbag Squib RH

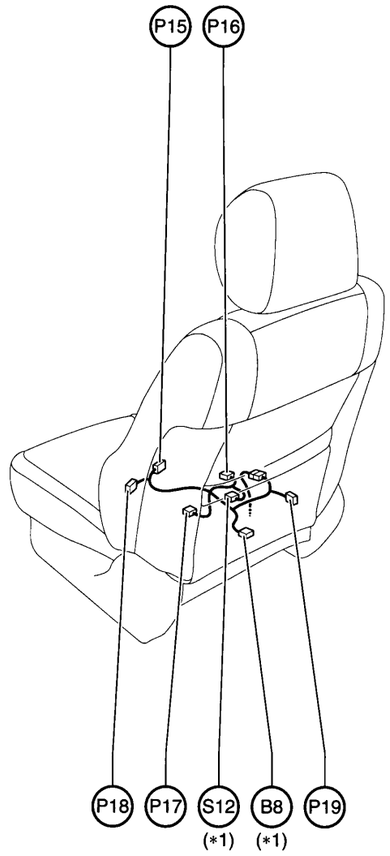
T 8 Telephone Transceiver and Speaker Relay
T 9 Telephone Transceiver and Speaker Relay

V 4 Vanity Light LH
V 5 Vanity Light RH

W 4 Wireless Door Lock ECU
W 5 Woofer Speaker LH
W 6 Woofer Speaker RH

Position of Parts in Seat

[LHD]



*1 : w/ Power Seat

B 8 Buckle SW LH

P15 Power Seat Control SW
P16 Power Seat Motor (Driver's Seat Front Vertical Control)
P17 Power Seat Motor (Driver's Seat Rear Vertical Control)
P18 Power Seat Motor (Driver's Seat Reclining Control)
P19 Power Seat Motor (Driver's Seat Slide Control)

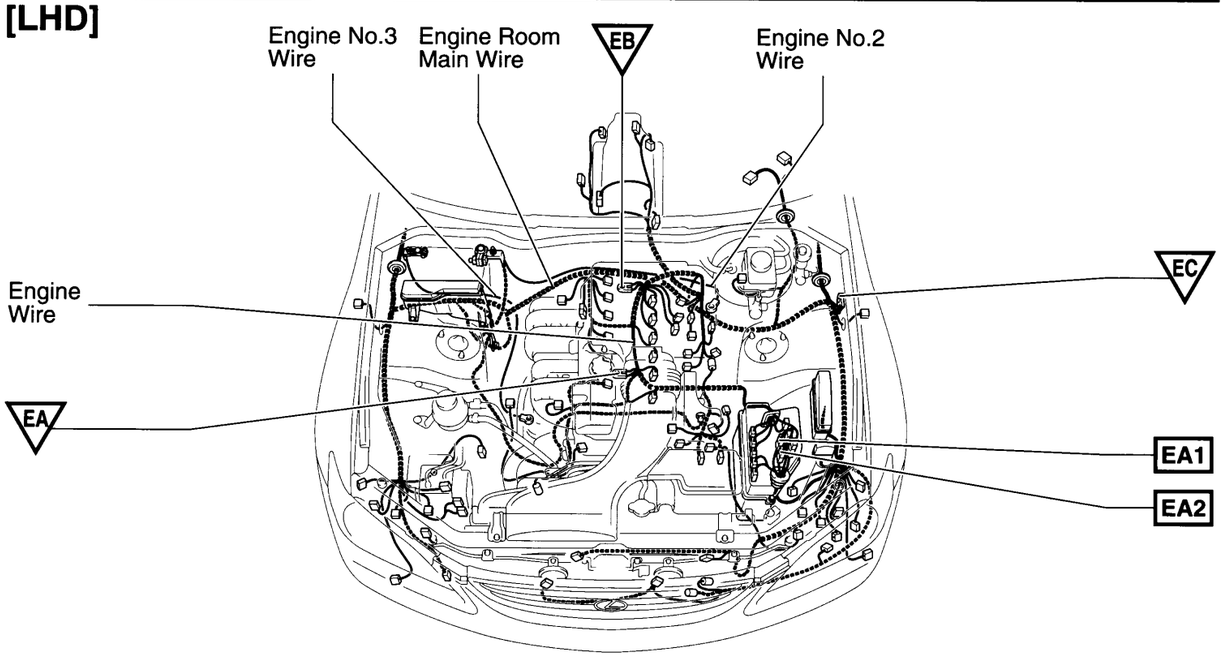
S12 Seat Heater (Driver's Seat)

G ELECTRICAL WIRING ROUTING

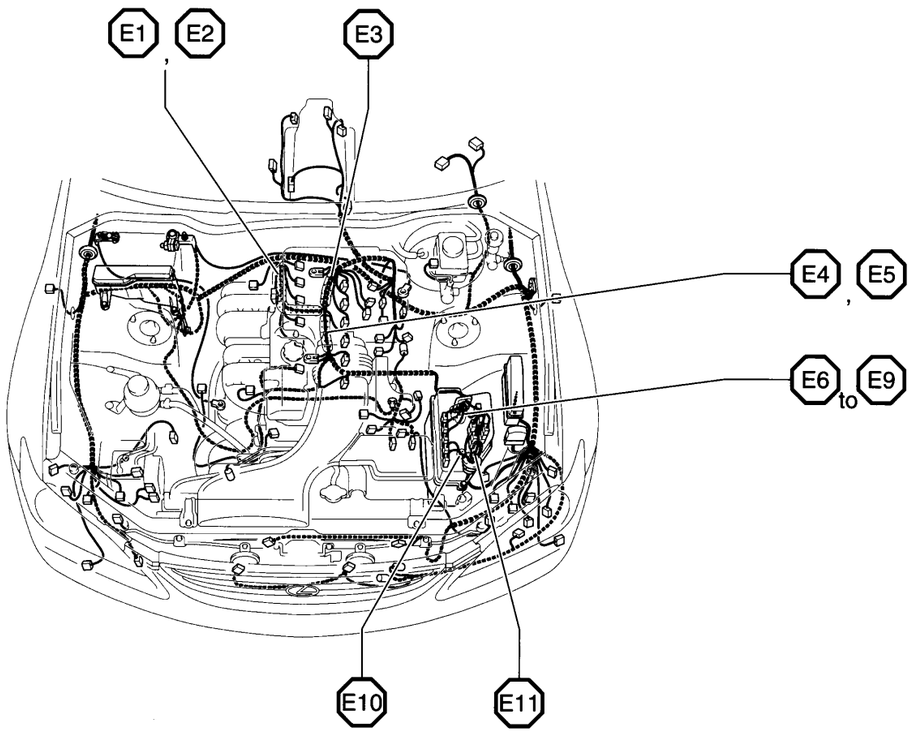
□ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

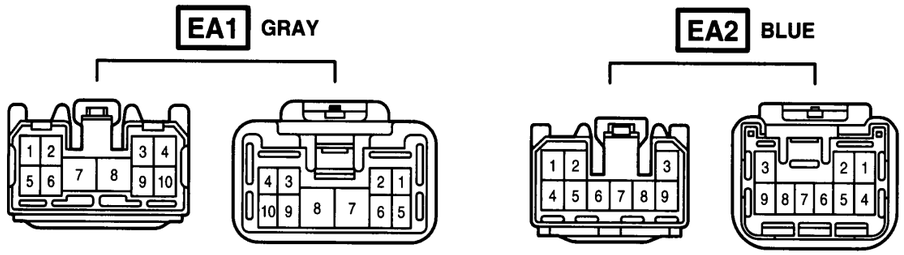
[LHD]



○ : Location of Splice Points



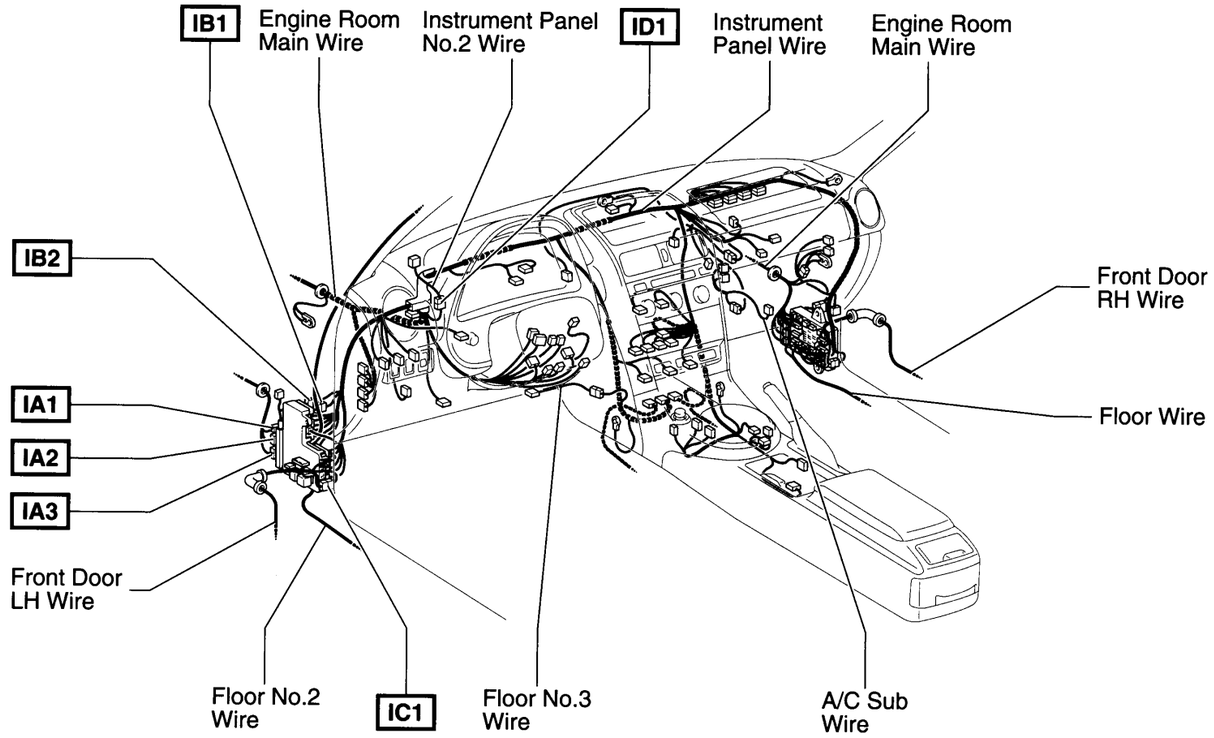
Connector Joining Wire Harness and Wire Harness



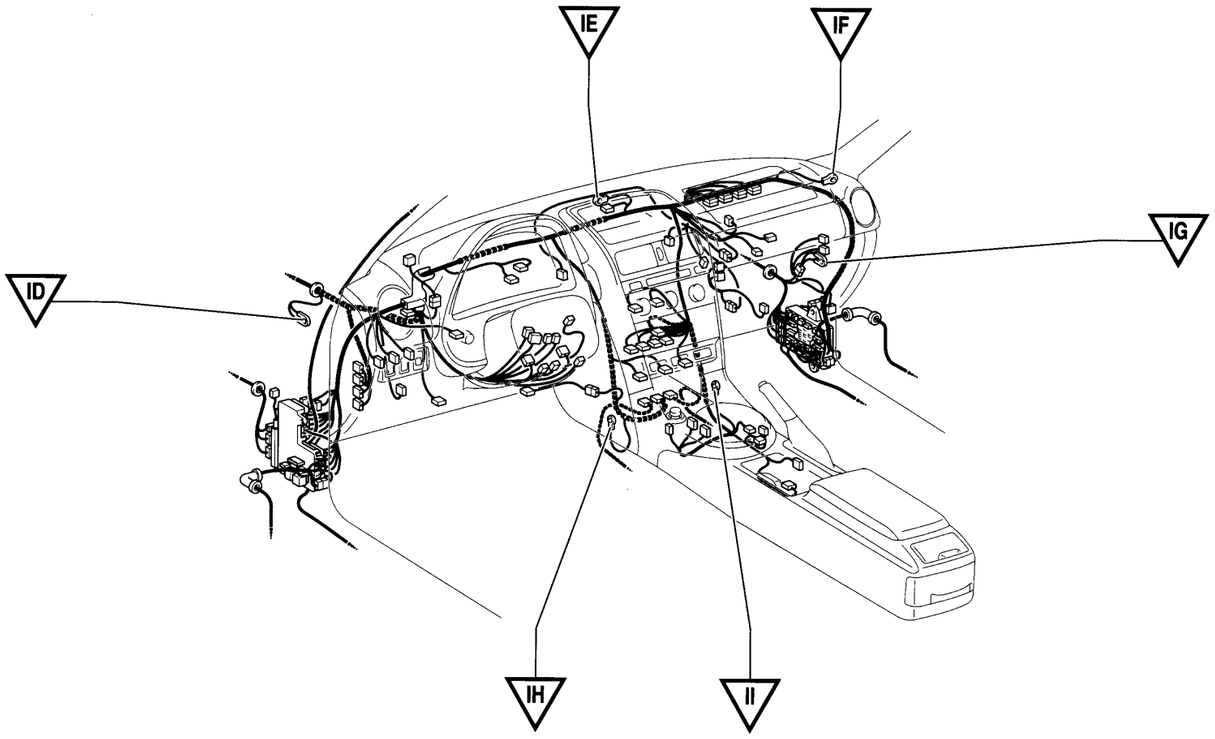
Code	Joining Wire Harness and Wire Harness (Connector Location)
EA1	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
EA2	

□ : Location of Connector Joining Wire Harness and Wire Harness

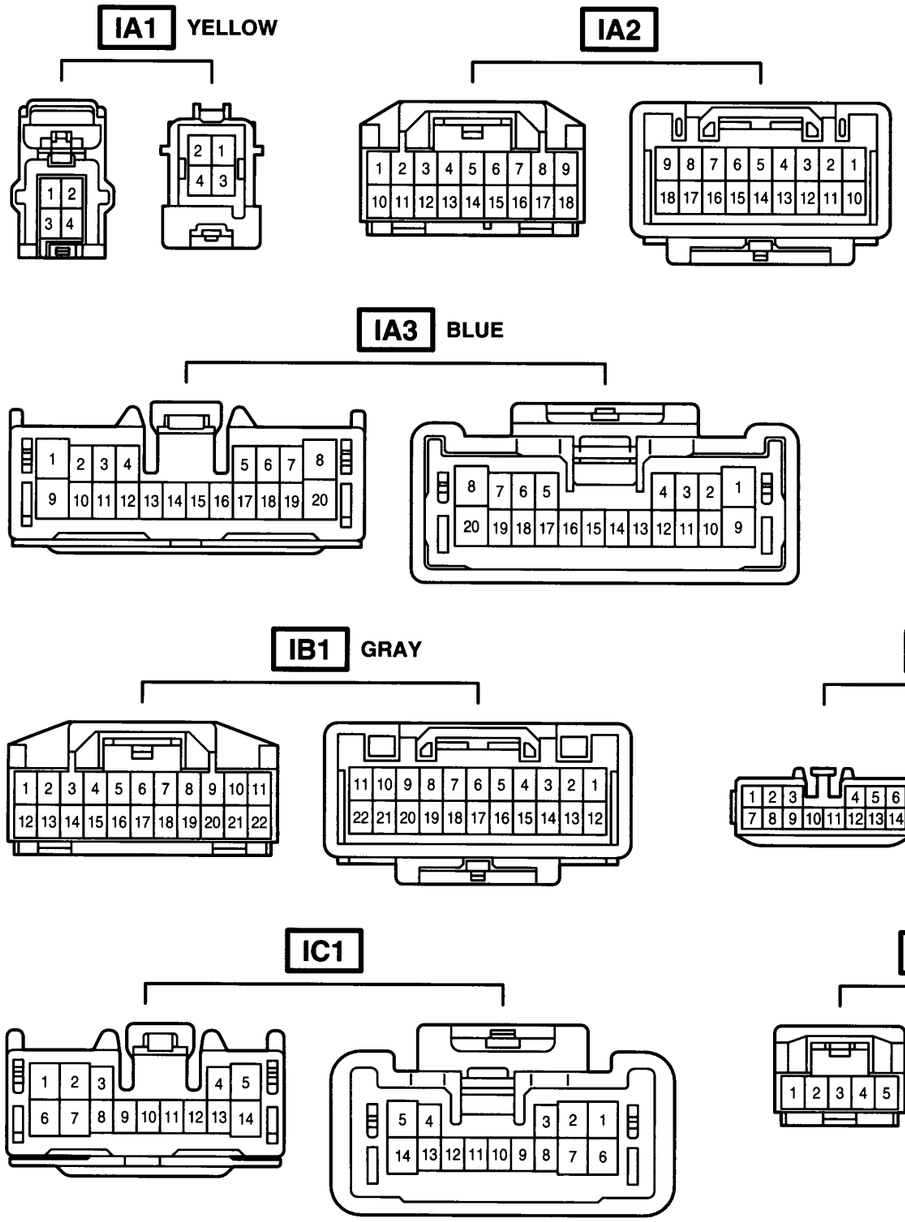
[LHD]



▽ : Location of Ground Points



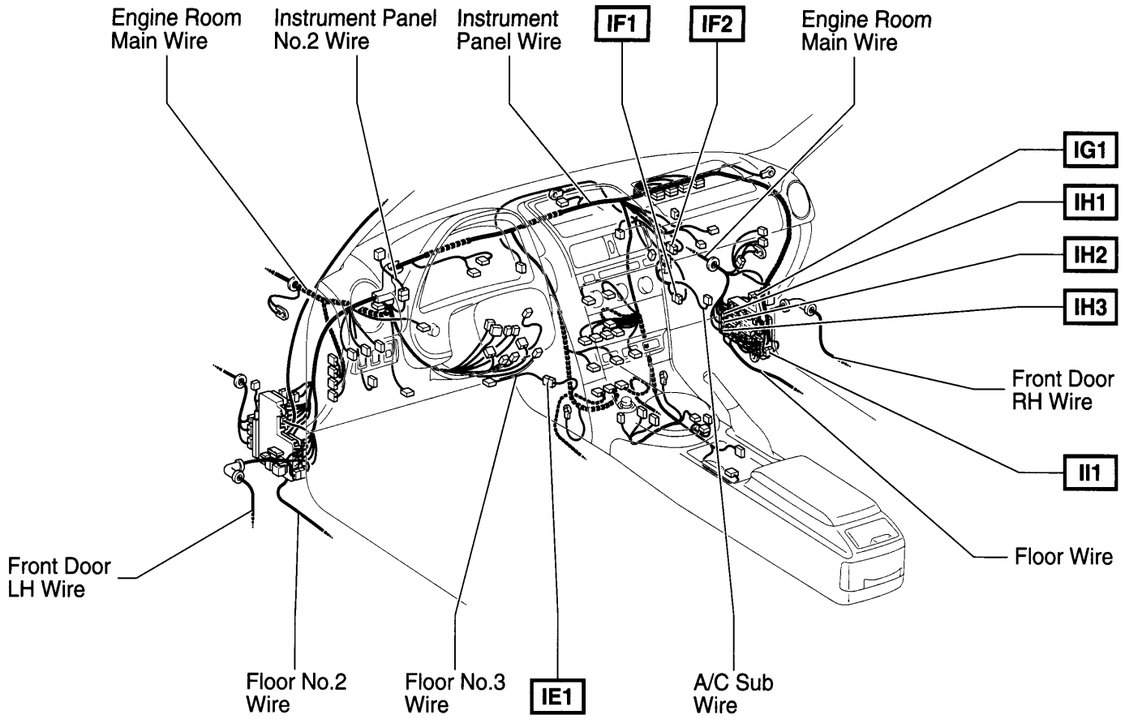
Connector Joining Wire Harness and Wire Harness



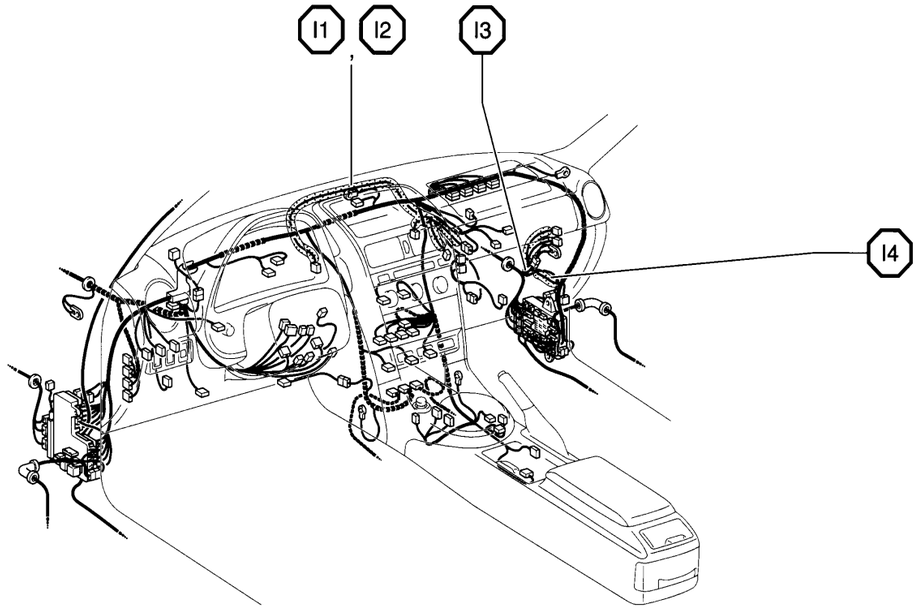
Code	Joining Wire Harness and Wire Harness (Connector Location)
IA1	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IA2	
IA3	
IB1	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
IB2	
IC1	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
ID1	Instrument Panel No.2 Wire and Instrument Panel Wire (Left Side of the Instrument Panel)

□ : Location of Connector Joining Wire Harness and Wire Harness

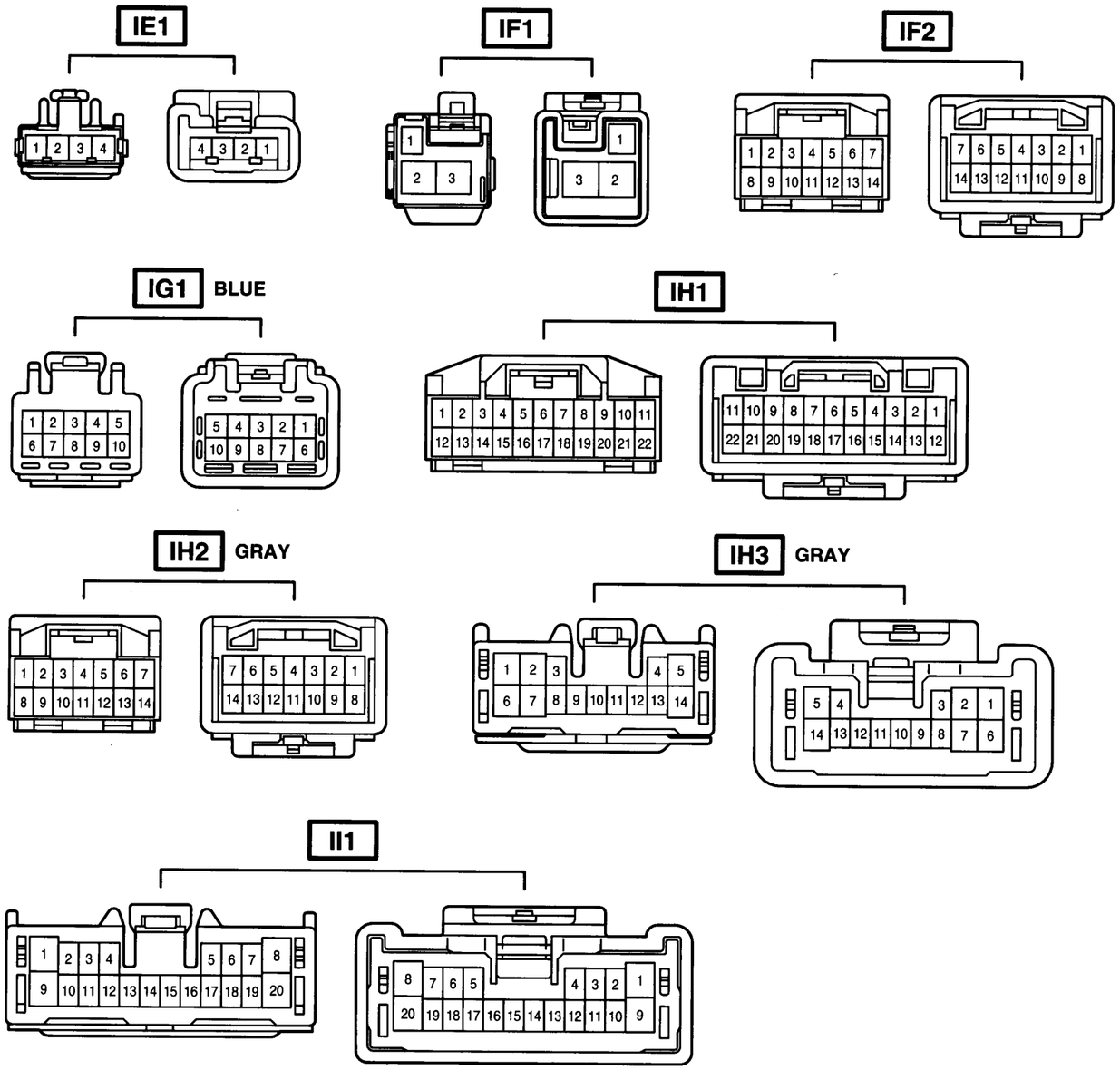
[LHD]



○ : Location of Splice Points



Connector Joining Wire Harness and Wire Harness

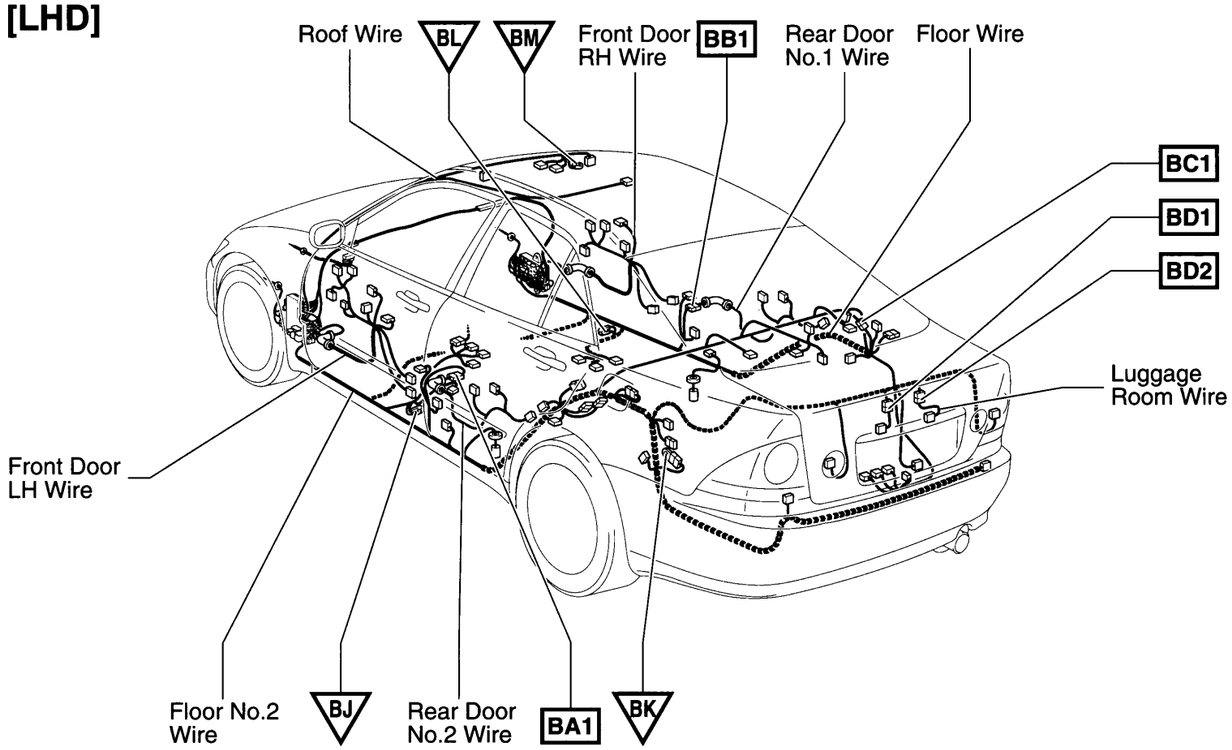


Code	Joining Wire Harness and Wire Harness (Connector Location)
IE1	Floor No.3 Wire and Floor No.2 Wire (Near the Steering Column)
IF1	Instrument Panel Wire and A/C Sub Wire (Left Side of the Blower Unit)
IF2	
IG1	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
IH1	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
IH2	
IH3	
II1	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)

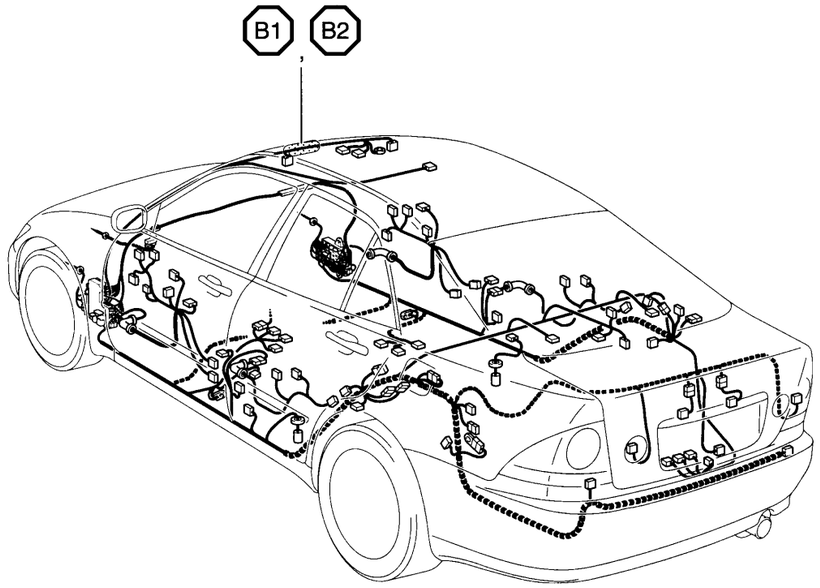
▭ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

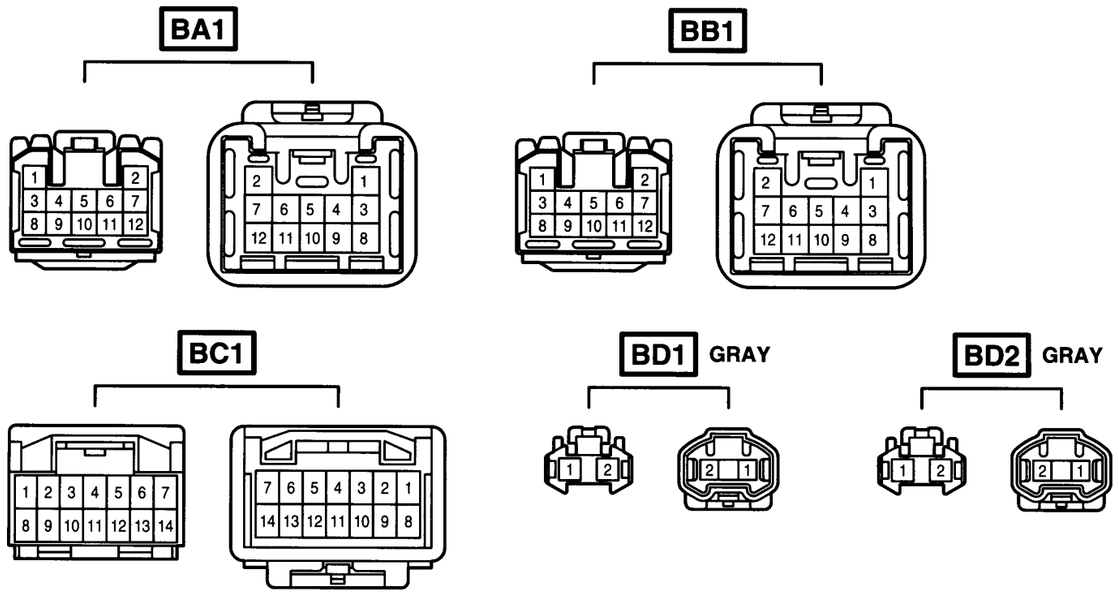
[LHD]



○ : Location of Splice Points



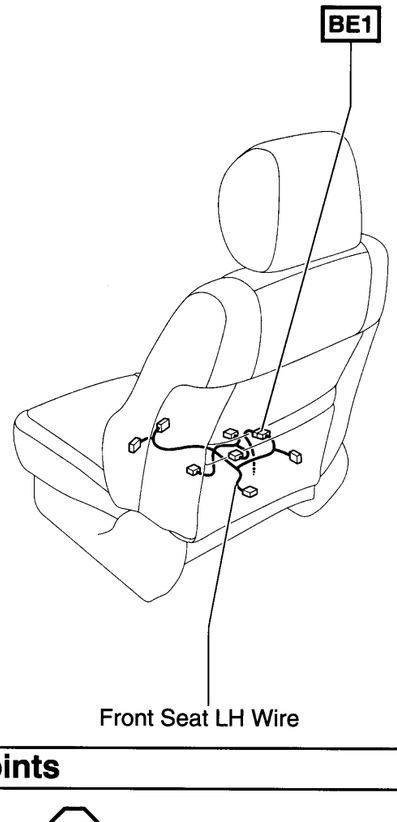
Connector Joining Wire Harness and Wire Harness



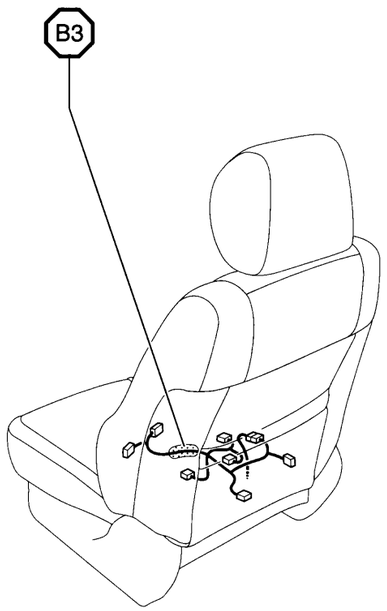
Code	Joining Wire Harness and Wire Harness (Connector Location)
BA1	Rear Door No.2 Wire and Floor No.2 Wire (Left Center Pillar)
BB1	Rear Door No.1 Wire and Floor Wire (Right Center Pillar)
BC1	Floor No.2 Wire and Floor Wire (Under the Right Rear Cushion)
BD1	Floor No.2 Wire and Luggage Room Wire (Right Side of the Luggage Door)
BD2	

: Location of Connector Joining Wire Harness and Wire Harness

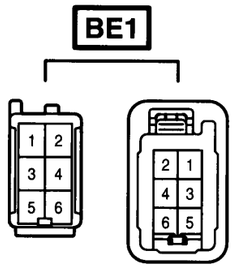
[LHD]



: Location of Splice Points



Connector Joining Wire Harness and Wire Harness



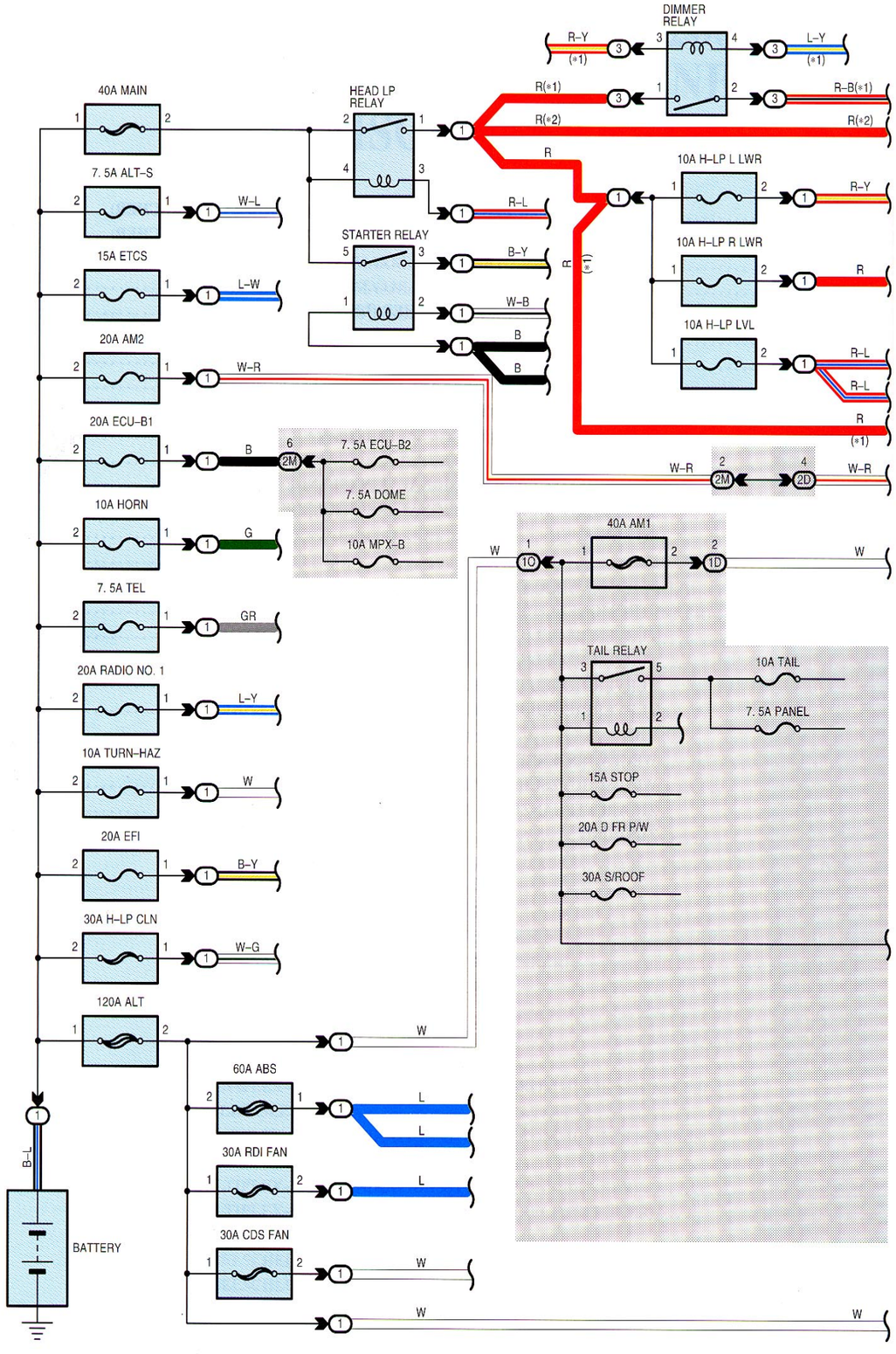
Code	Joining Wire Harness and Wire Harness (Connector Location)
BE1	Floor No.2 Wire and Front Seat LH Wire (Under the Driver's Seat)

English

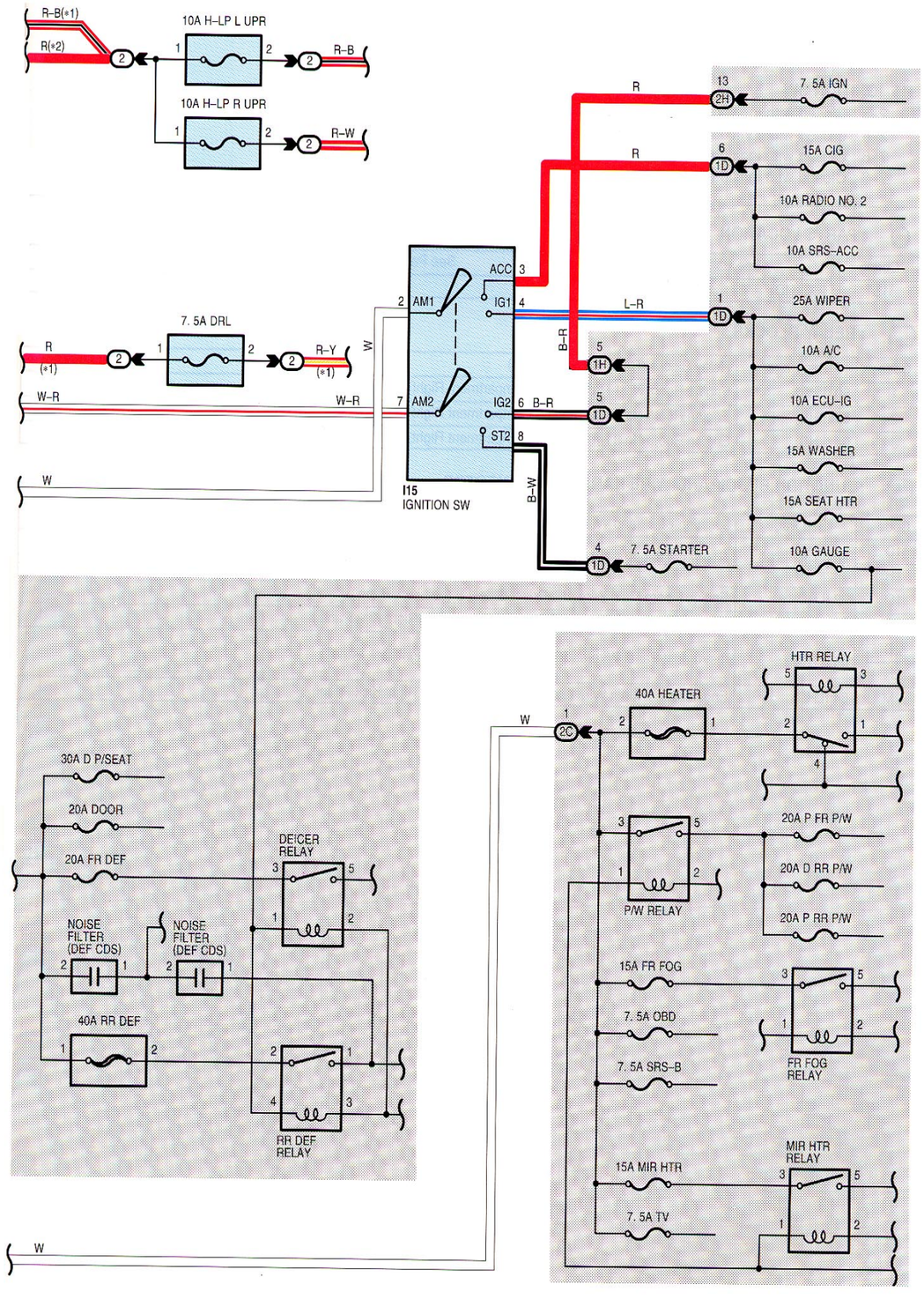
IS 200
ELECTRICAL WIRING DIAGRAM
SYSTEM CIRCUITS

	Page
ABS AND TRACTION CONTROL	366
AUTOMATIC AIR CONDITIONER (LHD)	452
AUTOMATIC AIR CONDITIONER (RHD)	458
AUTOMATIC LIGHT CONTROL (RHD)	274
BACK-UP LIGHT	226
CELLULAR MOBILE TELEPHONE	422
CHARGING	154
CIGARETTE LIGHTER	378
CLOCK	380
COMBINATION METER	442
CRUISE CONTROL	360
DOOR LOCK CONTROL (LHD)	278
DOOR LOCK CONTROL (RHD)	284
DOUBLE LOCKING (RHD)	312
ECT AND A/T INDICATOR	352
ENGINE CONTROL (LHD)	158
ENGINE CONTROL (RHD)	170
ENGINE IMMOBILISER SYSTEM	182
FRONT FOG LIGHT (LHD)	198
FRONT FOG LIGHT (RHD)	200
FRONT WINDOW DEICER	408
HEADLIGHT (LHD w/ DAYTIME RUNNING LIGHT)	186
HEADLIGHT (LHD w/o DAYTIME RUNNING LIGHT)	190
HEADLIGHT (RHD)	194
HEADLIGHT BEAM LEVEL CONTROL	388
HEADLIGHT CLEANER	384
HORN	382
IGNITION	150
ILLUMINATION (LHD)	214
ILLUMINATION (RHD)	218
INTERIOR LIGHT (LHD)	262
INTERIOR LIGHT (RHD)	268
LEXUS NAVIGATION SYSTEM (LHD)	414
LEXUS NAVIGATION SYSTEM (RHD)	418
LIGHT REMINDER (LHD)	338
LIGHT REMINDER (RHD)	342
MOON ROOF	404
MULTIPLEX COMMUNICATION SYSTEM (COMMUNICATION BUS) (LHD)	230
MULTIPLEX COMMUNICATION SYSTEM (COMMUNICATION BUS) (RHD)	246
MULTIPLEX COMMUNICATION SYSTEM (LHD)	232
MULTIPLEX COMMUNICATION SYSTEM (RHD)	248
POWER SEAT	350
POWER SOURCE (LHD)	140
POWER SOURCE (RHD)	144
POWER WINDOW (LHD)	318
POWER WINDOW (RHD)	324
RADIATOR FAN AND CONDENSER FAN	448
RADIO AND PLAYER (LHD 6 SPEAKER)	426
RADIO AND PLAYER (LHD 8 SPEAKER)	434
RADIO AND PLAYER (RHD 6 SPEAKER)	430
RADIO AND PLAYER (RHD 8 SPEAKER)	438
REAR FOG LIGHT (LHD)	202
REAR FOG LIGHT (RHD)	206
REAR WINDOW DEFOGGER AND MIRROR HEATER	410
REMOTE CONTROL MIRROR (LHD)	346
REMOTE CONTROL MIRROR (RHD)	348
SEAT BELT WARNING (LHD)	330
SEAT BELT WARNING (RHD)	334
SEAT HEATER	390
SHIFT LOCK	400
SRS	373
STARTING	148
STOP LIGHT	228
TAILLIGHT	210
THEFT DETERRENT (RHD)	306
TURN SIGNAL AND HAZARD WARNING LIGHT (LHD)	222
TURN SIGNAL AND HAZARD WARNING LIGHT (RHD)	224
WIPER AND WASHER (LHD)	392
WIPER AND WASHER (RHD)	396
WIRELESS DOOR LOCK CONTROL (LHD)	290
WIRELESS DOOR LOCK CONTROL (RHD)	298

POWER SOURCE (LHD)



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



POWER SOURCE (LHD)

SERVICE HINTS

HEAD LP RELAY

2-1 : Closed with light control SW at **HEAD** position or dimmer SW at **FLASH** position

TAIL RELAY

5-3 : Closed with light control SW at **TAIL** or **HEAD** position

I15 IGNITION SW

2-3 : Closed with ignition key at **ACC** or **ON** position
2-4 : Closed with ignition key at **ON** or **ST** position
7-6 : Closed with ignition key at **ON** or **ST** position
7-8 : Closed with ignition key at **ST** position

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
I15	99 (LHD)				

▭ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)
2	80 (LHD)	Engine Room No.2 R/B (Engine Compartment Right)
3	94 (LHD)	Engine Room No.3 R/B (Engine Compartment Right)

▭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1H		
1O	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2C	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2D	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2H		
2M	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)

POWER SOURCE (RHD)

SERVICE HINTS

HEAD LP RELAY

2-1 : Closed with light control SW at **HEAD** position or dimmer SW at **FLASH** position

TAIL RELAY

5-3 : Closed with light control SW at **TAIL** or **HEAD** position

I15 IGNITION SW

2-3 : Closed with ignition key at **ACC** or **ON** position
2-4 : Closed with ignition key at **ON** or **ST** position
7-6 : Closed with ignition key at **ON** or **ST** position
7-8 : Closed with ignition key at **ST** position

○ : PARTS LOCATION

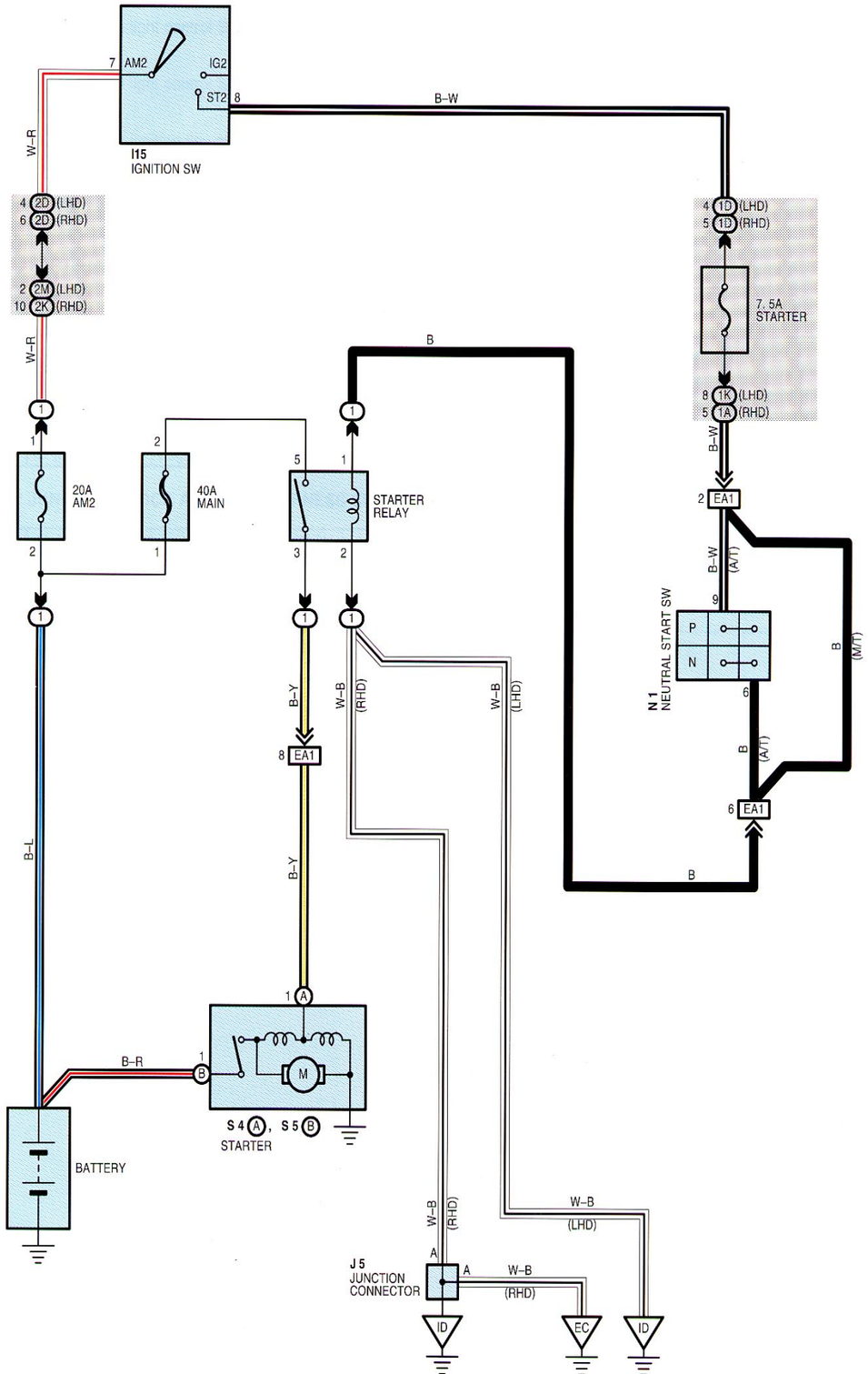
Code	See Page	Code	See Page	Code	See Page
I15	107 (RHD)				

▭ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	81 (RHD)	Engine Room No.1 R/B (Engine Compartment Left)
2	81 (RHD)	Engine Room No.2 R/B (Engine Compartment Left)

▭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1C	88 (RHD)	Engine Room Main Wire and Driver Side J/B (Right Kick Panel)
1D	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
2D	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2K	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)
2O		



SERVICE HINTS

S4 (A), S5 (B) STARTER

Points closed with the neutral start SW on and the ignition SW at **ST** position (A/T)
Points closed with the ignition SW at **ST** position (M/T)

N1 NEUTRAL START SW

9–6 : Closed with the A/T shift lever in **P** or **N** position

: PARTS LOCATION

Code	See Page	Code		See Page	Code		See Page
I15	99 (LHD)	N1		97 (LHD)	S4	A	105 (RHD)
	107 (RHD)			105 (RHD)	S5	B	97 (LHD)
J5	107 (RHD)	S4	A	97 (LHD)			105 (RHD)

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)
	81 (RHD)	Engine Room No.1 R/B (Engine Compartment Left)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	88 (RHD)	Engine Room Main Wire and Driver Side J/B (Right Kick Panel)
1D	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1K	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2D	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2K	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)
2M	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)

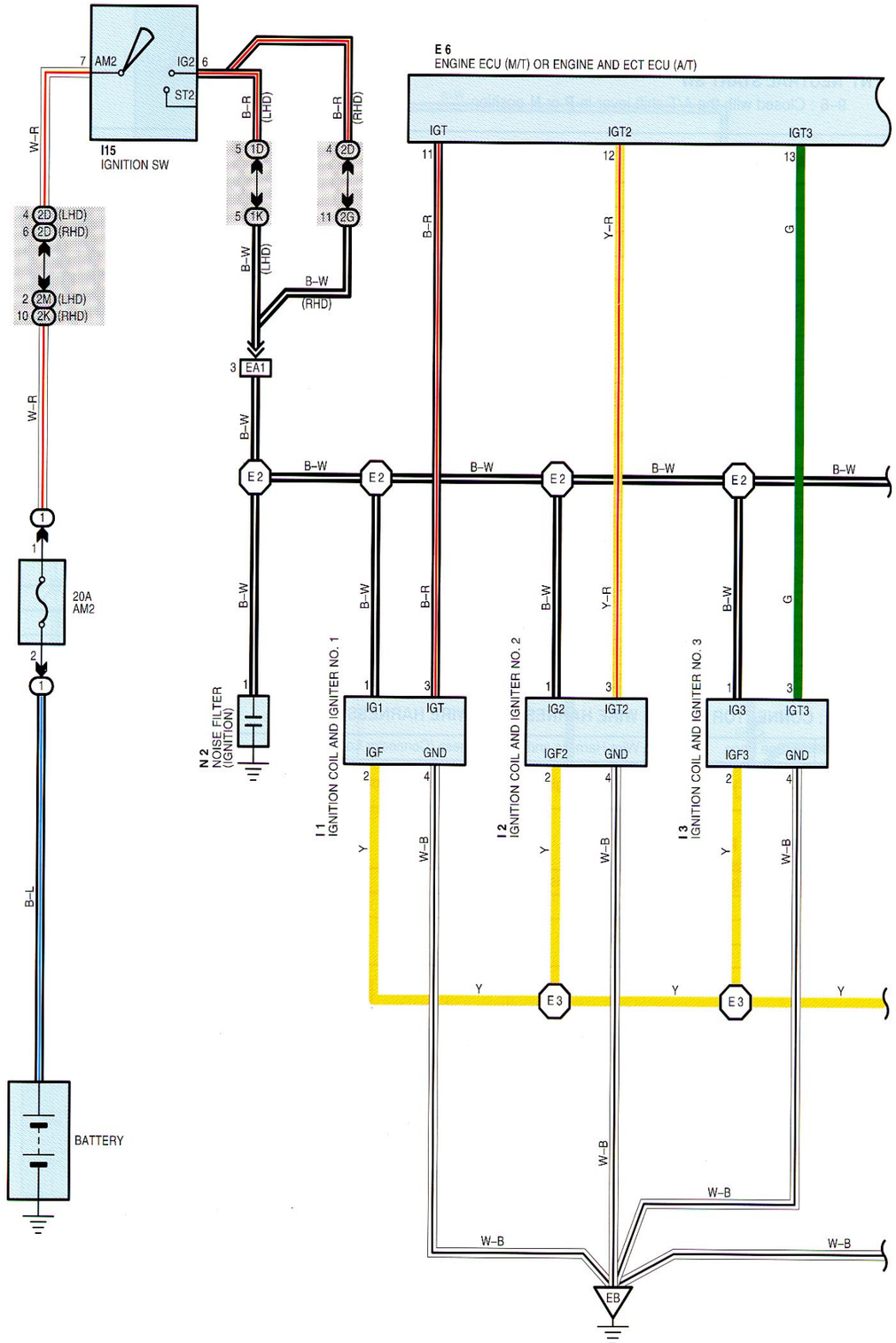
: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

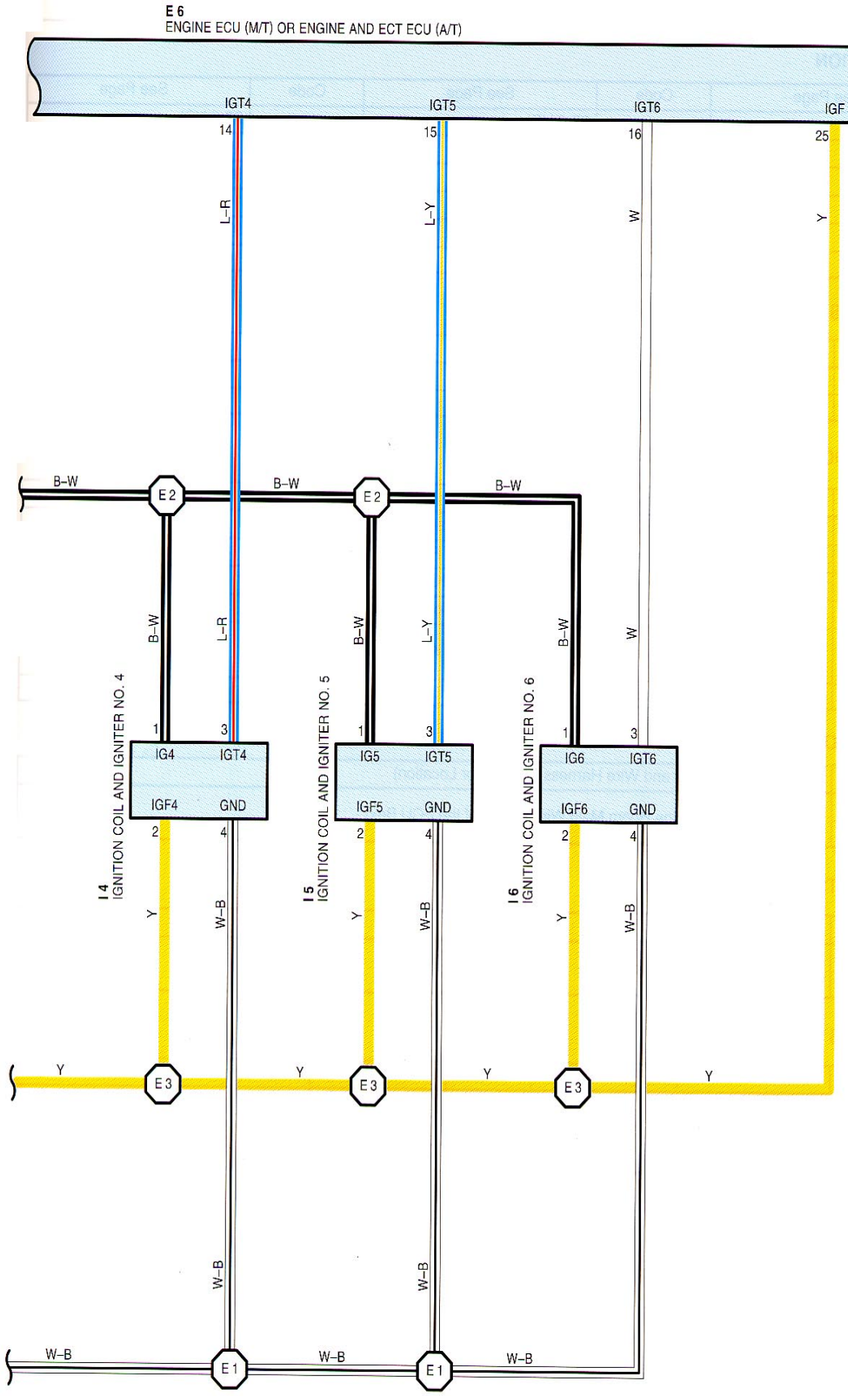
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	112 (LHD)	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
	122 (RHD)	

: GROUND POINTS

Code	See Page	Ground Points Location
EC	122 (RHD)	Left Fender Apron
ID	114 (LHD)	Cowl Side Panel LH
	124 (RHD)	

IGNITION


I15
IGNITION SW
AM2
IG2
ST2
W–R
B–R (LHD)
B–R (RHD)
4 2D (LHD)
6 2D (RHD)
2 2M (LHD)
10 2K (RHD)
5 1D
5 1K
4 2D
11 2G
B–W (LHD)
B–W (RHD)
3 EA1
1
20A AM2
2
B–L
BATTERY
N2
NOISE FILTER (IGNITION)
E6
ENGINE ECU (M/T) OR ENGINE AND ECT ECU (A/T)
IGT
IGT2
IGT3
11
12
13
B–R
Y–R
G
E2
B–W
I1
IGNITION COIL AND IGNITER NO. 1
I2
IGNITION COIL AND IGNITER NO. 2
I3
IGNITION COIL AND IGNITER NO. 3
IG1
IGT
IGF
GND
IG2
IGT2
IGF2
IG3
IGT3
IGF3
Y
W–B
E3
EB


E6
ENGINE ECU (M/T) OR ENGINE AND ECT ECU (A/T)
IGT4
IGT5
IGT6
IGF
14
15
16
25
L–R
L–Y
W
Y
B–W
E2
I4
IGNITION COIL AND IGNITER NO. 4
I5
IGNITION COIL AND IGNITER NO. 5
I6
IGNITION COIL AND IGNITER NO. 6
IG4
IGT4
IGF4
IG5
IGT5
IGF5
IG6
IGT6
IGF6
GND
E3
E1

IGNITION

SERVICE HINTS

I15 IGNITION SW

7–6 : Closed with the ignition SW at **ON** or **ST** position

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
E6	96 (LHD)	I3	97 (LHD)	I6	97 (LHD)
	104 (RHD)		105 (RHD)		105 (RHD)
I1	97 (LHD)	I4	97 (LHD)	I15	99 (LHD)
	105 (RHD)		105 (RHD)		107 (RHD)
I2	97 (LHD)	I5	97 (LHD)	N2	97 (LHD)
	105 (RHD)		105 (RHD)		105 (RHD)

▭ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)
	81 (RHD)	Engine Room No.1 R/B (Engine Compartment Left)

▭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1K	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2D	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2G	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)
2K		
2M	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)

▭ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	112 (LHD)	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
	122 (RHD)	

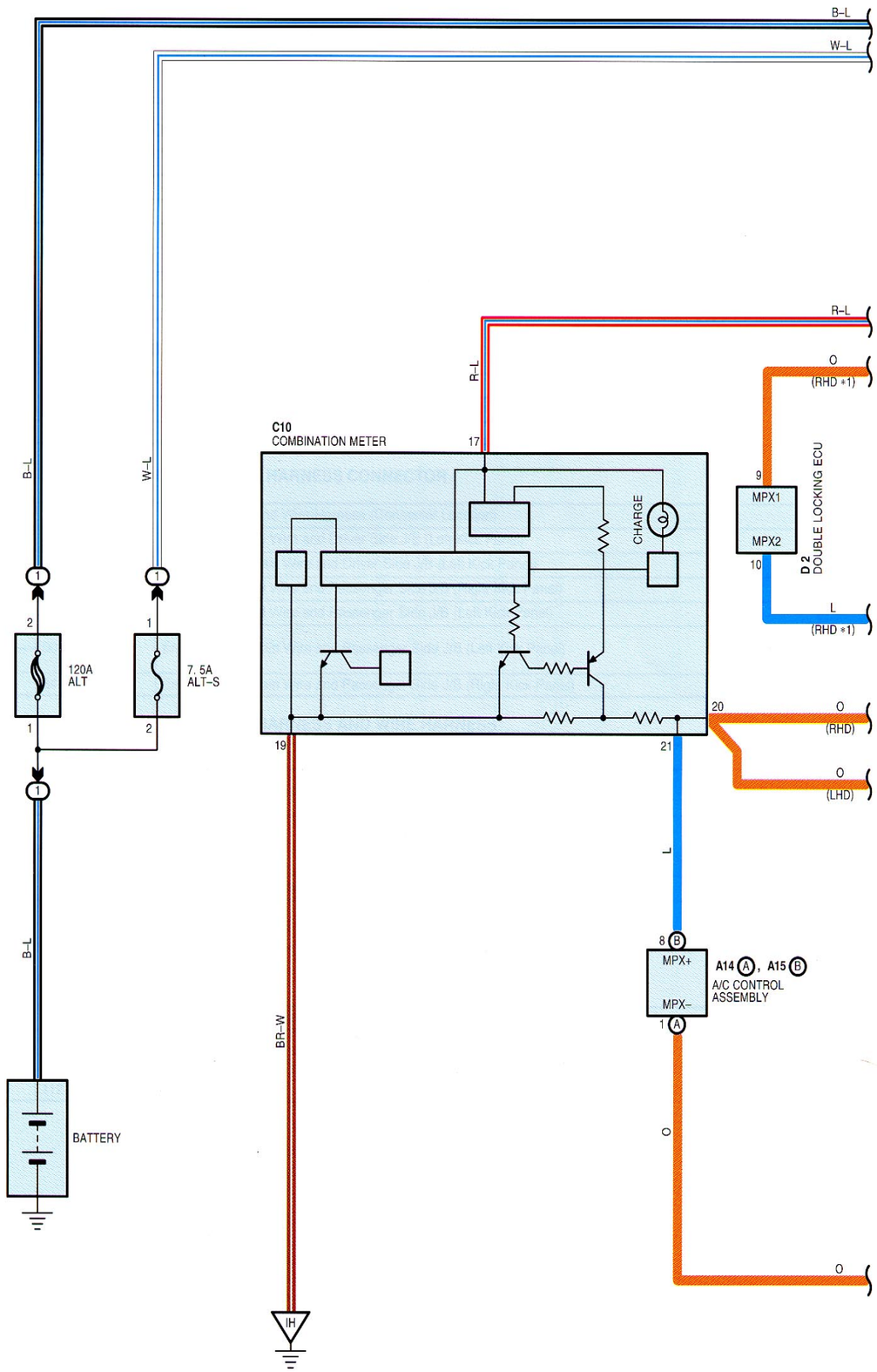
▽ : GROUND POINTS

Code	See Page	Ground Points Location
EB	112 (LHD)	Rear Side of Cylinder Head
	122 (RHD)	

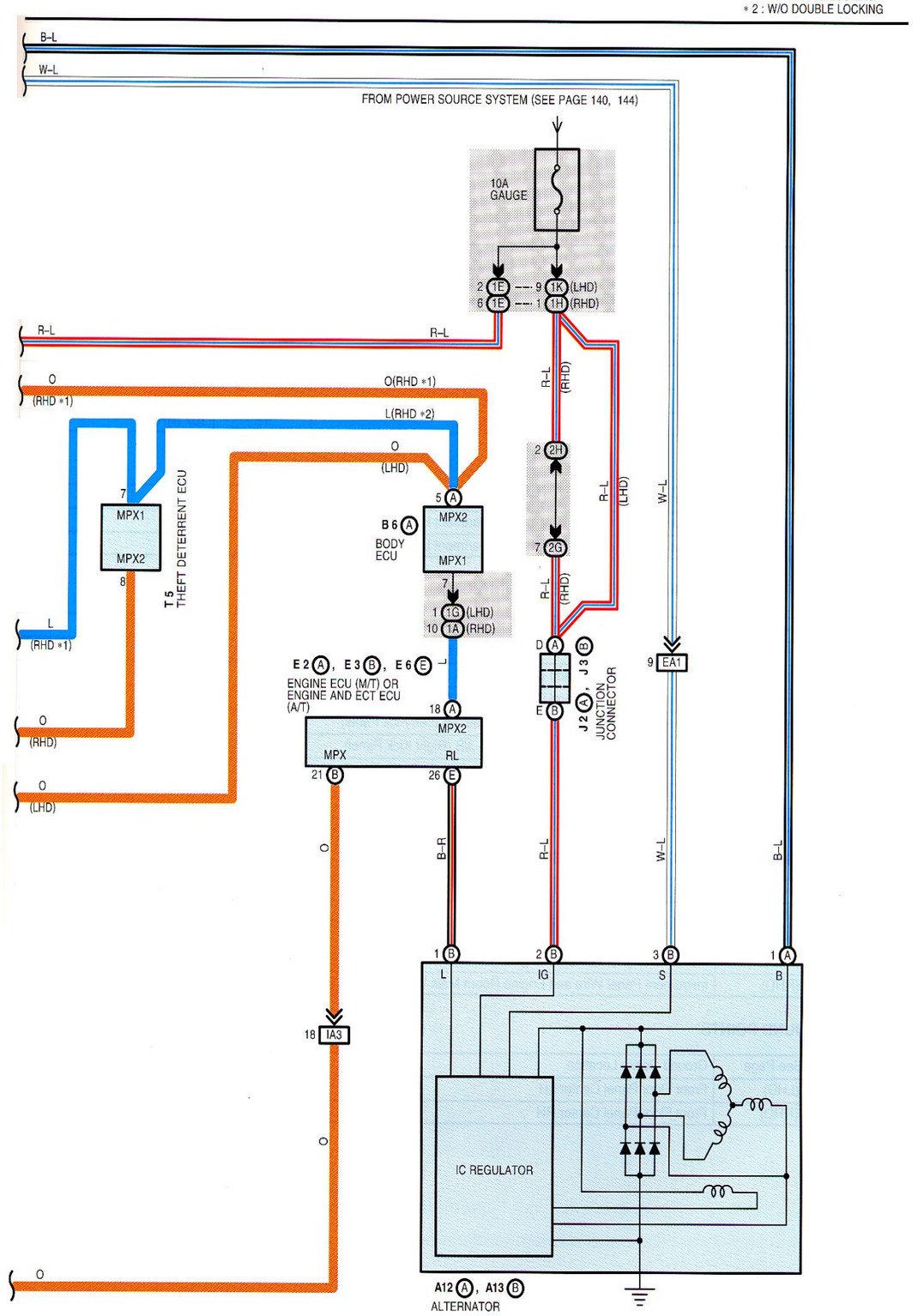
⬡ : SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	112 (LHD)	Engine Wire	E2	122 (RHD)	Engine Wire
	122 (RHD)		E3	112 (LHD)	
E2	112 (LHD)			122 (RHD)	

CHARGING



* 1 : W/ DOUBLE LOCKING
* 2 : W/O DOUBLE LOCKING



CHARGING

SERVICE HINTS

A12 (A), A13 (B) ALTERNATOR

(A) 1-GROUND : **13.9-15.1** volts with engine running at **2000** rpm and **25**°C
13.5-14.3 volts with engine running at **5000** rpm and **115**°C

(B) 3-GROUND : **0-4** volts with ignition SW at **ON** position and engine not running

: PARTS LOCATION

Code		See Page
A12	A	96 (LHD)
		104 (RHD)
A13	B	96 (LHD)
		104 (RHD)
A14	A	98 (LHD)
		106 (RHD)
A15	B	98 (LHD)
		106 (RHD)

Code		See Page
B6	A	98 (LHD)
		106 (RHD)
C10		98 (LHD)
		106 (RHD)
D2		106 (RHD)
E2	A	96 (LHD)
		104 (RHD)
E3	B	96 (LHD)

Code		See Page
E3	B	104 (RHD)
E6	E	96 (LHD)
		104 (RHD)
J2	A	97 (LHD)
		105 (RHD)
J3	B	97 (LHD)
		105 (RHD)
T5		107 (RHD)

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)
	81 (RHD)	Engine Room No.1 R/B (Engine Compartment Left)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	88 (RHD)	Engine Room Main Wire and Driver Side J/B (Right Kick Panel)
1E	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1K	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2G	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)
2H	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)

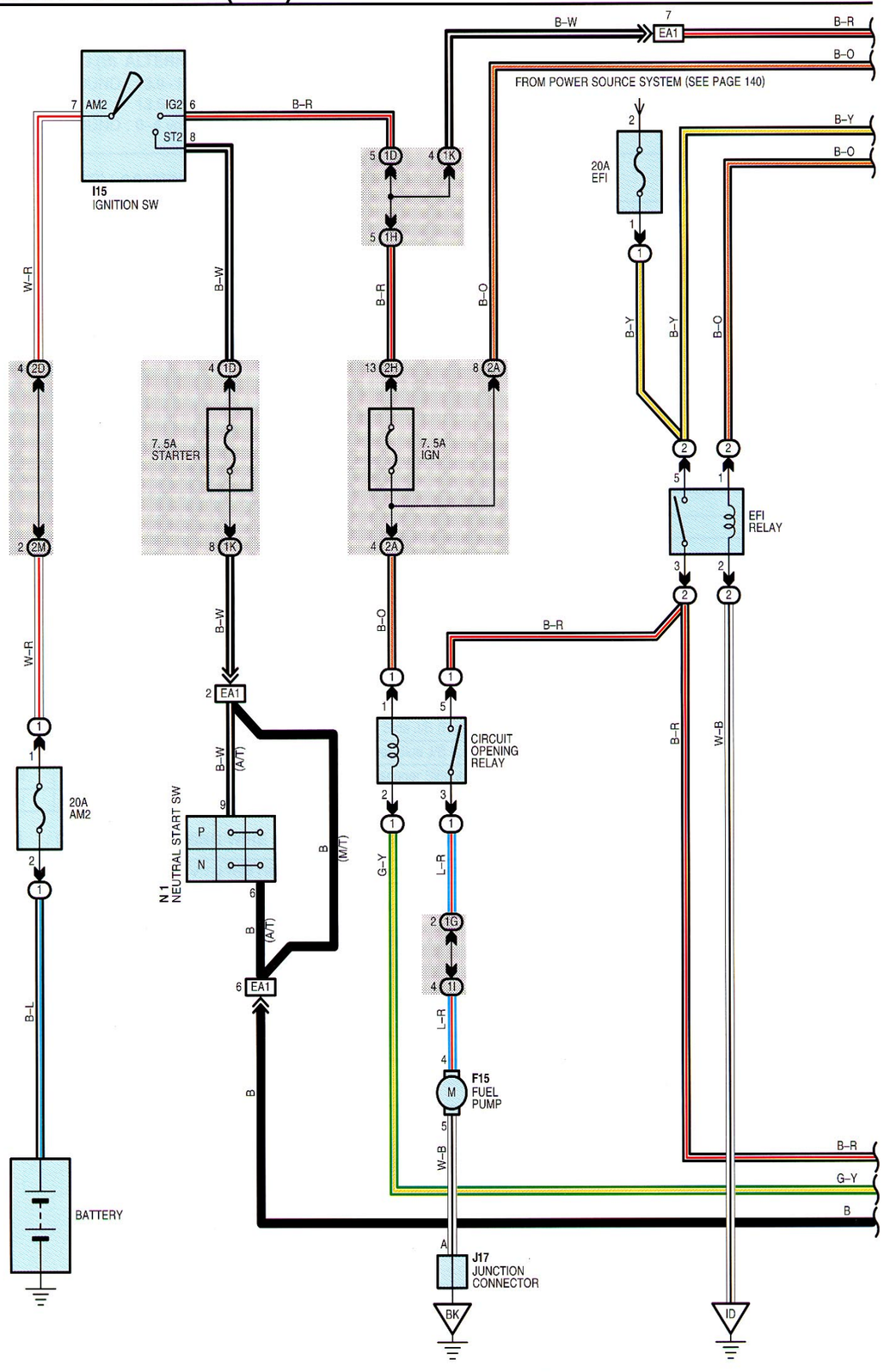
: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

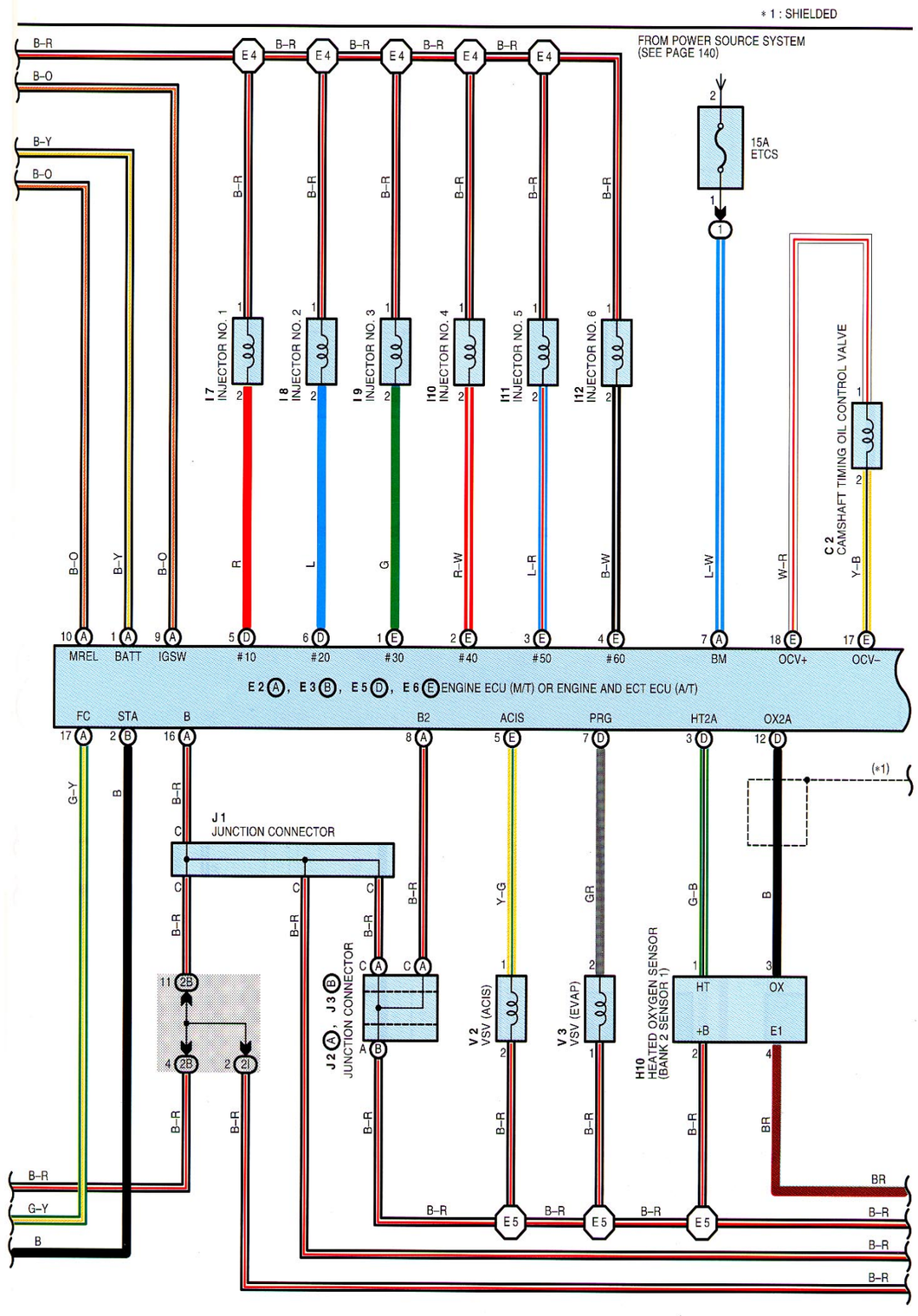
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	112 (LHD)	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
	122 (RHD)	
IA3	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
	124 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)

: GROUND POINTS

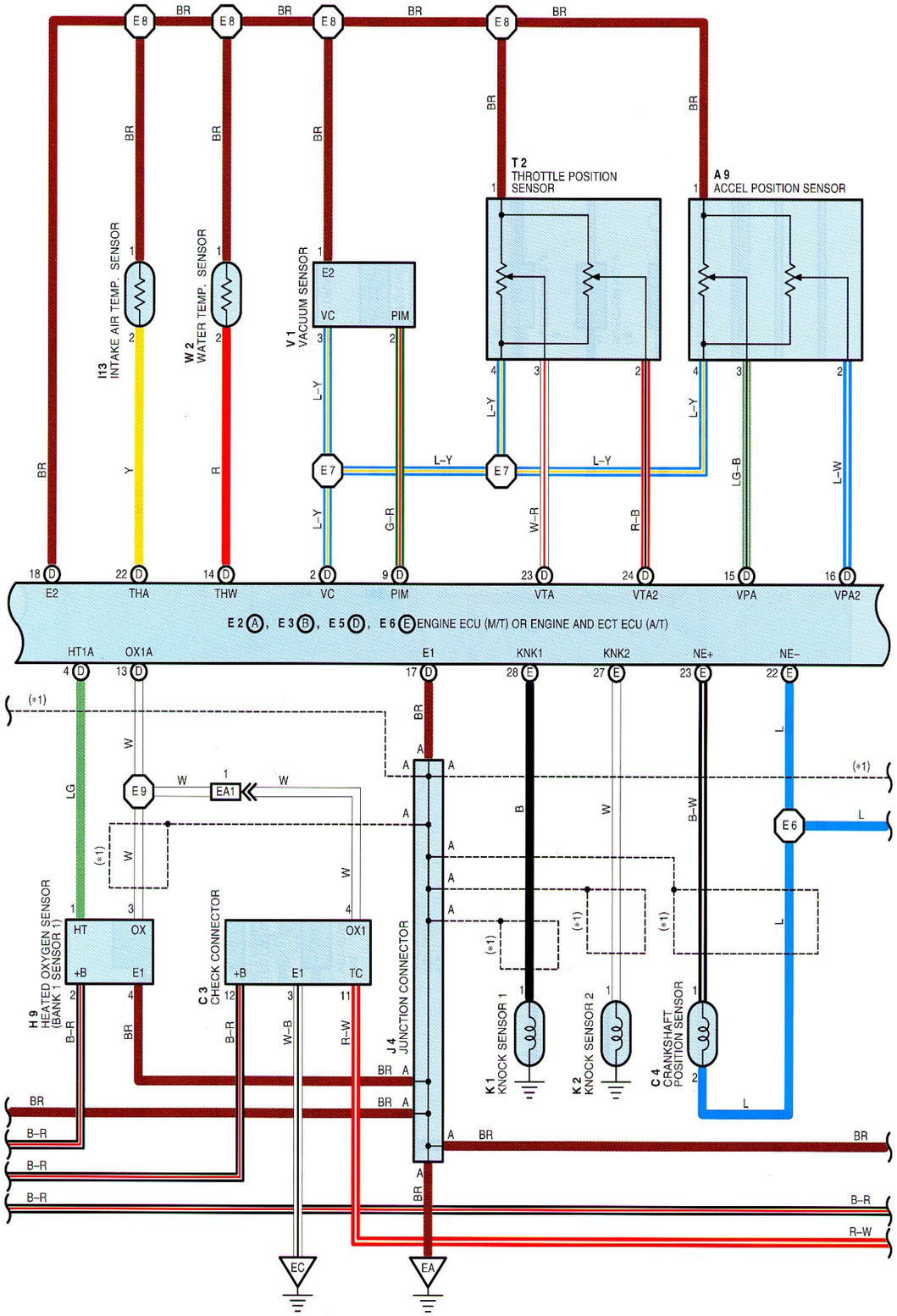
Code	See Page	Ground Points Location
IH	114 (LHD)	Front Floor Panel Center LH
	124 (RHD)	Front Floor Panel Center RH

ENGINE CONTROL (LHD)

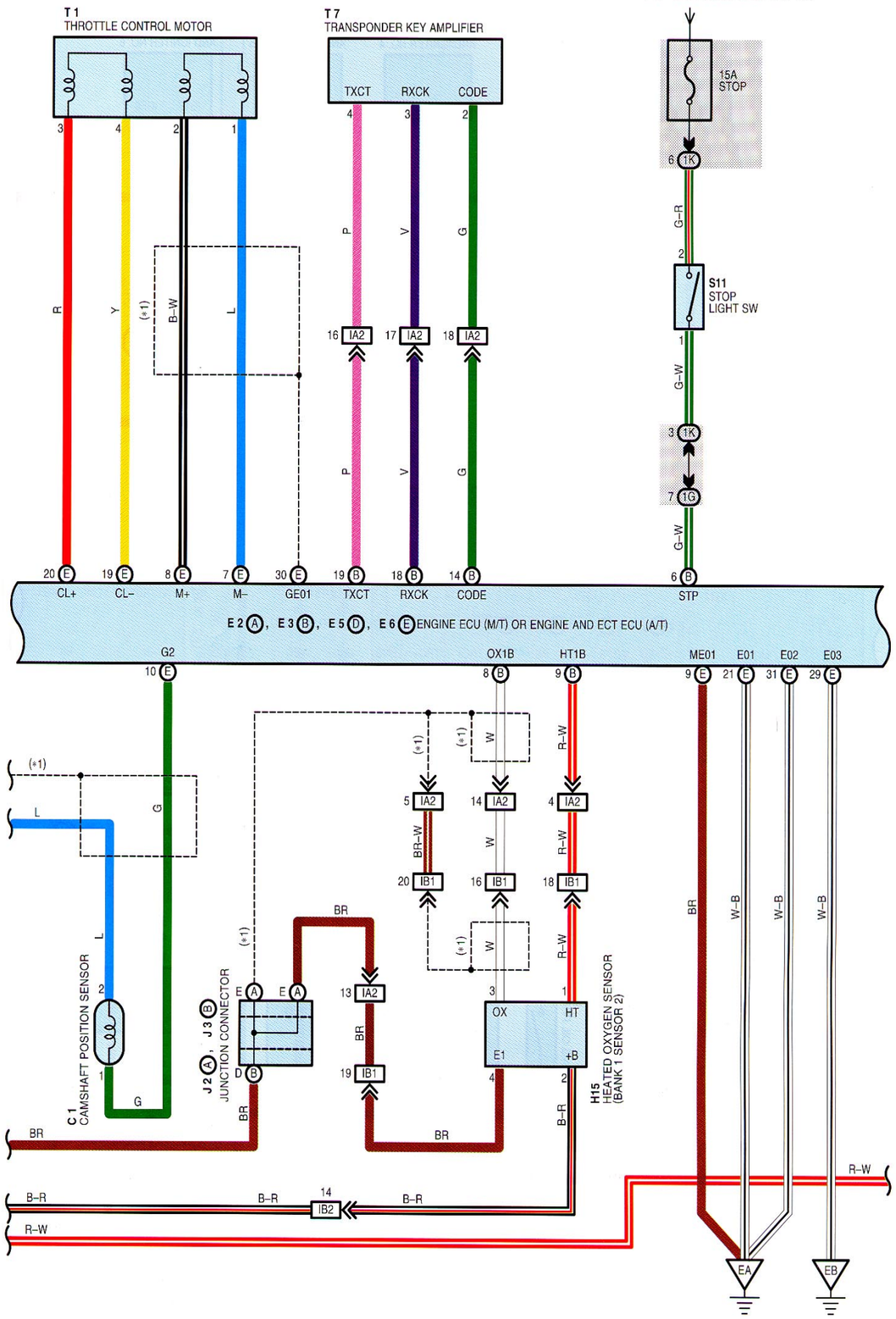




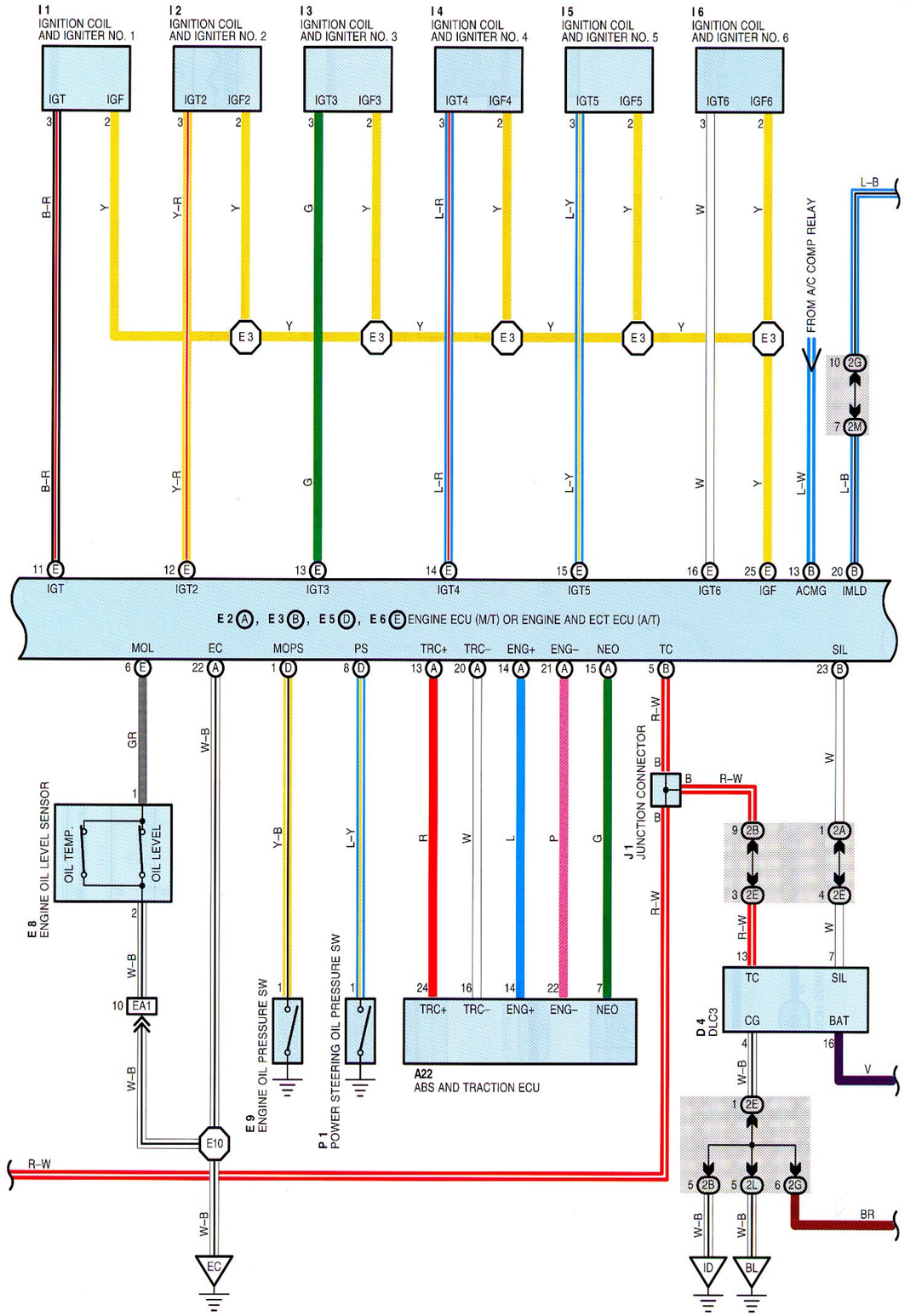
ENGINE CONTROL (LHD)



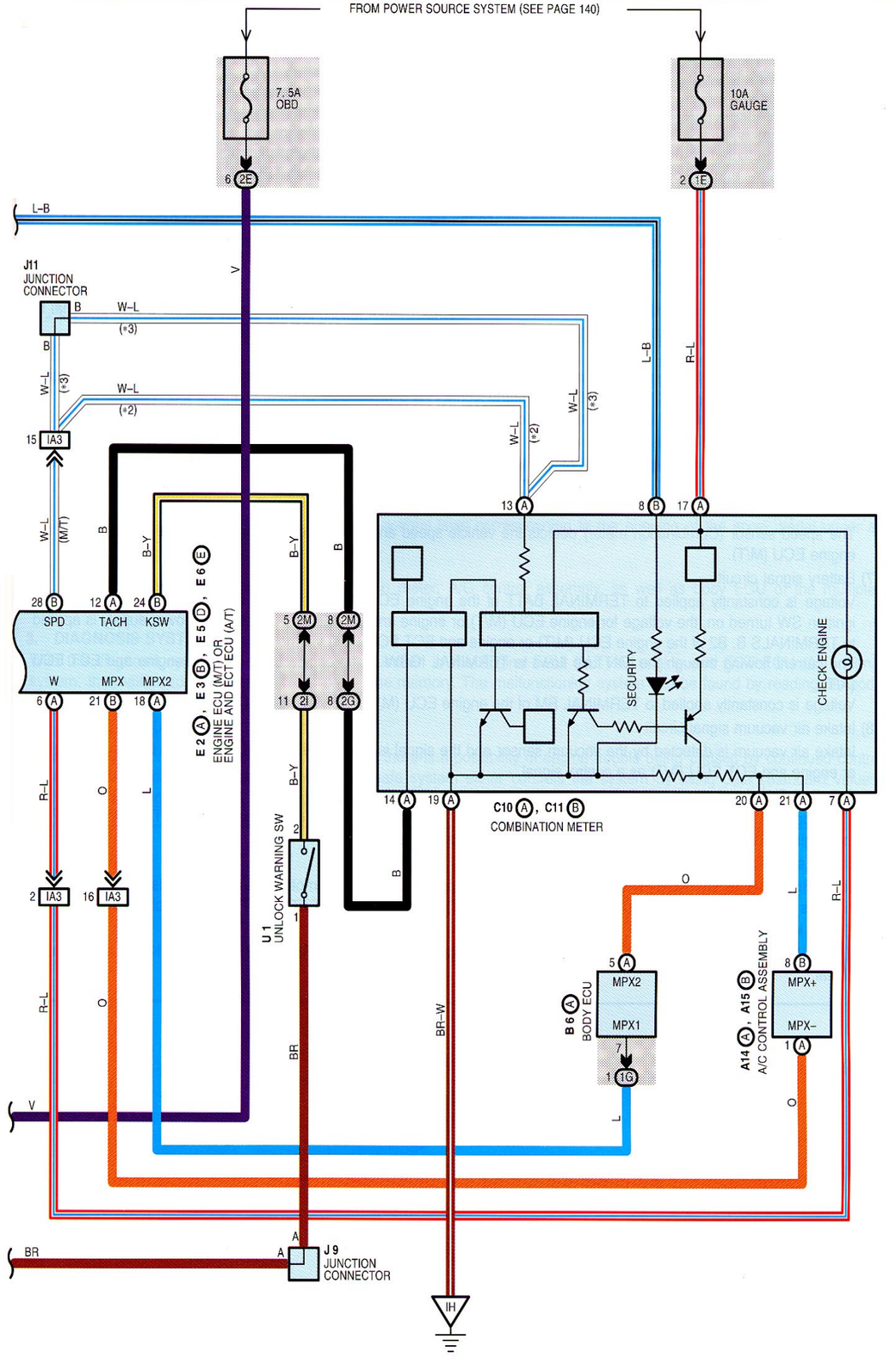
FROM POWER SOURCE SYSTEM (SEE PAGE 140)



ENGINE CONTROL (LHD)



* 2 : M/T W/O LEXUS NAVIGATION SYSTEM
* 3 : M/T W/ LEXUS NAVIGATION SYSTEM



ENGINE CONTROL (LHD)

SYSTEM OUTLINE

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

1. INPUT SIGNALS

(1) Engine coolant temp. signal circuit

The water temp. sensor detects the engine coolant temp. and has a built-in thermister with a resistance, which varies according to the engine coolant temp.. The engine coolant temp. which is input into TERMINAL THW of the engine ECU (M/T) or engine and ECT ECU (A/T) as a control signal.

(2) Intake air temp. signal circuit

The intake air temp. sensor is installed in the air flow meter and detects the intake air temp. which is input as a control signal to TERMINAL THA of the engine ECU (M/T) or engine and ECT ECU (A/T).

(3) Oxygen density signal circuit

The oxygen density in the exhaust emission is detected by the heated oxygen sensors and input as a control signal to TERMINALS OX1A, OX2A and OX1B of the engine ECU (M/T) or engine and ECT ECU (A/T).

(4) RPM signal circuit

Camshaft position is detected by the camshaft position sensor and its signal is input to TERMINAL G2 of the engine ECU (M/T) or engine and ECT ECU (A/T) as a control signal.
Also,engine RPM is detected by the crankshaft position sensor and is input as a control signal to TERMINAL NE+.

(5) Throttle position signal circuit

The throttle position sensor detects the throttle valve opening angle as a control signal, which is input into TERMINAL VTA of the engine ECU (M/T) or engine and ECT ECU (A/T).

(6) Vehicle speed circuit

The speed sensor (Combination meter) detects the vehicle speed and inputs a control signal to TERMINAL SPD of the engine ECU (M/T).

(7) Battery signal circuit

Voltage is constantly applied to TERMINAL BATT of the engine ECU (M/T) or engine and ECT ECU (A/T). With the ignition SW turned on, the voltage for engine ECU (M/T) or engine and ECT ECU (A/T) start-up power supply is applied to TERMINALS B, B2 of the engine ECU (M/T) or engine and ECT ECU (A/T) via the EFI relay.
The current flowing through the IGN fuse flows to TERMINAL IGSW of the engine ECU (M/T) or engine and ECT ECU (A/T).
Voltage is constantly applied to TERMINAL BM of the engine ECU (M/T) or engine and ECT ECU (A/T).

(8) Intake air vacuum signal circuit

Intake air vacuum is detected by the vacuum sensor and the signal is input to TERMINAL PIM of the engine ECU (M/T) or engine and ECT ECU (A/T) as a control signal.

(9) Stop light SW signal circuit

The stop light SW is used to detect whether the vehicle is braking or not and the signal is input into TERMINAL STP of the engine ECU (M/T) or engine and ECT ECU (A/T) 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 ECU (M/T) or engine and ECT ECU (A/T) as a control signal.

(11) Engine knock signal circuit

Engine knocking is detected by knock sensors and the signal is input into TERMINALS KNK1 and KNK2 as a control signal.

2. CONTROL SYSTEM

* EFI system

The EFI system monitors the engine condition through the signals input from each sensor (Input signals from (1) to (11) etc.) to the engine ECU (M/T) or engine and ECT ECU (A/T). And the control signal is output to TERMINALS #10, #20, #30, #40, #50 and #60 of the engine ECU (M/T) or engine and ECT ECU (A/T) to operate the injector (Inject the fuel). The EFI system controls the fuel injection operation by the engine ECU (M/T) or engine and ECT ECU (A/T) in response to the driving conditions.

* ESA system

The ESA system monitors the engine condition through the signals input to the engine ECU (M/T) or engine and ECT ECU (A/T) from each sensor (Input signals from (1), (2), (4), to (11) etc.). The best ignition timing is decided according to this data and the memorized data in the engine ECU (M/T) or engine and ECT ECU (A/T) and the control signal is output to TERMINALS IGT, IGT2, IGT3, IGT4, IGT5 and IGT6. This signal controls the igniter 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 oxygen sensors to improve detection performance of the sensors. The engine ECU (M/T) or engine and ECT ECU (A/T) evaluates the signals from each sensor (Input signals from (1), (2), (4), (7), to (9) etc.), and outputs current to TERMINALS HT1A, HT2A and HT1B to control the heater.

* ACIS

ACIS includes a valve in the bulkhead separating the surge tank into two parts. This valve is opened and closed in accordance with the driving conditions to control the intake manifold length in two stages for increased engine output in all ranges from low to high speeds.

* ETCS-i

The ETCS-i controls the engine output at its optimal level corresponding to the opening of the accel. pedal under all driving conditions.

* MPX

The MPX communicates with the combination meter, A/C control assembly, as well as body ECU of the multiplex communication system

3. DIAGNOSIS SYSTEM

With the diagnosis system, when there is a malfunction in the engine ECU (M/T) or engine and ECT ECU (A/T) signal system, the malfunctioning system is recorded in the memory. The malfunctioning system can be found by reading the code displayed by the check engine warning light.

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 ECU (M/T) or engine and ECT ECU (A/T) memory or else stops the engine.

ENGINE CONTROL (LHD)

SERVICE HINTS

EFI RELAY

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

E8 ENGINE OIL LEVEL SENSOR

1-2 : Closed with float up and engine oil temp. at below approx. **50**°C
Open with float down and engine oil temp. at above approx. **60**°C

E9 ENGINE OIL PRESSURE SW

1-GROUND : With oil pressure below approx. **0.2** kgf/cm^2 (**2.8** psi, **20** kpa)

W2 WATER TEMP. SENSOR

1-2 : Approx. **15.0** kΩ (**-20**°C)
Approx. **2.45** kΩ (**20**°C)
Approx. **0.32** kΩ (**80**°C)
Approx. **0.14** kΩ (**110**°C)

E2 (A), E3 (B), E5 (D), E6 (E) ENGINE ECU (M/T) OR ENGINE AND ECT ECU (A/T)

BATT-GROUND : Always approx. **12** volts
BM-GROUND : Always approx. **12** volts
IGSW-GROUND : Approx. **12** volts with ignition SW at **ON** or **ST** position
B, B2-GROUND : Approx. **12** volts with ignition SW at **ON** or **ST** position
VC-GROUND : **4.5-5.5** volts with ignition SW on
VTA2-GROUND : **2.0-2.9** volts with ignition SW on and throttle valve fully closed
4.6-5.0 volts with ignition SW on and throttle valve fully opened
VTA-GROUND : **0.4-1.0** volts with ignition SW on and throttle valve fully closed
3.2-4.8 volts with ignition SW on and throttle valve fully opened
VPA-GROUND : **0.25-0.9** volts with ignition SW at on and accelerator fully closed
3.2-4.8 volts with ignition SW at on and accelerator fully opened
VPA2-GROUND : **1.8-2.7** volts with ignition SW at on and accelerator fully closed
4.7-5.0 volts with ignition SW at on and accelerator fully opened
THA-GROUND : **0.5-3.4** volts with idling, intake air temp. **20**°C
THW-GROUND : **0.2-1.0** volts with idling, coolant temp. **80**°C
STA-GROUND : **6.0** volts or more with cranking
TC-GROUND : **9.0-14.0** volts with ignition SW on
W-GROUND : **9.0-14.0** volts with idling
0-3.0 volts with ignition SW on
ACMG-GROUND : **0-1.5** volts with A/C SW on (at idling)
7.5-14.0 volts with A/C SW off and throttle valve fully open
#10, #20, #30, #40, #50, #60-GROUND : **9.0-14.0** volts with ignition SW on pulse generation with idling

I7, I8, I9, I10, I11, I12 INJECTOR NO.1, NO.2, NO.3, NO.4, NO.5, NO.6

1-2 : **13.4-14.2** Ω

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A9	96 (LHD)	H9	97 (LHD)	J3 B	97 (LHD)
A14 A	98 (LHD)	H10	97 (LHD)	J4	97 (LHD)
A15 B	98 (LHD)	H15	100 (LHD)	J9	99 (LHD)
A22	98 (LHD)	I1	97 (LHD)	J11	99 (LHD)
B6 A	98 (LHD)	I2	97 (LHD)	J17	100 (LHD)
C1	96 (LHD)	I3	97 (LHD)	K1	97 (LHD)
C2	96 (LHD)	I4	97 (LHD)	K2	97 (LHD)
C3	96 (LHD)	I5	97 (LHD)	N1	97 (LHD)
C4	96 (LHD)	I6	97 (LHD)	P1	97 (LHD)
C10 A	98 (LHD)	I7	97 (LHD)	S11	99 (LHD)
C11 B	98 (LHD)	I8	97 (LHD)	T1	97 (LHD)
D4	98 (LHD)	I9	97 (LHD)	T2	97 (LHD)
E2 A	96 (LHD)	I10	97 (LHD)	T7	99 (LHD)
E3 B	96 (LHD)	I11	97 (LHD)	U1	99 (LHD)
E5 D	96 (LHD)	I12	97 (LHD)	V1	97 (LHD)
E6 E	96 (LHD)	I13	97 (LHD)	V2	97 (LHD)
E8	96 (LHD)	I15	99 (LHD)	V3	97 (LHD)
E9	96 (LHD)	J1	97 (LHD)	W2	97 (LHD)
F15	100 (LHD)	J2 A	97 (LHD)		

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)
2	80 (LHD)	Engine Room No.2 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1E		
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1I	82 (LHD)	Floor No.2 Wire and Driver Side J/B (Left Kick Panel)
1K	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2A	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2B		
2D	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2E		
2G		
2H		
2I		
2L	84 (LHD)	Floor Wire and Passenger Side J/B (Right Kick Panel)
2M	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	112 (LHD)	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
IA2	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IA3		
IB1	114 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
IB2		

ENGINE CONTROL (LHD)

▽ : **GROUND POINTS**

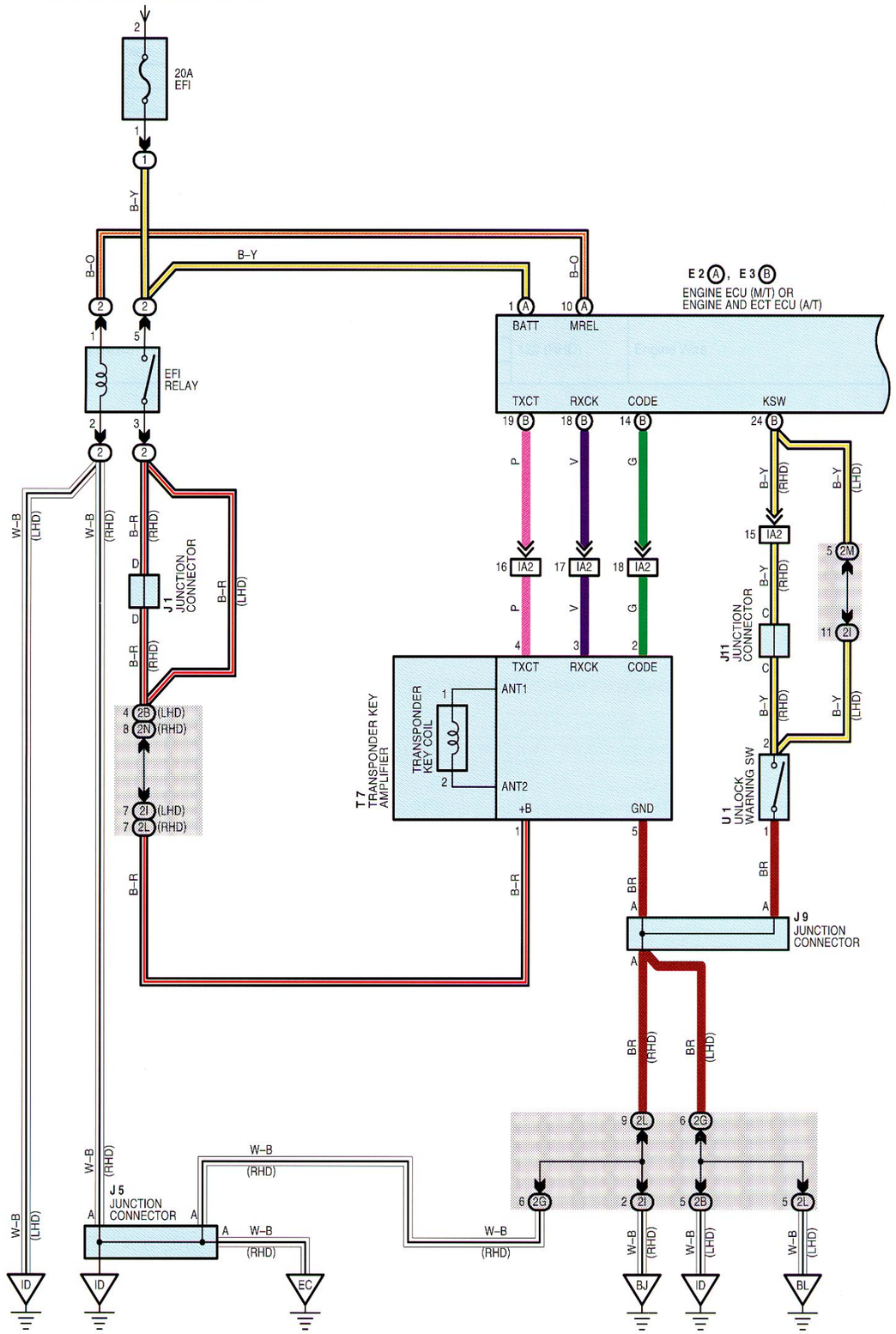
Code	See Page	Ground Points Location
EA	112 (LHD)	Front Side of Cylinder Head
EB	112 (LHD)	Rear Side of Cylinder Head
EC	112 (LHD)	Left Fender Apron
ID	114 (LHD)	Cowl Side Panel LH
IH	114 (LHD)	Front Floor Panel Center LH
BK	118 (LHD)	Left Quarter Panel LH
BL	118 (LHD)	Front Floor Panel RH

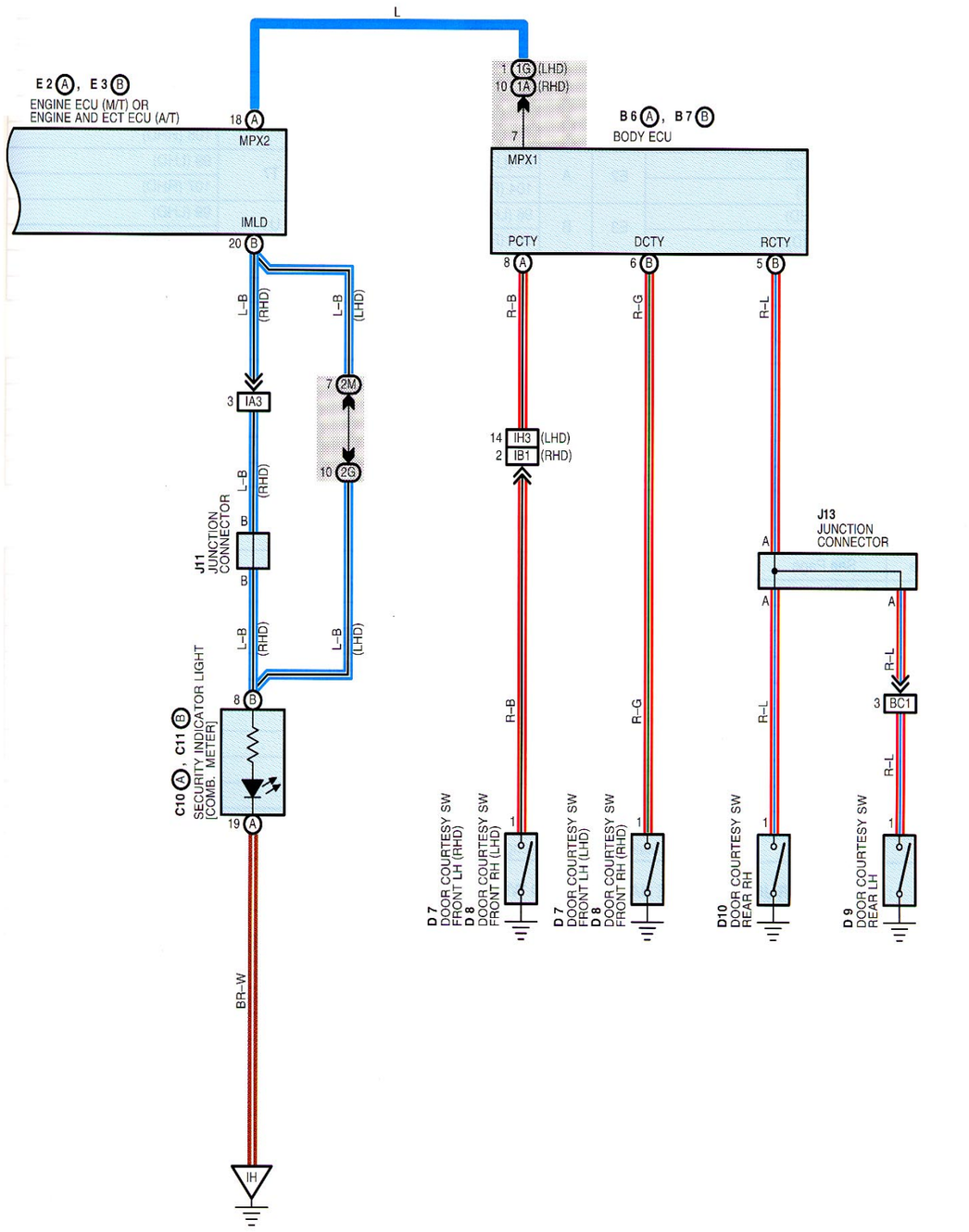
○ : **SPLICE POINTS**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E3	112 (LHD)	Engine Wire	E7	112 (LHD)	Engine Wire
E4			E8		
E5			E9		
E6			E10	112 (LHD)	Engine Room Main Wire

ENGINE IMMOBILISER SYSTEM

FROM POWER SOURCE SYSTEM (SEE PAGE 140, 144)





ENGINE IMMOBILISER SYSTEM

SERVICE HINTS

EFI RELAY

5–3 : Closed with the ignition SW at **ON** position

U1 UNLOCK WARNING SW

1–2 : Closed with ignition key in cylinder

○ : PARTS LOCATION

Code		See Page	Code		See Page	Code	See Page
B6	A	98 (LHD)	D8		108 (RHD)	J9	99 (LHD)
		106 (RHD)	D9		100 (LHD)		107 (RHD)
B7	B	98 (LHD)			108 (RHD)	J11	107 (RHD)
		106 (RHD)	D10		100 (LHD)	J13	100 (LHD)
C10	A	98 (LHD)			108 (RHD)		108 (RHD)
		106 (RHD)	E2	A	96 (LHD)	T7	99 (LHD)
C11	B	98 (LHD)			104 (RHD)		107 (RHD)
		106 (RHD)	E3	B	96 (LHD)	U1	99 (LHD)
D7		100 (LHD)			104 (RHD)		107 (RHD)
		108 (RHD)	J1		105 (RHD)		
D8		100 (LHD)	J5		107 (RHD)		

⬭ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)
	81 (RHD)	Engine Room No.1 R/B (Engine Compartment Left)
2	80 (LHD)	Engine Room No.2 R/B (Engine Compartment Right)
	81 (RHD)	Engine Room No.2 R/B (Engine Compartment Left)

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	88 (RHD)	Engine Room Main Wire and Driver Side J/B (Right Kick Panel)
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2G	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)
2I	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Floor No.2 Wire and Passenger Side J/B (Left Kick Panel)
2L	84 (LHD)	Floor Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2M	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2N	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)

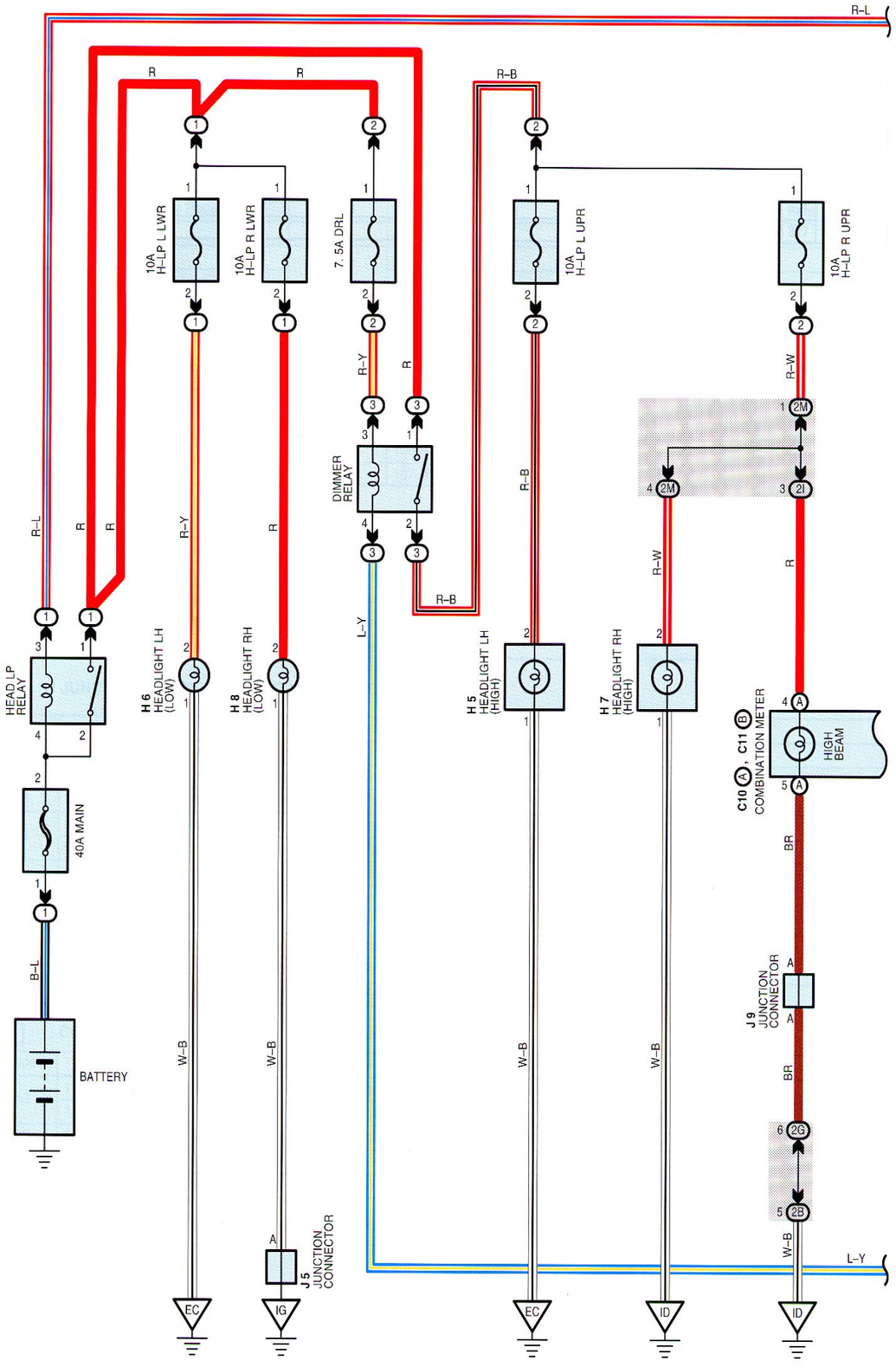
□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

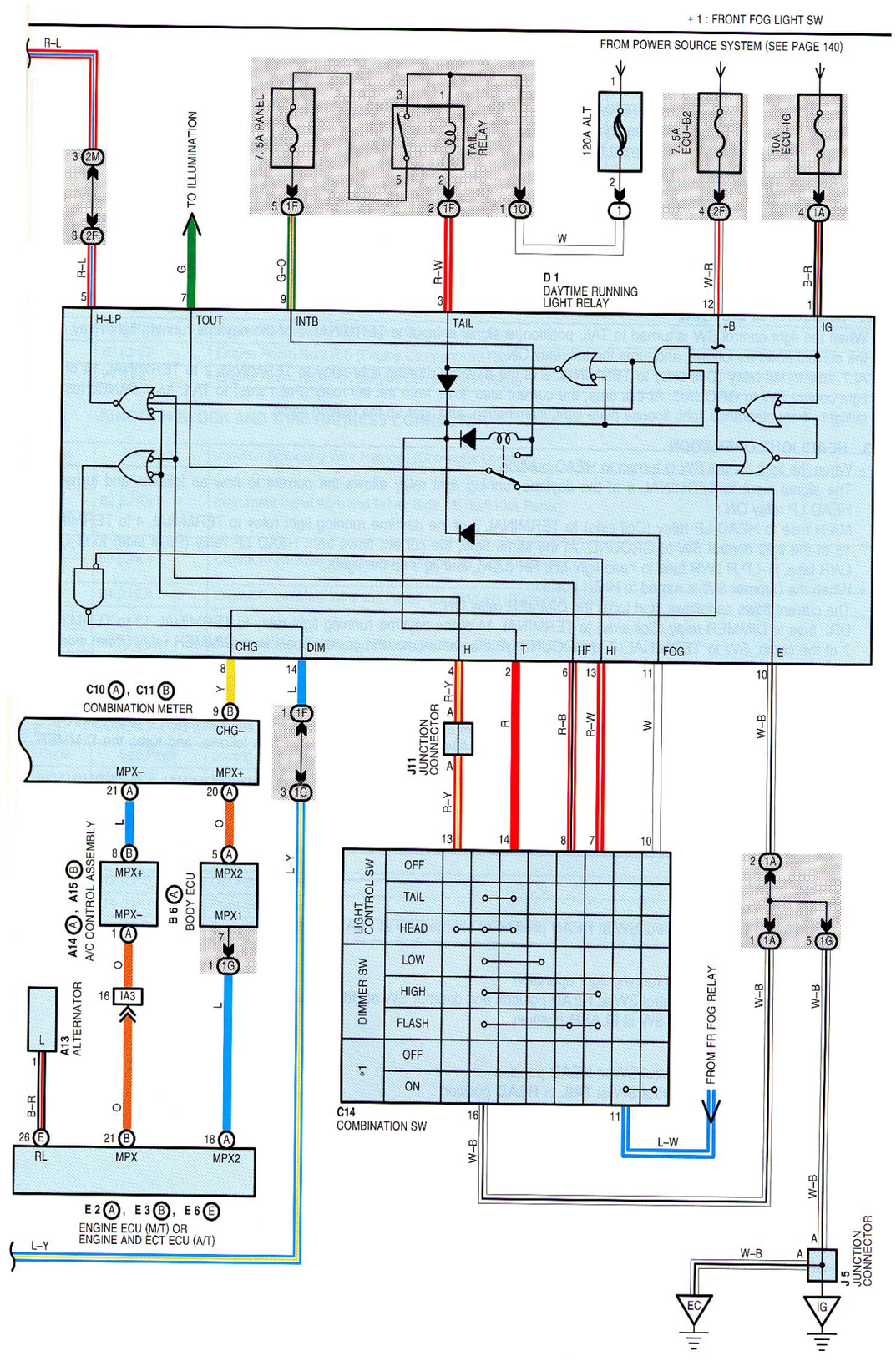
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
	124 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
IA3	124 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
IB1	124 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Passenger Side J/B)
IH3	116 (LHD)	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
BC1	118 (LHD)	Floor No.2 Wire and Floor Wire (Under the Right Rear Cushion)
	128 (RHD)	

▽ : GROUND POINTS

Code	See Page	Ground Points Location
EC	122 (RHD)	Left Fender Apron
ID	114 (LHD)	Cowl Side Panel LH
	124 (RHD)	
IH	114 (LHD)	Front Floor Panel Center LH
	124 (RHD)	Front Floor Panel Center RH
BJ	128 (RHD)	Front Floor Panel LH
BL	118 (LHD)	Front Floor Panel RH

HEADLIGHT (w/ DAYTIME RUNNING LIGHT)





HEADLIGHT (w/ DAYTIME RUNNING LIGHT)

SYSTEM OUTLINE

Current is constantly applied from the battery as follows :
ALT fuse to tail relay (Coil side) to TERMINAL 3 of the daytime running light relay. MAIN fuse to HEAD LP relay (Coil side) to TERMINAL 5 of the daytime running light relay. ECU-B2 fuse to TERMINAL 12 of the daytime running light relay. When the ignition SW is turned to ON, the current flows from ECU-IG fuse to TERMINAL 1 of the daytime running light relay.

1. DAYTIME RUNNING LIGHT OPERATION

When the engine is started, a signal from the alternator is input to TERMINAL 5 of the daytime running light relay. This activates the daytime running light relay, allowing the current to flow as follows, and light up the related lights :
Tail relay (Point side) to TAIL fuse, PANEL fuse to taillight, front clearance light, license plate light, illumination. As the same time, the current also flows from HEAD LP relay (Point side) to H-LP L LWR fuse, H-LP R LWR fuse to headlight LH, RH (Low), and light up the headlights.

2. TAILLIGHT OPERATION

When the light control SW is turned to TAIL position, a signal is input to TERMINAL 2 of the daytime running light relay, and the current flows as follows, and turns the tail relay ON :
ALT fuse to tail relay (Coil side) to TERMINAL 3 of the daytime running light relay to TERMINAL 2 to TERMINAL 14 of the light control SW to GROUND. At this time, the current also flows from the tail relay (Point side) to TAIL fuse, PANEL fuse to taillight , front clearance light, license plate light, illumination, and light up the related lights.

3. HEADLIGHT OPERATION

* When the light control SW is turned to HEAD position
  The signal input to TERMINAL 5 of the daytime running light relay allows the current to flow as follows, and turns the HEAD LP relay ON :
  MAIN fuse to HEAD LP relay (Coil side) to TERMINAL 5 of the daytime running light relay to TERMINAL 4 to TERMINAL 13 of the light control SW to GROUND. At the same time, the current flows from HEAD LP relay (Point side) to H-LP L LWR fuse, H-LP R LWR fuse to head light LH, RH (Low), and light up the lights.
* When the Dimmer SW is turned to HIGH position
  The current flows as follows, and turns the DIMMER relay ON :
  DRL fuse to DIMMER relay (Coil side) to TERMINAL 14 of the daytime running light relay to TERMINAL 13 to TERMINAL 7 of the comb. SW to TERMINAL16 to GROUND. At the same time, the current flows from DIMMER relay (Point side) to HEAD L UPR fuse, HEAD R UPR fuse to headlight LH, RH (High), and light up the lights.
* When the Dimmer SW is turned to FLASH position
  The current flows as follows, and turns the HEAD LP relay ON :
  MAIN fuse to HEAD LP relay (Coil side) to TERMINAL 5 of the daytime running light relay to TERMINAL 6 to TERMINAL 8 of the comb. SW to TERMINAL 16 to GROUND. At the same time, the current flows as follows, and turns the DIMMER relay ON :
  DRL fuse to DIMMER relay (Coil side) to TERMINAL 14 of the daytime running light relay to TERMINAL 6 to TERMINAL 8 of the comb. SW to TERMINAL 16 to GROUND. This lights up the headlight LH, RH (High) and headlight LH, RH (Low), as when the dimmer SW is turned to HIGH position.

SERVICE HINTS

HEAD LP RELAY
1-2 : Closed with light control SW at **HEAD** position or dimmer SW at **FLASH** position

DIMMER RELAY
1-2 : Closed with daytime running light operation
Closed with light control SW at **HEAD** position and dimmer SW at **HIGH** position
Closed with dimmer SW at **FLASH** position

C14 COMBINATION SW
13-16 : Closed with light control SW at **HEAD** position
14-16 : Closed with light control SW at **TAIL** or **HEAD** position
8-16 : Closed with dimmer SW at **FLASH** position
7-16 : Closed with dimmer SW at **HIGH** or **FLASH** position

D1 DAYTIME RUNNING LIGHT RELAY
12-GROUND : Always approx. **12** volts
10-GROUND : Always continuity
4-GROUND : Continuity with the light control SW at **HEAD** position
2-GROUND : Continuity with the light control SW at **TAIL** or **HEAD** position
6-GROUND : Continuity with the light control SW at **FLASH** position
13-GROUND : Continuity with the light control SW at **HIGH** or **FLASH** position
1-GROUND : Approx. **12** volts with the ignition SW at **ON** position

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A13	96 (LHD)	C14	98 (LHD)	H6	97 (LHD)
A14 A	98 (LHD)	D1	98 (LHD)	H7	97 (LHD)
A15 B	98 (LHD)	E2 A	96 (LHD)	H8	97 (LHD)
B6 A	98 (LHD)	E3 B	96 (LHD)	J5	99 (LHD)
C10 A	98 (LHD)	E6 E	96 (LHD)	J9	99 (LHD)
C11 B	98 (LHD)	H5	97 (LHD)	J11	99 (LHD)

▢ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)
2	80 (LHD)	Engine Room No.2 R/B (Engine Compartment Right)
3	94 (LHD)	Engine Room No.3 R/B (Engine Compartment Right)

▢ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1E		
1F		
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1O		
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2F	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G		
2I		
2M	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)

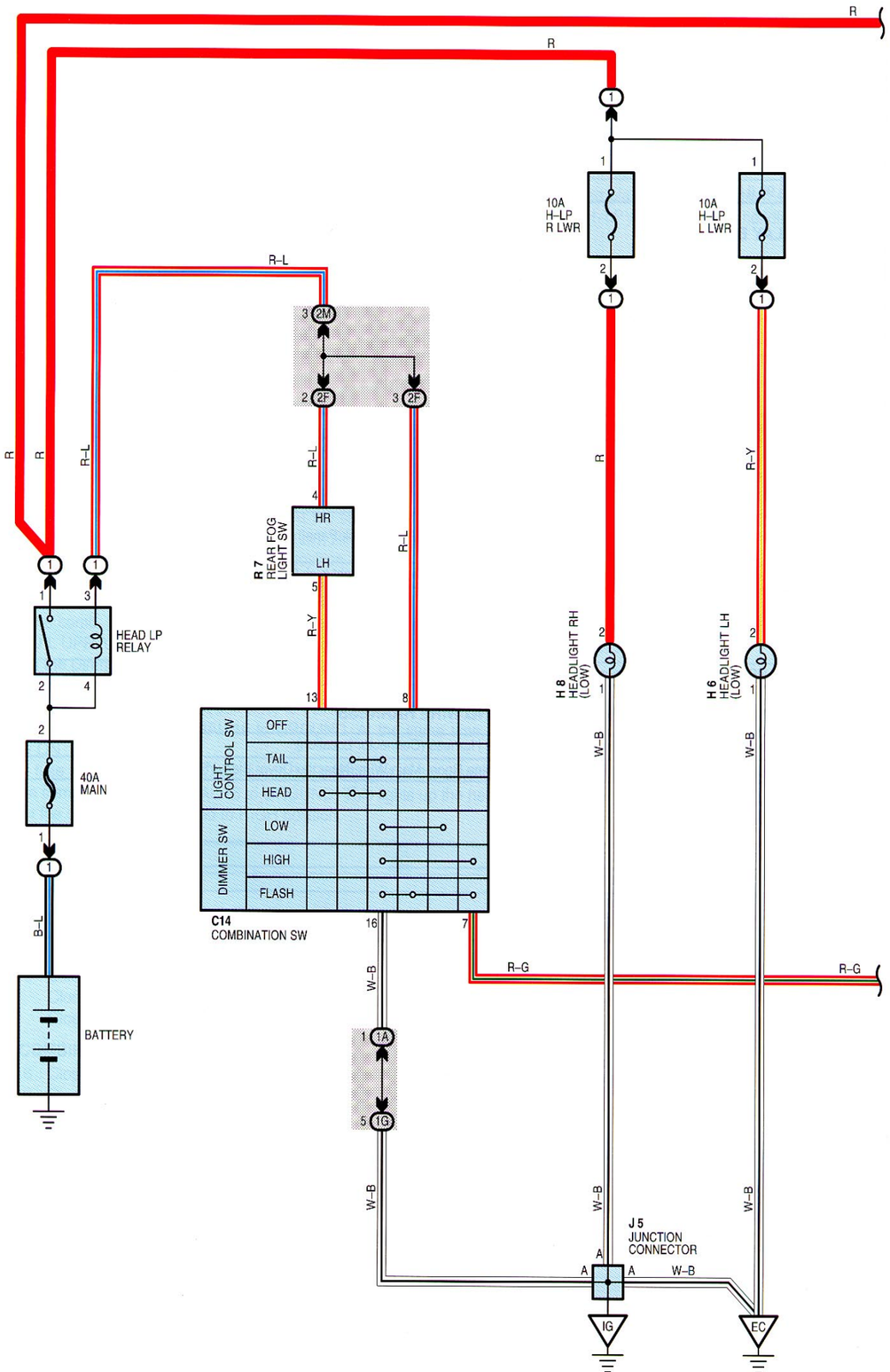
▢ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

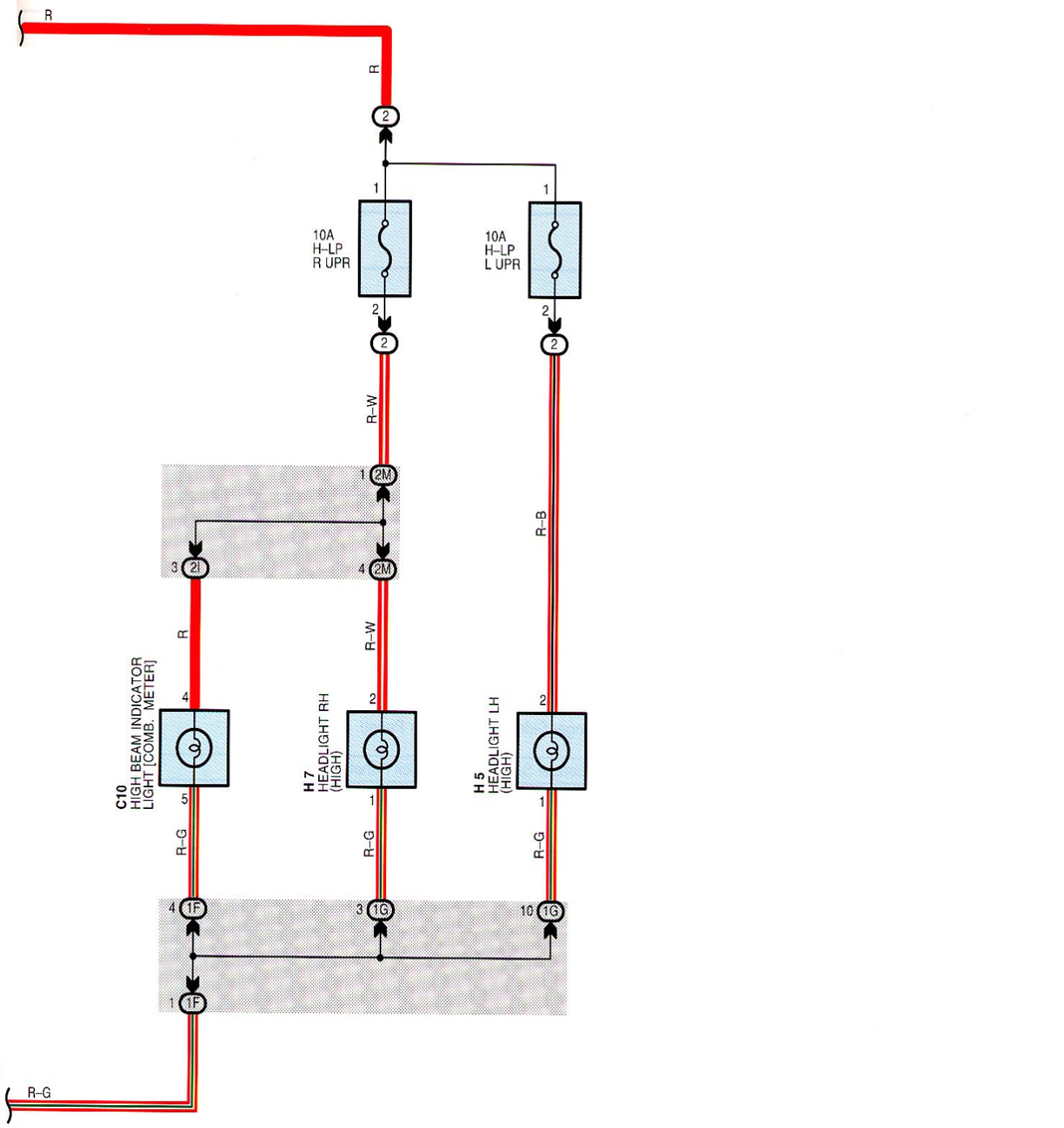
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA3	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)

▽ : GROUND POINTS

Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
ID	114 (LHD)	Cowl Side Panel LH
IG	114 (LHD)	Cowl Side Panel RH

HEADLIGHT (LHD w/o DAYTIME RUNNING LIGHT)





HEADLIGHT (LHD w/o DAYTIME RUNNING LIGHT)

SERVICE HINTS

HEAD LP RELAY

1–2 : Closed with the light control SW at **HEAD** position or the dimmer SW at **FLASH** position

C14 COMBINATION SW

7–16 : Closed with the dimmer SW at **HIGH** or **FLASH** position
8–16 : Closed with the dimmer SW at **FLASH** position
13–16 : Closed with the light control SW at **HEAD** position

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C10	98 (LHD)	H6	97 (LHD)	J5	99 (LHD)
C14	98 (LHD)	H7	97 (LHD)	R7	99 (LHD)
H5	97 (LHD)	H8	97 (LHD)		

▭ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)
2	80 (LHD)	Engine Room No.2 R/B (Engine Compartment Right)

▭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1F		
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2F	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2I		
2M	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)

▽ : GROUND POINTS

Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
IG	114 (LHD)	Cowl Side Panel RH

HEADLIGHT (RHD)

SERVICE HINTS

HEAD LP RELAY

1–2 : Closed with the light control SW at **HEAD** position or the dimmer SW at **FLASH** position

C14 (A), (B) COMBINATION SW

(A) 7, (B) 2–(A)16, (B)17 : Closed with the dimmer SW at **HIGH** or **FLASH** position
(A) 8, (B) 1–(A)16, (B)17 : Closed with the light control SW at **FLASH** position
(A)13, (B)15–(A)16, (B)17 : Closed with the dimmer SW at **HEAD** position

○ : PARTS LOCATION

Code		See Page	Code	See Page	Code	See Page
C10		106 (RHD)	H6	105 (RHD)	J9	107 (RHD)
C14	A	106 (RHD)	H7	105 (RHD)	R7	107 (RHD)
	B	106 (RHD)	H8	105 (RHD)	T4	107 (RHD)
H5		105 (RHD)	J5	107 (RHD)		

▭ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	81 (RHD)	Engine Room No.1 R/B (Engine Compartment Left)
2	81 (RHD)	Engine Room No.2 R/B (Engine Compartment Left)

▭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

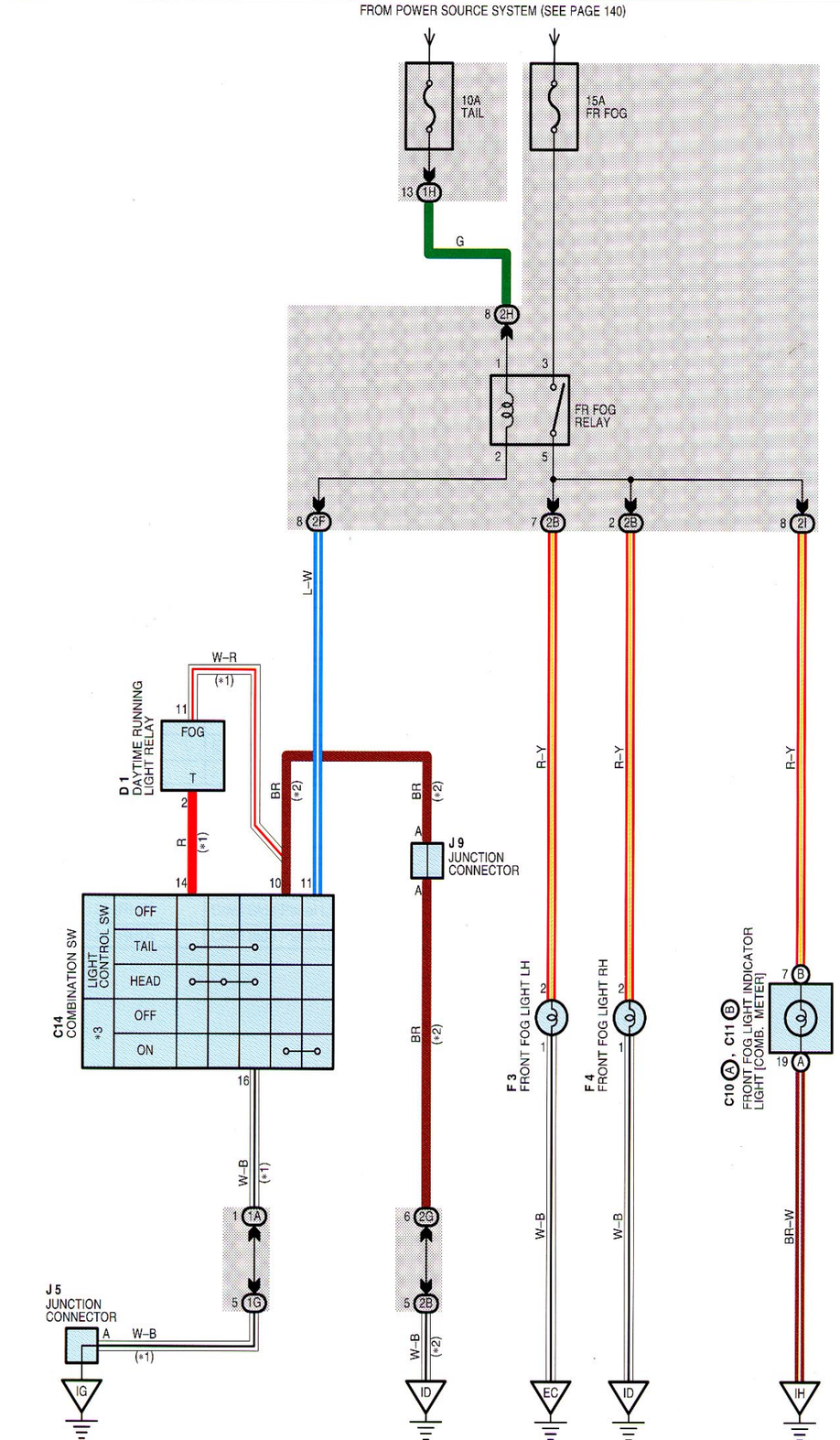
Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	88 (RHD)	Engine Room Main Wire and Driver Side J/B (Right Kick Panel)
1B		
1E	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1F		
1G		
2G	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)
2L	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)

▽ : GROUND POINTS

Code	See Page	Ground Points Location
EC	122 (RHD)	Left Fender Apron
ID	124 (RHD)	Cowl Side Panel LH
IF	124 (RHD)	Cowl Side Panel RH

FRONT FOG LIGHT (LHD)

* 1 : W/ DAYTIME RUNNING LIGHT
* 2 : W/O DAYTIME RUNNING LIGHT
* 3 : FRONT FOG LIGHT SW



SERVICE HINTS

FR FOG RELAY

5–3 : Closed with the light control SW at **TAIL** or **HEAD** position and the fog light SW at **ON** position

○ : PARTS LOCATION

Code		See Page	Code	See Page	Code	See Page
C10	A	98 (LHD)	D1	98 (LHD)	J5	99 (LHD)
C11	B	98 (LHD)	F3	96 (LHD)	J9	99 (LHD)
C14		98 (LHD)	F4	96 (LHD)		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

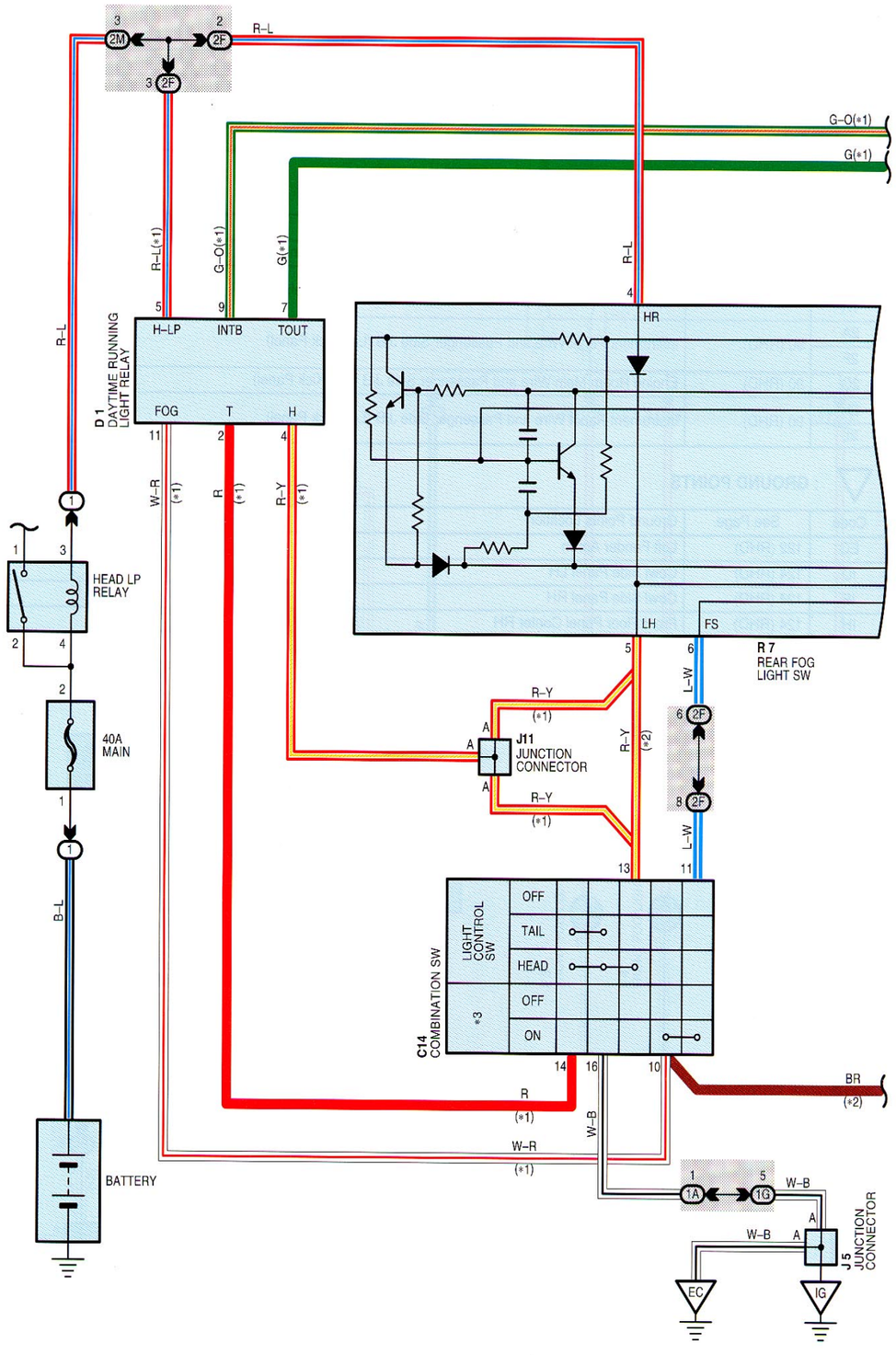
Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2F	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G		
2H		
2I		

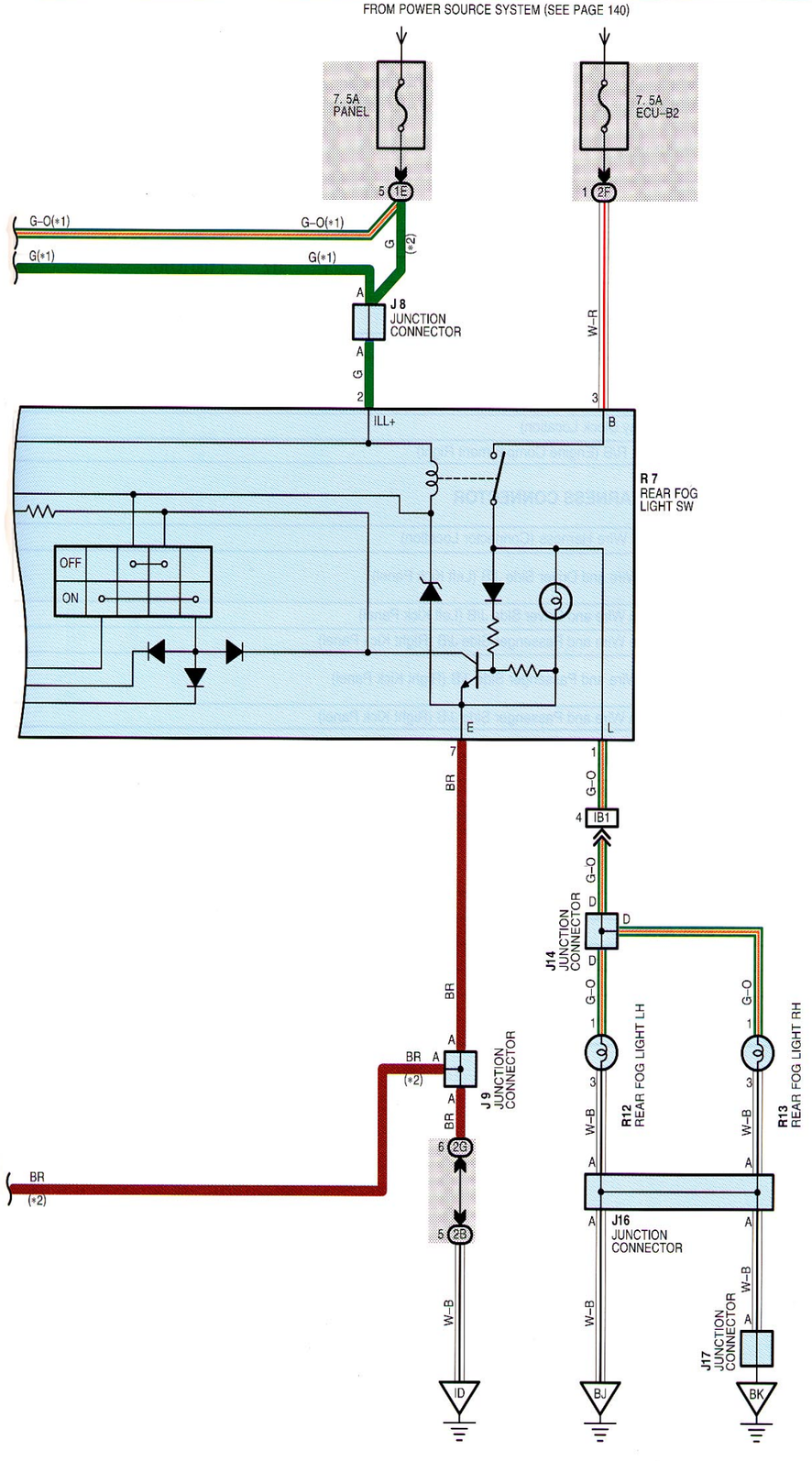
▽ : GROUND POINTS

Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
ID	114 (LHD)	Cowl Side Panel LH
IG	114 (LHD)	Cowl Side Panel RH
IH	114 (LHD)	Front Floor Panel Center LH

REAR FOG LIGHT (LHD)

＊1 : W/ DAYTIME RUNNING LIGHT
＊2 : W/O DAYTIME RUNNING LIGHT
＊3 : FRONT FOG LIGHT SW





REAR FOG LIGHT (LHD)

SERVICE HINTS

R7 REAR FOG LIGHT SW

1-GROUND : Approx. **12** volts with the light control SW at **HEAD** or **TAIL** position and the rear fog light SW at **ON** position
2-GROUND : Approx. **12** volts with the light control SW at **HEAD** or **TAIL** position
7-GROUND : Always continuity
3, 4, 5-GROUND : Always approx. **12** volts

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C14	98 (LHD)	J9	99 (LHD)	J17	100 (LHD)
D1	98 (LHD)	J11	99 (LHD)	R7	99 (LHD)
J5	99 (LHD)	J14	100 (LHD)	R12	101 (LHD)
J8	99 (LHD)	J16	100 (LHD)	R13	101 (LHD)

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1E		
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2F	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G		
2M	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)

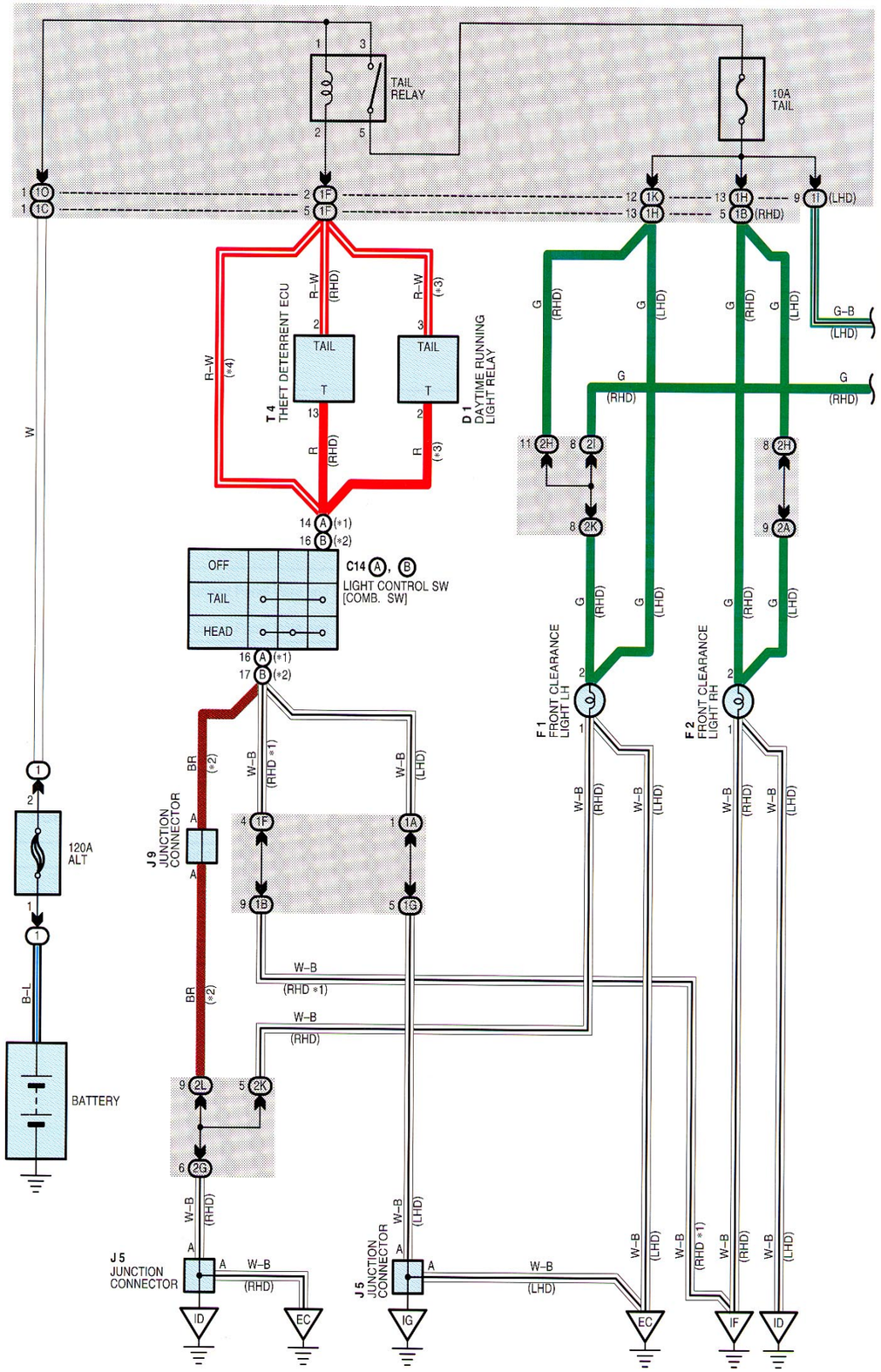
: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	114 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)

: GROUND POINTS

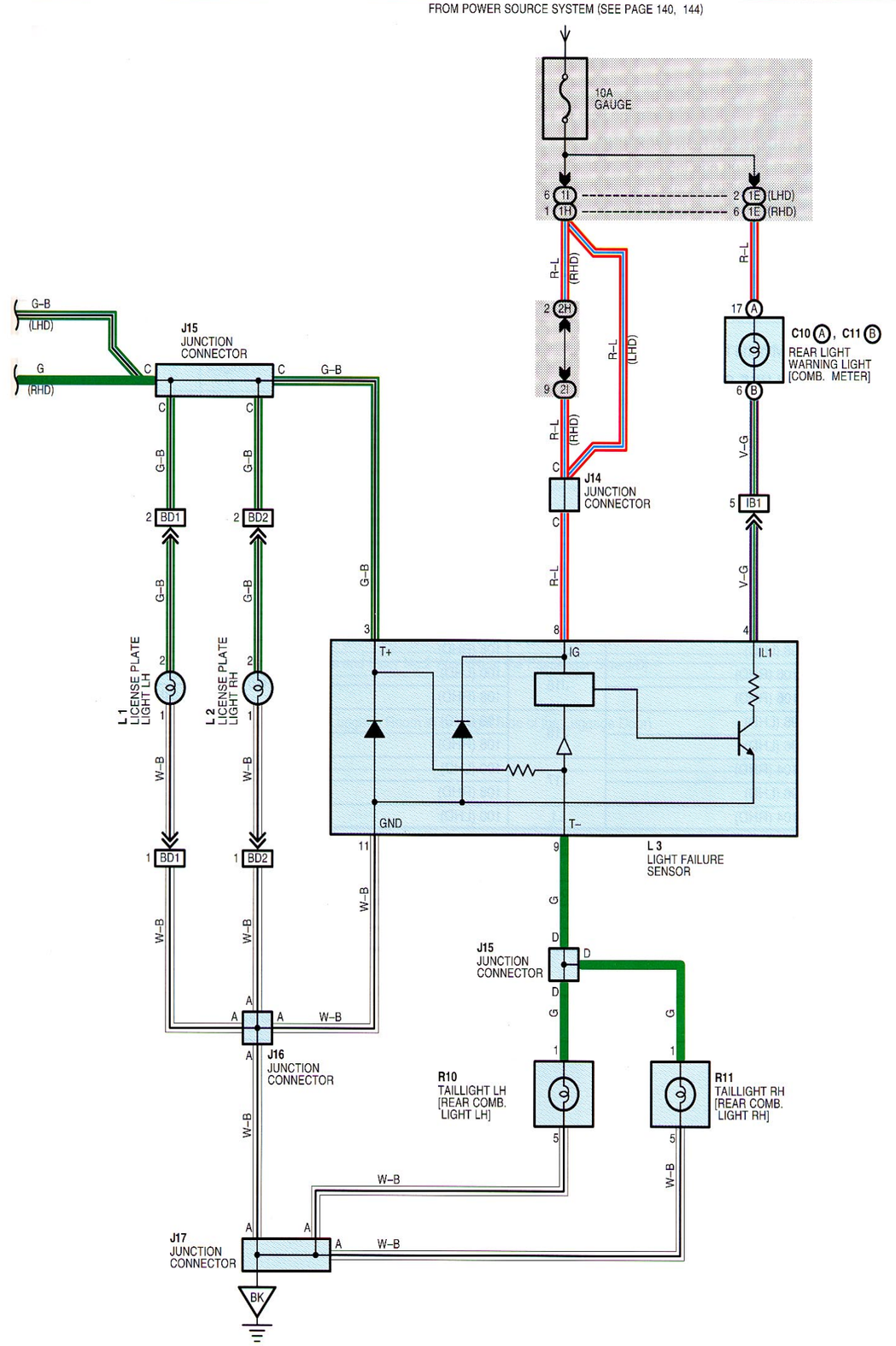
Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
ID	114 (LHD)	Cowl Side Panel LH
IG	114 (LHD)	Cowl Side Panel RH
BJ	118 (LHD)	Front Floor Panel LH
BK	118 (LHD)	Left Quarter Panel LH

TAILLIGHT



* 1 : EUROPE
* 2 : AUSTRALIA
* 3 : LHD W/ DAYTIME RUNNING LIGHT
* 4 : LHD W/O DAYTIME RUNNING LIGHT

FROM POWER SOURCE SYSTEM (SEE PAGE 140, 144)



TAILLIGHT

SYSTEM OUTLINE

When the light control SW is turned to TAIL or HEAD position, the current flows to TERMINAL 3 of the light failure sensor through the TAIL fuse.
When the ignition SW is turned on, the current flows from the GAUGE fuse to TERMINAL 8 of the light failure sensor, and also flows through the rear light warning light to TERMINAL 4 of the light failure sensor.

TAILLIGHT DISCONNECTION WARNING

With the ignition SW on and the light control SW turned to TAIL or HEAD position, if the taillight circuit is open, the light failure sensor detects the failure by the change in current flowing from TERMINAL 3 of the light failure sensor to TERMINAL 9 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, which remains on until the light control SW is turned off.

SERVICE HINTS

TAIL RELAY

5–3 : Closed with the light control SW at **TAIL** or **HEAD** position

L3 LIGHT FAILURE SENSOR

4, 8–GROUND : Approx. **12** volts with ignition SW at **ON** or **ST** position
3, 9–GROUND : Approx. **12** volts with light control SW at **TAIL** or **HEAD** position
11–GROUND : Always continuity

○ : PARTS LOCATION

Code		See Page	Code	See Page	Code	See Page
C10	A	98 (LHD)	J5	99 (LHD)	L1	108 (RHD)
		106 (RHD)		107 (RHD)	L2	100 (LHD)
C11	B	98 (LHD)	J9	107 (RHD)		108 (RHD)
		106 (RHD)	J14	100 (LHD)	L3	100 (LHD)
C14	A	98 (LHD)		108 (RHD)		108 (RHD)
		106 (RHD)	J15	100 (LHD)	R10	101 (LHD)
	B	106 (RHD)		108 (RHD)		109 (RHD)
D1		98 (LHD)	J16	100 (LHD)	R11	101 (LHD)
F1		96 (LHD)		108 (RHD)		109 (RHD)
		104 (RHD)	J17	100 (LHD)	T4	107 (RHD)
F2		96 (LHD)		108 (RHD)		
		104 (RHD)	L1	100 (LHD)		

⬭ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)
	81 (RHD)	Engine Room No.1 R/B (Engine Compartment Left)

⬡ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1B	88 (RHD)	Engine Room Main Wire and Driver Side J/B (Right Kick Panel)
1C		
1E	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1F	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1I	82 (LHD)	Floor No.2 Wire and Driver Side J/B (Left Kick Panel)
1K	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1O		
2A	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2G	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)
2H	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2I	90 (RHD)	Floor No.2 Wire and Passenger Side J/B (Left Kick Panel)
2K	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)
2L	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)

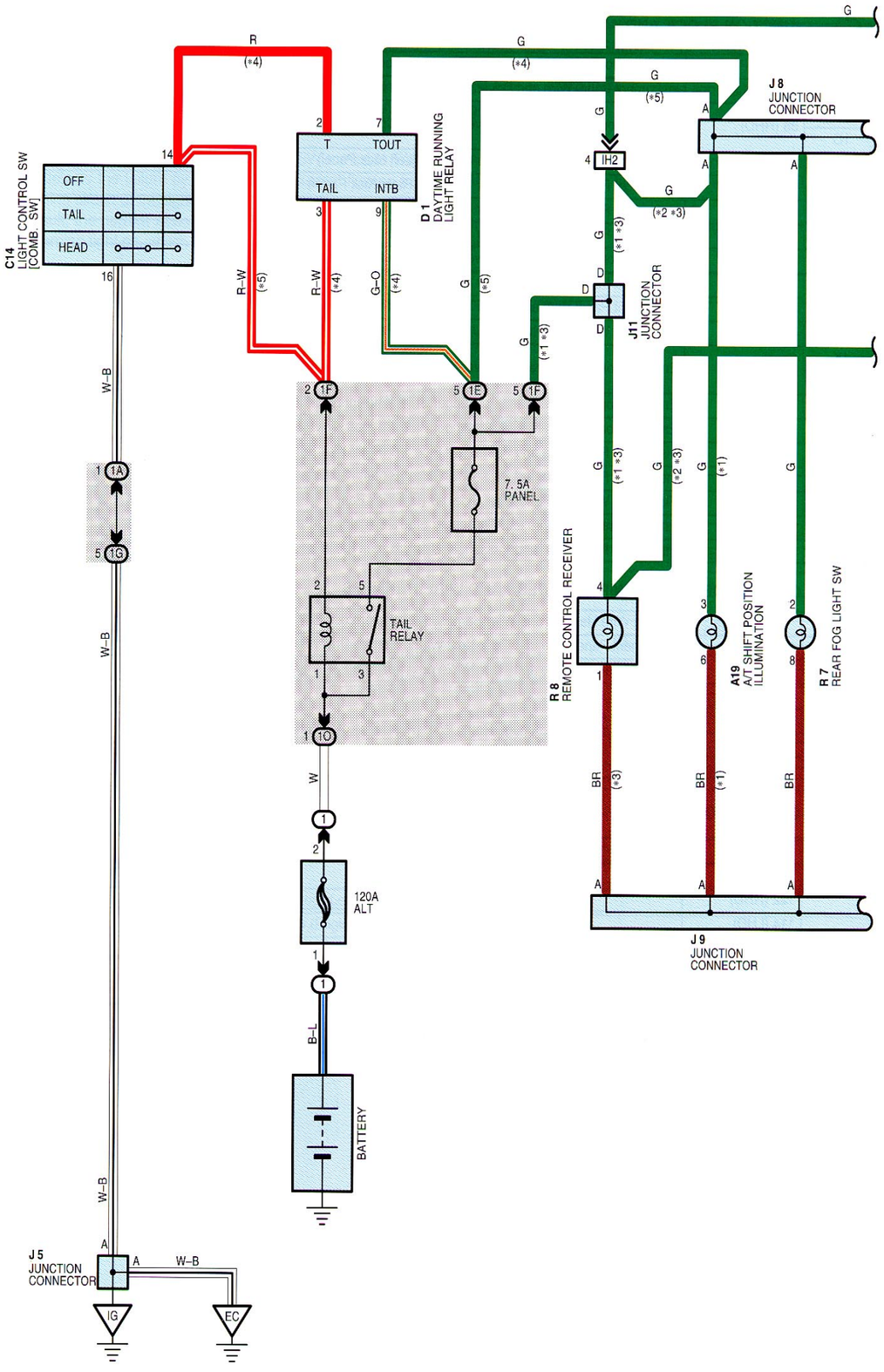
□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	114 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
	124 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Passenger Side J/B)
BD1	118 (LHD)	Floor No.2 Wire and Luggage Room Wire (Right Side of the Luggage Door)
	128 (RHD)	
BD2	118 (LHD)	
	128 (RHD)	

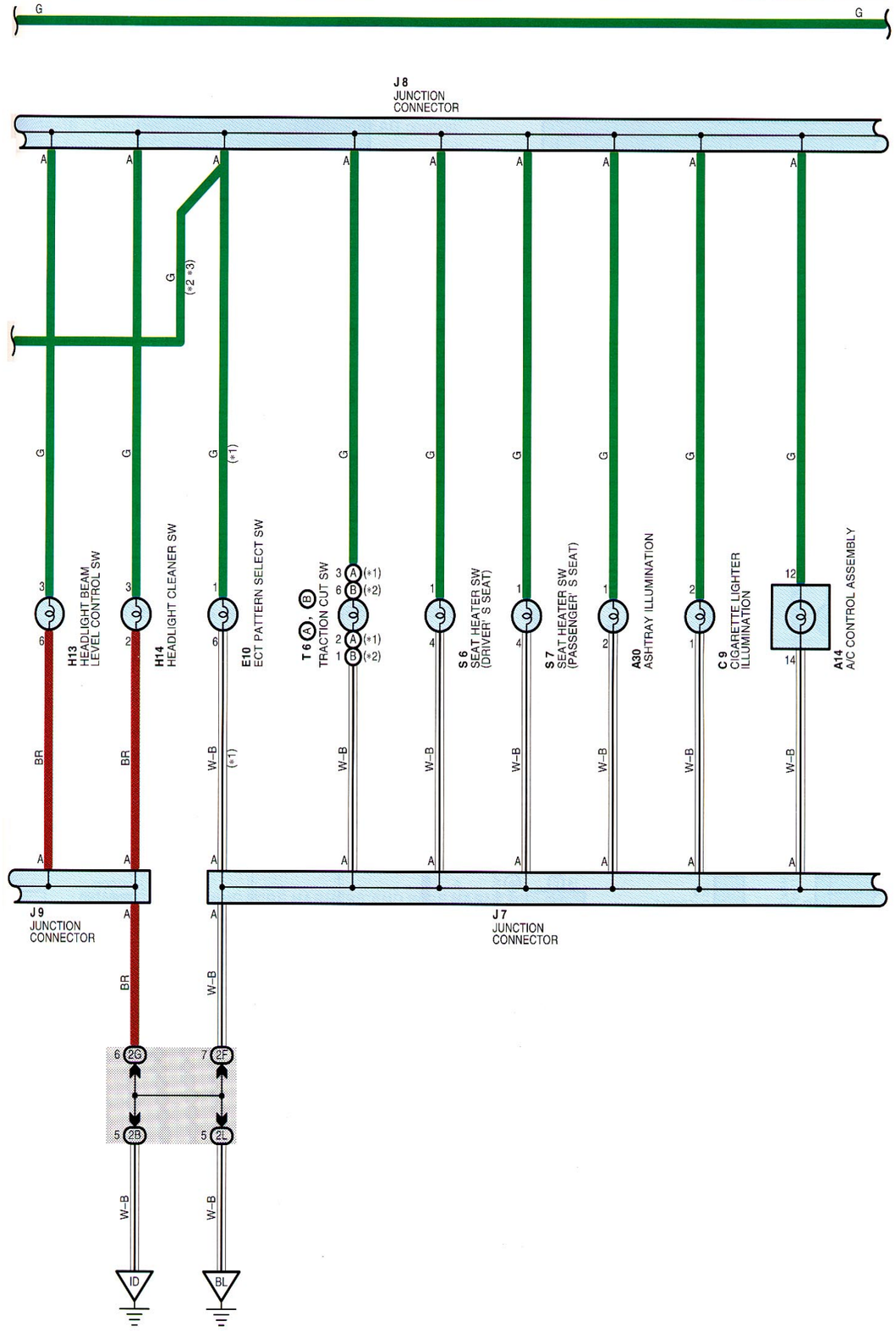
▽ : GROUND POINTS

Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
	122 (RHD)	
ID	114 (LHD)	Cowl Side Panel LH
	124 (RHD)	
IF	124 (RHD)	Cowl Side Panel RH
IG	114 (LHD)	
BK	118 (LHD)	Left Quarter Panel LH
	128 (RHD)	

ILLUMINATION (LHD)

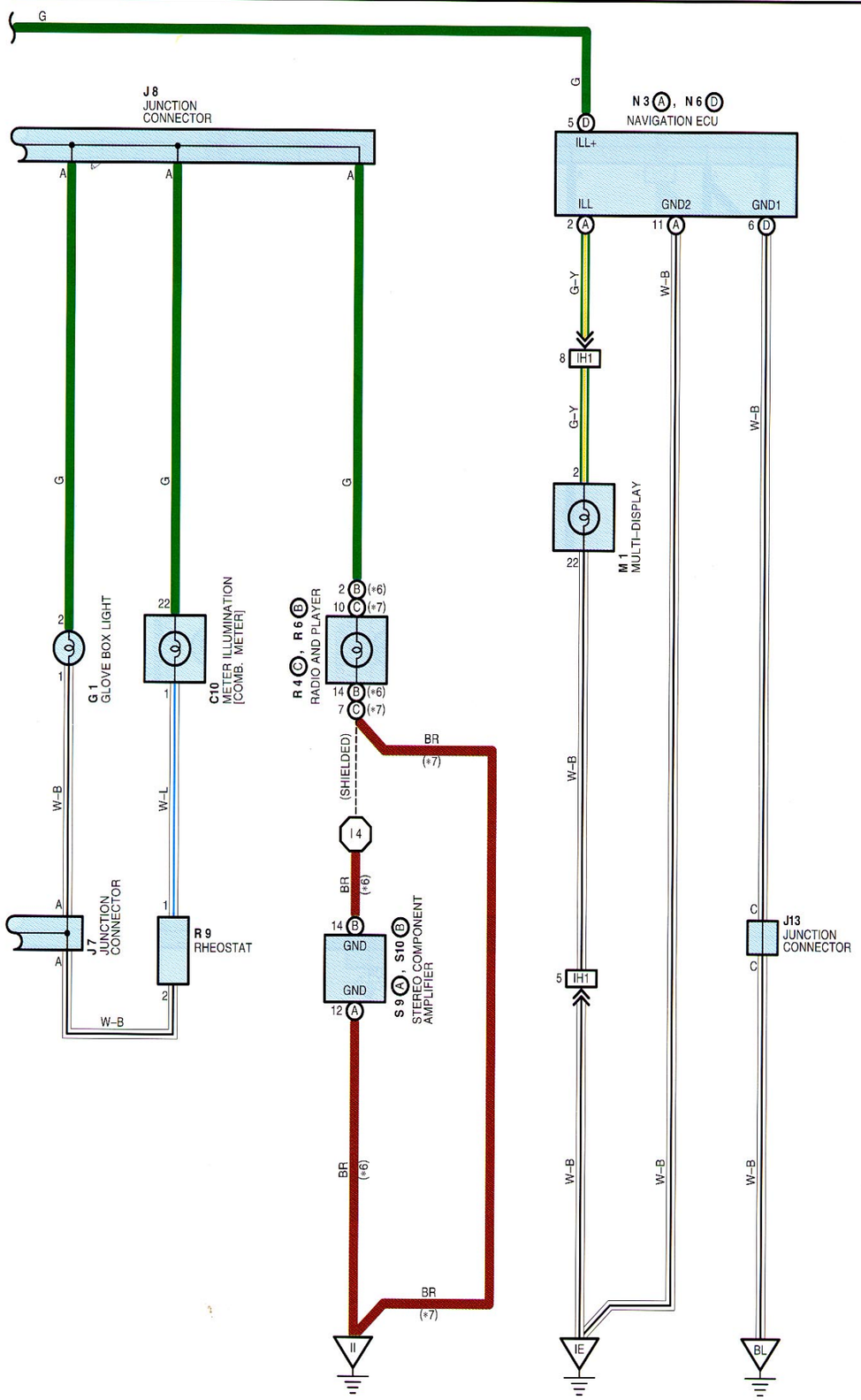


＊1 : A/T
＊2 : M/T
＊3 : W/ LEXUS NAVIGATION SYSTEM
＊4 : W/ DAYTIME RUNNING LIGHT
＊5 : W/O DAYTIME RUNNING LIGHT



ILLUMINATION (LHD)

* 6 : 8 SPEAKER
* 7 : 6 SPEAKER



SERVICE HINTS

TAIL RELAY

5–3 : Closed with light control SW at **TAIL** or **HEAD** position

C14 LIGHT CONTROL SW [COMB. SW]

14–16 : Closed with light control SW at **TAIL** or **HEAD** position

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A14	98 (LHD)	J5	99 (LHD)	R7	99 (LHD)
A19	98 (LHD)	J7	99 (LHD)	R8	99 (LHD)
A30	98 (LHD)	J8	99 (LHD)	R9	99 (LHD)
C9	98 (LHD)	J9	99 (LHD)	S6	99 (LHD)
C10	98 (LHD)	J11	99 (LHD)	S7	99 (LHD)
C14	98 (LHD)	J13	100 (LHD)	S9 A	99 (LHD)
D1	98 (LHD)	M1	99 (LHD)	S10 B	99 (LHD)
E10	99 (LHD)	N3 A	101 (LHD)	T6 A	99 (LHD)
G1	99 (LHD)	N6 D	101 (LHD)	T6 B	99 (LHD)
H13	99 (LHD)	R4 C	99 (LHD)		
H14	99 (LHD)	R6 B	99 (LHD)		

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1E		
1F		
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1O		
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2F	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G		
2L	84 (LHD)	Floor Wire and Passenger Side J/B (Right Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IH1	116 (LHD)	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
IH2		

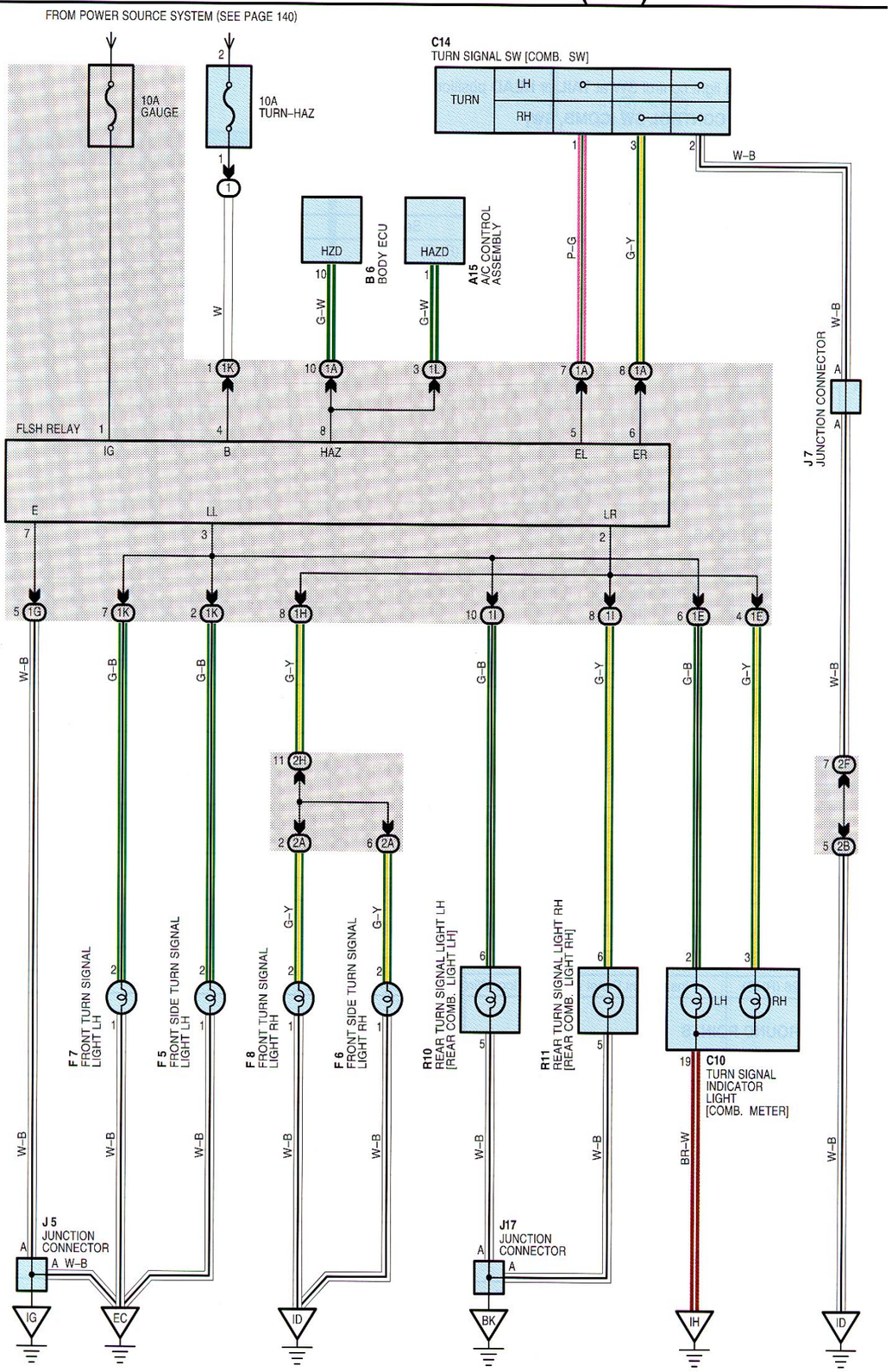
: GROUND POINTS

Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
ID	114 (LHD)	Cowl Side Panel LH
IE	114 (LHD)	Instrument Panel Center
IG	114 (LHD)	Cowl Side Panel RH
II	114 (LHD)	Front Floor Panel Center RH
BL	118 (LHD)	Front Floor Panel RH

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I4	116 (LHD)	Instrument Panel Wire			

TURN SIGNAL AND HAZARD WARNING LIGHT (LHD)



SERVICE HINTS

FLSH RELAY

4–GROUND : Always approx. **12** volts
1–GROUND : Approx. **12** volts with ignition SW at **ON** or **ST** position
7–GROUND : Always continuity

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A15	98 (LHD)	F6	96 (LHD)	J17	100 (LHD)
B6	98 (LHD)	F7	96 (LHD)	R10	101 (LHD)
C10	98 (LHD)	F8	96 (LHD)	R11	101 (LHD)
C14	98 (LHD)	J5	99 (LHD)		
F5	96 (LHD)	J7	99 (LHD)		

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)

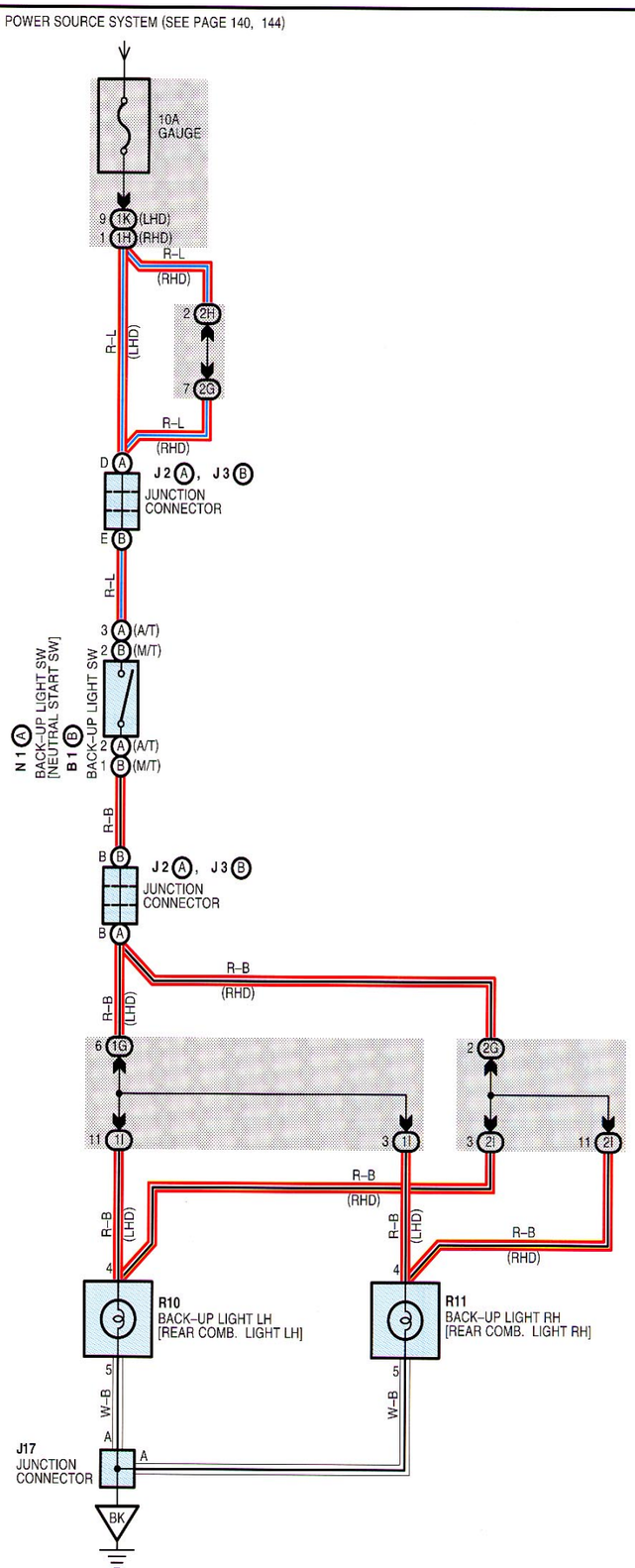
: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A 1E	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1I	82 (LHD)	Floor No.2 Wire and Driver Side J/B (Left Kick Panel)
1K	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1L	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
2A 2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2F 2H	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)

: GROUND POINTS

Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
ID	114 (LHD)	Cowl Side Panel LH
IG	114 (LHD)	Cowl Side Panel RH
IH	114 (LHD)	Front Floor Panel Center LH
BK	118 (LHD)	Left Quarter Panel LH

BACK-UP LIGHT



SERVICE HINTS

N1 (A) BACK–UP LIGHT SW [NEUTRAL START SW] (A/T)
3–2 : Closed with the shift lever at **R** position

B1 (B) BACK–UP LIGHT SW (M/T)
2–1 : Closed with the shift lever at **R** position

: PARTS LOCATION

Code		See Page	Code		See Page	Code	See Page
B1	B	96 (LHD)	J3	B	105 (RHD)	R10	101 (LHD)
		104 (RHD)	J17		100 (LHD)		109 (RHD)
J2	A	97 (LHD)			108 (RHD)	R11	101 (LHD)
		105 (RHD)	N1	A	97 (LHD)		109 (RHD)
J3	B	97 (LHD)			105 (RHD)		

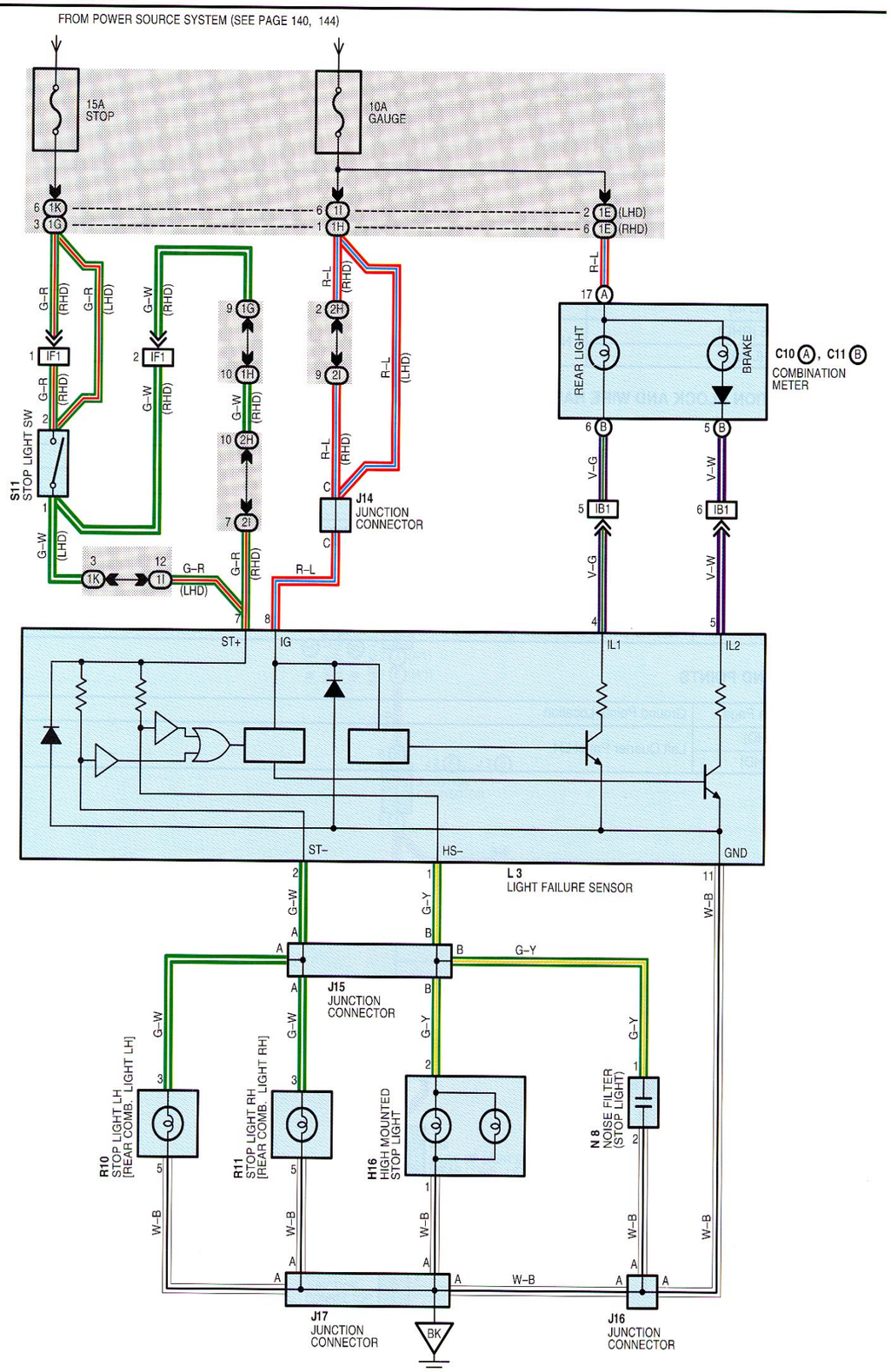
: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1I	82 (LHD)	Floor No.2 Wire and Driver Side J/B (Left Kick Panel)
1K	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1L	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
2G	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)
2H	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2I	90 (RHD)	Floor No.2 Wire and Passenger Side J/B (Left Kick Panel)

: GROUND POINTS

Code	See Page	Ground Points Location
BK	118 (LHD)	Left Quarter Panel LH
	128 (RHD)	

STOP LIGHT



SYSTEM OUTLINE

Current is applied at all times through a STOP fuse to TERMINAL 2 of the stop light SW. When the ignition SW is turned on, current flows from the GAUGE fuse to TERMINAL 8 of the light failure sensor, and also flows through the rear light warning light to TERMINAL 4 of the light failure sensor.

STOP LIGHT DISCONNECTION WARNING

When the ignition SW is turned on and the brake pedal is depressed (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 depressing the brake pedal, the current flowing to TERMINAL 8 of the light failure sensor keeps the warning circuit on and the warning light on until the ignition SW is turned off.

SERVICE HINTS

S11 STOP LIGHT SW

2–1 : Closed with the brake pedal depressed

L3 LIGHT FAILURE SENSOR

1, 2, 7–GROUND : Approx. **12** volts with stop light SW on
4, 8–GROUND : Approx. **12** volts with ignition SW at **ON** or **ST** position
11–GROUND : Always continuity

: PARTS LOCATION

Code		See Page	Code	See Page	Code	See Page
C10	A	98 (LHD)	J15	100 (LHD)	N8	101 (LHD)
		106 (RHD)		108 (RHD)		109 (RHD)
C11	B	98 (LHD)	J16	100 (LHD)	R10	101 (LHD)
		106 (RHD)		108 (RHD)		109 (RHD)
H16		100 (LHD)	J17	100 (LHD)	R11	101 (LHD)
		108 (RHD)		108 (RHD)		109 (RHD)
J14		100 (LHD)	L3	100 (LHD)	S11	99 (LHD)
		108 (RHD)		108 (RHD)		107 (RHD)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1E	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1G	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1H		
1I	82 (LHD)	Floor No.2 Wire and Driver Side J/B (Left Kick Panel)
1K	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2H	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2I	90 (RHD)	Floor No.2 Wire and Passenger Side J/B (Left Kick Panel)

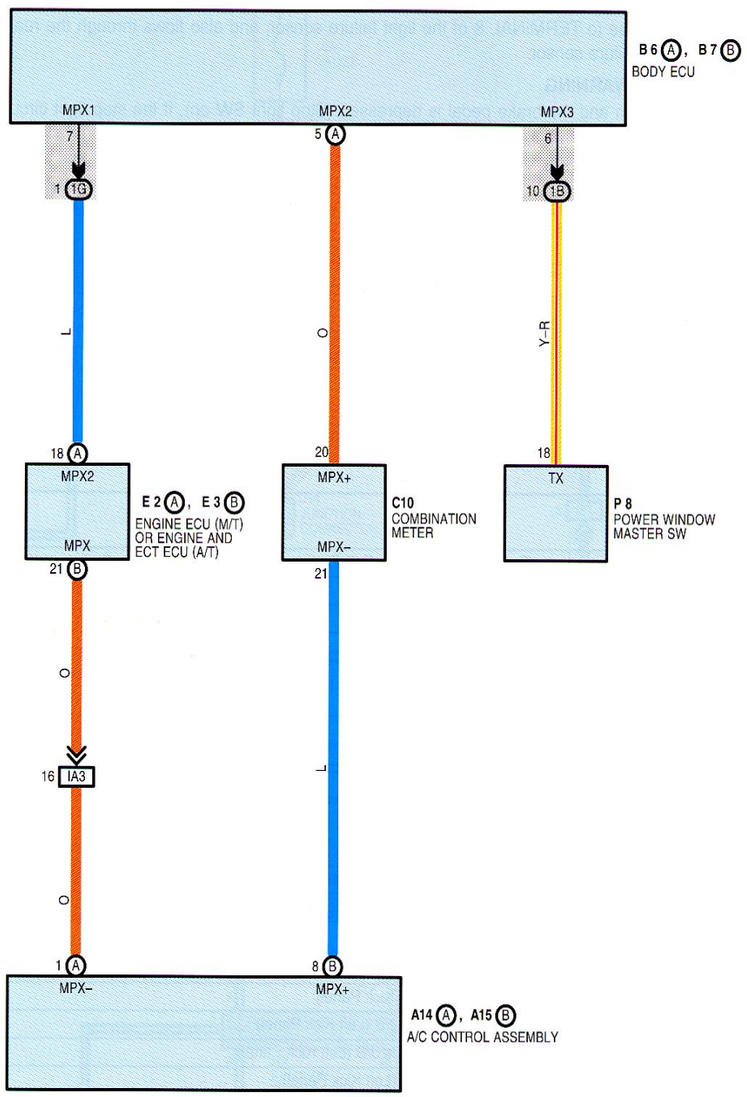
: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	114 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
	124 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Passenger Side J/B)
IF1	126 (RHD)	Instrument Panel No.3 Wire and Instrument Panel Wire (Right Side of the Instrument Panel)

: GROUND POINTS

Code	See Page	Ground Points Location
BK	118 (LHD)	Left Quarter Panel LH
	128 (RHD)	

MULTIPLEX COMMUNICATION SYSTEM (COMMUNICATION BUS) (LHD)

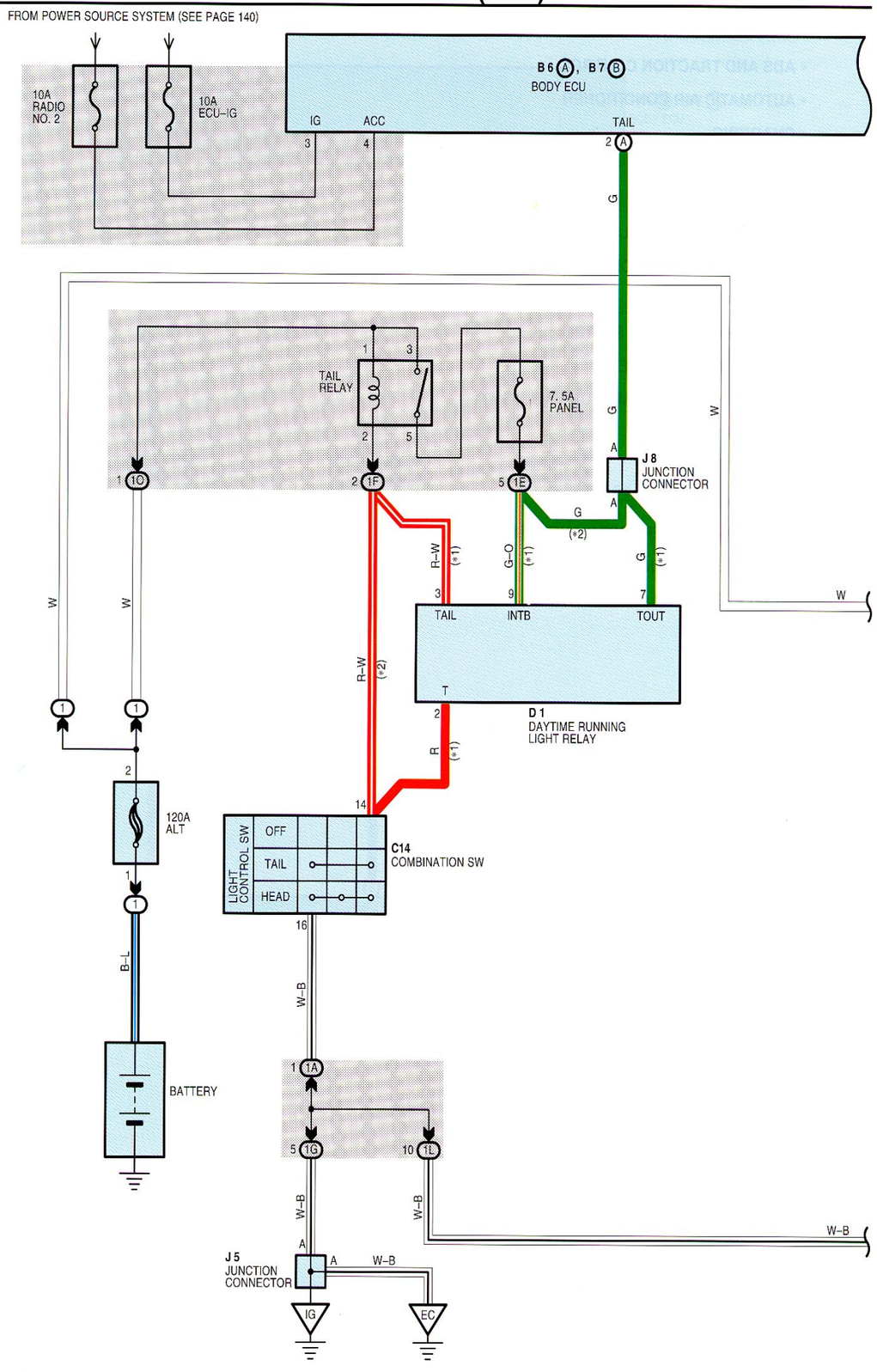


MULTIPLEX COMMUNICATION SYSTEM (COMMUNICATION BUS) (LHD)

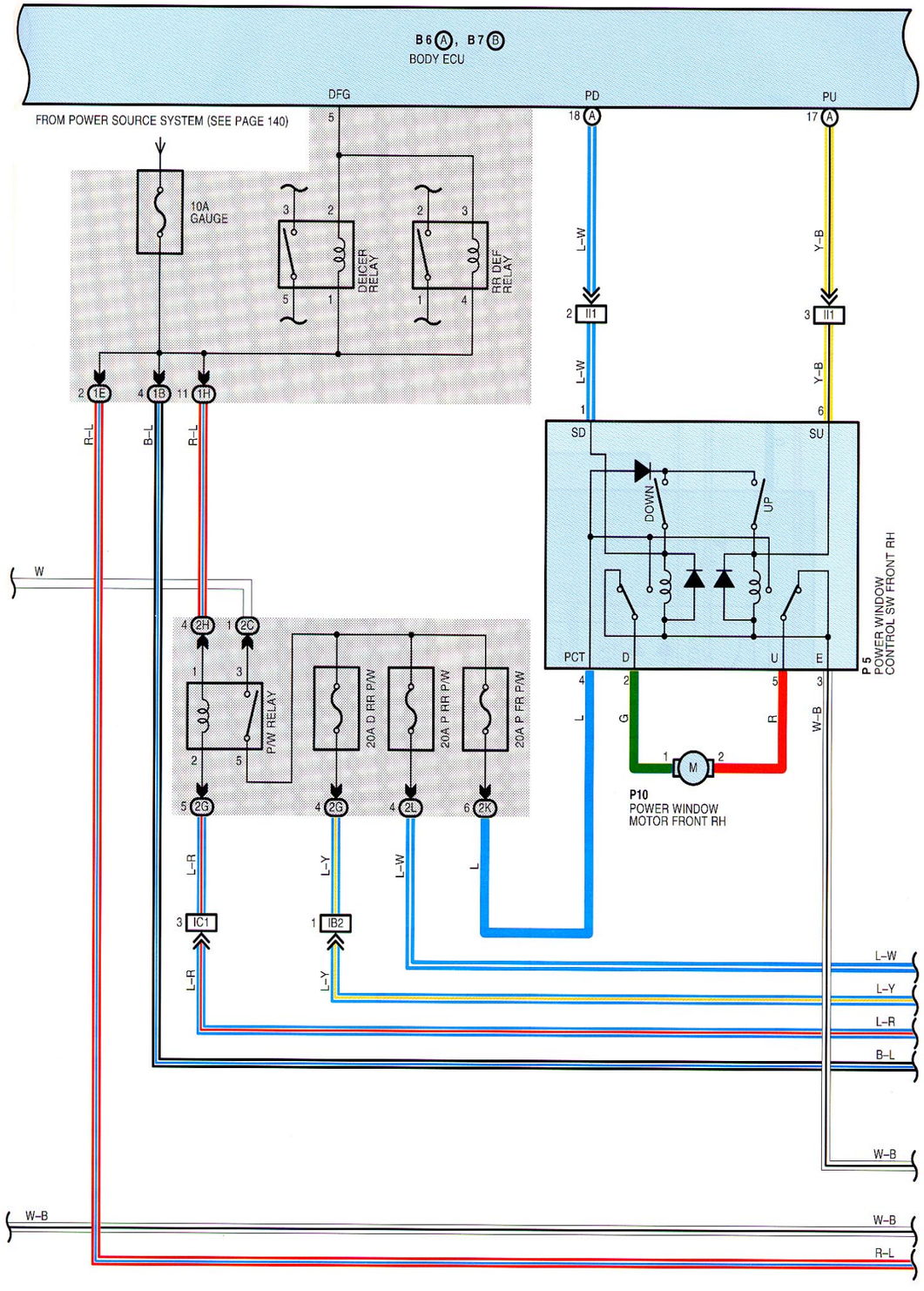
MULTIPLEX COMMUNICATION SYSTEM INCLUDES FOLLOWING SYSTEMS

- * ABS AND TRACTION CONTROL
- * AUTOMATIC AIR CONDITIONER
- * CHARGING
- * COMBINATION METER
- * CRUISE CONTROL
- * DOOR LOCK CONTROL
- * ECT AND A/T INDICATOR
- * ENGINE CONTROL
- * ENGINE IMMOBILISER SYSTEM
- * FRONT WINDOW DEICER
- * HEADLIGHT (w/ DAYTIME RUNNING LIGHT)
- * INTERIOR LIGHT
- * LIGHT REMINDER
- * POWER WINDOW
- * REAR WINDOW DEFOGGER AND MIRROR HEATER
- * SEAT BELT WARNING
- * WIRELESS DOOR LOCK CONTROL

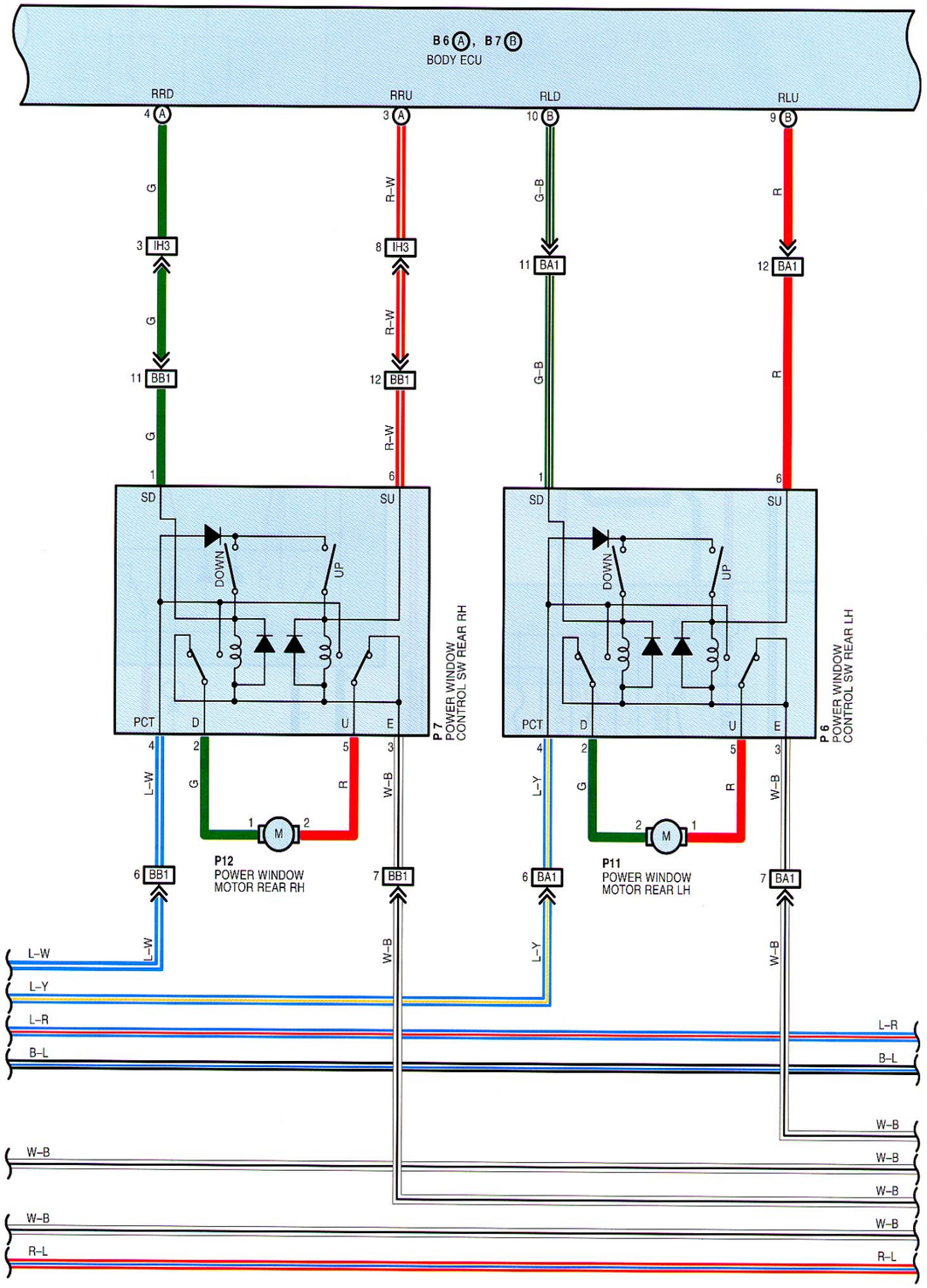
MULTIPLEX COMMUNICATION SYSTEM (LHD)

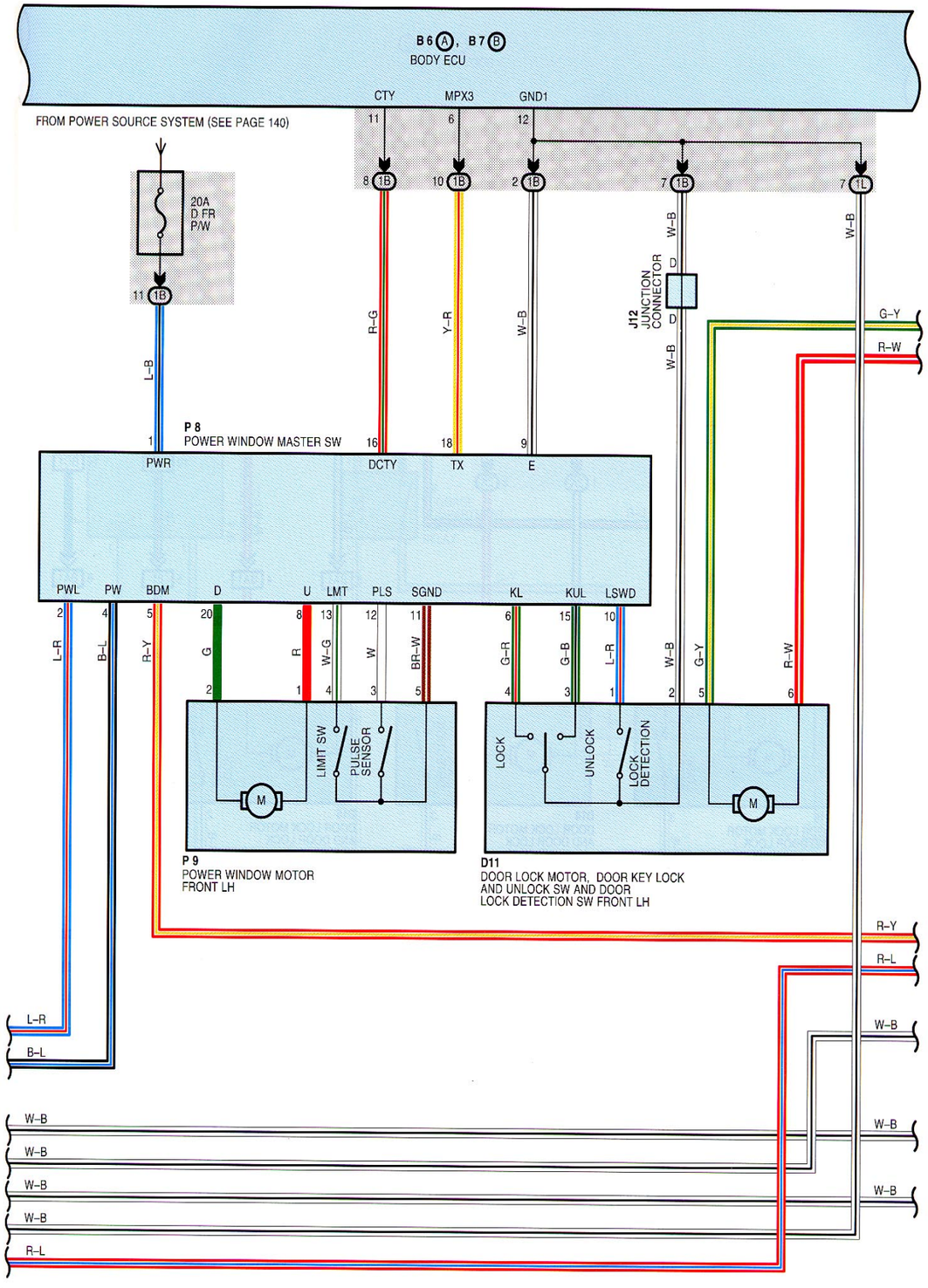


＊1 : W/ DAYTIME RUNNING LIGHT
＊2 : W/O DAYTIME RUNNING LIGHT

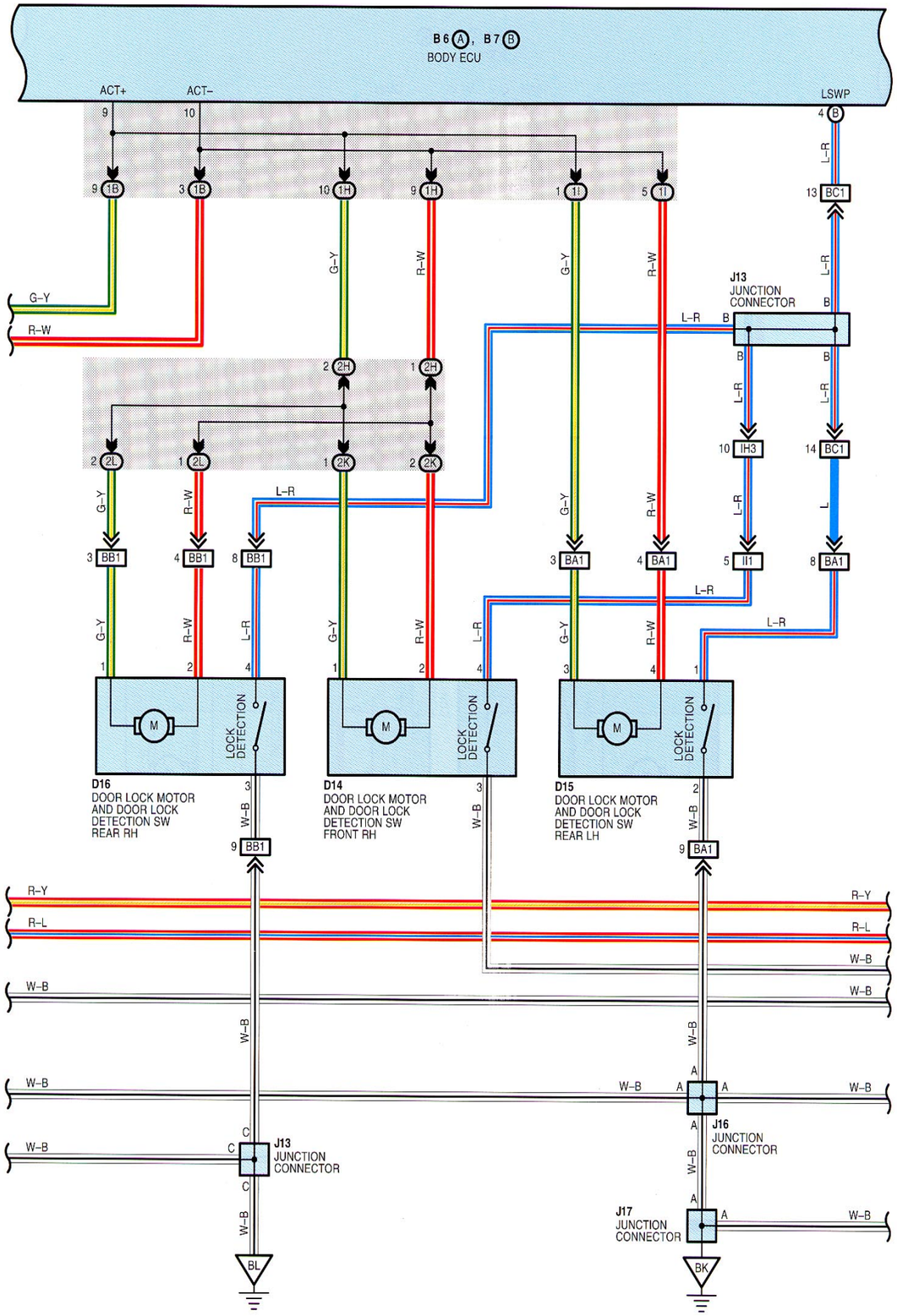


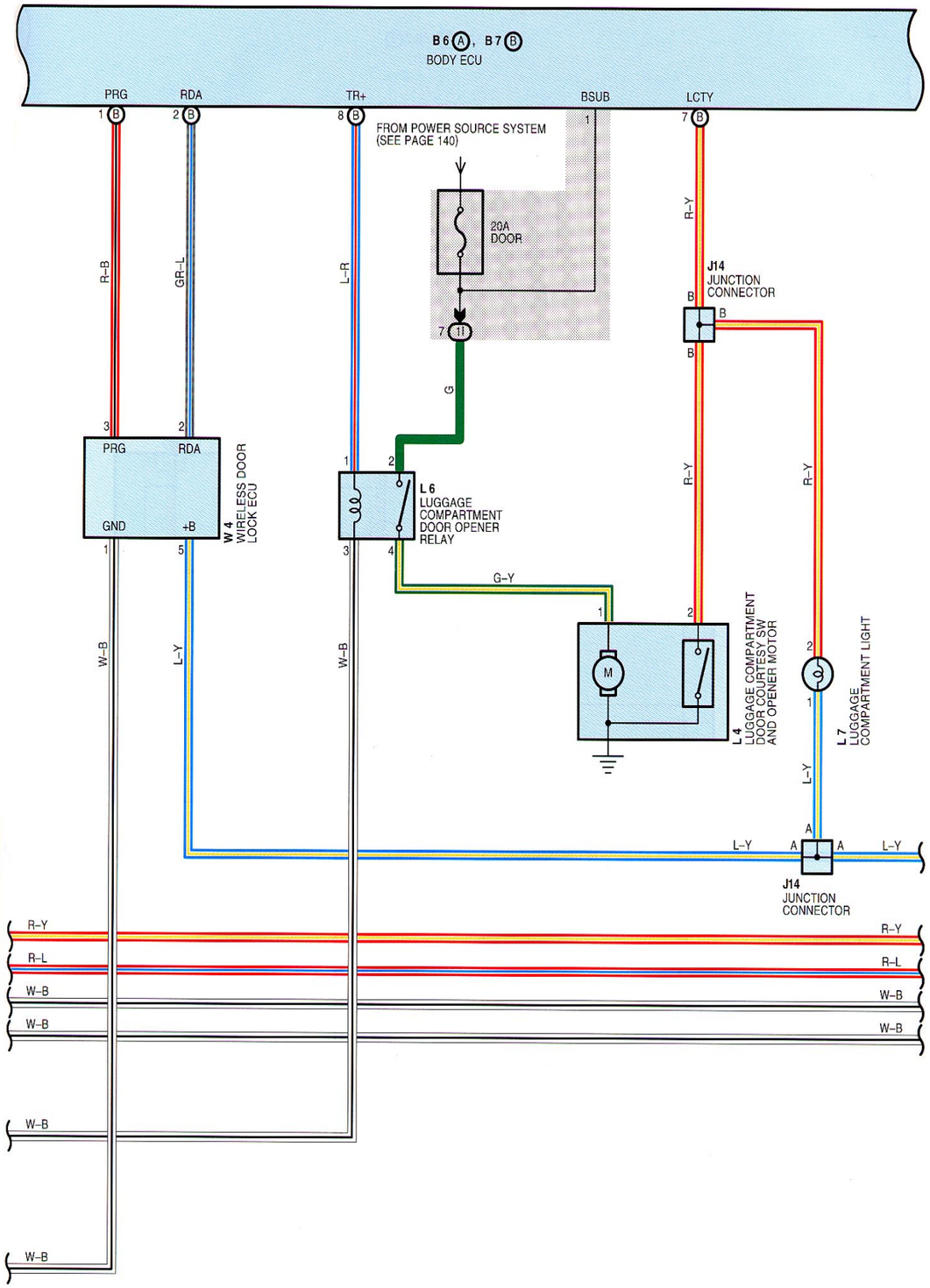
MULTIPLEX COMMUNICATION SYSTEM (LHD)



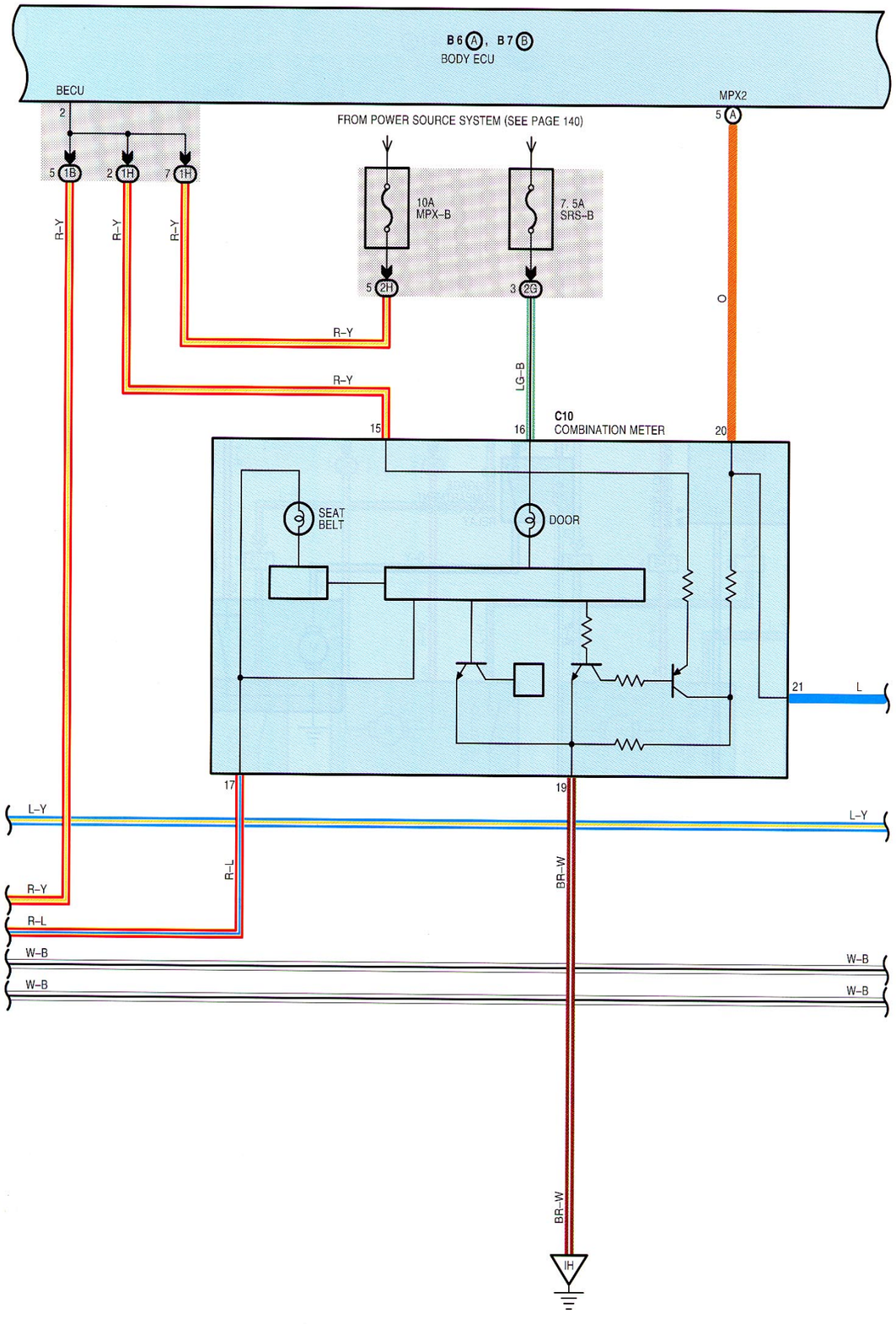


MULTIPLEX COMMUNICATION SYSTEM (LHD)

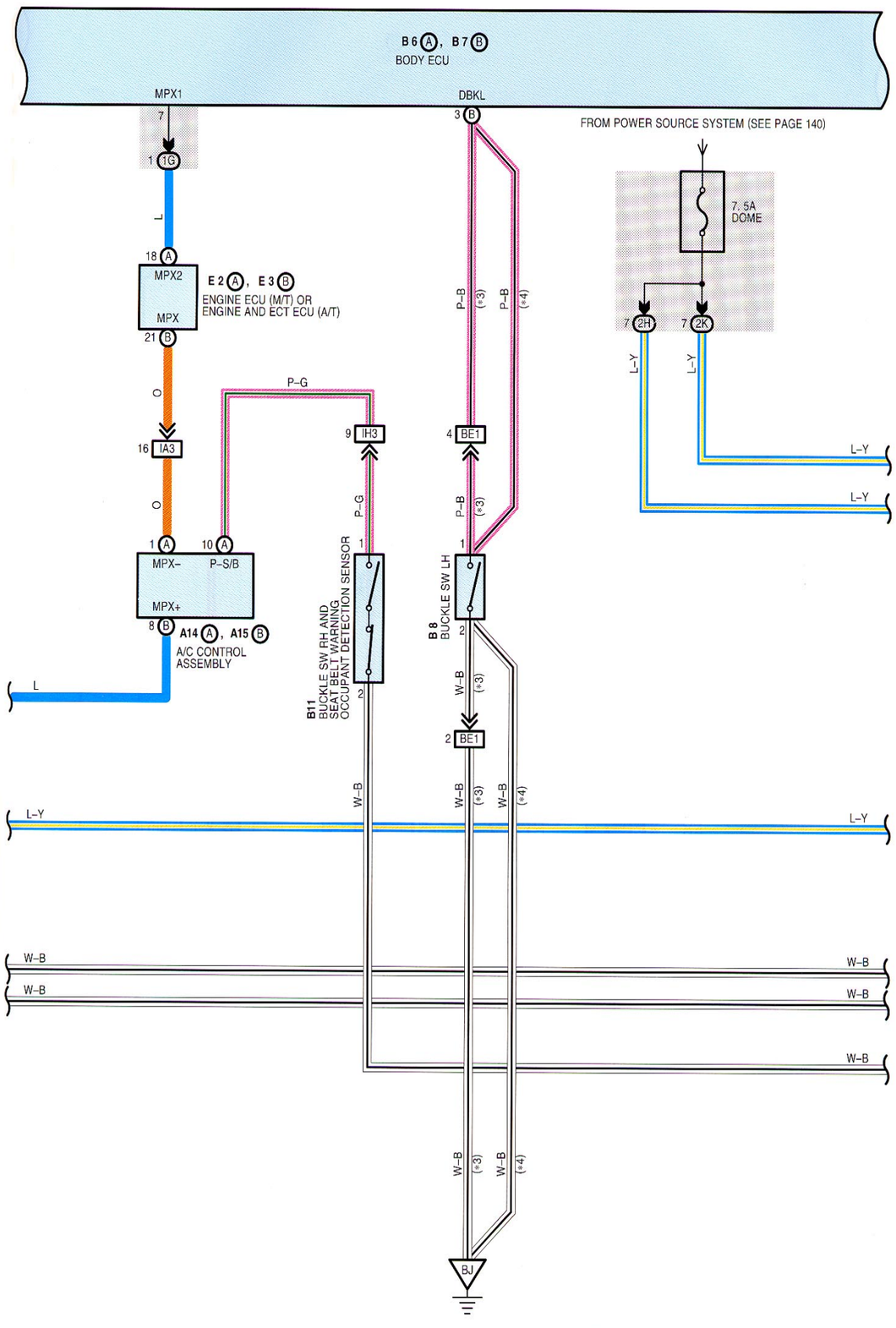




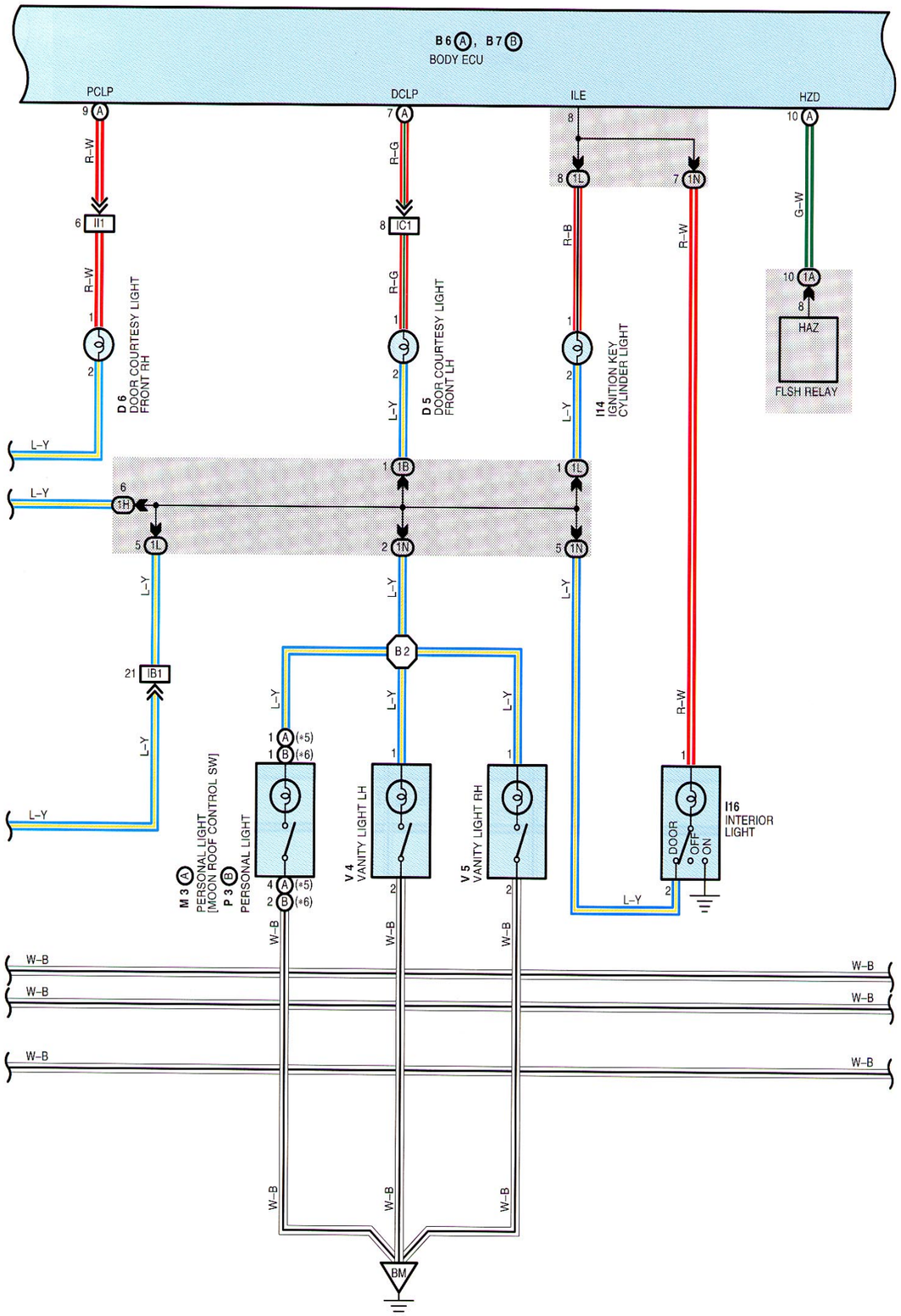
MULTIPLEX COMMUNICATION SYSTEM (LHD)



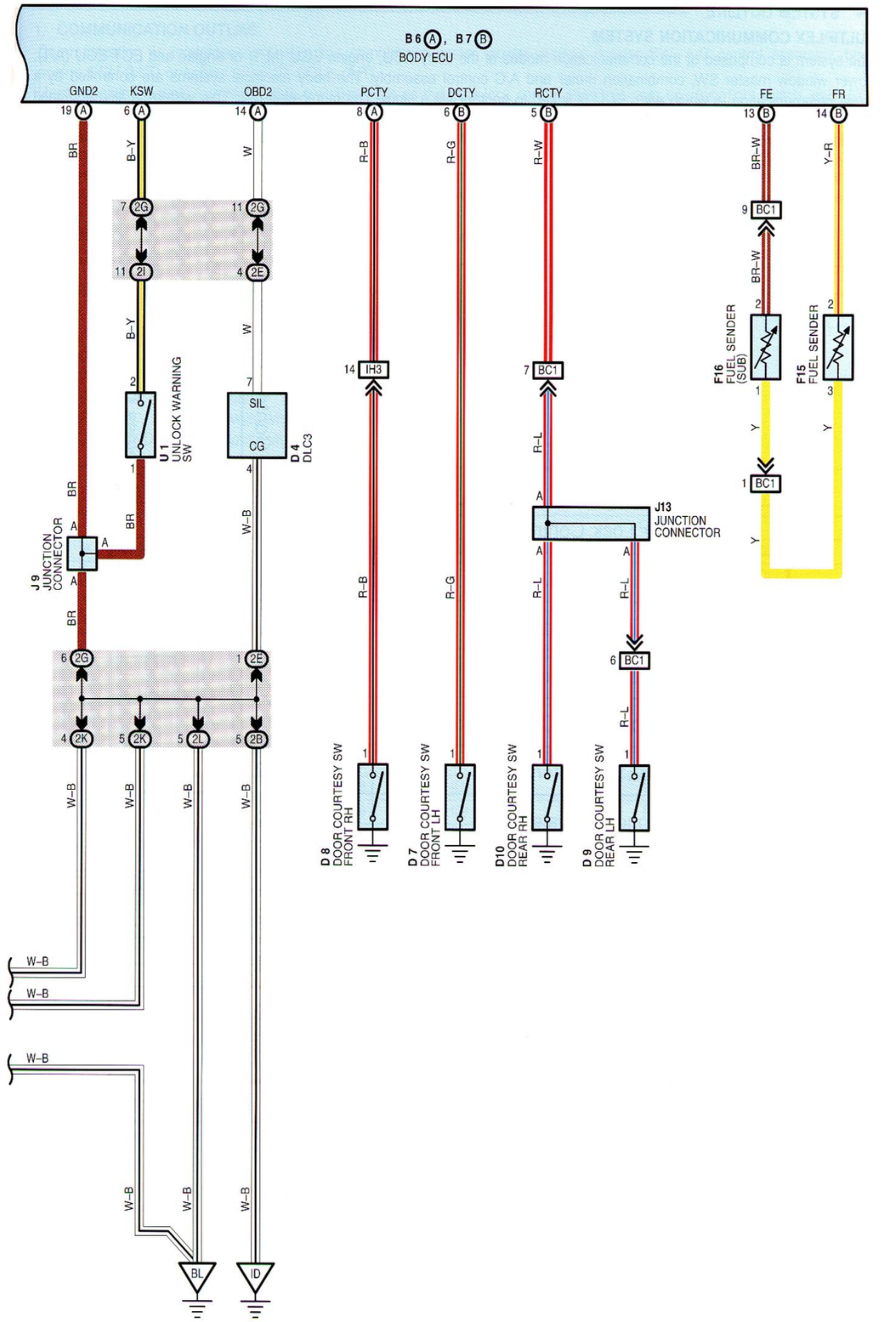
* 3 : W/ POWER SEAT
* 4 : W/O POWER SEAT



MULTIPLEX COMMUNICATION SYSTEM (LHD)



* 5 : W/ MOON ROOF
* 6 : W/O MOON ROOF



MULTIPLEX COMMUNICATION SYSTEM (LHD)

SYSTEM OUTLINE

MULTIPLEX COMMUNICATION SYSTEM

The system is comprised of the communication modes of the body ECU, engine ECU (M/T) or engine and ECT ECU (A/T), power window master SW, combination meter and A/C control assembly. The body electrical systems are controlled by a serial communication in which each ECU is linked to another via a single communication line. This system is also equipped with a self-diagnosis function.

The table below shows the systems under the control of the MPX communication system and related ECUs (Communication nodes).

	Body ECU	Engine ECU (M/T) or Engine and ECT ECU (A/T)	Combination Meter	A/C Control Assembly	Double Door Lock ECU	Power Window Master SW	Wireless Door Lock ECU
Door Lock Control	1	–	–	–	2	2	2
Wireless Door Lock	2	–	–	–	2	1	1
Illuminated Entry	1	–	–	–	–	–	–
Light Reminder	1	–	2	–	–	–	–
Luggage Compartment Door Opener	1	–	–	–	–	–	–
C-BEST System	1	–	2	2	–	–	–
Diagonosis System	1	–	2	2	–	–	–
Seat Belt Warning	1	–	2	–	–	–	–
ECT Signal	–	1	2	2	–	–	–
A/C Control	–	2	–	1	–	–	–
Multi Information Display	2	2	1	2	–	–	–
Double Door Lock	–	–	–	–	1	–	–

1 : Master control 2 : Sub control

1. COMMUNICATION OUTLINE

Communication is implemented among the combination meter, power window master SW, A/C control assembly, body, engine ECU (M/T) or engine and ECT ECUs (A/T).

Upon receiving signals from applicable switches such as the door lock control switch or door courtesy light switch, each ECU determines the conditions of the switches as well as of the doors, and after converting this information into digital signals, outputs them to other ECUs via serial data communication. The ECU that receives these digital signals determines the conditions of the switches and doors so that it can implement various controls such as to activate a door lock motor.

However, if there are no changes in the input signals because no doors were opened and no switches were used within 30 seconds, the body ECU interrupts the communication to save electricity. Following this interruption, any changes in the input signals will cause the communication to resume.

For details please refer to the new car features and repair manuals.

SERVICE HINTS

B6 (A), B7 (B) BODY ECU

3-GROUND : Approx. **12** volts with ignition SW at **ON** or **ST** position
1-GROUND : Always approx. **12** volts
2-GROUND : Always approx. **12** volts
12-GROUND : Always continuity
4-GROUND : Approx. **12** volts with ignition SW at **ACC** or **ON** position
(A)19-GROUND : Always continuity

○ : PARTS LOCATION

Code		See Page	Code		See Page	Code		See Page
A14	A	98 (LHD)	D14		100 (LHD)	L6		100 (LHD)
A15	B	98 (LHD)	D15		100 (LHD)	L7		100 (LHD)
B6	A	98 (LHD)	D16		100 (LHD)	M3	A	100 (LHD)
B7	B	98 (LHD)	E2	A	96 (LHD)	P3	B	101 (LHD)
B8		100 (LHD)	E3	B	96 (LHD)	P5		101 (LHD)
		102 (LHD)	F15		100 (LHD)	P6		101 (LHD)
B11		100 (LHD)	F16		100 (LHD)	P7		101 (LHD)
C10		98 (LHD)	I14		99 (LHD)	P8		101 (LHD)
C14		98 (LHD)	I16		100 (LHD)	P9		101 (LHD)
D1		98 (LHD)	J5		99 (LHD)	P10		101 (LHD)
D4		98 (LHD)	J8		99 (LHD)	P11		101 (LHD)
D5		100 (LHD)	J9		99 (LHD)	P12		101 (LHD)
D6		100 (LHD)	J12		100 (LHD)	U1		99 (LHD)
D7		100 (LHD)	J13		100 (LHD)	V4		101 (LHD)
D8		100 (LHD)	J14		100 (LHD)	V5		101 (LHD)
D9		100 (LHD)	J16		100 (LHD)	W4		101 (LHD)
D10		100 (LHD)	J17		100 (LHD)			
D11		100 (LHD)	L4		100 (LHD)			

▭ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)

MULTIPLEX COMMUNICATION SYSTEM (LHD)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1B	82 (LHD)	Front Door LH Wire and Driver Side J/B (Left Kick Panel)
1E	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1F		
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1I	82 (LHD)	Floor No.2 Wire and Driver Side J/B (Left Kick Panel)
1L	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1N	82 (LHD)	Roof Wire and Driver Side J/B (Left Kick Panel)
1O	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2C		
2E	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G		
2H		
2I		
2K	84 (LHD)	Front Door RH Wire and Passenger Side J/B (Right Kick Panel)
2L	84 (LHD)	Floor Wire and Passenger Side J/B (Right Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA3	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IB1	114 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
IB2		
IC1	114 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IH3	116 (LHD)	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
II1	116 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BA1	118 (LHD)	Rear Door No.2 Wire and Floor No.2 Wire (Left Center Pillar)
BB1	118 (LHD)	Rear Door No.1 Wire and Floor Wire (Right Center Pillar)
BC1	118 (LHD)	Floor No.2 Wire and Floor Wire (Under the Right Rear Cushion)
BE1	120 (LHD)	Floor No.2 Wire and Front Seat LH Wire (Under the Driver's Seat)

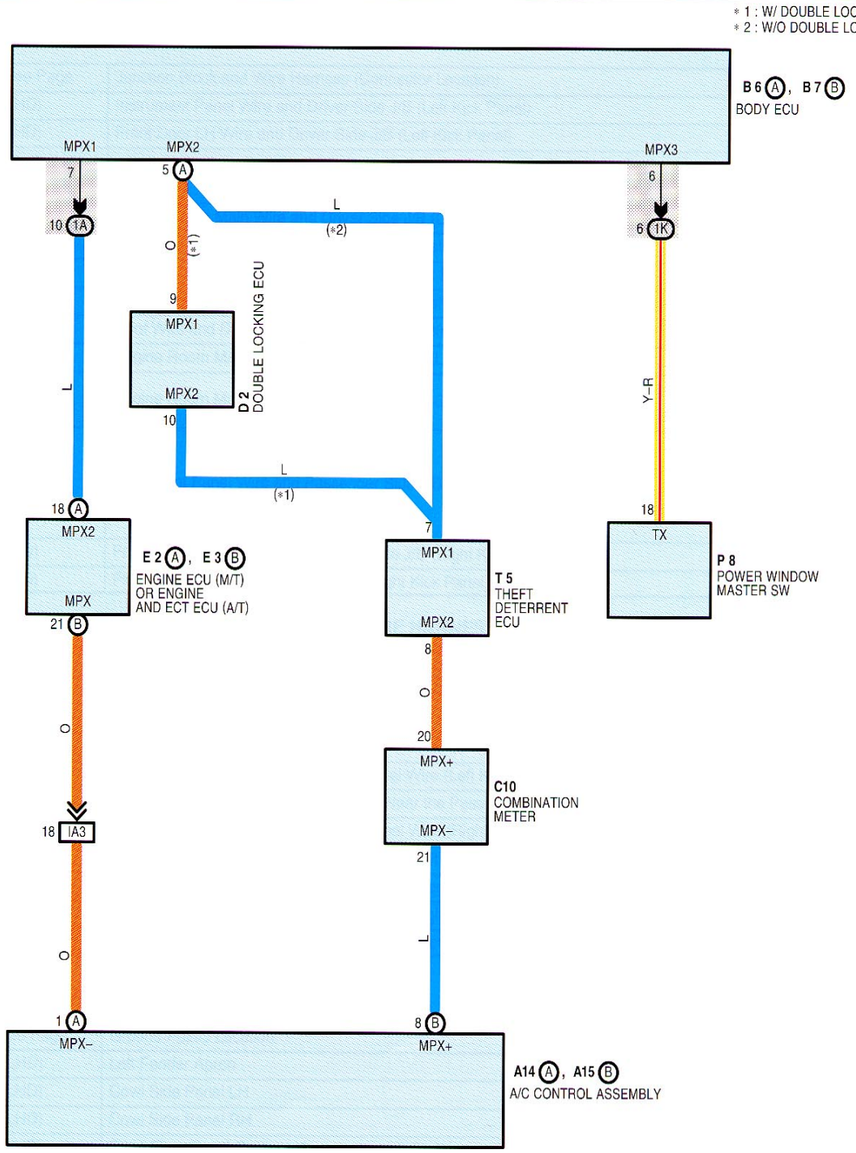
: GROUND POINTS

Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
ID	114 (LHD)	Cowl Side Panel LH
IG	114 (LHD)	Cowl Side Panel RH
IH	114 (LHD)	Front Floor Panel Center LH
BJ	118 (LHD)	Front Floor Panel LH
BK	118 (LHD)	Left Quarter Panel LH
BL	118 (LHD)	Front Floor Panel RH
BM	118 (LHD)	Roof Panel

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B2	118 (LHD)	Roof Wire			

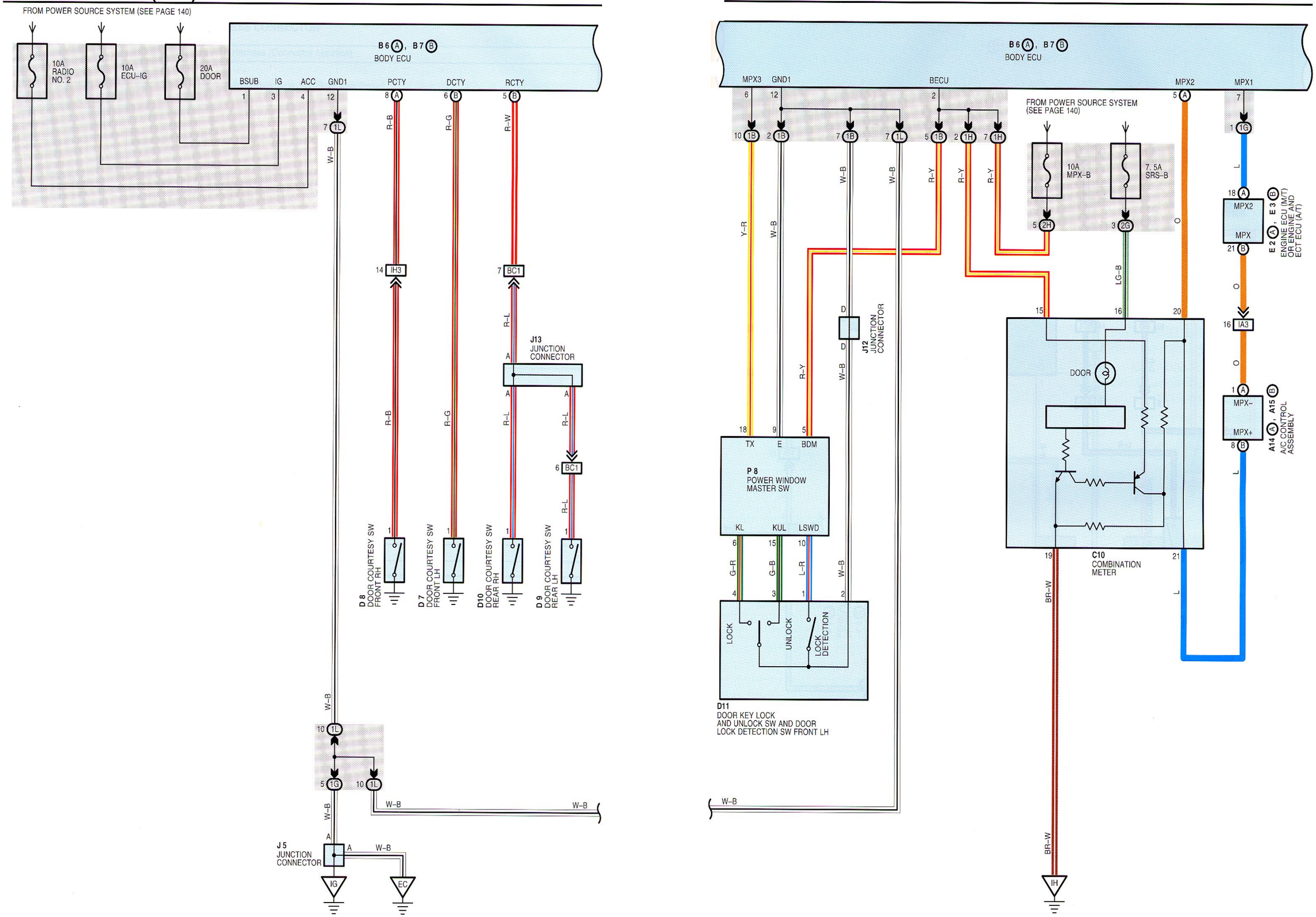
MULTIPLEX COMMUNICATION SYSTEM (COMMUNICATION BUS) (RHD)



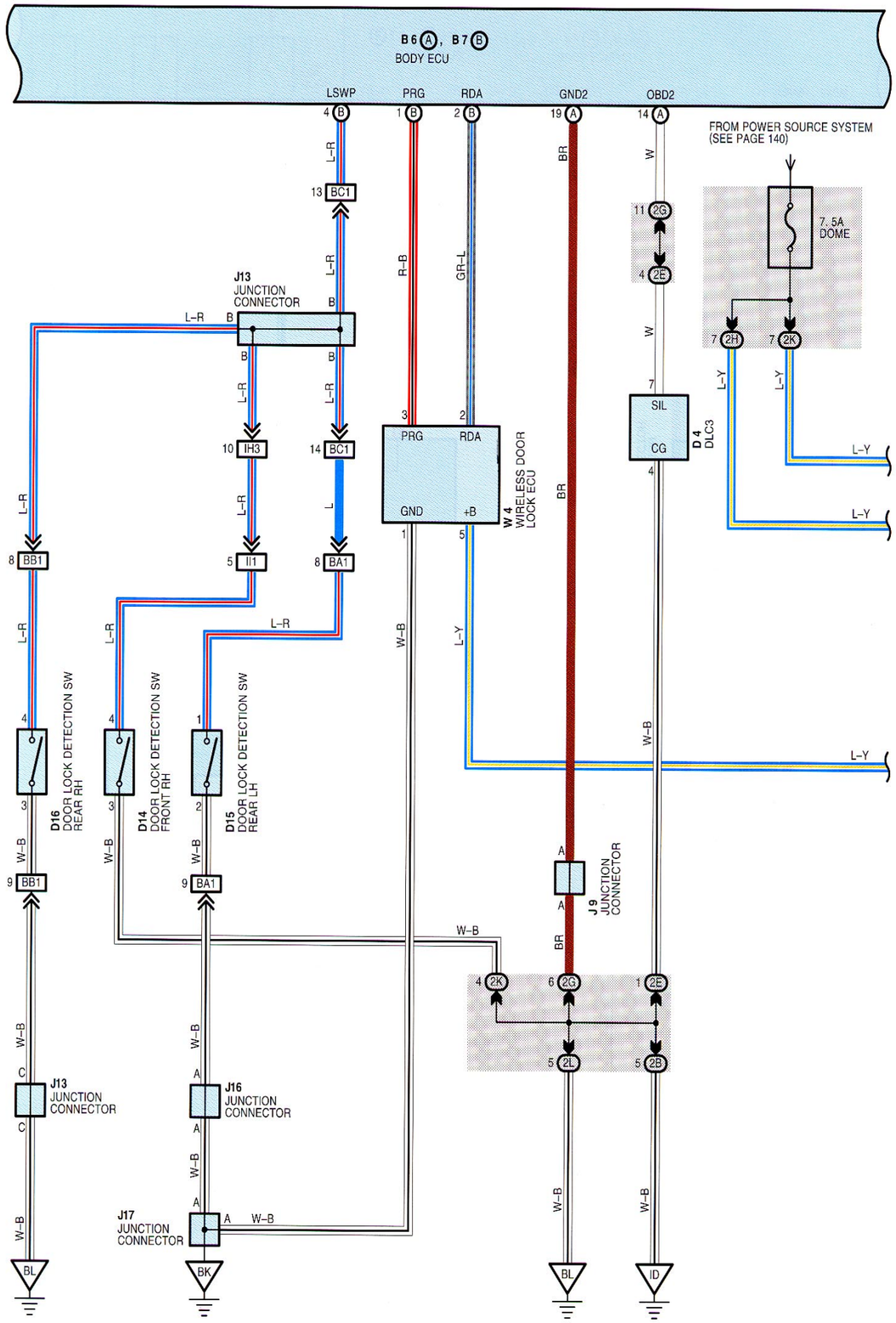
MULTIPLEX COMMUNICATION SYSTEM INCLUDES FOLLOWING SYSTEMS

* ABS AND TRACTION CONTROL
* AUTOMATIC AIR CONDITIONER
* AUTOMATIC LIGHT CONTROL
* CHARGING
* COMBINATION METER
* CRUISE CONTROL
* DOOR LOCK CONTROL
* DOUBLE LOCKING
* ECT AND A/T INDICATOR
* ENGINE CONTROL
* ENGINE IMMOBILISER SYSTEM
* FRONT WINDOW DEICER
* INTERIOR LIGHT
* LIGHT REMINDER
* POWER WINDOW
* REAR WINDOW DEFOGGER AND MIRROR HEATER
* SEAT BELT WARNING
* THEFT DETERRENT
* WIRELESS DOOR LOCK CONTROL

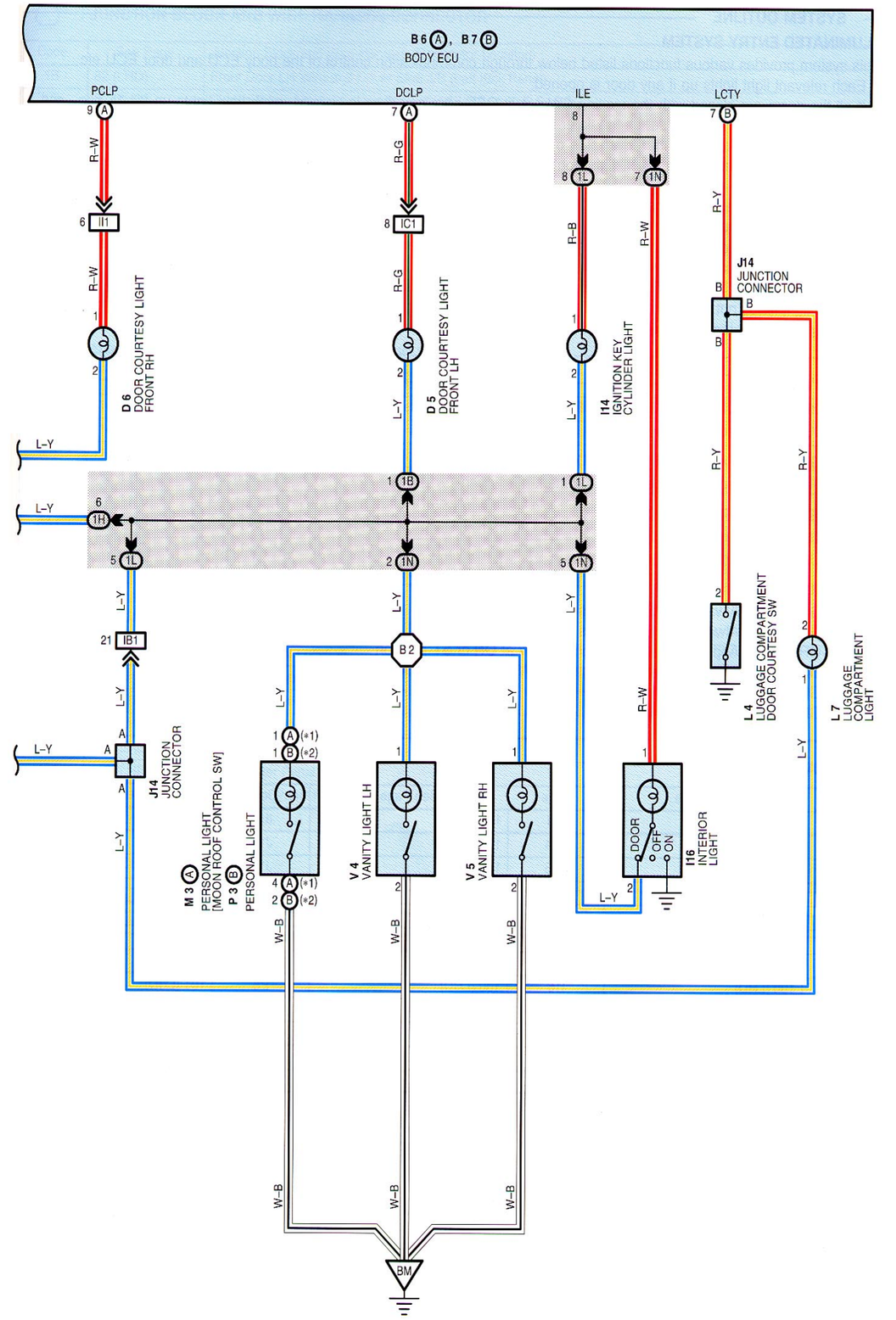
INTERIOR LIGHT (LHD)



INTERIOR LIGHT (LHD)



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



INTERIOR LIGHT (LHD)

SYSTEM OUTLINE

ILLUMINATED ENTRY SYSTEM

This system provides various functions listed below through communication control of the body ECU and door ECU etc.

* Each relevant light lights up if any door is opened.
* If all the doors are closed with the ignition SW set at OFF after any door is opened, each light lights up for 15 sec., and then fades out when the time set on the timer has elapsed.
* If any door is unlocked from the driver side or if any door is unlocked with the unlock SW on the transmitter after all the doors are closed and locked, each light lights up for 15 sec., and then fades out when the time set on the timer has elapsed.
* If the ignition SW is turned to the ACC or ON position while each light is being lit by the timer, the timer lighting is cancelled and the light fades out.
* If all the doors are closed and locked from the driver side or with the lock SW on the transmitter while each light is being lit, the timer lighting is cancelled and the light fades out.
* If all the doors are closed with the ignition SW set at ACC or ON after any door is opened, the timer lighting is cancelled and the light fades out.
* Each light above is the interior light, ignition key cylinder light, and any door is opened.

SERVICE HINTS

D7, D8, D9, D10 DOOR COURTESY SW FRONT LH, RH, REAR LH, RH

1-GROUND : Closed with door open

L4 LUGGAGE COMPARTMENT DOOR COURTESY SW

2-GROUND : Closed with luggage compartment door open

W4 WIRELESS DOOR LOCK ECU

5-GROUND : Always approx. **12** volts
1-GROUND : Always continuity

B6 (A) BODY ECU

BECU-GROUND : Always approx. **12** volts
BSUB-GROUND : Always approx. **12** volts
IG-GROUND : Approx. **12** volts with ignition SW at **ON** or **ST** position
ACC-GROUND : Approx. **12** volts with ignition SW at **ACC** or **ON** position
GND1-GROUND : Always continuity
GND2-GROUND : Always continuity

: PARTS LOCATION

Code		See Page
A14	A	98 (LHD)
A15	B	98 (LHD)
B6	A	98 (LHD)
B7	B	98 (LHD)
C10		98 (LHD)
D4		98 (LHD)
D5		100 (LHD)
D6		100 (LHD)
D7		100 (LHD)
D8		100 (LHD)
D9		100 (LHD)
D10		100 (LHD)

Code		See Page
D11		100 (LHD)
D14		100 (LHD)
D15		100 (LHD)
D16		100 (LHD)
E2	A	96 (LHD)
E3	B	96 (LHD)
I14		99 (LHD)
I16		100 (LHD)
J5		99 (LHD)
J9		99 (LHD)
J12		100 (LHD)
J13		100 (LHD)

Code		See Page
J14		100 (LHD)
J16		100 (LHD)
J17		100 (LHD)
L4		100 (LHD)
L7		100 (LHD)
M3	A	100 (LHD)
P3	B	101 (LHD)
P8		101 (LHD)
V4		101 (LHD)
V5		101 (LHD)
W4		101 (LHD)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	82 (LHD)	Front Door LH Wire and Driver Side J/B (Left Kick Panel)
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1L		
1N	82 (LHD)	Roof Wire and Driver Side J/B (Left Kick Panel)
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2E	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G		
2H		
2K	84 (LHD)	Front Door RH Wire and Passenger Side J/B (Right Kick Panel)
2L	84 (LHD)	Floor Wire and Passenger Side J/B (Right Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA3	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IB1	114 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
IC1	114 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IH3	116 (LHD)	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
II1	116 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BA1	118 (LHD)	Rear Door No.2 Wire and Floor No.2 Wire (Left Center Pillar)
BB1	118 (LHD)	Rear Door No.1 Wire and Floor Wire (Right Center Pillar)
BC1	118 (LHD)	Floor No.2 Wire and Floor Wire (Under the Right Rear Cushion)

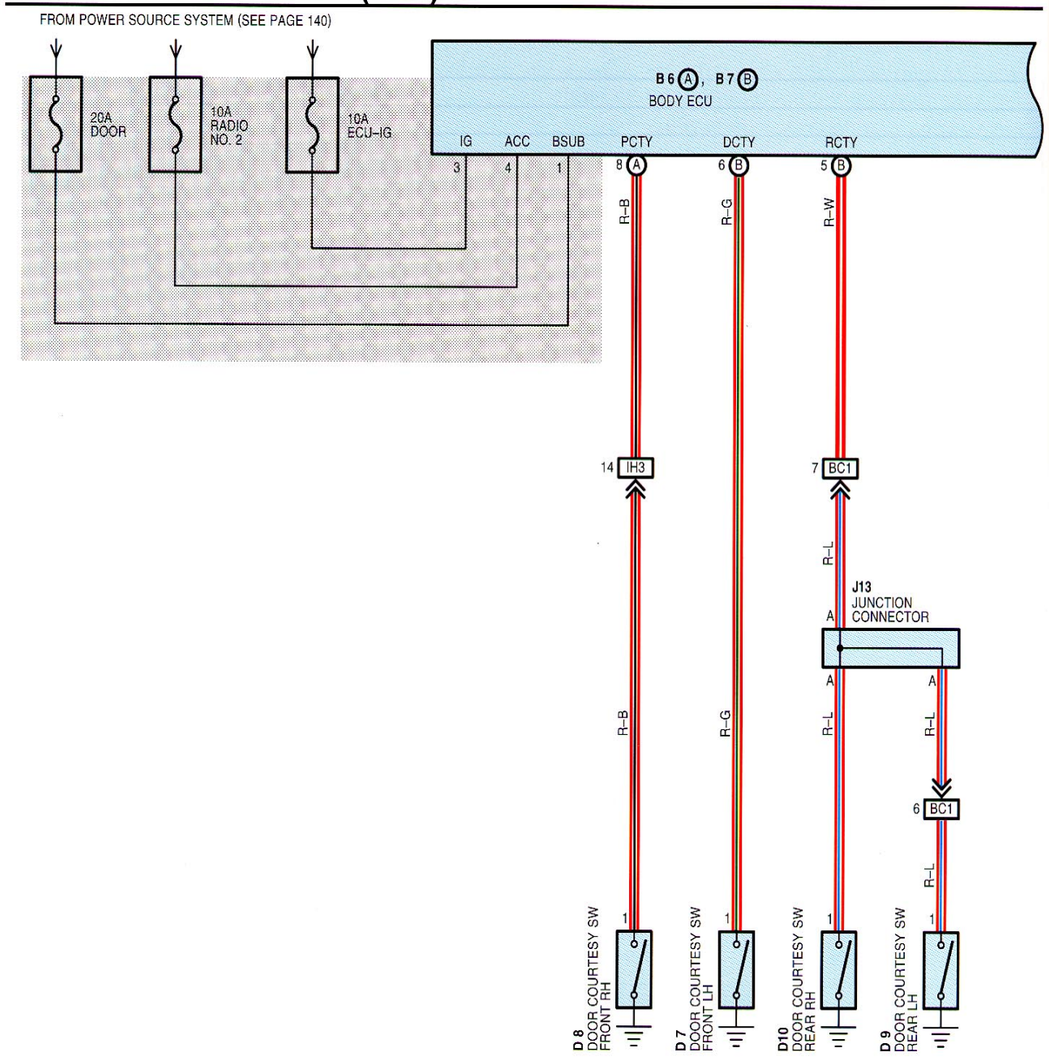
: GROUND POINTS

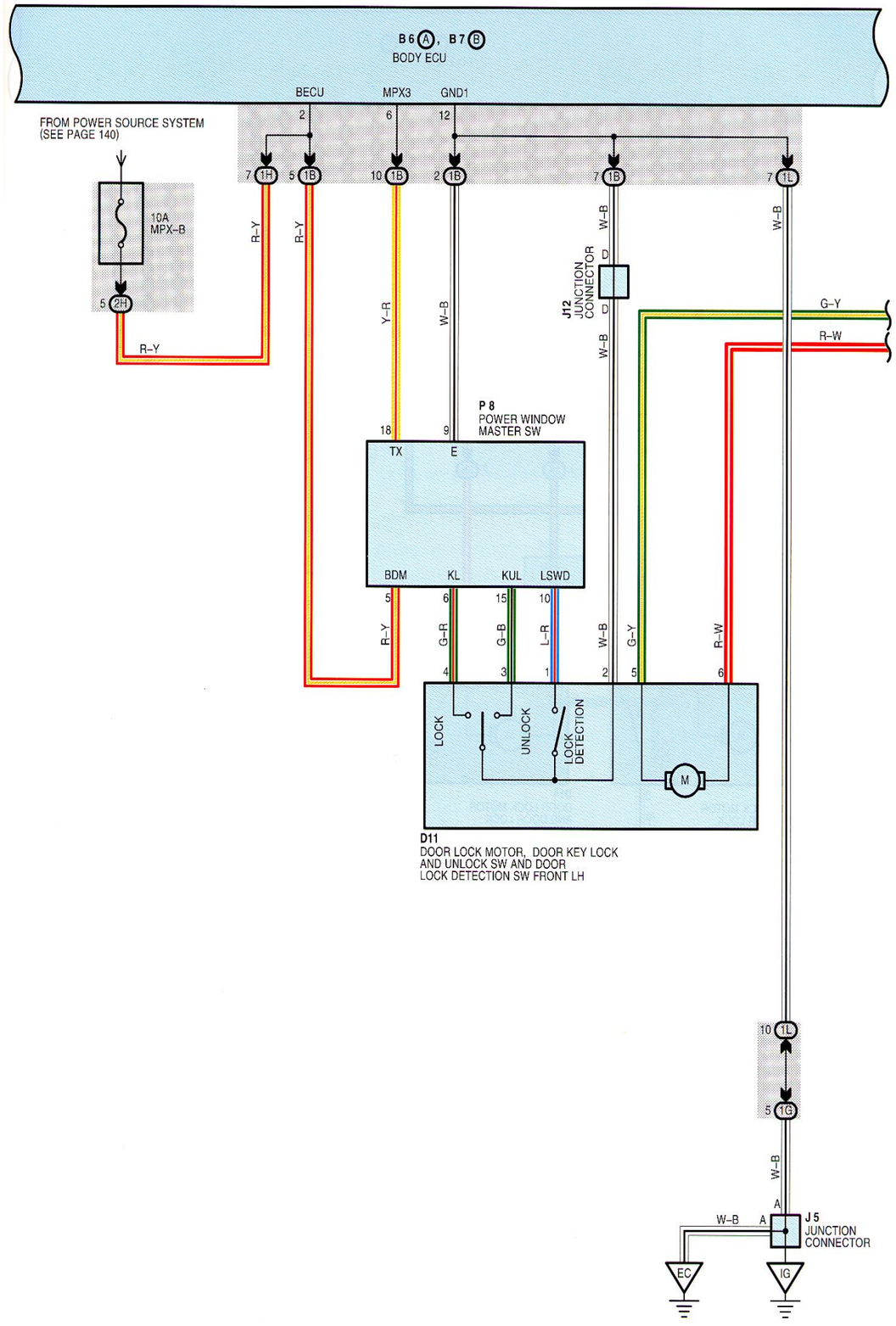
Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
ID	114 (LHD)	Cowl Side Panel LH
IG	114 (LHD)	Cowl Side Panel RH
IH	114 (LHD)	Front Floor Panel Center LH
BK	118 (LHD)	Left Quarter Panel LH
BL	118 (LHD)	Front Floor Panel RH
BM	118 (LHD)	Roof Panel

: SPLICE POINTS

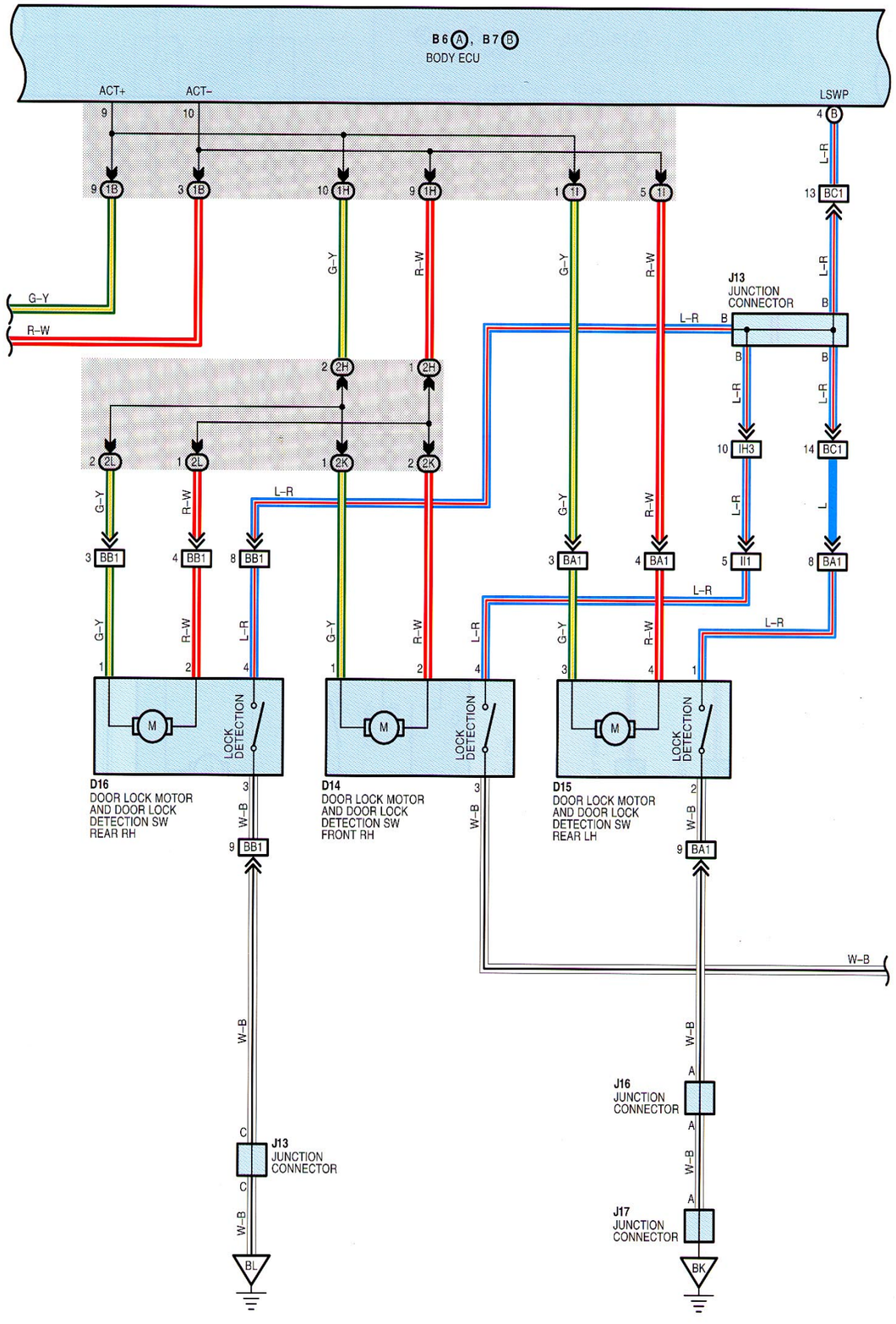
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B2	118 (LHD)	Roof Wire			

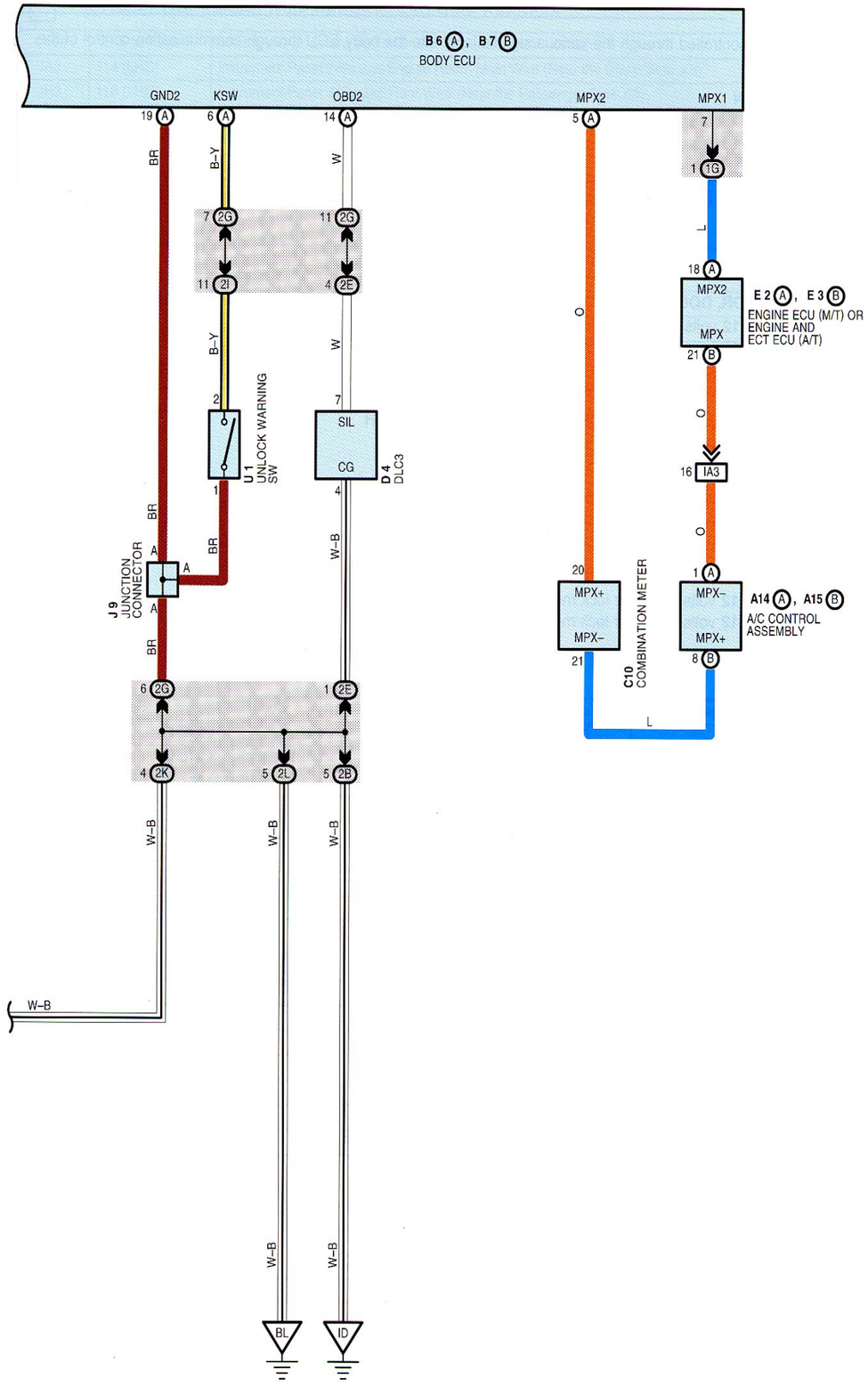
DOOR LOCK CONTROL (LHD)





DOOR LOCK CONTROL (LHD)





DOOR LOCK CONTROL (LHD)

SYSTEM OUTLINE

The door lock control is controlled through the various signals input into the body ECU through communication control of the body ECU etc.

1. MANUAL OPERATION

All doors can be Locked/Unlocked through the operation of the driver side door lock control SW.

2. MANUAL UNLOCK PROTECTION

Once the doors are locked by the door knob (Key less operation), the door key or the transmitter, they can not be unlocked by the door lock control SW. The protection is canceled when the ignition SW is turned on or unlock operation is made by the door key or the transmitter.

SERVICE HINTS

D11 DOOR LOCK MOTOR, DOOR KEY LOCK AND UNLOCK SW AND DOOR LOCK DETECTION SW FRONT LH

5-GROUND : Approx. **12** volts with door lock motor at lock operate
6-GROUND : Approx. **12** volts with door lock motor at unlock operate
4-2 : Closed with door lock cylinder locked with key
3-2 : Closed with door lock cylinder unlocked with key

D14 DOOR LOCK MOTOR AND DOOR LOCK DETECTION SW FRONT RH

1-GROUND : Approx. **12** volts with door lock motor at lock operate
2-GROUND : Approx. **12** volts with door lock motor at unlock operate

D15 DOOR LOCK MOTOR AND DOOR LOCK DETECTION SW REAR LH

3-GROUND : Approx. **12** volts with door lock motor at lock operate
4-GROUND : Approx. **12** volts with door lock motor at unlock operate

D16 DOOR LOCK MOTOR AND DOOR LOCK DETECTION SW REAR RH

1-GROUND : Approx. **12** volts with door lock motor at lock operate
2-GROUND : Approx. **12** volts with door lock motor at unlock operate

○ : PARTS LOCATION

Code		See Page	Code		See Page	Code	See Page
A14	A	98 (LHD)	D9		100 (LHD)	J5	99 (LHD)
A15	B	98 (LHD)	D10		100 (LHD)	J9	99 (LHD)
B6	A	98 (LHD)	D11		100 (LHD)	J12	100 (LHD)
B7	B	98 (LHD)	D14		100 (LHD)	J13	100 (LHD)
C10		98 (LHD)	D15		100 (LHD)	J16	100 (LHD)
D4		98 (LHD)	D16		100 (LHD)	J17	100 (LHD)
D7		100 (LHD)	E2	A	96 (LHD)	P8	101 (LHD)
D8		100 (LHD)	E3	B	96 (LHD)	U1	99 (LHD)

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	82 (LHD)	Front Door LH Wire and Driver Side J/B (Left Kick Panel)
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1I	82 (LHD)	Floor No.2 Wire and Driver Side J/B (Left Kick Panel)
1L	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2E	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G		
2H		
2I		
2K	84 (LHD)	Front Door RH Wire and Passenger Side J/B (Right Kick Panel)
2L	84 (LHD)	Floor Wire and Passenger Side J/B (Right Kick Panel)

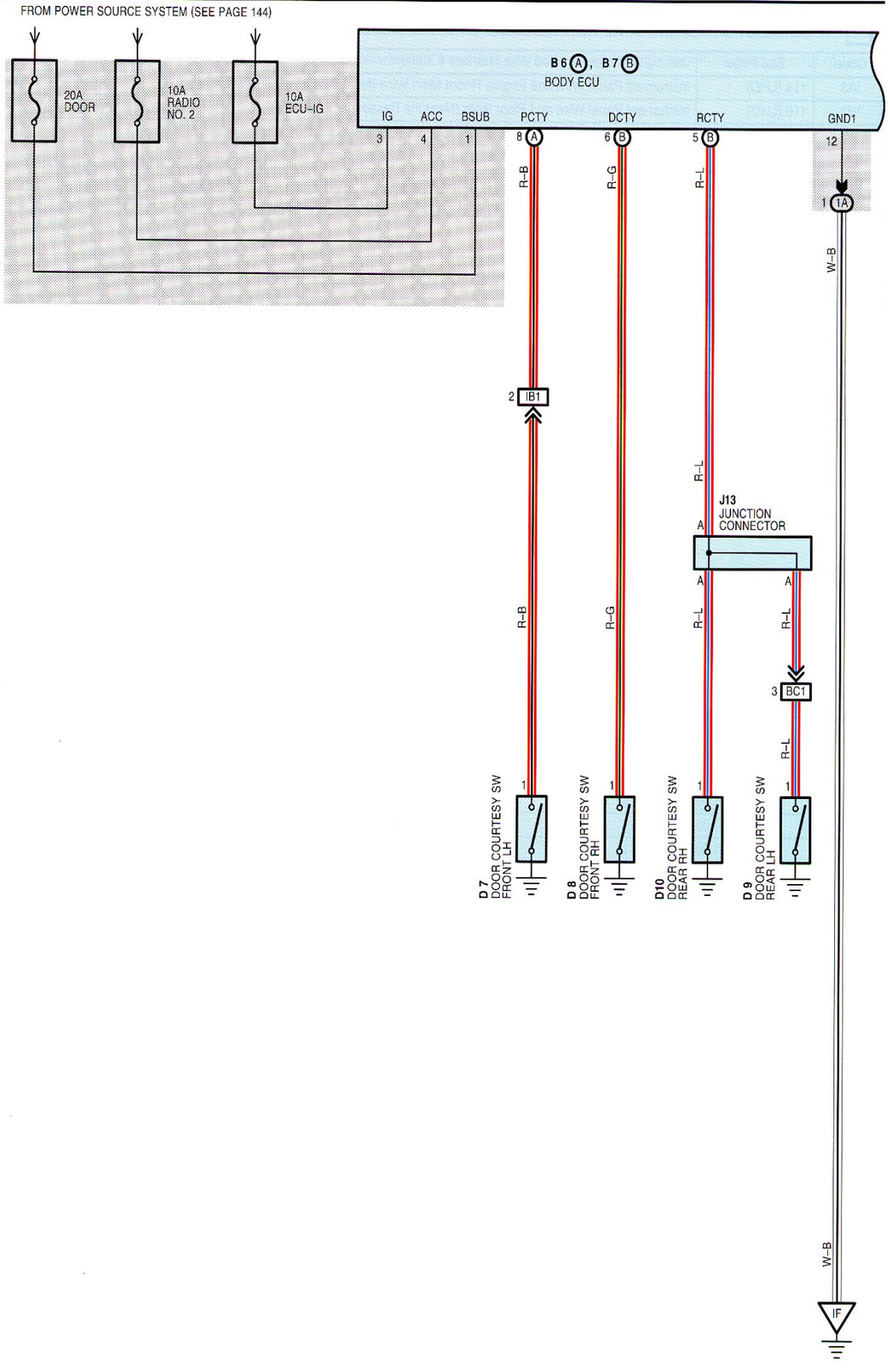
▭ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA3	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IH3	116 (LHD)	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
II1	116 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BA1	118 (LHD)	Rear Door No.2 Wire and Floor No.2 Wire (Left Center Pillar)
BB1	118 (LHD)	Rear Door No.1 Wire and Floor Wire (Right Center Pillar)
BC1	118 (LHD)	Floor No.2 Wire and Floor Wire (Under the Right Rear Cushion)

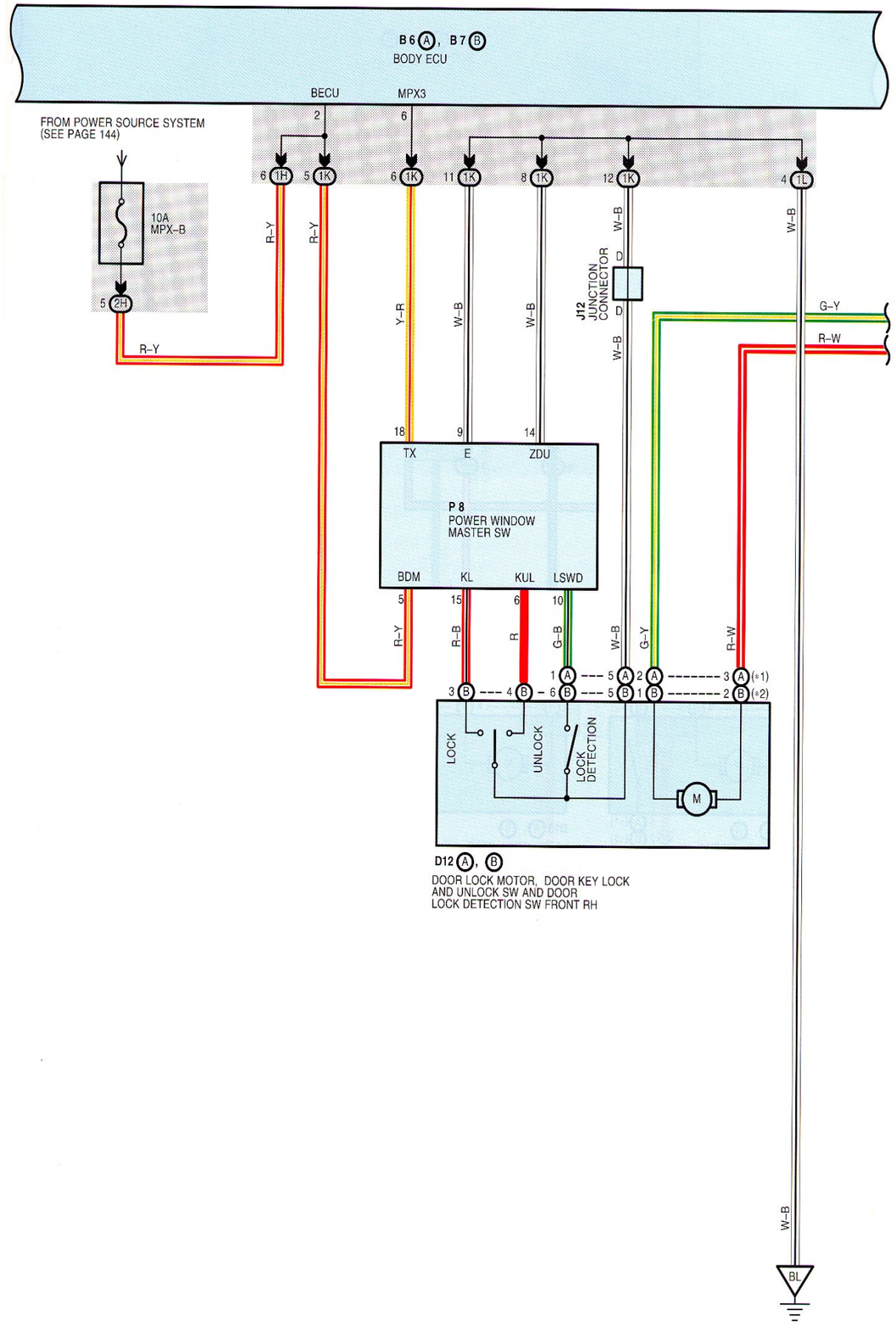
▽ : GROUND POINTS

Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
ID	114 (LHD)	Cowl Side Panel LH
IG	114 (LHD)	Cowl Side Panel RH
BK	118 (LHD)	Left Quarter Panel LH
BL	118 (LHD)	Front Floor Panel RH

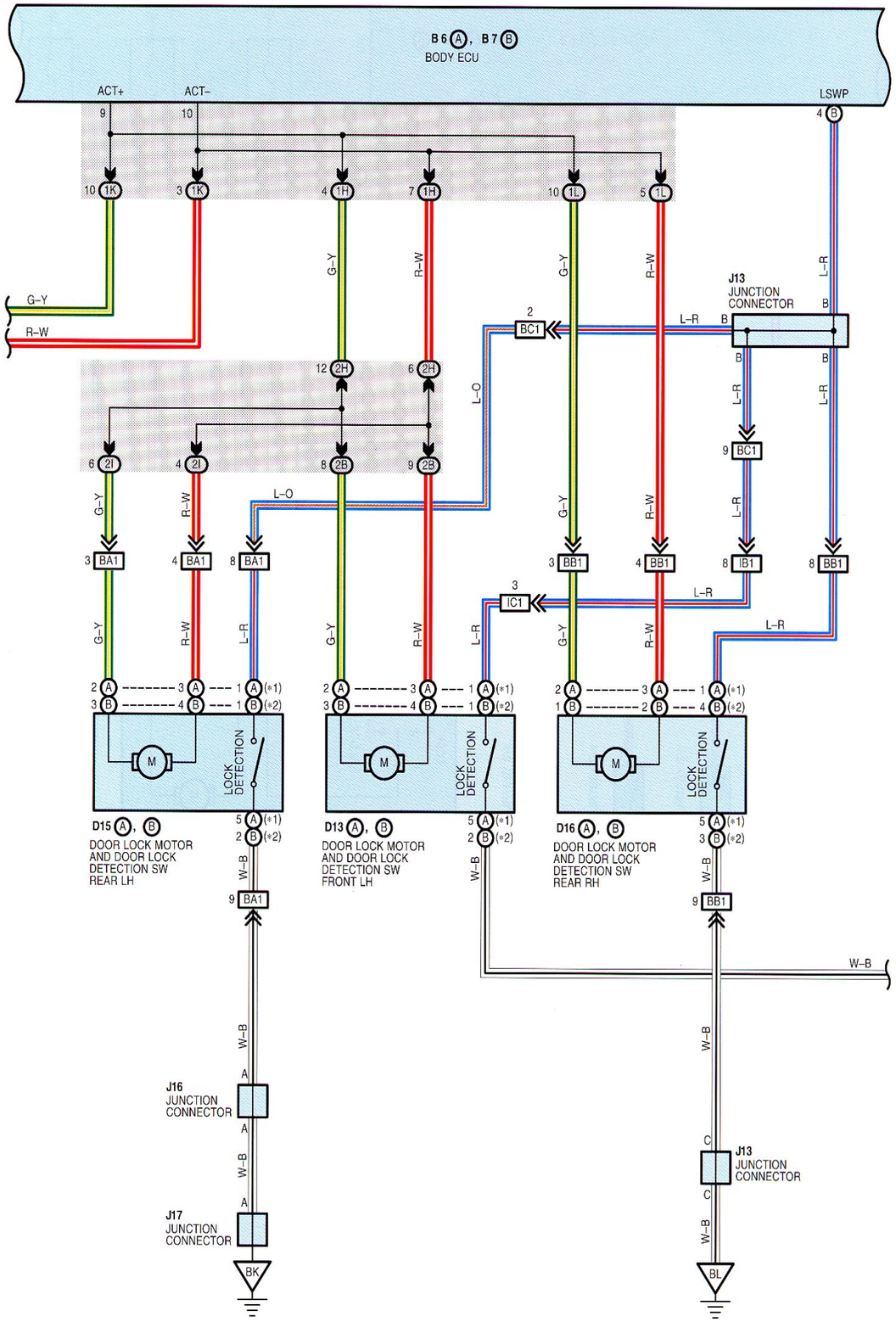
DOOR LOCK CONTROL (RHD)



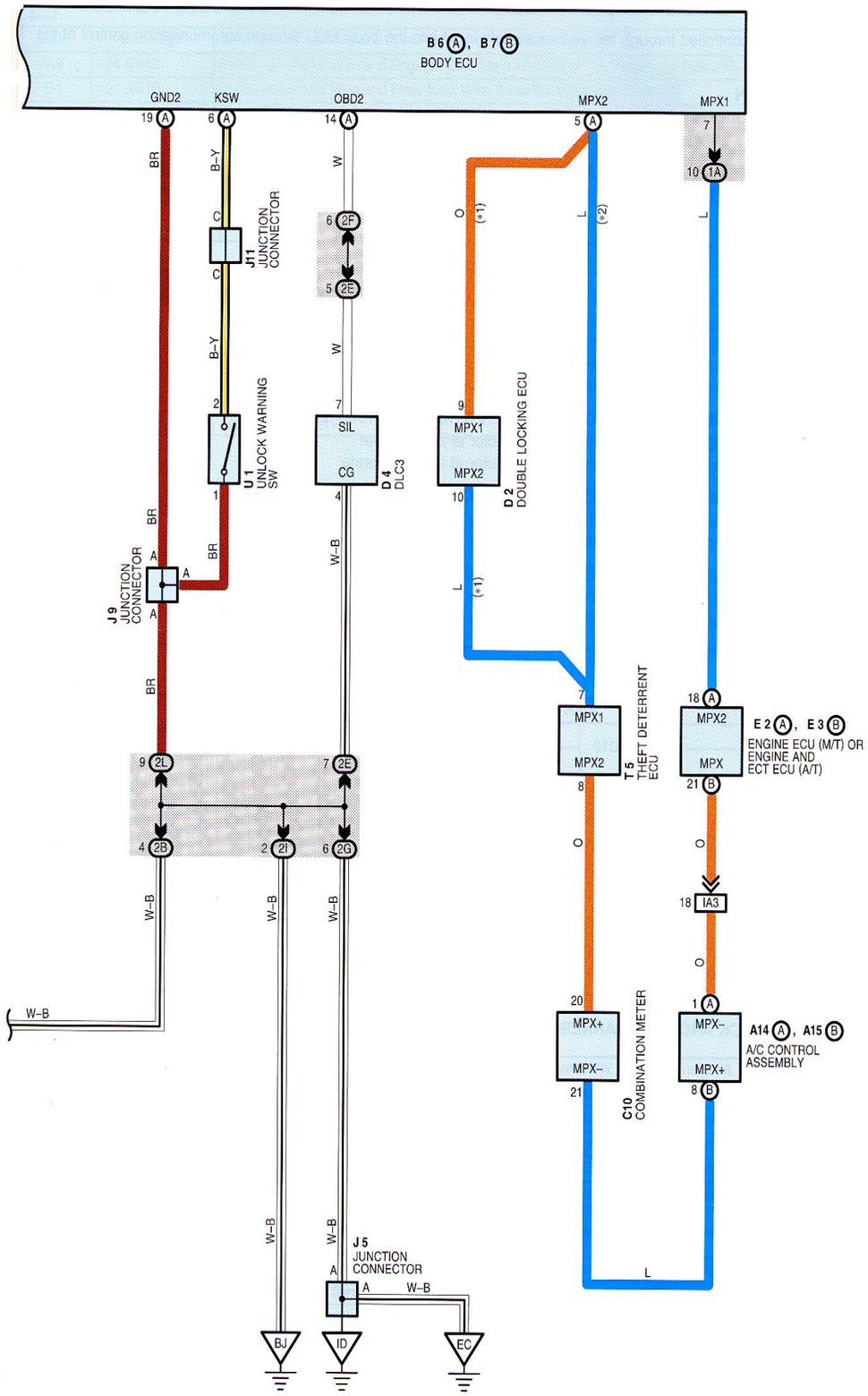
＊1 : W/ DOUBLE LOCKING
＊2 : W/O DOUBLE LOCKING



DOOR LOCK CONTROL (RHD)



* 1 : W/ DOUBLE LOCKING
* 2 : W/O DOUBLE LOCKING



DOOR LOCK CONTROL (RHD)

SYSTEM OUTLINE

The door lock control is controlled through the various signals input into the body ECU through communication control of the body ECU etc.

1. MANUAL OPERATION

All doors can be Locked/Unlocked through the operation of the driver side door lock control SW.

2. MANUAL UNLOCK PROTECTION

Once the doors are locked by the door knob (Key less operation), the door key or the transmitter, they can not be unlocked by the door lock control SW. The protection is canceled when the ignition SW is turned on or unlock operation is made by the door key or the transmitter.

SERVICE HINTS

D12 (A), (B) DOOR LOCK MOTOR, DOOR KEY LOCK AND UNLOCK SW AND DOOR LOCK DETECTION SW FRONT RH

2 (A), 1 (B)–GROUND : Approx. **12** volts with door lock motor at lock operate
3 (A), 2 (B)–GROUND : Approx. **12** volts with door lock motor at unlock operate
3 (B)–5 (B) : Closed with door lock cylinder locked with key
4 (B)–5 (B) : Closed with door lock cylinder unlocked with key

D13 (A), (B) DOOR LOCK MOTOR AND DOOR LOCK DETECTION SW FRONT LH

2 (A), 3 (B)–GROUND : Approx. **12** volts with door lock motor at lock operate
3 (A), 4 (B)–GROUND : Approx. **12** volts with door lock motor at unlock operate

D15 (A), (B) DOOR LOCK MOTOR AND DOOR LOCK DETECTION SW REAR LH

2 (A), 3 (B)–GROUND : Approx. **12** volts with door lock motor at lock operate
3 (A), 4 (B)–GROUND : Approx. **12** volts with door lock motor at unlock operate

D16 (A), (B) DOOR LOCK MOTOR AND DOOR LOCK DETECTION SW REAR RH

2 (A), 1 (B)–GROUND : Approx. **12** volts with door lock motor at lock operate
3 (A), 2 (B)–GROUND : Approx. **12** volts with door lock motor at unlock operate

○ : PARTS LOCATION

Code		See Page	Code		See Page	Code	See Page
A14	A	106 (RHD)	D12	A	108 (RHD)	J9	107 (RHD)
A15	B	106 (RHD)		B	108 (RHD)	J11	107 (RHD)
B6	A	106 (RHD)	D13	A	108 (RHD)	J12	108 (RHD)
B7	B	106 (RHD)		B	108 (RHD)	J13	108 (RHD)
C10		106 (RHD)	D15	A	108 (RHD)	J16	108 (RHD)
D2		106 (RHD)		B	108 (RHD)	J17	108 (RHD)
D4		106 (RHD)	D16	A	108 (RHD)	P8	109 (RHD)
D7		108 (RHD)		B	108 (RHD)	T5	107 (RHD)
D8		108 (RHD)	E2	A	104 (RHD)	U1	107 (RHD)
D9		108 (RHD)	E3	B	104 (RHD)		
D10		108 (RHD)	J5		107 (RHD)		

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	88 (RHD)	Engine Room Main Wire and Driver Side J/B (Right Kick Panel)
1H	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1K	88 (RHD)	Front Door RH Wire and Driver Side J/B (Right Kick Panel)
1L	88 (RHD)	Floor Wire and Driver Side J/B (Right Kick Panel)
2B	90 (RHD)	Front Door LH Wire and Passenger Side J/B (Left Kick Panel)
2E	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2F		
2G	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)
2H	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2I	90 (RHD)	Floor No.2 Wire and Passenger Side J/B (Left Kick Panel)
2L	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)

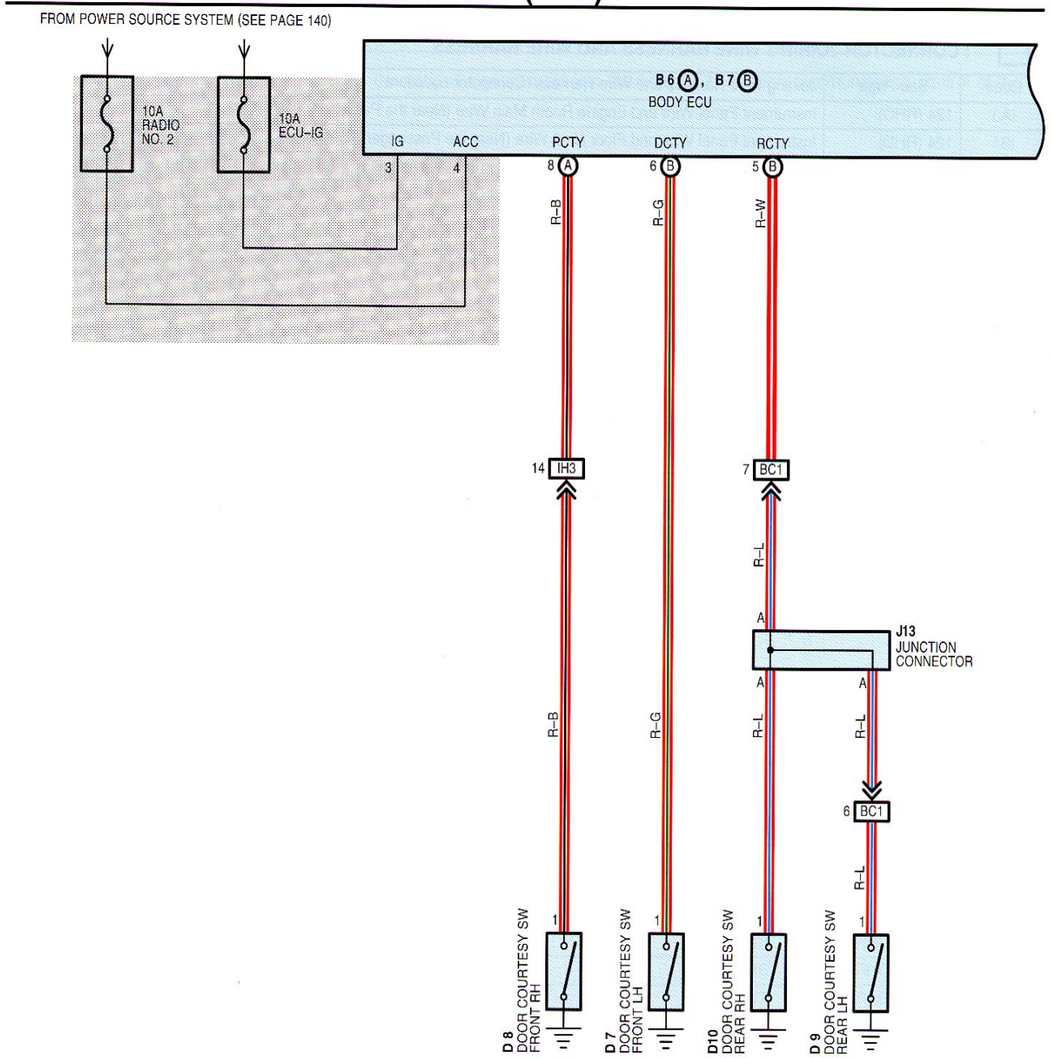
□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

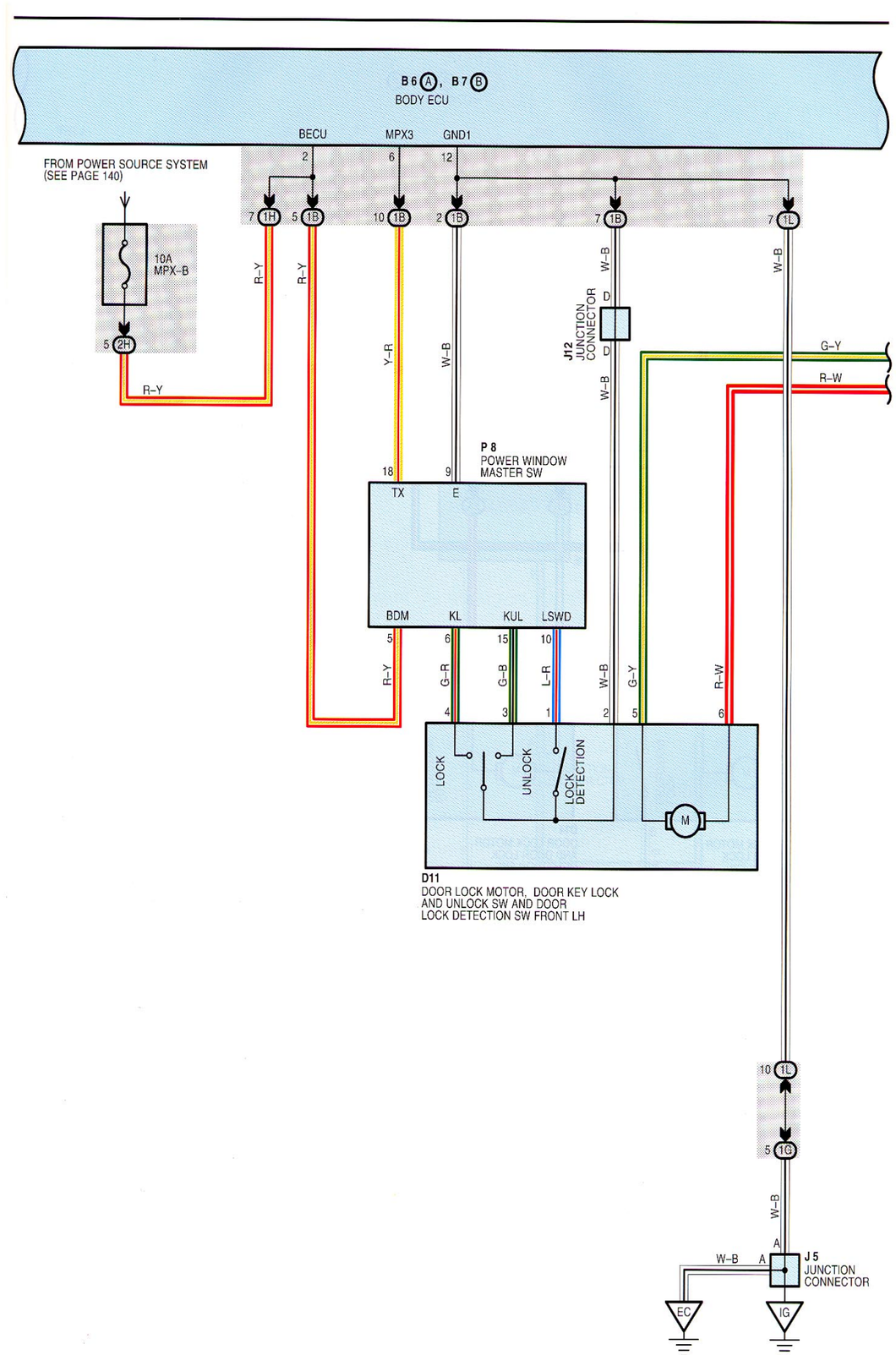
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA3	124 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
IB1	124 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Passenger Side J/B)
IC1	124 (RHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
BA1	128 (RHD)	Rear Door No.2 Wire and Floor No.2 Wire (Left Center Pillar)
BB1	128 (RHD)	Rear Door No.1 Wire and Floor Wire (Right Center Pillar)
BC1	128 (RHD)	Floor No.2 Wire and Floor Wire (Under the Right Rear Cushion)

▽ : GROUND POINTS

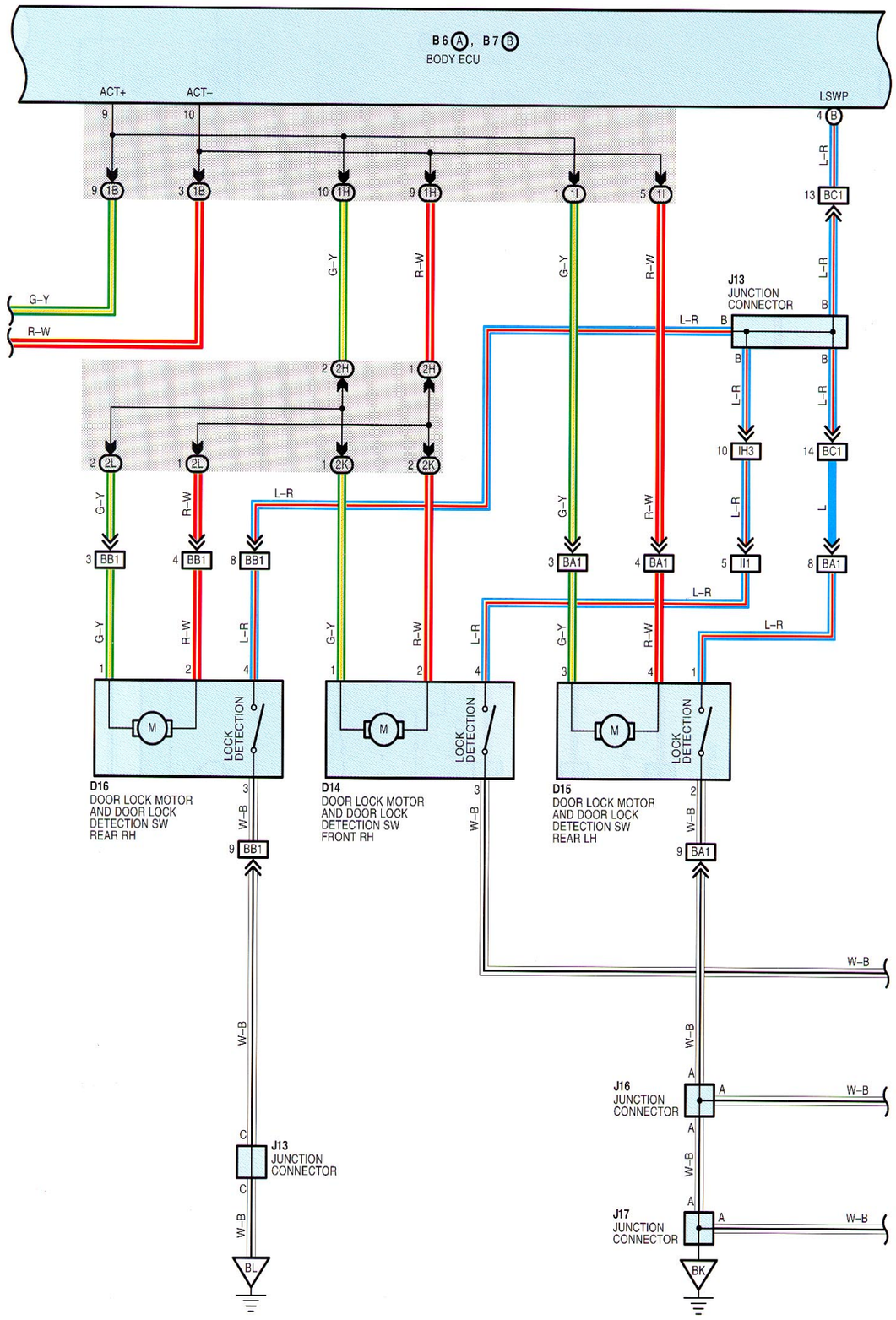
Code	See Page	Ground Points Location
EC	122 (RHD)	Left Fender Apron
ID	124 (RHD)	Cowl Side Panel LH
IF	124 (RHD)	Cowl Side Panel RH
BJ	128 (RHD)	Front Floor Panel LH
BK	128 (RHD)	Left Quarter Panel LH
BL	128 (RHD)	Front Floor Panel RH

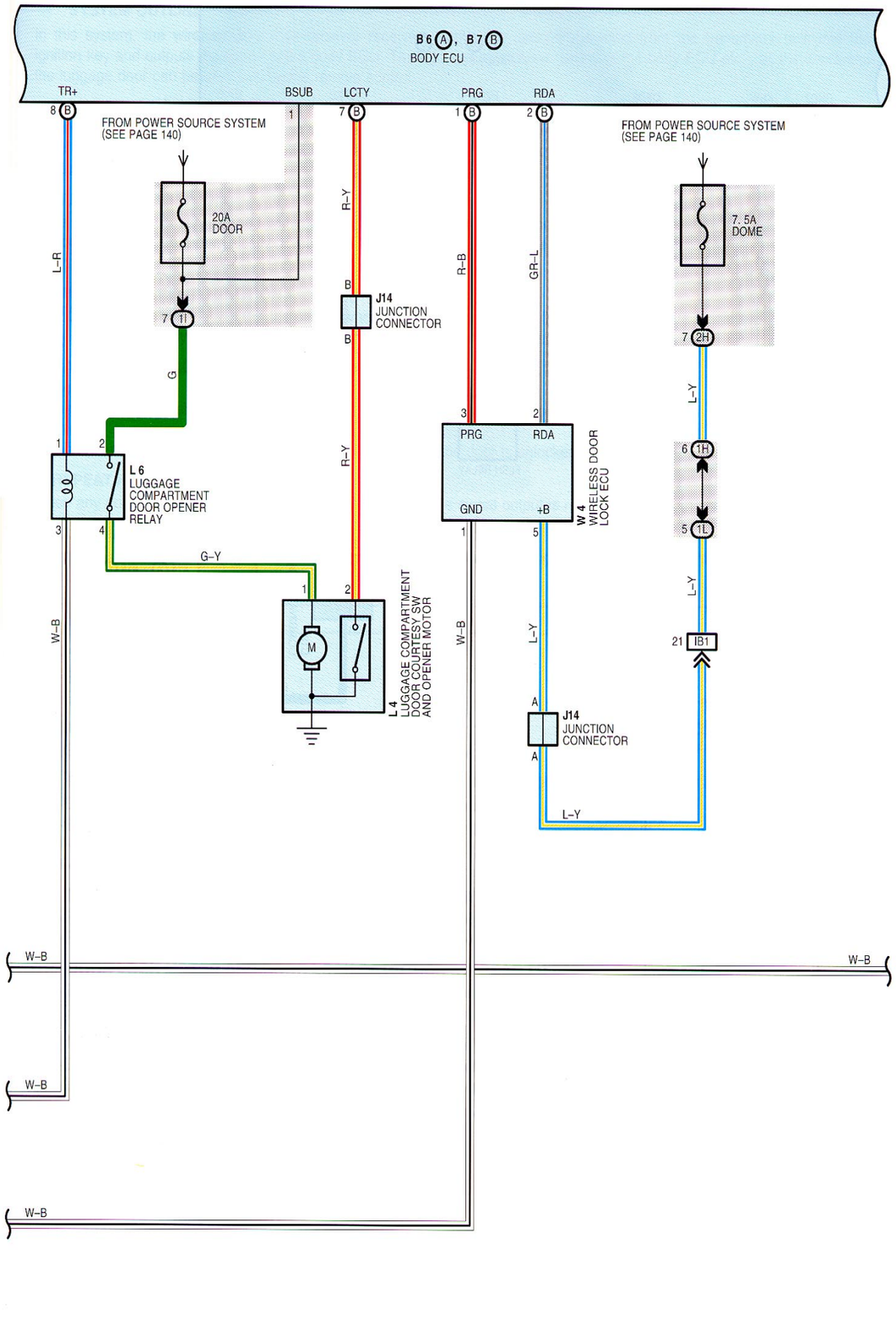
WIRELESS DOOR LOCK CONTROL (LHD)



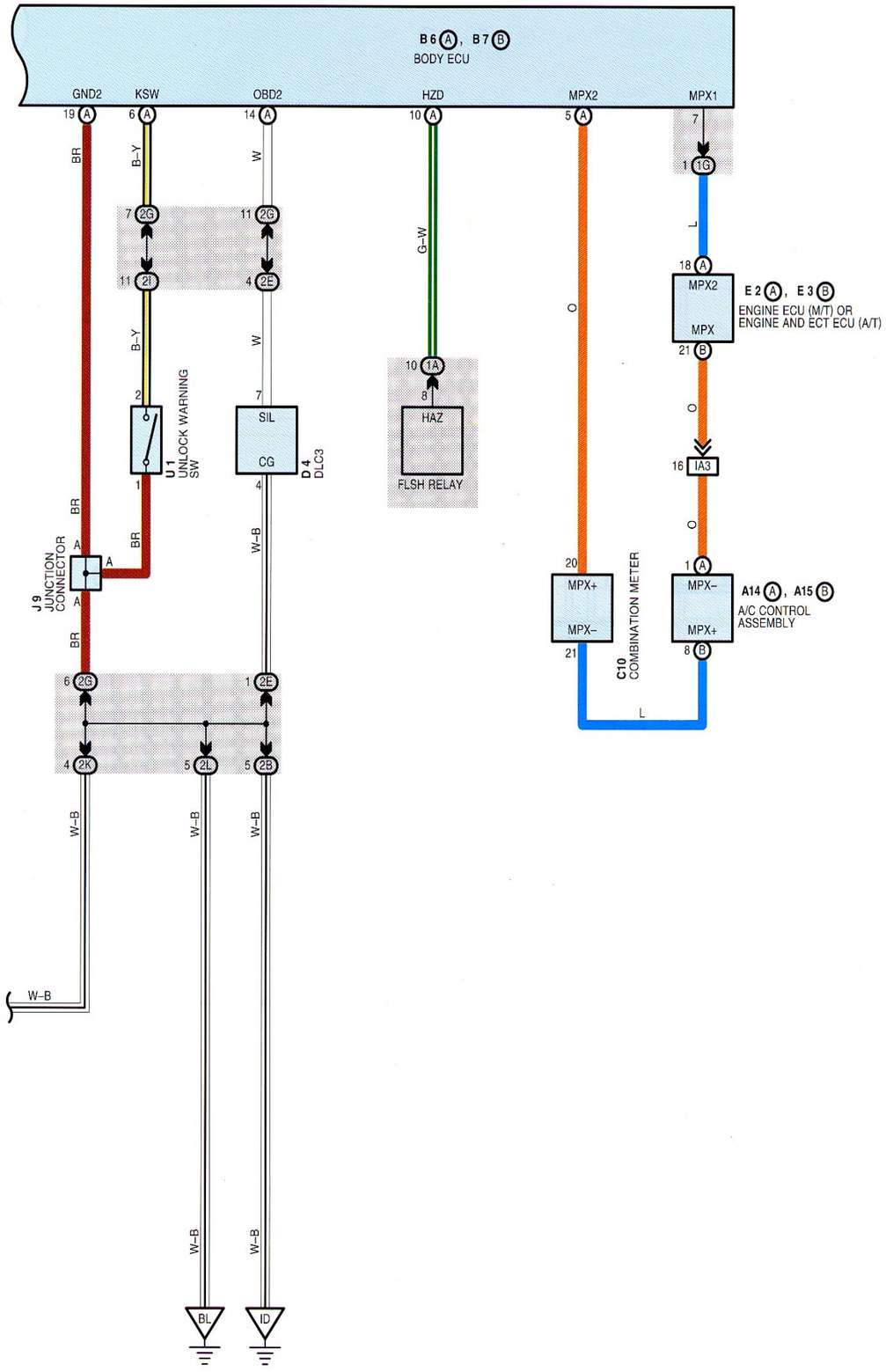


WIRELESS DOOR LOCK CONTROL (LHD)





WIRELESS DOOR LOCK CONTROL (LHD)



SYSTEM OUTLINE

In this system, the wireless door lock receiver receives weak radio wave transmitted from the transmitter built–into the ignition key and outputs the signal to the body ECU. Through communication control of the body ECU etc. , all the doors and the luggage door can be unlocked by the remote control.

1. BASIC FUNCTION

When the vehicle receives the radio wave signals from the transmitter, the system determines the condition of respective switches by the function code attached to the identification code, and controls them. In case any door is open, the lock does not function.

2. AUTO LOCK FUNCTION

If the door is not actually opened within approximately 30 seconds after the door has been unlocked by the transmitter, all the doors are locked automatically. Every time the receiver receives the unlock signal from the transmitter, the 30 second timer is canceled.

3. THEFT DETERRENT FUNCTION

Although the data configuration is the same, when the receiver receives 10 kinds of radio wave signals within 10 minutes, which does not comply with the identification code, the system inhibits further control.

4. CAR FINDER FUNCTION

* Lock
  The hazard light flashes once when the signal is sent and the door is locked.
* Unlock
  The hazard light flashes twice when the signal is sent and the door is unlocked.

5. REPEAT FUNCTION

When any door does not respond to the lock/unlock signal, the signal output is repeated maximum twice.

6. ILLUMINATED ENTRY OPERATION

When the body ECU detects that any door is unlocked, the interior light, ignition key cylinder light and door courtesy light front LH, RH comes on.

SERVICE HINTS

W4 WIRELESS DOOR LOCK ECU

1–GROUND : Always continuity
5–GROUND : Always approx. **12** volts

L4 LUGGAGE COMPARTMENT DOOR OPENER MOTOR

1–GROUND : Approx. **12** volts with luggage door open operate

D11 DOOR LOCK MOTOR, DOOR KEY LOCK AND UNLOCK SW AND DOOR LOCK DETECTION SW FRONT LH

5–GROUND : Approx. **12** volts with door lock motor at lock operate
6–GROUND : Approx. **12** volts with door lock motor at unlock operate
4–2 : Closed with door lock cylinder locked with key
3–2 : Closed with door lock cylinder unlocked with key

D14 DOOR LOCK MOTOR AND DOOR LOCK DETECTION SW FRONT RH

1–GROUND : Approx. **12** volts with door lock motor at lock operate
2–GROUND : Approx. **12** volts with door lock motor at unlock operate

D15 DOOR LOCK MOTOR AND DOOR LOCK DETECTION SW REAR LH

3–GROUND : Approx. **12** volts with door lock motor at lock operate
4–GROUND : Approx. **12** volts with door lock motor at unlock operate

D16 DOOR LOCK MOTOR AND DOOR LOCK DETECTION SW REAR RH

1–GROUND : Approx. **12** volts with door lock motor at lock operate
2–GROUND : Approx. **12** volts with door lock motor at unlock operate

WIRELESS DOOR LOCK CONTROL (LHD)

: PARTS LOCATION

Code		See Page	Code		See Page	Code	See Page
A14	A	98 (LHD)	D11		100 (LHD)	J14	100 (LHD)
A15	B	98 (LHD)	D14		100 (LHD)	J16	100 (LHD)
B6	A	98 (LHD)	D15		100 (LHD)	J17	100 (LHD)
B7	B	98 (LHD)	D16		100 (LHD)	L4	100 (LHD)
C10		98 (LHD)	E2	A	96 (LHD)	L6	100 (LHD)
D4		98 (LHD)	E3	B	96 (LHD)	P8	101 (LHD)
D7		100 (LHD)	J5		99 (LHD)	U1	99 (LHD)
D8		100 (LHD)	J9		99 (LHD)	W4	101 (LHD)
D9		100 (LHD)	J12		100 (LHD)		
D10		100 (LHD)	J13		100 (LHD)		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1B	82 (LHD)	Front Door LH Wire and Driver Side J/B (Left Kick Panel)
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1I	82 (LHD)	Floor No.2 Wire and Driver Side J/B (Left Kick Panel)
1L	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2E	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G		
2H		
2I		
2K	84 (LHD)	Front Door RH Wire and Passenger Side J/B (Right Kick Panel)
2L	84 (LHD)	Floor Wire and Passenger Side J/B (Right Kick Panel)

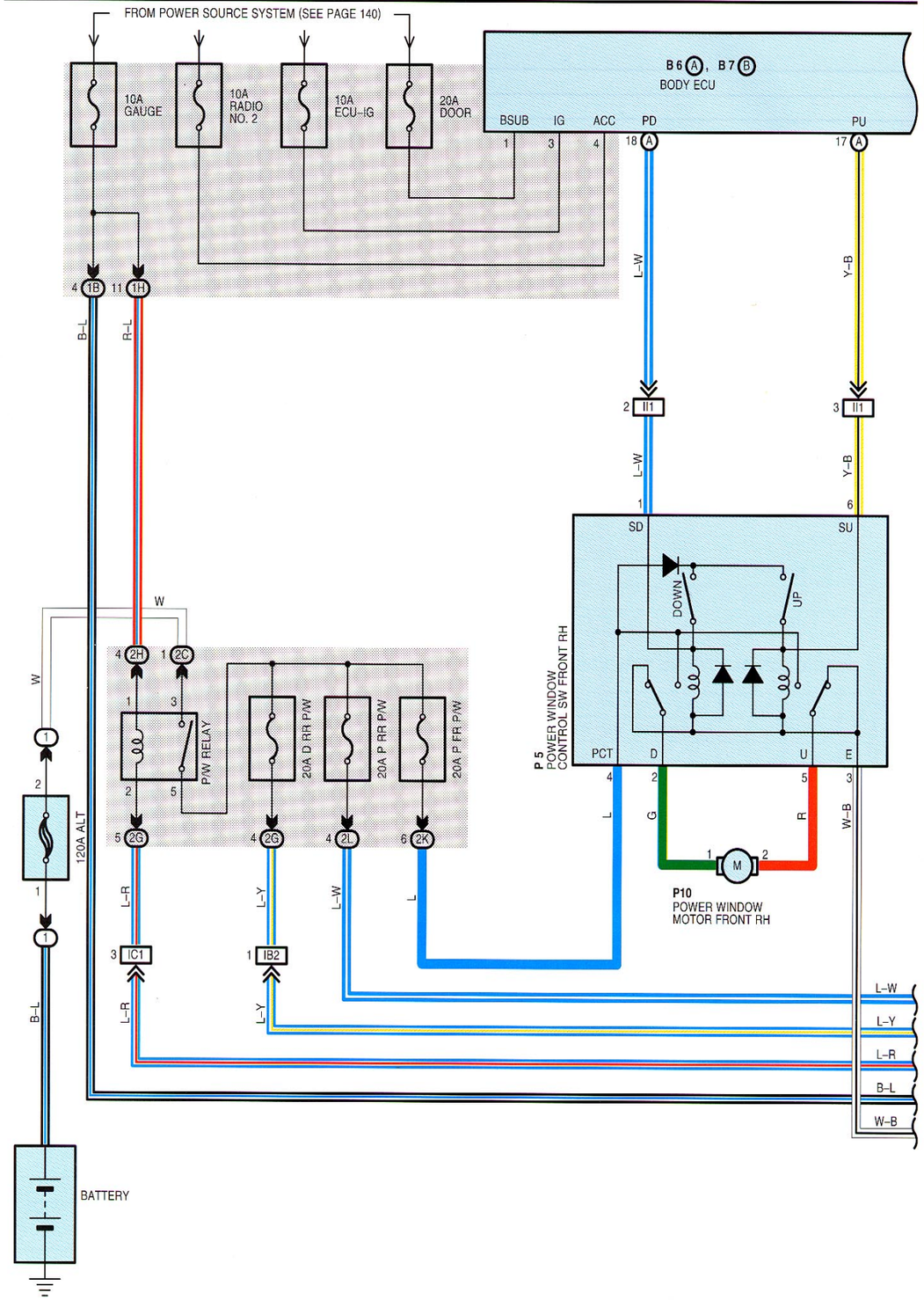
: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

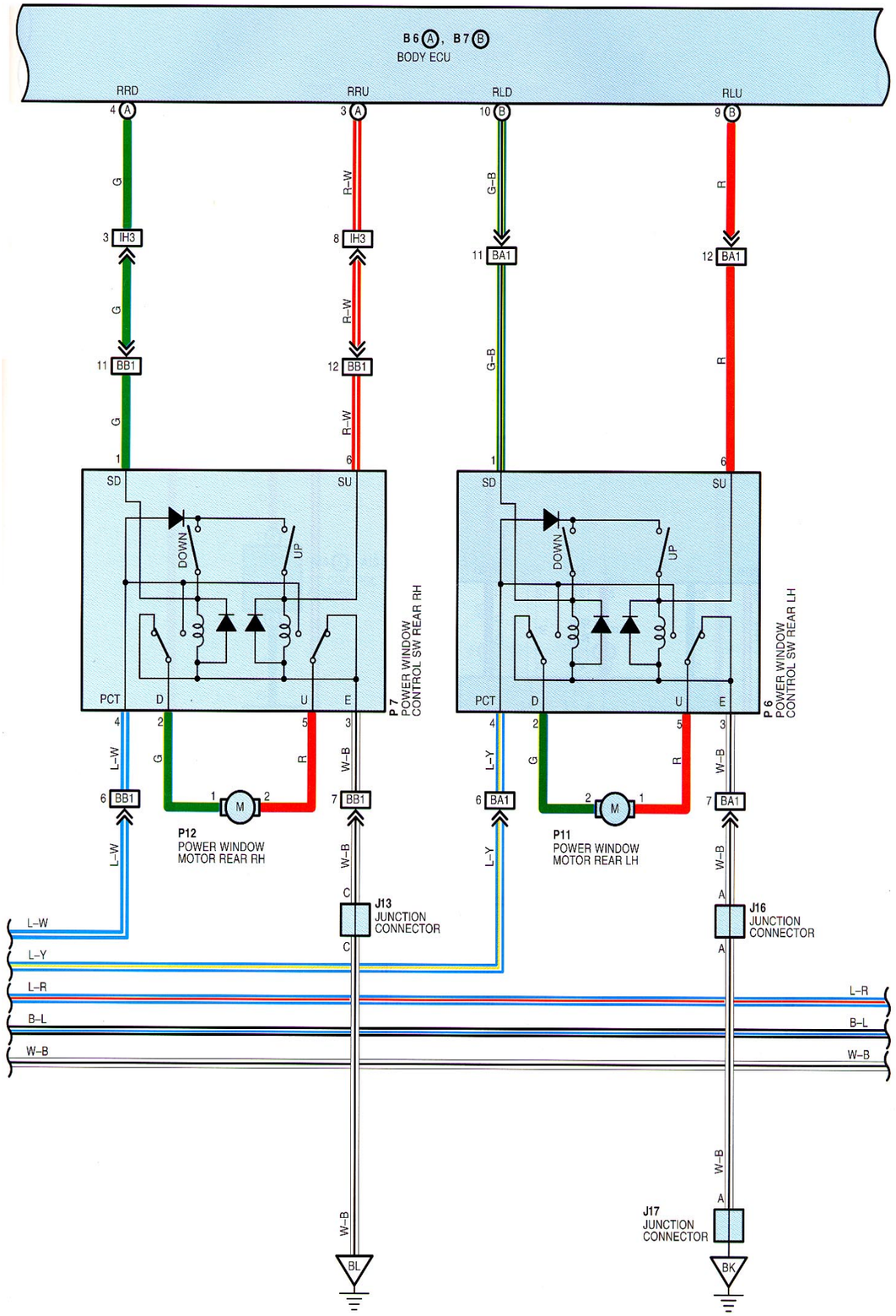
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA3	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IB1	114 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
IH3	116 (LHD)	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
II1	116 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BA1	118 (LHD)	Rear Door No.2 Wire and Floor No.2 Wire (Left Center Pillar)
BB1	118 (LHD)	Rear Door No.1 Wire and Floor Wire (Right Center Pillar)
BC1	118 (LHD)	Floor No.2 Wire and Floor Wire (Under the Right Rear Cushion)

: GROUND POINTS

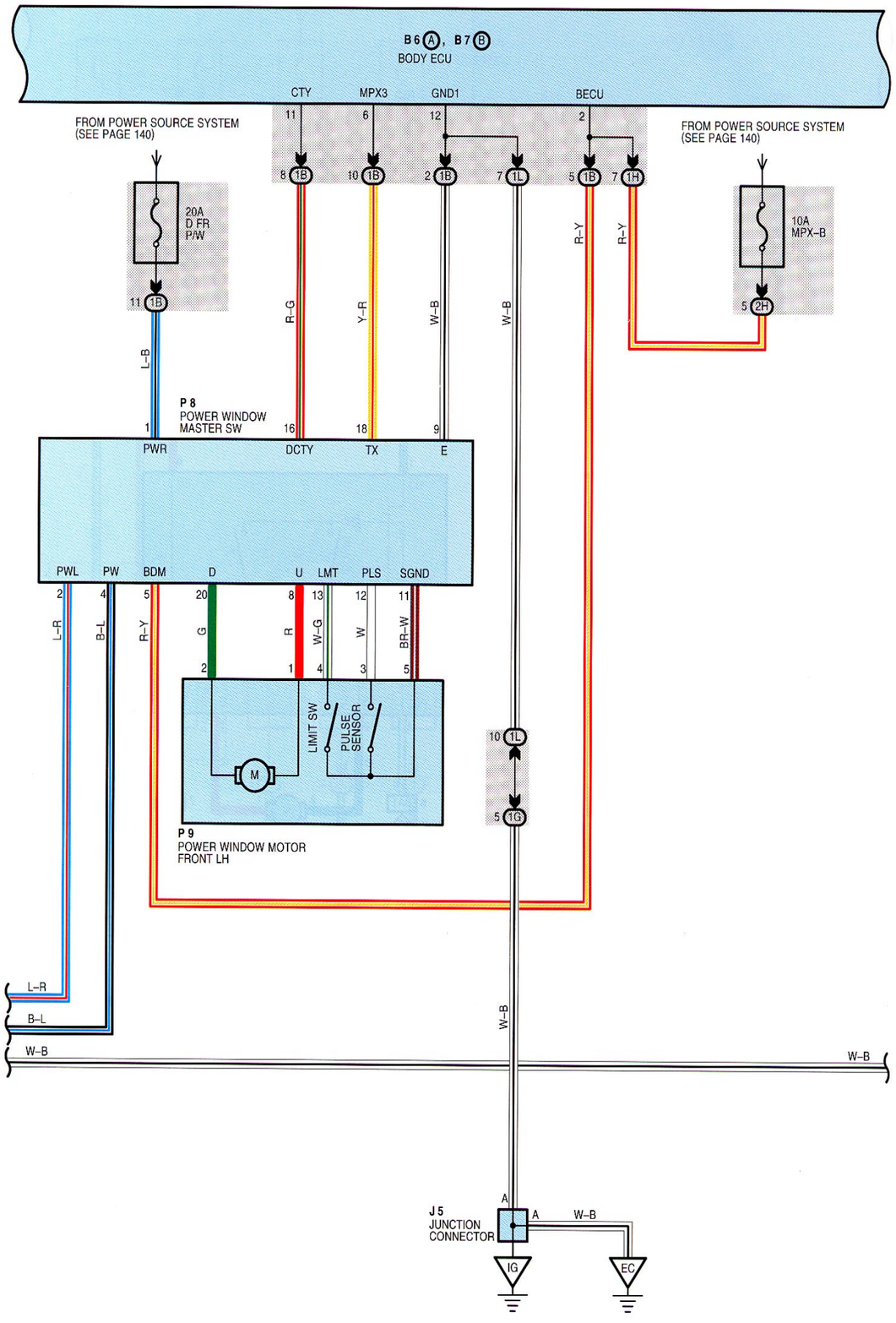
Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
ID	114 (LHD)	Cowl Side Panel LH
IG	114 (LHD)	Cowl Side Panel RH
BK	118 (LHD)	Left Quarter Panel LH
BL	118 (LHD)	Front Floor Panel RH

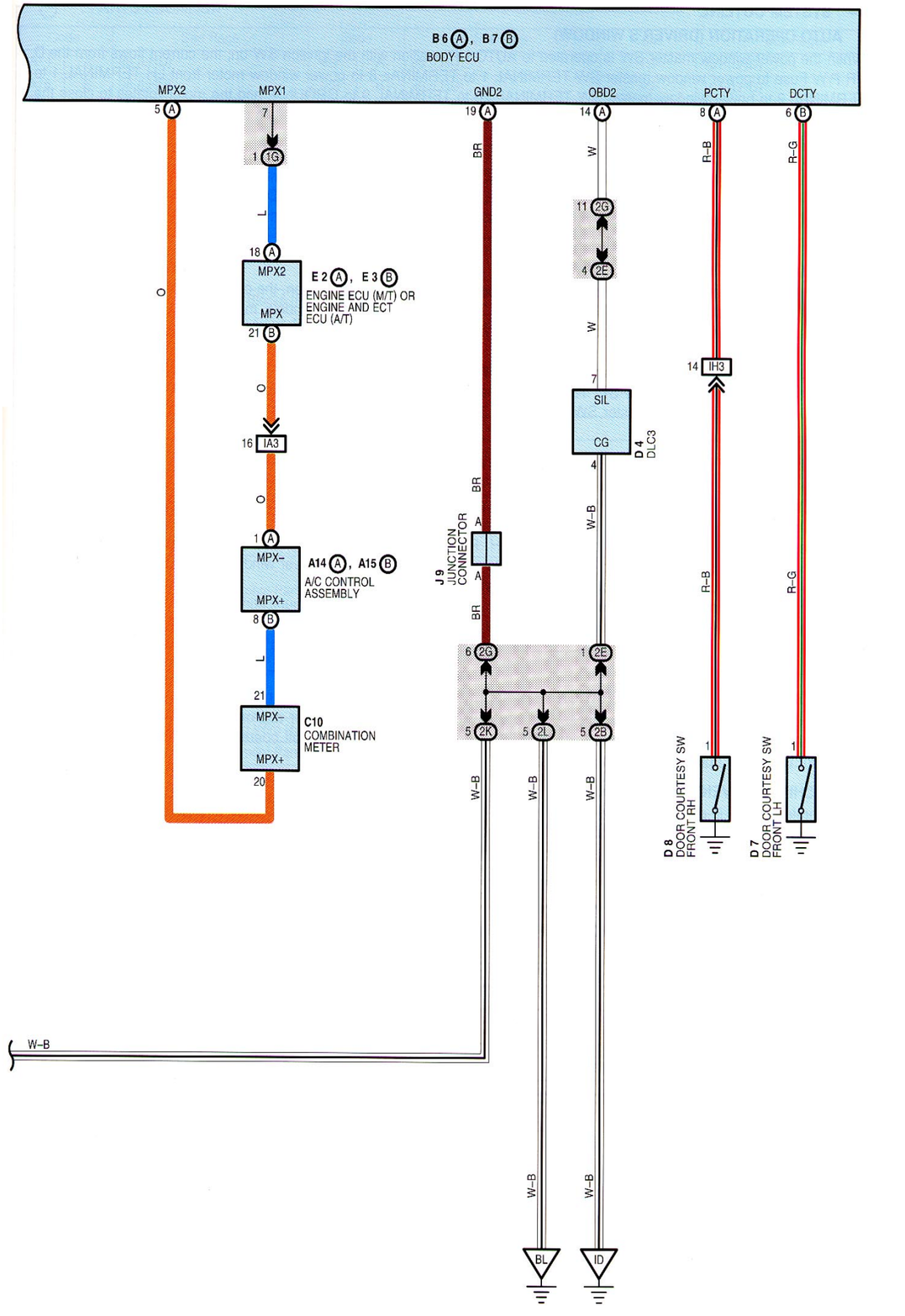
POWER WINDOW (LHD)





POWER WINDOW (LHD)





POWER WINDOW (LHD)

SYSTEM OUTLINE

1. AUTO OPERATION (DRIVER'S WINDOW)

When the power window master SW is operated to AUTO UP position with the ignition SW on, the current flows from the D FR P/W Fuse to power window master SW TERMINAL 1 to TERMINAL 8 to power window motor front LH TERMINAL 1 to TERMINAL 2 to power window master SW TERMINAL 20 to TERMINAL 9 to GROUND, and the motor rotates to close the window. The motor continues to rotate until the window is fully closed or the DOWN position of the power window master SW is operated.

When the power window master SW is operated to AUTO DOWN position with the ignition SW on, the current flows from the D FR P/W Fuse to power window master SW TERMINAL 1 to TERMINAL 20 to power window motor front LH TERMINAL 2 to TERMINAL 1 to power window master SW TERMINAL 8 to TERMINAL 9 to GROUND, and the motor rotates to open the window. The motor continues to rotate until the window is fully opened or the UP position of the power window master SW is operated.

2. MANUAL OPERATION (DRIVER'S WINDOW)

When the power window master SW is operated to UP position with the ignition SW on, the current flows from the D FR P/W Fuse to power window master SW TERMINAL 1 to TERMINAL 8 to power window motor front LH TERMINAL 1 to TERMINAL 2 to power window master SW TERMINAL 20 to TERMINAL 9 to GROUND, and the motor rotates to close the window.

When the power window master SW is operated to DOWN position with the ignition SW on, the current flows from the D FR P/W Fuse to power window master SW TERMINAL 1 to TERMINAL 20 to power window motor front LH TERMINAL 2 to TERMINAL 1 to power window master SW TERMINAL 8 to TERMINAL 9 to GROUND, and the motor rotates to open the window.

3. MANUAL OPERATION (EXCEPT DRIVER'S WINDOW)

When the power window control SW front RH, rear LH, RH is operated to UP position, the current flows to the power window control SW TERMINAL PCT to TERMINAL U to power window motor to power window control SW TERMINAL D to TERMINAL E to GROUND, and the motor rotates to close the window.

When the power window control SW front RH, rear LH, RH is operated to DOWN position, the current flows to the power window control SW TERMINAL PCT to TERMINAL D to power window motor to power window control SW TERMINAL U to TERMINAL E to GROUND, and the motor rotates to open the window.

When controlling the respective windows with the power window master SW, a communication signal is input from the power window master TERMINAL TX to body ECU TERMINAL MPX3, and the current flows from the body ECU to respective power window control SW TERMINAL SU (UP operation), SD (DOWN operation), and the motor rotates in the controlled direction.

4. KEY OFF POWER WINDOW OPERATION

After the ignition SW is turned off, the driver's side power window can be operated for approximately 45 seconds, unless the driver's side door or the front passenger side door is opened. However, if the key off operation time finishes during AUTO operation, the AUTO operation is stopped immediately.

5. CATCHING PREVENTION FUNCTION

If any foreign matter is caught in the window while it is rising, the pulse sensor installed in the power window motor detects changes in the number of motor rotations, forcibly lowers the door window 50 mm or if the door window opening amount is 200 mm or less, the window is lowered so that the opening amount is 200 mm.

SERVICE HINTS

P5, P6, P7 POWER WINDOW CONTROL SW FRONT RH, REAR LH, RH

3-GROUND : Always continuity
4-GROUND : Approx. **12** volts with ignition SW at **ON** or **ST** position

P8 POWER WINDOW MASTER SW

9-GROUND : Always continuity
4-GROUND : Approx. **12** volts with ignition SW at **ON** or **ST** position
1-GROUND : Always approx. **12** volts

: PARTS LOCATION

Code		See Page	Code		See Page	Code	See Page
A14	A	98 (LHD)	E2	A	96 (LHD)	P6	101 (LHD)
A15	B	98 (LHD)	E3	B	96 (LHD)	P7	101 (LHD)
B6	A	98 (LHD)	J5		99 (LHD)	P8	101 (LHD)
B7	B	98 (LHD)	J9		99 (LHD)	P9	101 (LHD)
C10		98 (LHD)	J13		100 (LHD)	P10	101 (LHD)
D4		98 (LHD)	J16		100 (LHD)	P11	101 (LHD)
D7		100 (LHD)	J17		100 (LHD)	P12	101 (LHD)
D8		100 (LHD)	P5		101 (LHD)		

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	82 (LHD)	Front Door LH Wire and Driver Side J/B (Left Kick Panel)
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1L		
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2C		
2E	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G		
2H		
2K	84 (LHD)	Front Door RH Wire and Passenger Side J/B (Right Kick Panel)
2L	84 (LHD)	Floor Wire and Passenger Side J/B (Right Kick Panel)

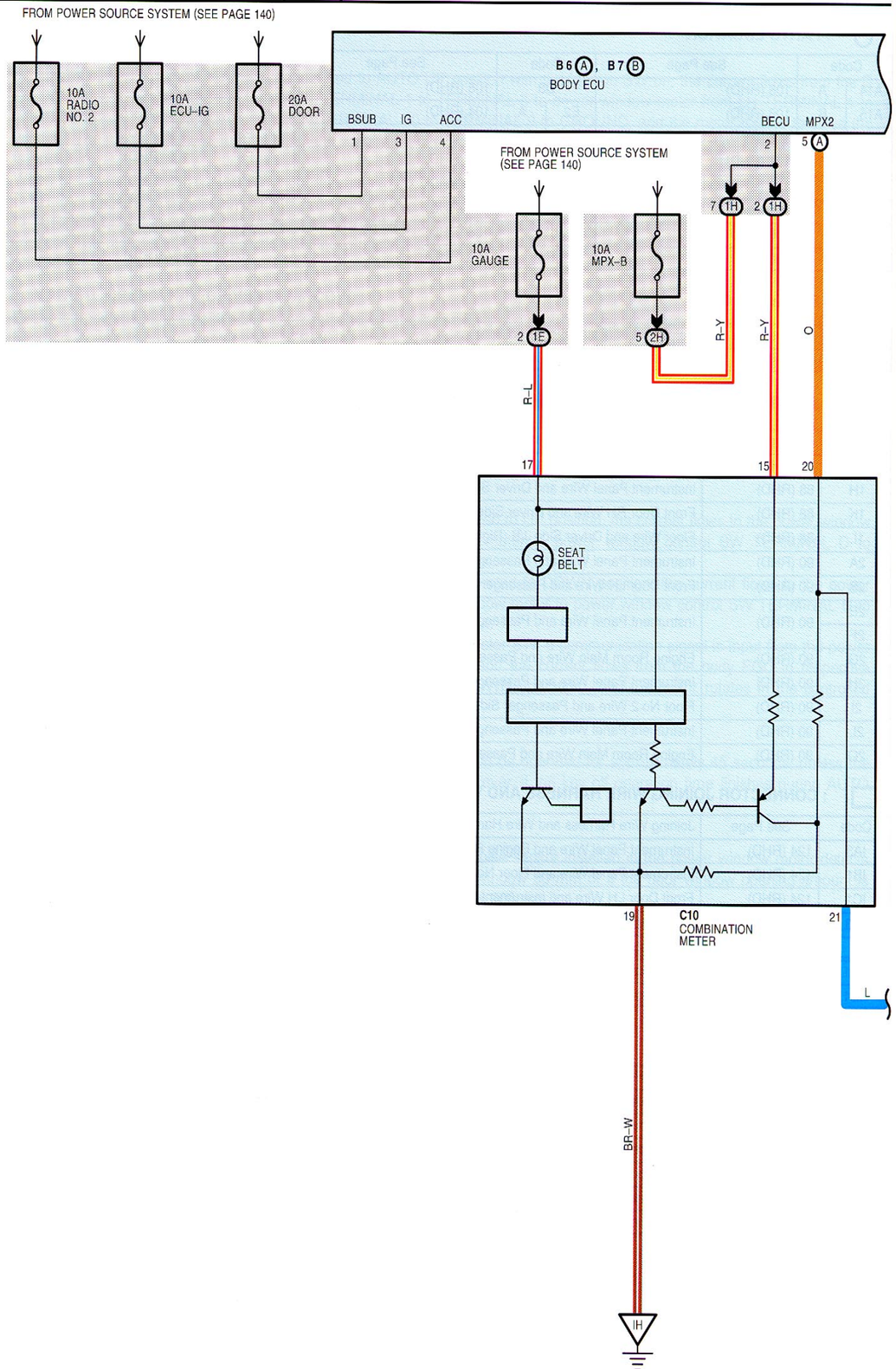
: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA3	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IB2	114 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
IC1	114 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IH3	116 (LHD)	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
II1	116 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BA1	118 (LHD)	Rear Door No.2 Wire and Floor No.2 Wire (Left Center Pillar)
BB1	118 (LHD)	Rear Door No.1 Wire and Floor Wire (Right Center Pillar)

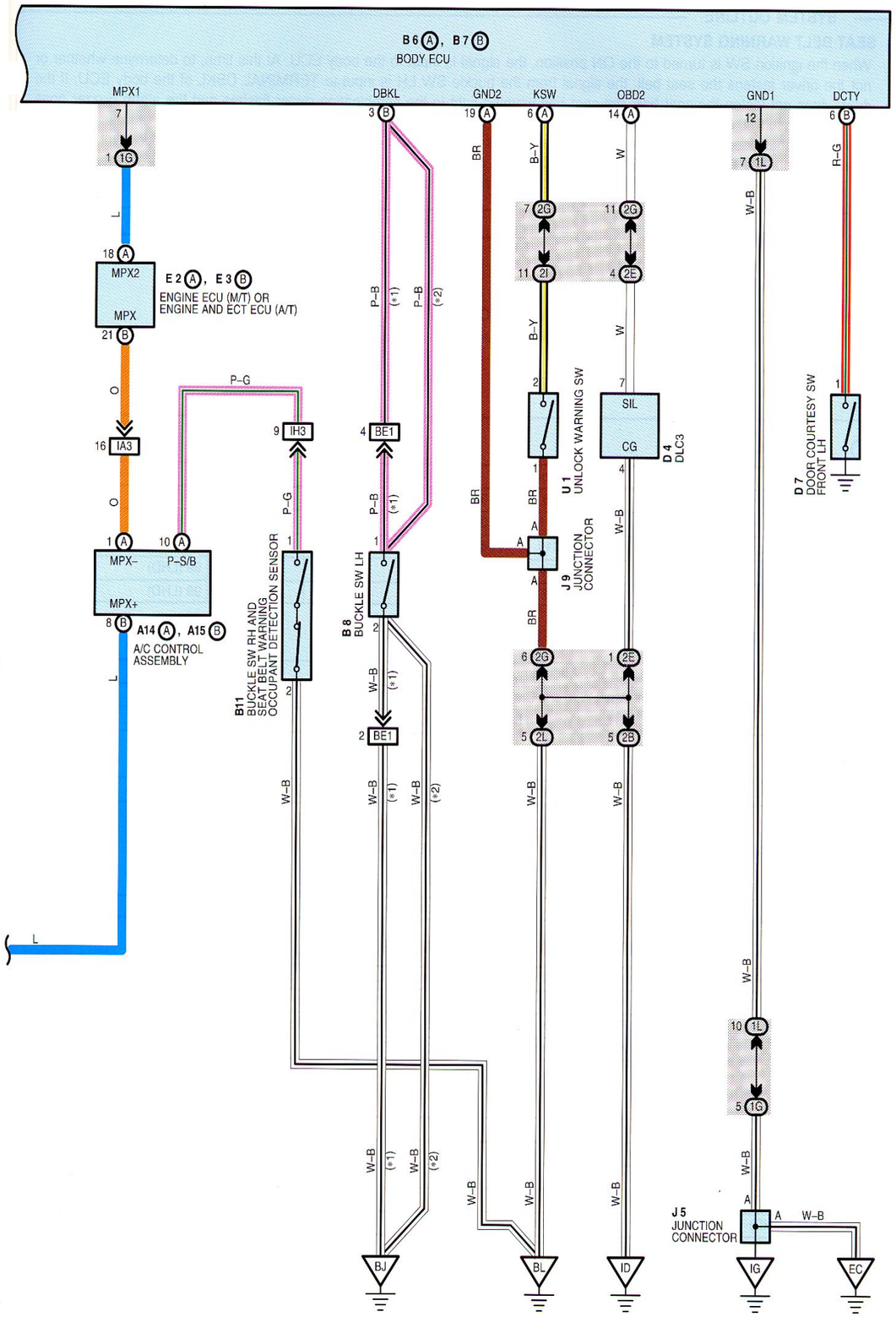
: GROUND POINTS

Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
ID	114 (LHD)	Cowl Side Panel LH
IG	114 (LHD)	Cowl Side Panel RH
BK	118 (LHD)	Left Quarter Panel LH
BL	118 (LHD)	Front Floor Panel RH

SEAT BELT WARNING (LHD)



* 1 : W/ POWER SEAT
* 2 : W/O POWER SEAT



SEAT BELT WARNING (LHD)

SYSTEM OUTLINE

SEAT BELT WARNING SYSTEM

When the ignition SW is turned to the ON position, the signal is input to the body ECU. At this time, to determine whether or not the driver fastens the seat belt, the signal from the buckle SW LH is input to TERMINAL DBKL of the body ECU. If the driver does not fasten the seat belt, the seat belt warning light in the combination meter flashes and the alarm buzzer goes on, in response to the communication control of the body ECU etc.

If the passenger does not fasten the seat belt, the signals from the buckle SW RH and seat belt warning occupant detection sensor are input to TERMINAL P-S/B of the A/C control assembly and through communication control of the body ECU etc. the passenger seat belt warning light in the A/C control assembly is flashed.

SERVICE HINTS

B8 BUCKLE SW LH

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

B11 BUCKLE SW RH AND SEAT BELT WARNING OCCUPANT DETECTION SENSOR

1-2 : Continuity with front passenger's seat belt in use

U1 UNLOCK WARNING SW

1-2 : Continuity with ignition key in cylinder

○ : PARTS LOCATION

Code		See Page	Code	See Page	Code		See Page
A14	A	98 (LHD)	B8	102 (LHD)	E2	A	96 (LHD)
A15	B	98 (LHD)	B11	100 (LHD)	E3	B	96 (LHD)
B6	A	98 (LHD)	C10	98 (LHD)	J5		99 (LHD)
B7	B	98 (LHD)	D4	98 (LHD)	J9		99 (LHD)
B8		100 (LHD)	D7	100 (LHD)	U1		99 (LHD)

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1E	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1L		
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2E	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G		
2H		
2I		
2L	84 (LHD)	Floor Wire and Passenger Side J/B (Right Kick Panel)

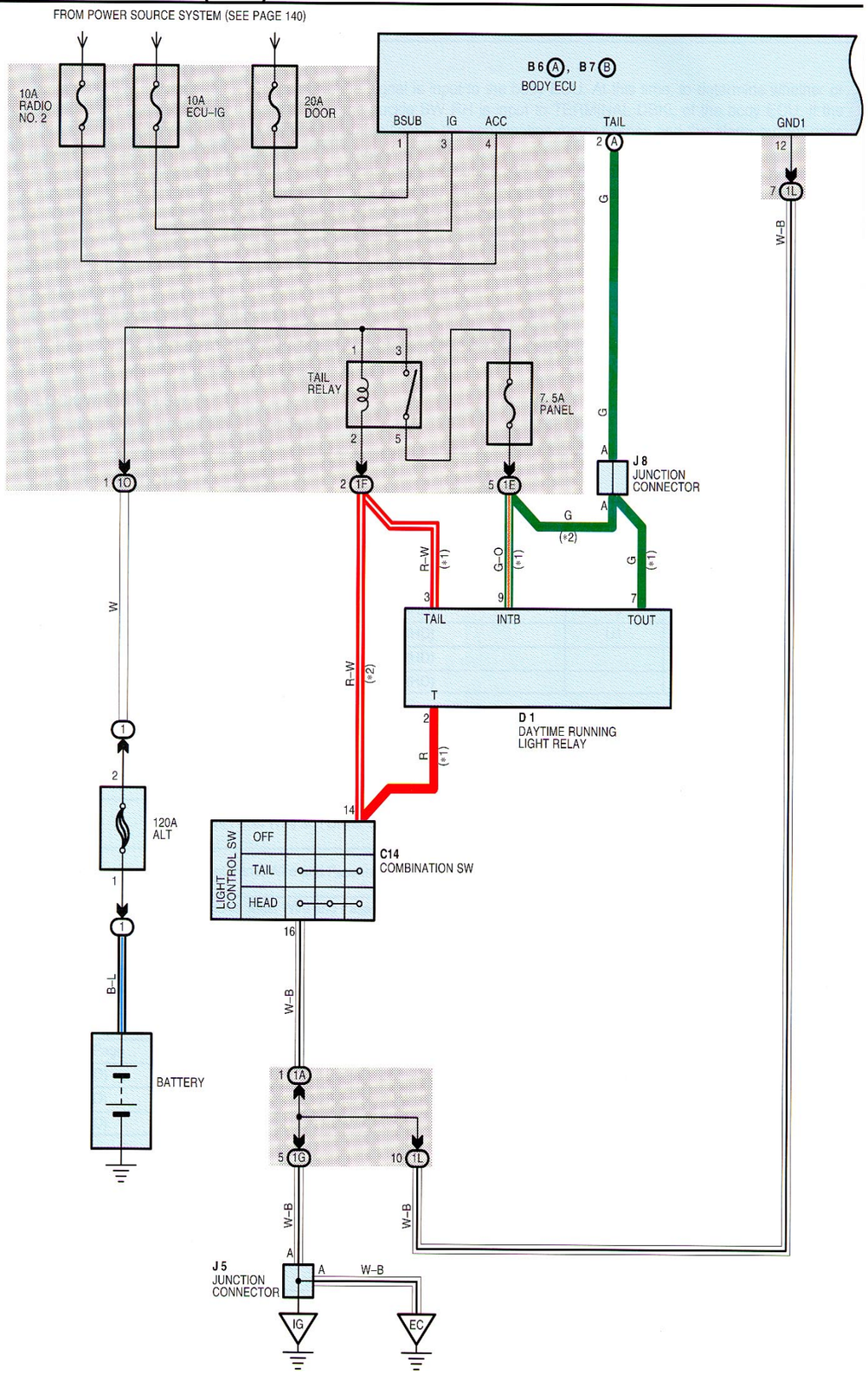
▭ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA3	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IH3	116 (LHD)	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
BE1	120 (LHD)	Floor No.2 Wire and Front Seat LH Wire (Under the Driver's Seat)

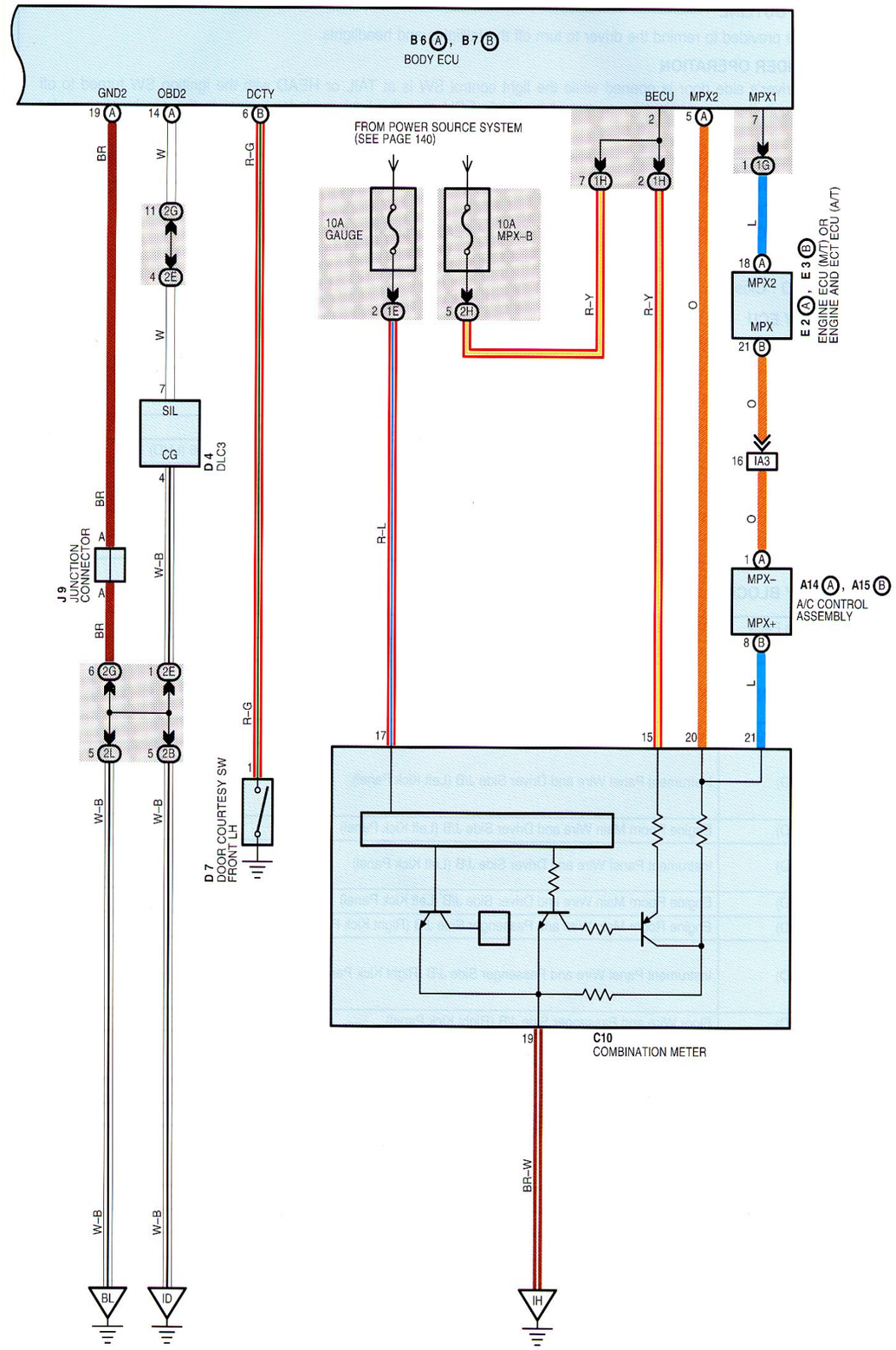
▽ : GROUND POINTS

Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
ID	114 (LHD)	Cowl Side Panel LH
IG	114 (LHD)	Cowl Side Panel RH
IH	114 (LHD)	Front Floor Panel Center LH
BJ	118 (LHD)	Front Floor Panel LH
BL	118 (LHD)	Front Floor Panel RH

LIGHT REMINDER (LHD)



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



LIGHT REMINDER (LHD)

SYSTEM OUTLINE

This system is provided to remind the driver to turn off the taillights and headlights.

LIGHT REMINDER OPERATION

In case the driver's side door is opened while the light control SW is at TAIL or HEAD with the ignition SW turned to off from on, through the communication control of the body ECU etc., the light reminder buzzer in the combination meter comes on.

SERVICE HINTS

C14 COMBINATION SW

14–GROUND : Continuity with light control SW at **TAIL** or **HEAD** position

D7 DOOR COURTESY SW FRONT LH

1–GROUND : Closed with door open

B7 (B) BODY ECU

6–GROUND : Continuity with driver door open

○ : PARTS LOCATION

Code		See Page	Code	See Page	Code		See Page
A14	A	98 (LHD)	C14	98 (LHD)	E3	B	96 (LHD)
A15	B	98 (LHD)	D1	98 (LHD)	J5		99 (LHD)
B6	A	98 (LHD)	D4	98 (LHD)	J8		99 (LHD)
B7	B	98 (LHD)	D7	100 (LHD)	J9		99 (LHD)
C10		98 (LHD)	E2	A 96 (LHD)			

⬭ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1E		
1F		
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1L		
1O	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2E	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G		
2H		
2L	84 (LHD)	Floor Wire and Passenger Side J/B (Right Kick Panel)

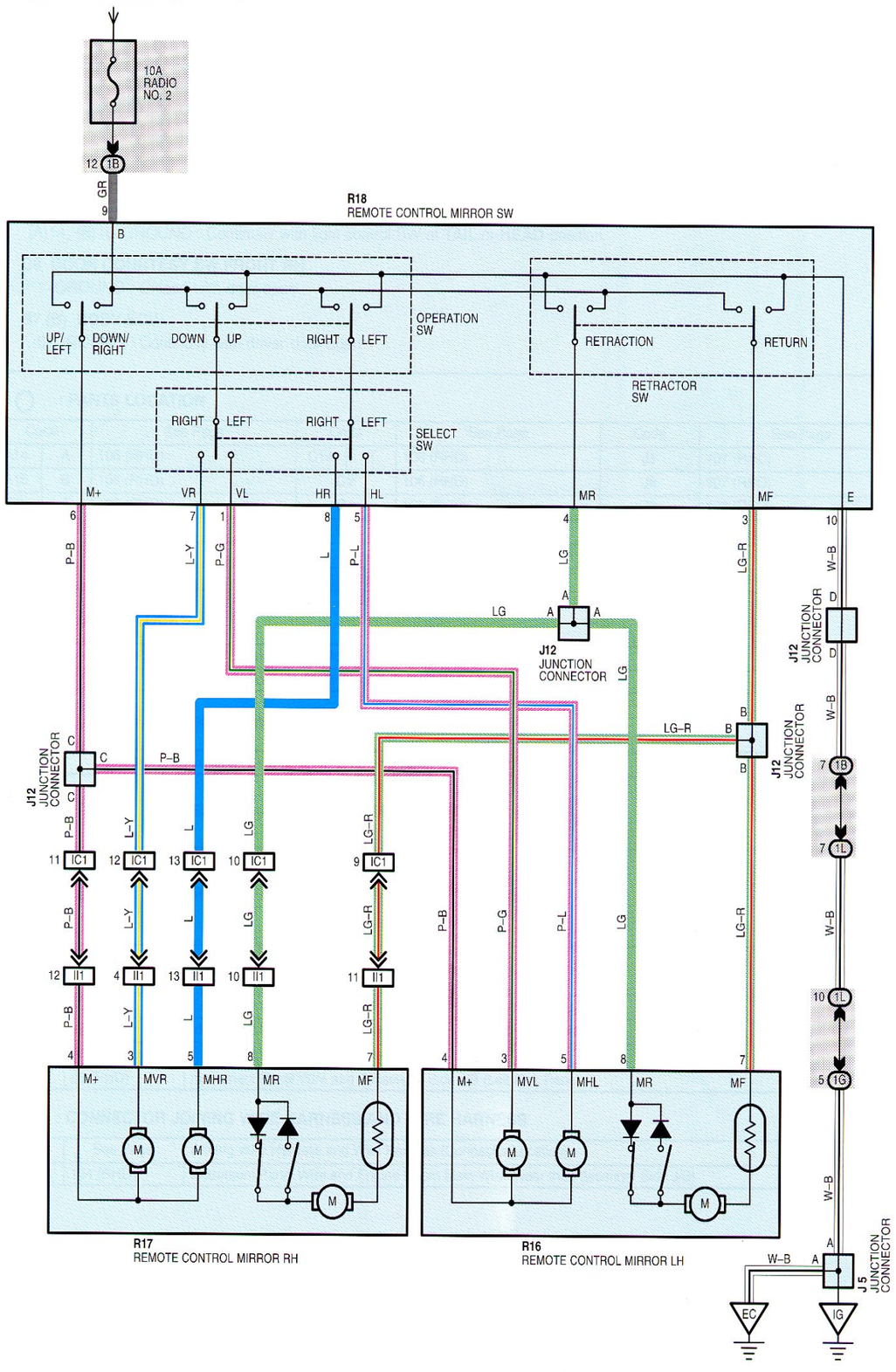
▭ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA3	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)

▽ : GROUND POINTS

Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
ID	114 (LHD)	Cowl Side Panel LH
IG	114 (LHD)	Cowl Side Panel RH
IH	114 (LHD)	Front Floor Panel Center LH
BL	118 (LHD)	Front Floor Panel RH

REMOTE CONTROL MIRROR (LHD)



SERVICE HINTS

R18 REMOTE CONTROL MIRROR SW

9–6 : Continuity with the operation SW at **DOWN** or **RIGHT** position
6–10 : Continuity with the operation SW at **UP** or **LEFT** position
4–9, 3–10 : Continuity with the retractor SW at **RETRACTION** position
3–9, 4–10 : Continuity with the retractor SW at **RETURN** position
9–GROUND : Approx. **12** votls with the ignition SW at **ACC** or **ON** position
10–GROUND : Always continuity

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
J5	99 (LHD)	R16	101 (LHD)	R18	101 (LHD)
J12	100 (LHD)	R17	101 (LHD)		

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	82 (LHD)	Front Door LH Wire and Driver Side J/B (Left Kick Panel)
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1L	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)

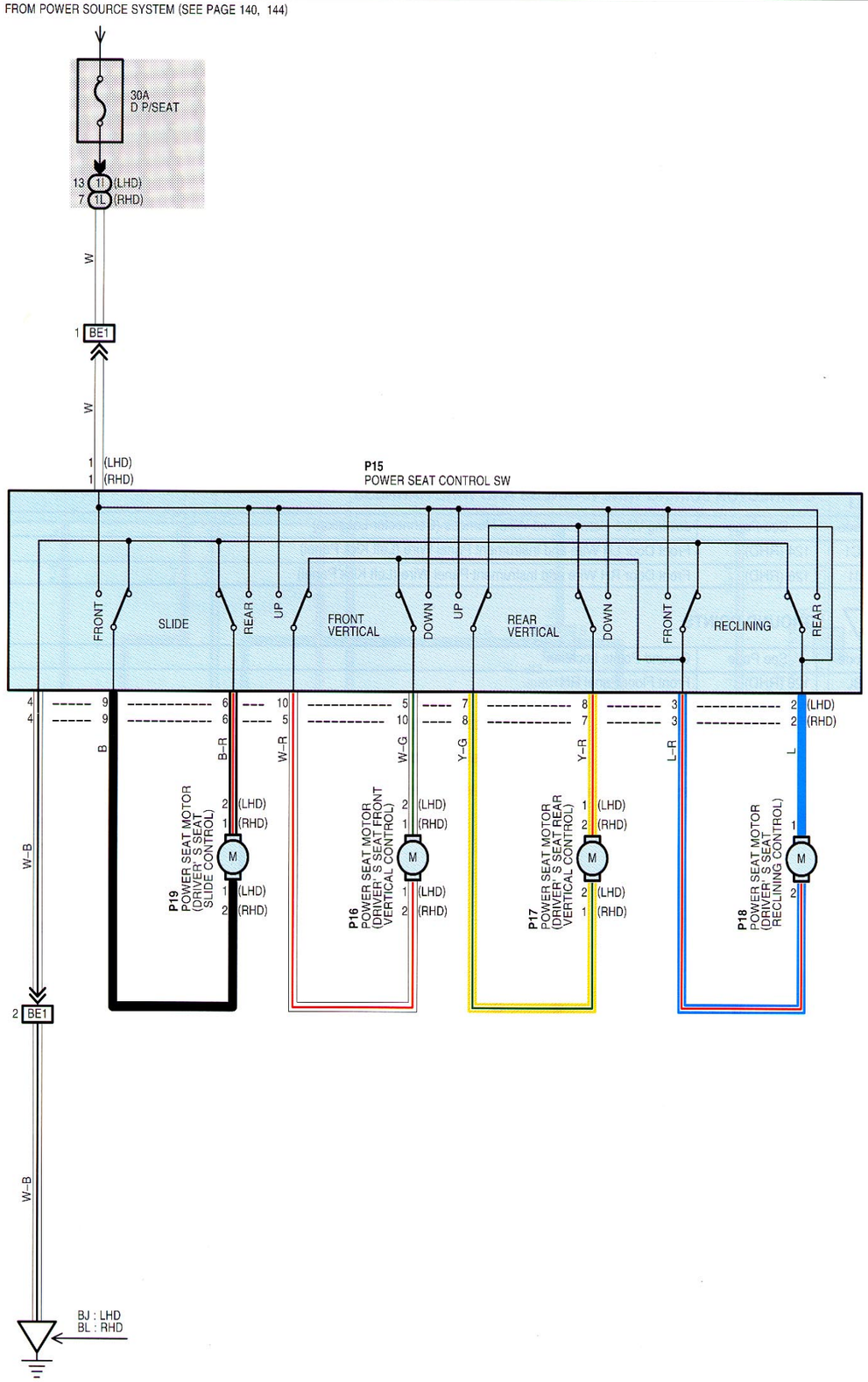
□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	114 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
II1	116 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)

▽ : GROUND POINTS

Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
IG	114 (LHD)	Cowl Side Panel RH

POWER SEAT



SERVICE HINTS

P15 POWER SEAT CONTROL SW

1–GROUND : Always approx. **12** volts
4–GROUND : Always continuity

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
P15	102 (LHD)	P17	102 (LHD)	P19	102 (LHD)
	110 (RHD)		110 (RHD)		110 (RHD)
P16	102 (LHD)	P18	102 (LHD)		
	110 (RHD)		110 (RHD)		

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1I	82 (LHD)	Floor No.2 Wire and Driver Side J/B (Left Kick Panel)
1L	88 (RHD)	Floor Wire and Driver Side J/B (Right Kick Panel)

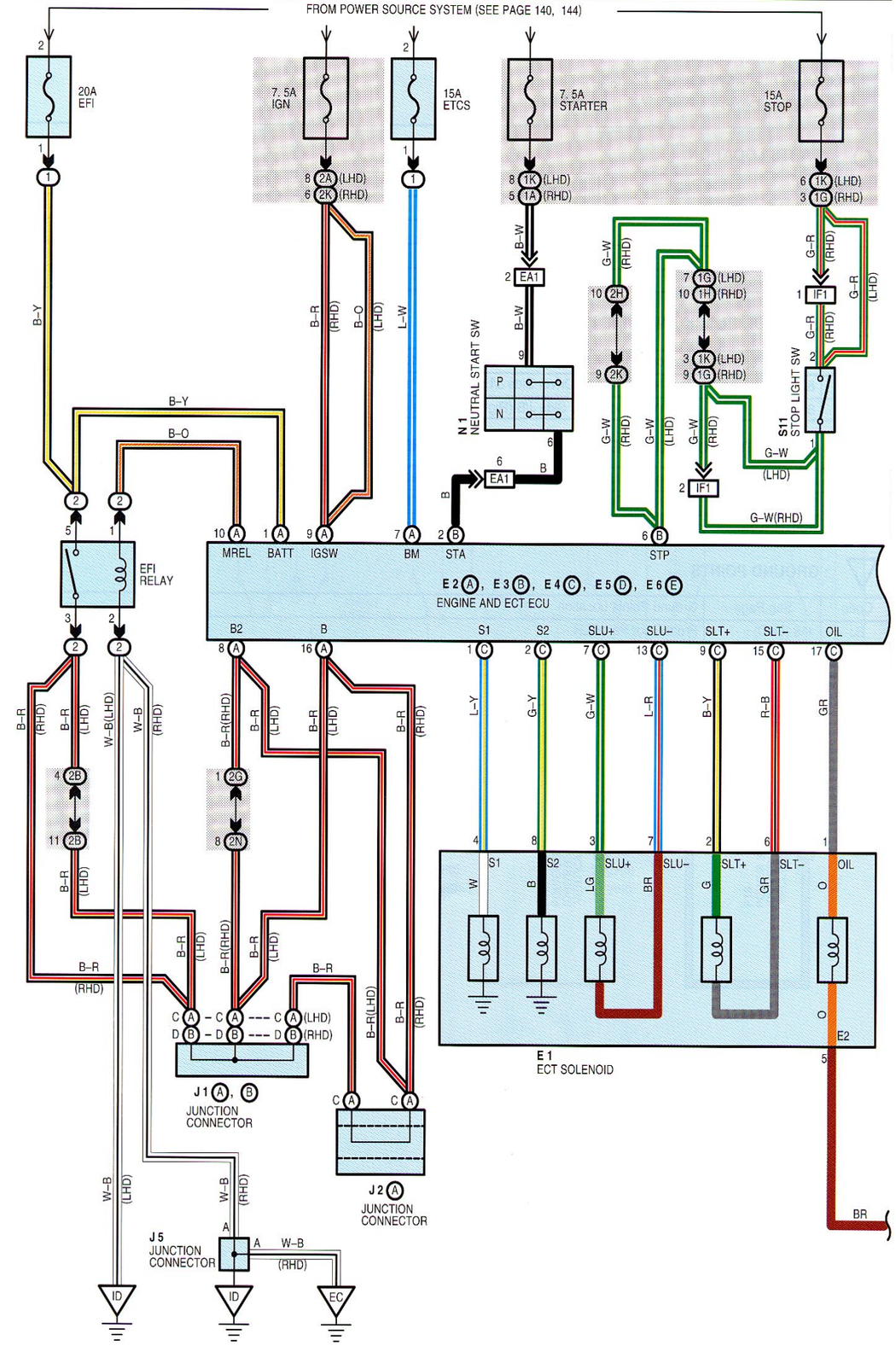
▭ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

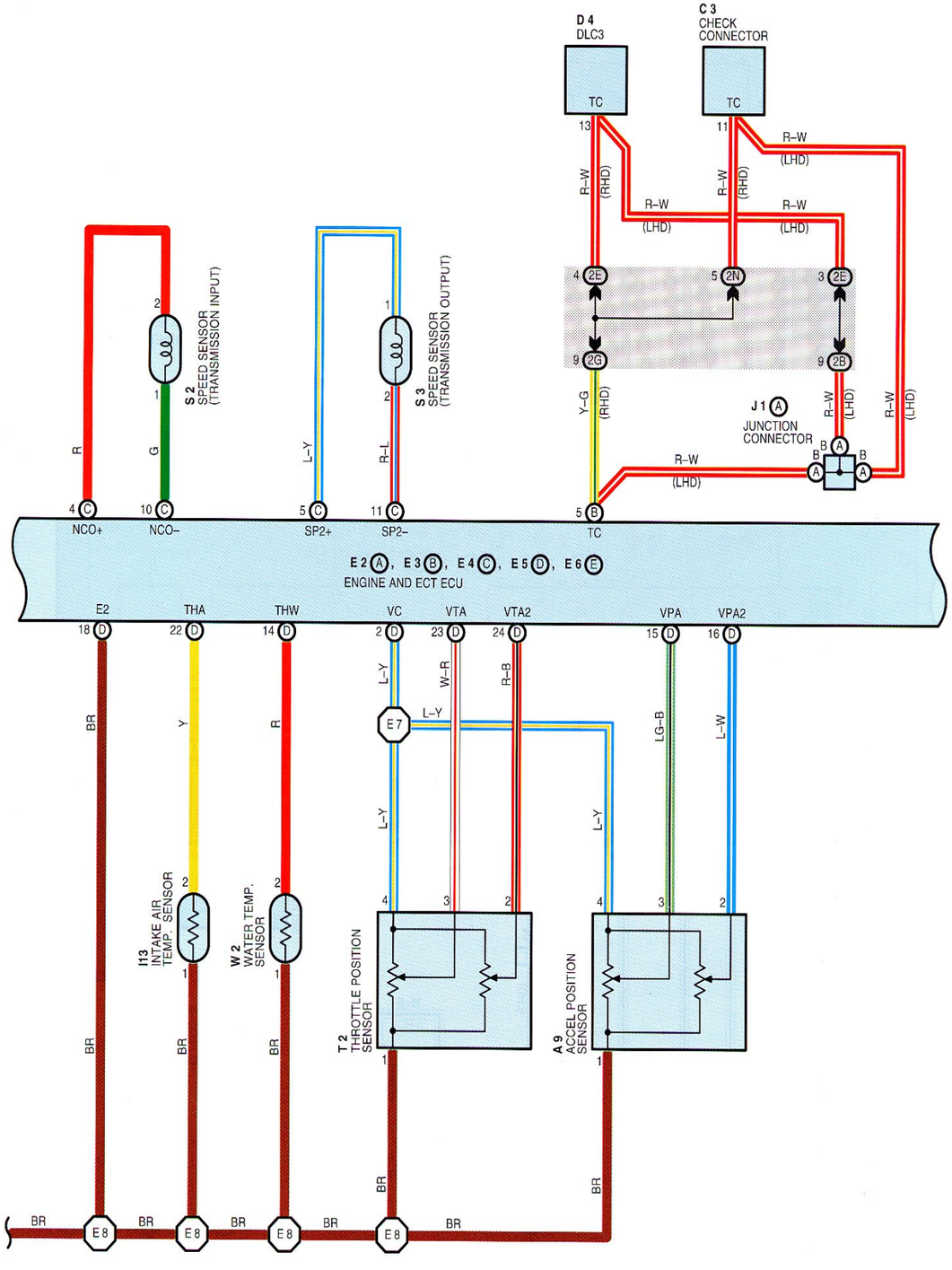
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
BE1	120 (LHD)	Floor No.2 Wire and Front Seat LH Wire (Under the Driver's Seat)
	130 (RHD)	Floor Wire and Front Seat RH Wire (Under the Driver's Seat)

▽ : GROUND POINTS

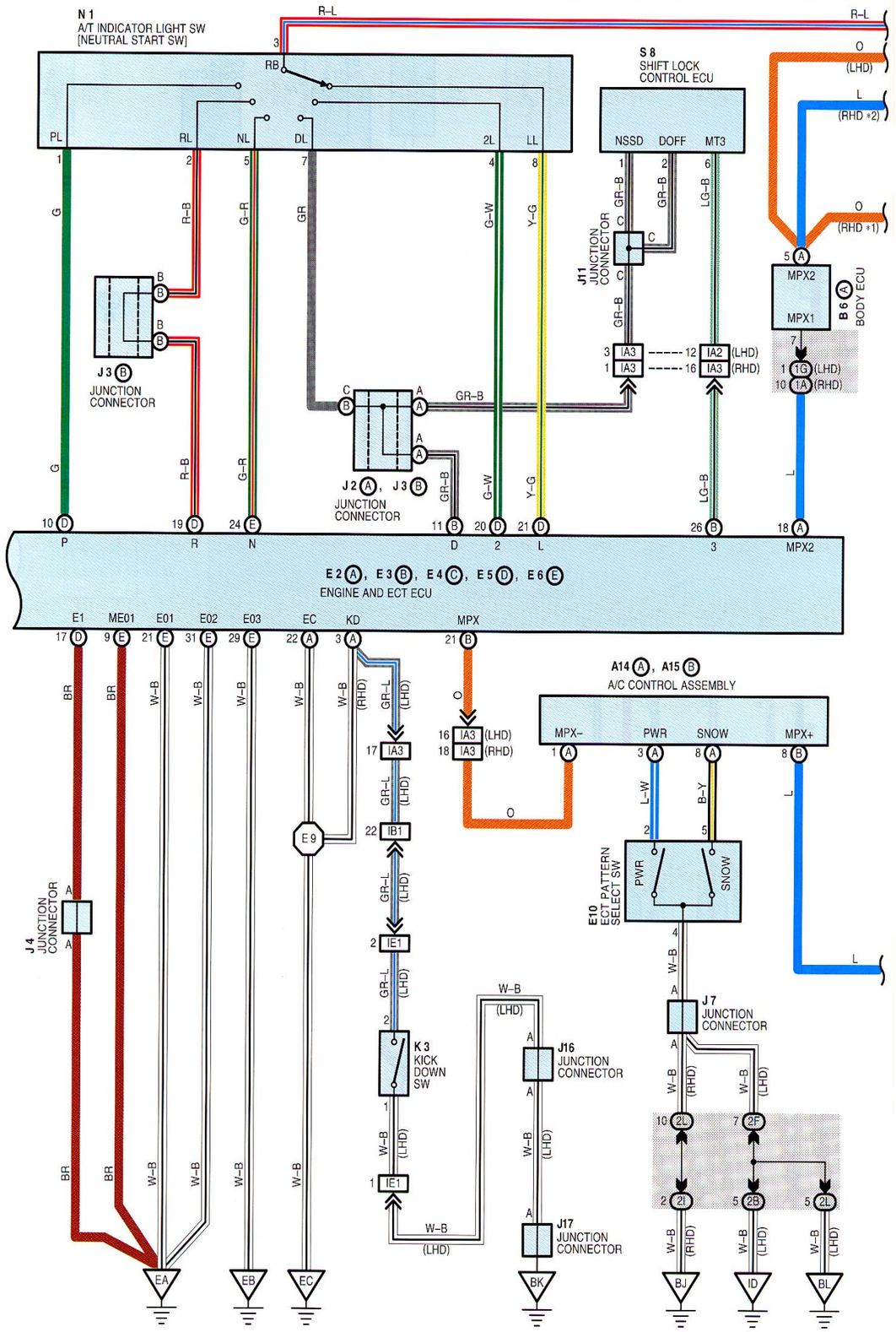
Code	See Page	Ground Points Location
BJ	118 (LHD)	Front Floor Panel LH
BL	128 (RHD)	Front Floor Panel RH

ECT AND A/T INDICATOR



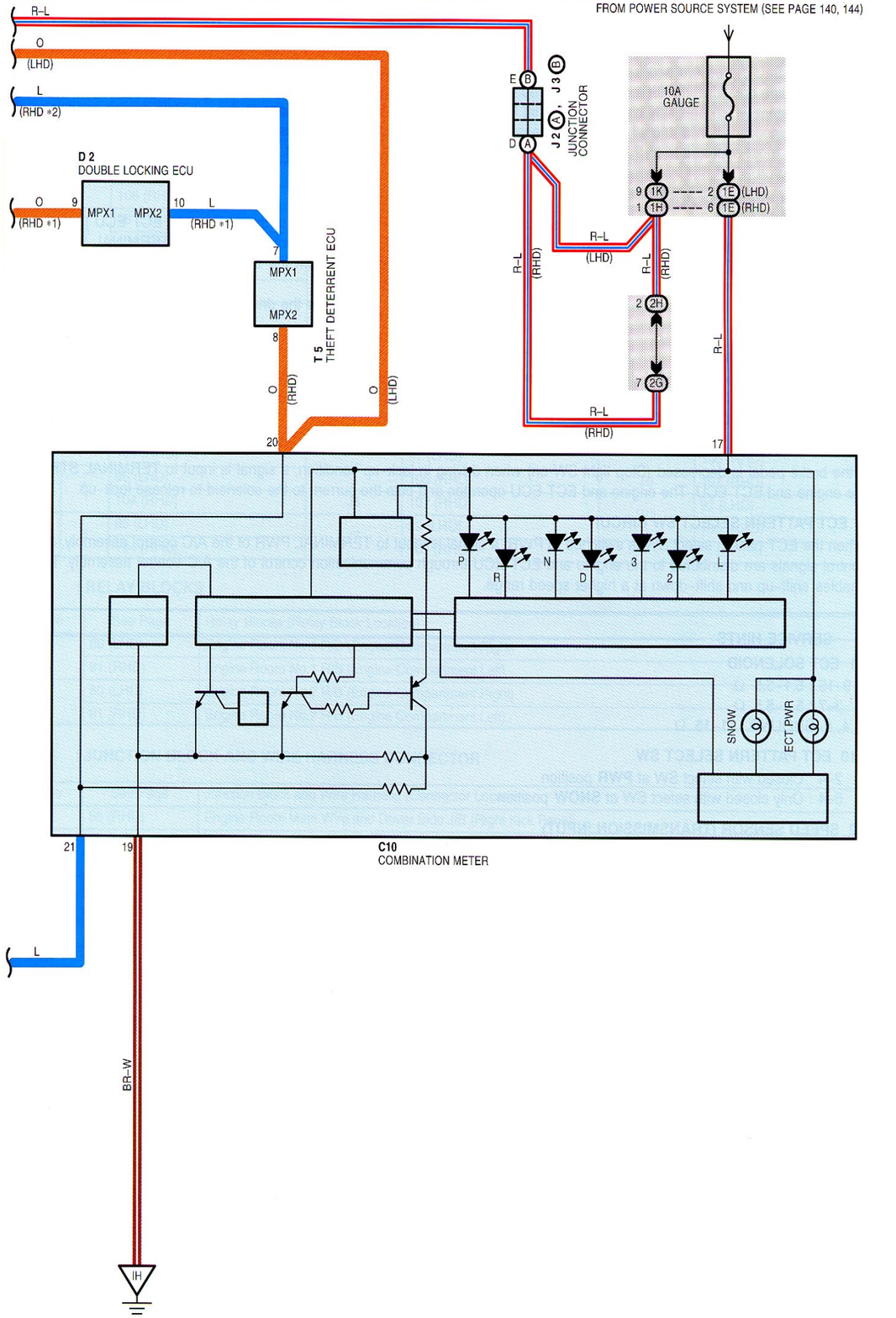


ECT AND A/T INDICATOR



* 1 : W/ DOUBLE LOCKING
* 2 : W/O DOUBLE LOCKING

FROM POWER SOURCE SYSTEM (SEE PAGE 140, 144)



ECT AND A/T INDICATOR

SYSTEM OUTLINE

Previous automatic transmissions have selected each gear shift using mechanically controlled throttle hydraulic pressure, governor hydraulic pressure and lock-up hydraulic pressure. The electronically controlled transmission, however, electrically controls the line pressure, throttle pressure, lock-up pressure and accumulator pressure etc. through the solenoid valve. The ECT is a system which precisely controls gear shift timing and lock-up timing in response to the vehicle's driving conditions and the engine condition detected by various sensors. It makes smooth driving possible by shift selection for each gear which is the most appropriate to the driving conditions at that time, and by preventing downing, squat and gear shift shock when starting off.

1. GEAR SHIFT OPERATION

When driving, the engine warm up condition is input as a signal to TERMINAL THW of the engine and ECT ECU from the water temp. sensor and the vehicle speed signal from speed sensor (Transmission Output) is input to TERMINAL SP2+ of the engine and ECT ECU. At the same time, the throttle valve opening signal from the throttle position sensor is input to TERMINALS VTA and VTA2 of the engine and ECT ECU as throttle angle signal.
Based on these signals, the engine and ECT ECU selects the best shift position for the driving conditions and sends current to the ECT solenoid.

2. LOCK-UP OPERATION

When the engine and ECT ECU decides based on each signal that the lock-up condition has been met, the current flows through TERMINAL SLU+ of the engine and ECT ECU to TERMINAL 3 of the ECT solenoid to TERMINAL 7 to TERMINAL SLU- of the engine and ECT ECU to GROUND.

3. STOP LIGHT SW CIRCUIT

If the brake pedal is depressed (Stop light SW on) when driving in lock-up condition, a signal is input to TERMINAL STP of the engine and ECT ECU. The engine and ECT ECU operates and cuts the current to the solenoid to release lock-up.

4. ECT PATTERN SELECT SW CIRCUIT

When the ECT pattern select SW is switched to PWR, a signal is input to TERMINAL PWR of the A/C control assembly, and control signals are distributed to the engine and ECT ECU through communication control of the A/C control assembly. This enables shift-up and shift-down at a higher speed range.

SERVICE HINTS

E1 ECT SOLENOID
9-15 : **5.1-5.5** Ω
3-7 : **5.1-5.5** Ω
4, 8-GROUND : **11-15** Ω

E10 ECT PATTERN SELECT SW
2-4 : Closed with select SW at **PWR** position
5-4 : Only closed with select SW at **SNOW** position

S2 SPEED SENSOR (TRANSMISSION INPUT)
1-2 : **560-680** Ω

S3 SPEED SENSOR (TRANSMISSION OUTPUT)
1-2 : **560-680** Ω

E2 (A), E3 (B), E4 (C), E5 (D), E6 (E) ENGINE AND ECT ECU
BATT-E1 : Always approx. **12** volts
B-E1 : Approx. **12** volts with ignition SW **ON** or **ST** position
B2-E1 : Approx. **12** volts with ignition SW **ON** or **ST** position
MREL-E1 : Approx. **12** volts with ignition SW **ON** or **ST** position
STA-E1 : Approx. **12** volts with ignition SW **ST** position and shift lever other than **P** or **N** position

N1 A/T INDICATOR LIGHT SW [NEUTRAL START SW]
3-1 : Closed with shift lever in **P** position
3-2 : Closed with shift lever in **R** position
3-5 : Closed with shift lever in **N** position
3-7 : Closed with shift lever in **D** position or **3** position
3-4 : Closed with shift lever in **2** position
3-8 : Closed with shift lever in **L** position

○ : PARTS LOCATION

Code	See Page
A9	96 (LHD)
	104 (RHD)
A14 A	98 (LHD)
	106 (RHD)
A15 B	98 (LHD)
	106 (RHD)
B6 A	98 (LHD)
	106 (RHD)
C3	96 (LHD)
	104 (RHD)
C10	98 (LHD)
	106 (RHD)
D2	106 (RHD)
D4	98 (LHD)
	106 (RHD)
E1	96 (LHD)
	104 (RHD)
E2 A	96 (LHD)
	104 (RHD)
E3 B	96 (LHD)
	104 (RHD)
E4 C	96 (LHD)
	104 (RHD)
E5 D	96 (LHD)
	104 (RHD)
E6 E	96 (LHD)
	104 (RHD)
E10	99 (LHD)
	107 (RHD)
I13	97 (LHD)
	105 (RHD)
J1 A	97 (LHD)
J1 B	105 (RHD)
J2 A	97 (LHD)
	105 (RHD)
J3 B	97 (LHD)
	105 (RHD)
J4	97 (LHD)
	105 (RHD)
J5	107 (RHD)
J7	99 (LHD)
	107 (RHD)
J11	99 (LHD)
	107 (RHD)
J16	100 (LHD)
J17	100 (LHD)
K3	99 (LHD)
N1	97 (LHD)
	105 (RHD)
S2	97 (LHD)
	105 (RHD)
S3	97 (LHD)
	105 (RHD)
S8	99 (LHD)
	107 (RHD)
S11	99 (LHD)
	107 (RHD)
T2	97 (LHD)
	105 (RHD)
T5	107 (RHD)
W2	97 (LHD)
	105 (RHD)

▭ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)
	81 (RHD)	Engine Room No.1 R/B (Engine Compartment Left)
2	80 (LHD)	Engine Room No.2 R/B (Engine Compartment Right)
	81 (RHD)	Engine Room No.2 R/B (Engine Compartment Left)

▭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	88 (RHD)	Engine Room Main Wire and Driver Side J/B (Right Kick Panel)
1E	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1H	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1K	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2A	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2B		
2E	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2F	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)
2H	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2I	90 (RHD)	Floor No.2 Wire and Passenger Side J/B (Left Kick Panel)
2K	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)
2L	84 (LHD)	Floor Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2N	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)

ECT AND A/T INDICATOR

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	112 (LHD)	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
	122 (RHD)	
IA2	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IA3	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
	124 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
IB1	114 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
IE1	116 (LHD)	Floor No.3 Wire and Floor No.2 Wire (Near the Steering Column)
IF1	126 (RHD)	Instrument Panel No.3 Wire and Instrument Panel Wire (Right Side of the Instrument Panel)

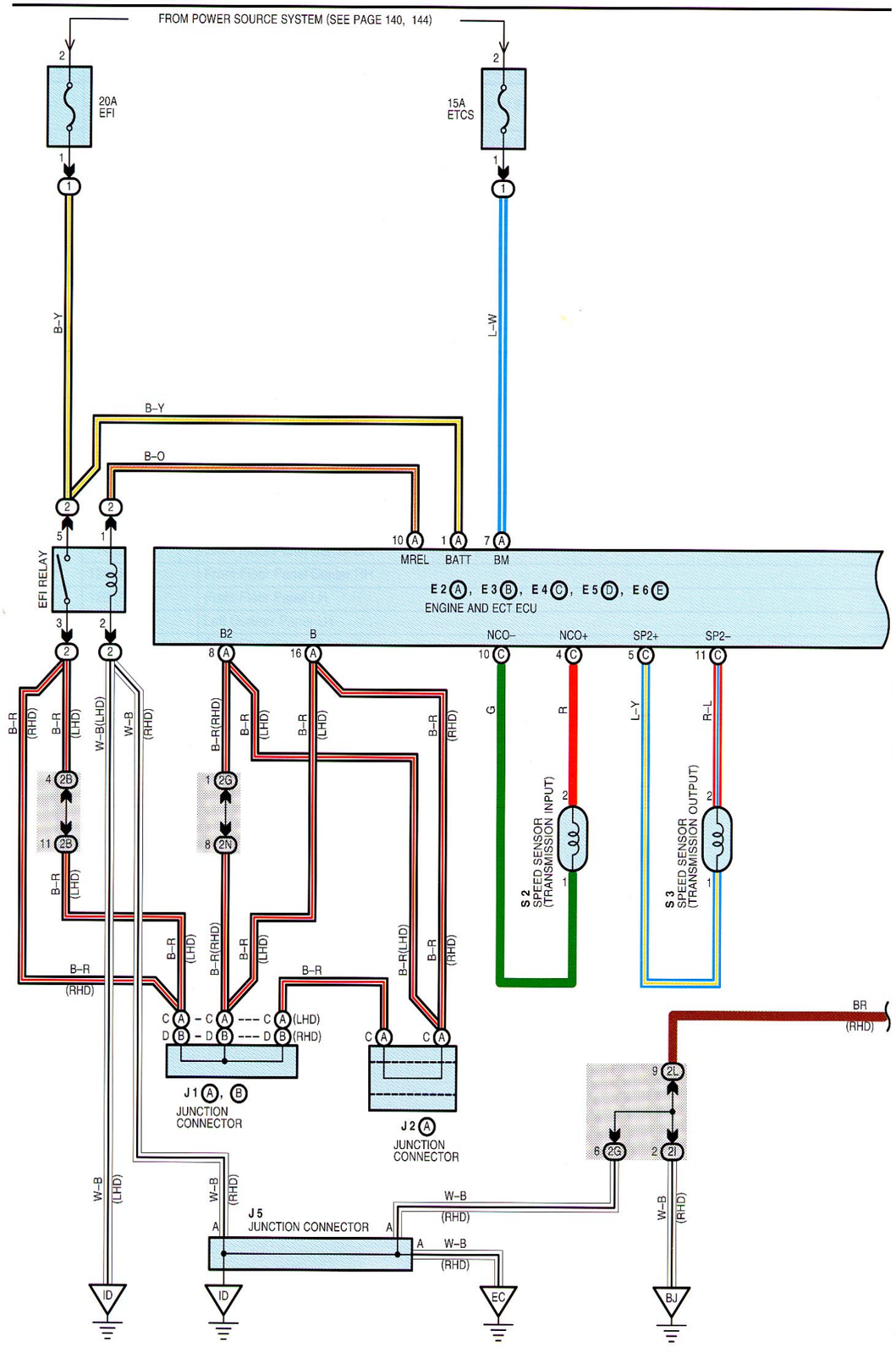
: GROUND POINTS

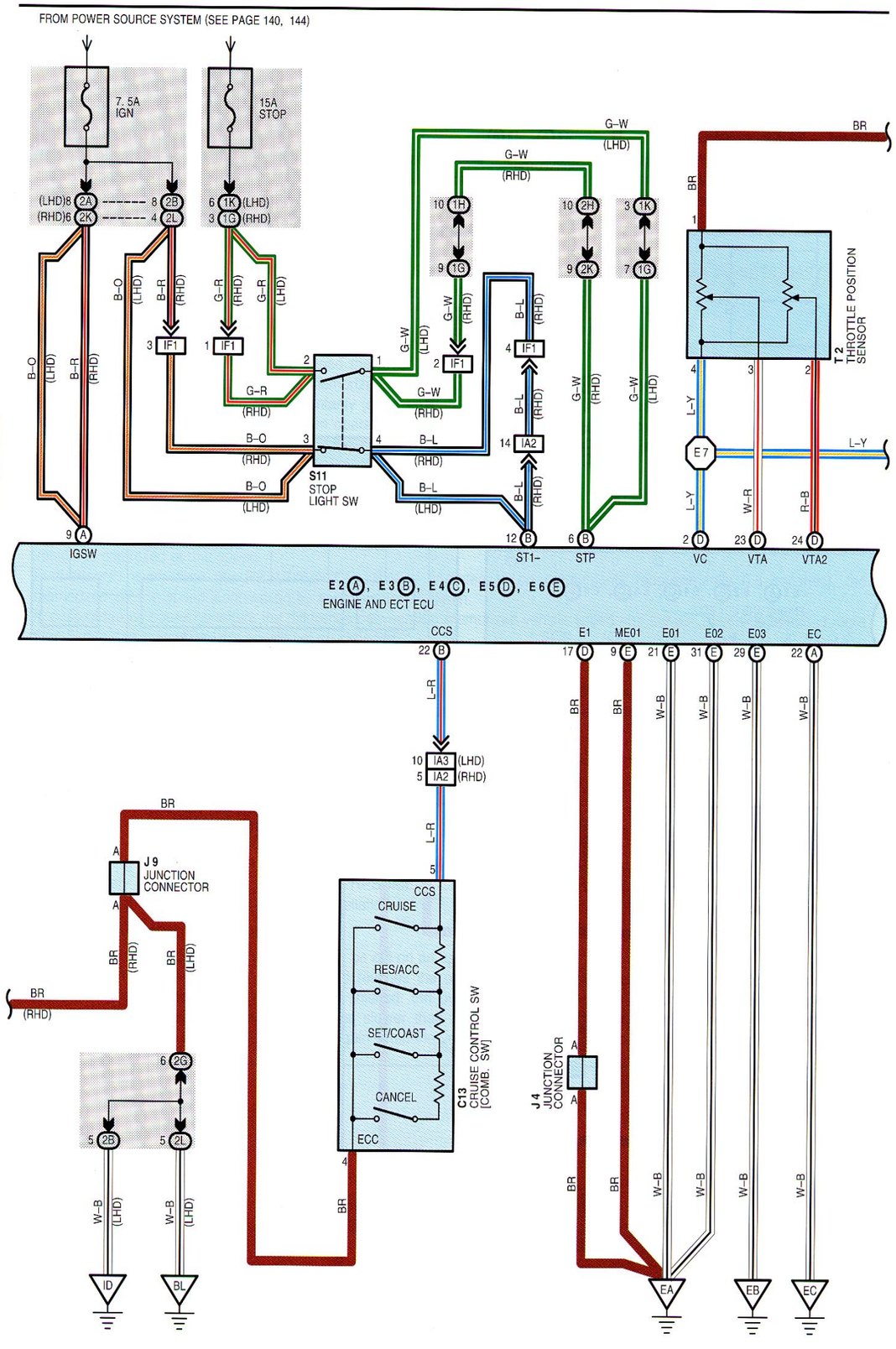
Code	See Page	Ground Points Location
EA	112 (LHD)	Front Side of Cylinder Head
	122 (RHD)	
EB	112 (LHD)	Rear Side of Cylinder Head
	122 (RHD)	
EC	112 (LHD)	Left Fender Apron
	122 (RHD)	
ID	114 (LHD)	Cowl Side Panel LH
	124 (RHD)	
IH	114 (LHD)	Front Floor Panel Center LH
	124 (RHD)	Front Floor Panel Center RH
BJ	128 (RHD)	Front Floor Panel LH
BK	118 (LHD)	Left Quarter Panel LH
BL	118 (LHD)	Front Floor Panel RH

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E7	112 (LHD)	Engine Wire	E8	122 (RHD)	Engine Wire
	122 (RHD)		E9	112 (LHD)	
E8	112 (LHD)			122 (RHD)	Engine Room Main Wire

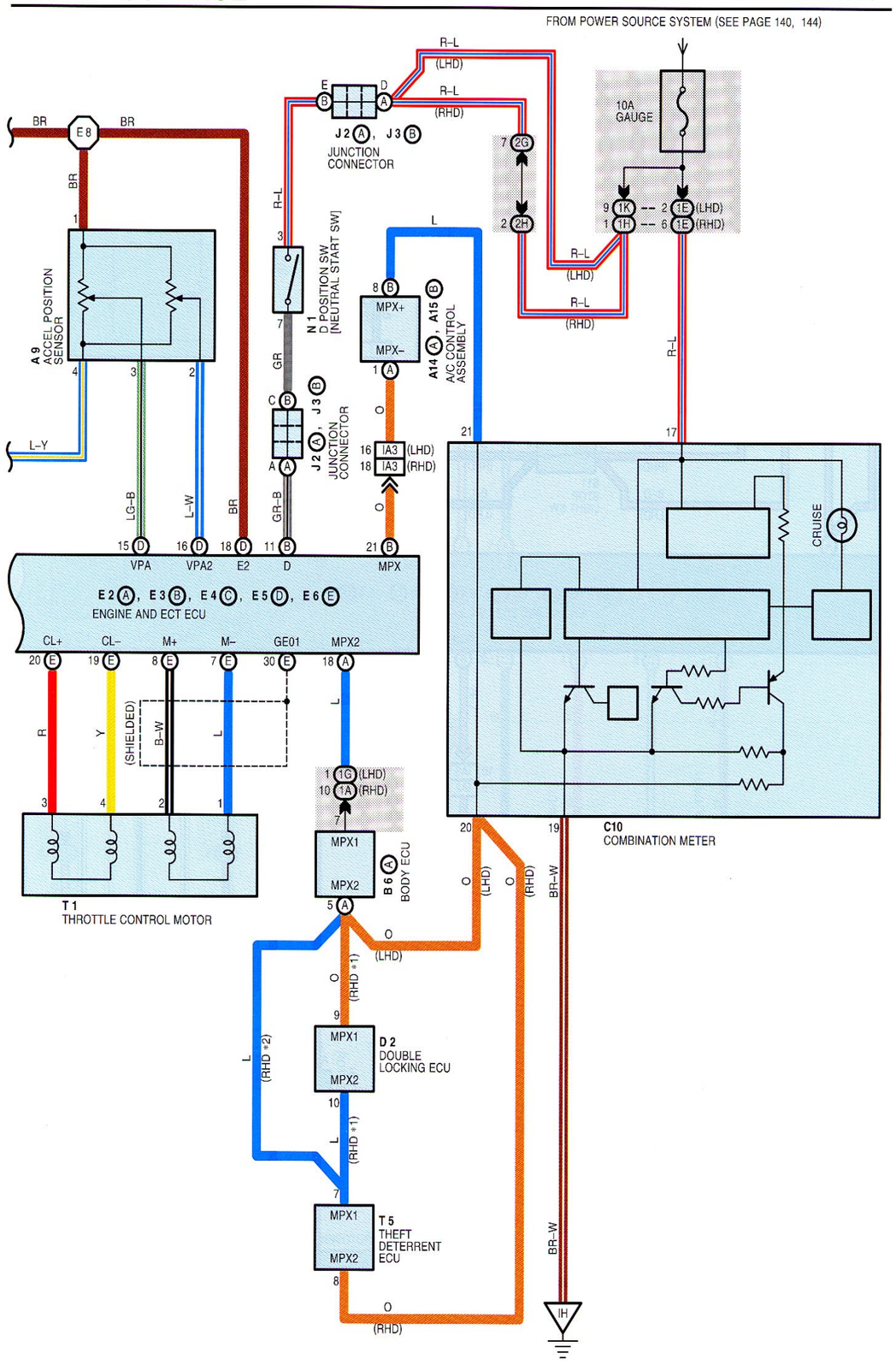
CRUISE CONTROL





CRUISE CONTROL

* 1 : W/ DOUBLE LOCKING
* 2 : W/O DOUBLE LOCKING



SYSTEM OUTLINE

The cruise control system allows the driver to control the vehicle speed at a constant speed, such as on a high way, without depressing the accelerator pedal. By operating the SW, the engine throttle valve is automatically adjusted to control the vehicle speed at a constant speed.

1. SET OPERATION

The actual vehicle speed is compared with the memorized vehicle speed, and when the actual vehicle speed is faster than the memorized speed, a signal is output to rotate the electronic throttle motor to close the throttle valve. When the actual vehicle speed is slower than the memorized speed, a signal is output to rotate the electronic throttle motor to open the throttle valve.

2. SET SPEED CONTROL

While traveling (within the set speed limit) with the main SW on (power indicator on), the speed when the SET/COAST SW is operated to off is memorized and the vehicle is controlled at that speed.

3. COAST CONTROL

When the SET/COAST SW is operated to on during cruise control driving, the cruise control opening angle requirement is controlled to 0 to decrease the vehicle speed (however the throttle valve itself is not fully closed due to ISC etc.), and the speed when the SW is operated to off is memorized, and the vehicle is controlled at that speed. Furthermore, every time the SET/COAST SW is operated to on momentarily (approximately 0.5 seconds), the memorized vehicle speed is decreased by approximately 1.5km/h.In case of tap down operation where the difference between the memorized vehicle speed and the actual vehicle speed is more than 5km/h, the speed when the SW is operated to off is memorized, and the vehicle is controlled at that speed.

4. ACCEL CONTROL

When the RESUME/ACCEL SW is operated to on during cruise control driving, the electronic throttle motor is rotated so that the throttle valve opens to increase the vehicle speed, and the speed when the SW is operated to off is memorized, and the vehicle is controlled at that speed.
Furthermore, every time the RESUME/ACCEL SW is operated to on momentarily (approximately 0.5 seconds), the memorized vehicle speed is increased by approximately 1.5km/h.
In case of tap up operation where the difference between the memorized vehicle speed and the actual vehicle speed is more than 5km/h, the memorized speed will not be changed.

5. MANUAL CANCEL MECHANISM

If any of the following signals are input during cruise control driving, the current to the motor flows in the direction to close the throttle valve, and the cruise control is canceled. (Vehicle speed memory will not be not erased)
* Stop light SW is on (Brake pedal is depressed)
* D position circuit in the neutral start SW is turned from on to off
(Shift position is changed from D to N, 2, or 1)
* The CANCEL SW of the control SW is on
* The main SW is off (Vehicle speed memory will be erased)

6. RESUME CONTROL

After canceling the cruise control (except when the main SW is off) if the vehicle speed is above the minimum speed limit (approximately 40km/h, 25mph) operating the RESUME/ACCEL SW from off to on will cause the system to accelerate to resume the vehicle speed before manual cancellation.

7. OVERDRIVE CONTROL FUNCTION

During cruise control driving, the overdrive may be cut on an uphill grade.
After the overdrive is cut, if the vehicle speed reaches the overdrive resume speed (set speed minus 2km/h), and if the system determines that the uphill grade has finished, the overdrive will resume after overdrive resume timer operation. However, if the actual vehicle speed becomes slower than the overdrive resume speed before the timer operation has finished, the timer will be reset, and will start again when the vehicle speed reaches the overdrive resume speed.

8. AUTO CANCEL OPERATION

(1) If any of the following conditions are detected, the set speed is erased and the control is canceled.
At this time, the power indicator will blink, and control of the system will be prohibited until the main SW is turned on again.

* Disconnection and/or short in the stop light SW
* Failure in the vehicle speed signal
* Failure in the electronic throttle parts

(2) If any of the following conditions are detected, the set speed is erased and the control is canceled.
At this time, the power indicator will blink, and control of the system will be prohibited until the ignition SW is turned off.

* Failure in the stop light SW input circuit
* Failure in the cancel circuit

(3) If any of the following conditions are detected, the set speed is erased and the control is canceled. (Reset is possible)

* The actual speed becomes slower than the minimum speed limit.
* The actual speed becomes −16km/h slower than the set speed.

SERVICE HINTS

E2 (A), E3 (B), E4 (C), E5 (D), E6 (E) ENGINE AND ECT ECU

(A) 9−GROUND : Approx. **12** volts with ignition SW at **ON** or **ST** position
(A) 1−GROUND : Always approx. **12** volts
(A) 22, (D)17, (E) 9, (E)21, (E)29, (E)31−GROUND : Always continuity
(B) 6−GROUND : Approx. **12** volts with stop light SW at on
(B)22−GROUND : Continuity with cruise control main SW at on
Approx. **1540** Ω with CANCEL SW on in cruise control SW
Approx. **240** Ω with RES/ACC SW on in cruise control SW
Approx. **630** Ω with SET/COAST SW on in cruise control SW

C13 CRUISE CONTROL SW [COMB. SW]

5−4 : Approx. **1540** Ω with CANCEL SW on
Approx. **240** Ω with RES/ACC SW on
Approx. **630** Ω with SET/COAST SW on

: PARTS LOCATION

Code		See Page
A9		96 (LHD)
		104 (RHD)
A14	A	98 (LHD)
		106 (RHD)
A15	B	98 (LHD)
		106 (RHD)
B6	A	98 (LHD)
		106 (RHD)
C10		98 (LHD)
		106 (RHD)
C13		98 (LHD)
		106 (RHD)
D2		106 (RHD)
E2	A	96 (LHD)
		104 (RHD)
E3	B	96 (LHD)
		104 (RHD)

Code		See Page
E4	C	96 (LHD)
		104 (RHD)
E5	D	96 (LHD)
		104 (RHD)
E6	E	96 (LHD)
		104 (RHD)
J1	A	97 (LHD)
		105 (RHD)
	B	97 (LHD)
		105 (RHD)
J2	A	97 (LHD)
		105 (RHD)
J3	B	97 (LHD)
		105 (RHD)
J4		97 (LHD)
		105 (RHD)
J5		107 (RHD)

Code	See Page
J9	99 (LHD)
	107 (RHD)
N1	97 (LHD)
	105 (RHD)
S2	97 (LHD)
	105 (RHD)
S3	97 (LHD)
	105 (RHD)
S11	99 (LHD)
	107 (RHD)
T1	97 (LHD)
	105 (RHD)
T2	97 (LHD)
	105 (RHD)
T5	107 (RHD)

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)
	81 (RHD)	Engine Room No.1 R/B (Engine Compartment Left)
2	80 (LHD)	Engine Room No.2 R/B (Engine Compartment Right)
	81 (RHD)	Engine Room No.2 R/B (Engine Compartment Left)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	88 (RHD)	Engine Room Main Wire and Driver Side J/B (Right Kick Panel)
1E	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1H	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1K	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2A	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Front Door LH Wire and Passenger Side J/B (Left Kick Panel)
2G	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)
2H	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2I	90 (RHD)	Floor No.2 Wire and Passenger Side J/B (Left Kick Panel)
2K	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)
2L	84 (LHD)	Floor Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2N	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	124 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
IA3	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
	124 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
IF1	126 (RHD)	Instrument Panel No.3 Wire and Instrument Panel Wire (Right Side of the Instrument Panel)

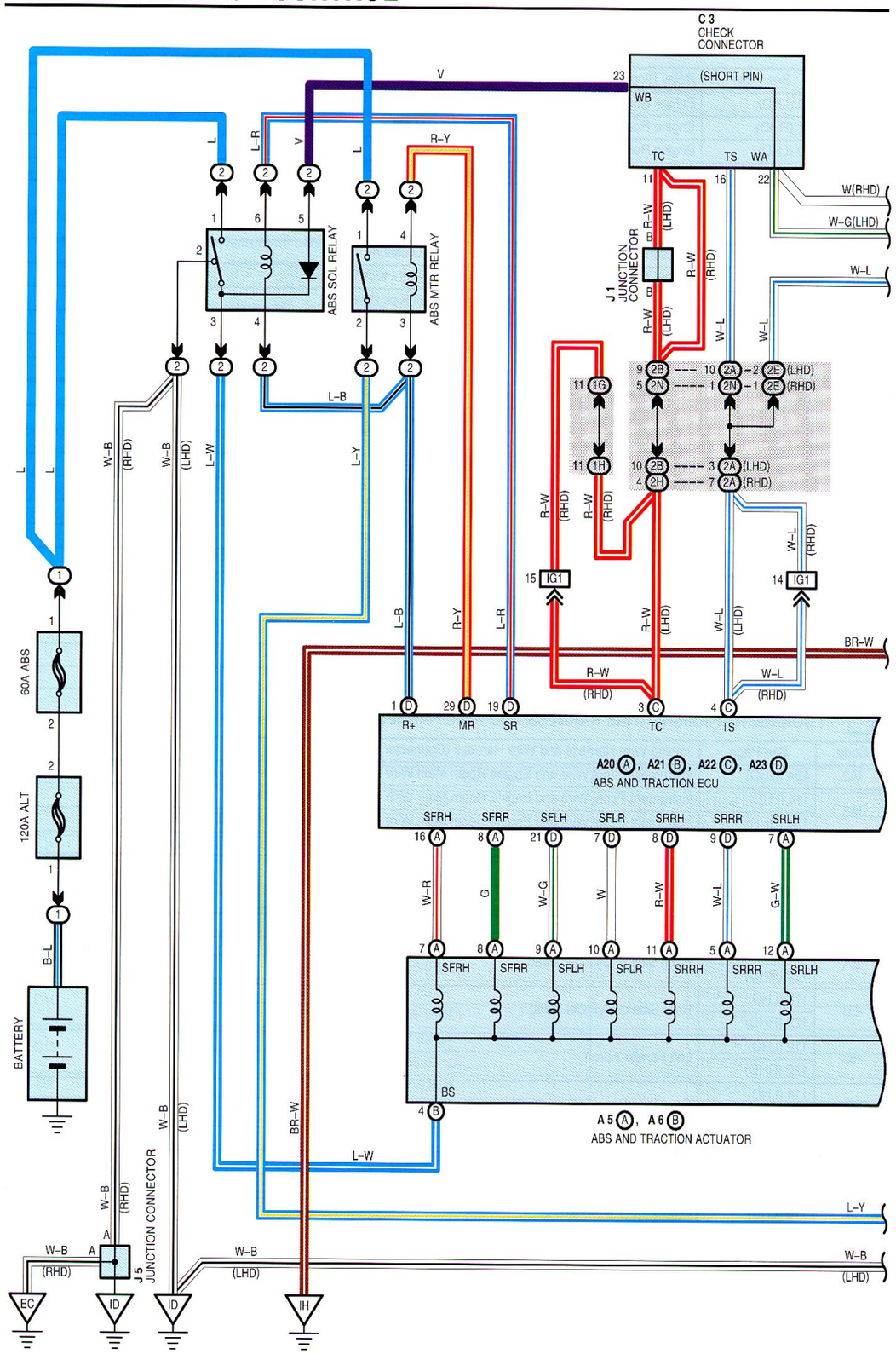
: GROUND POINTS

Code	See Page	Ground Points Location
EA	112 (LHD)	Front Side of Cylinder Head
	122 (RHD)	
EB	112 (LHD)	Rear Side of Cylinder Head
	122 (RHD)	
EC	112 (LHD)	Left Fender Apron
	122 (RHD)	
ID	114 (LHD)	Cowl Side Panel LH
	124 (RHD)	
IH	114 (LHD)	Front Floor Panel Center LH
	124 (RHD)	Front Floor Panel Center RH
BJ	128 (RHD)	Front Floor Panel LH
BL	118 (LHD)	Front Floor Panel RH

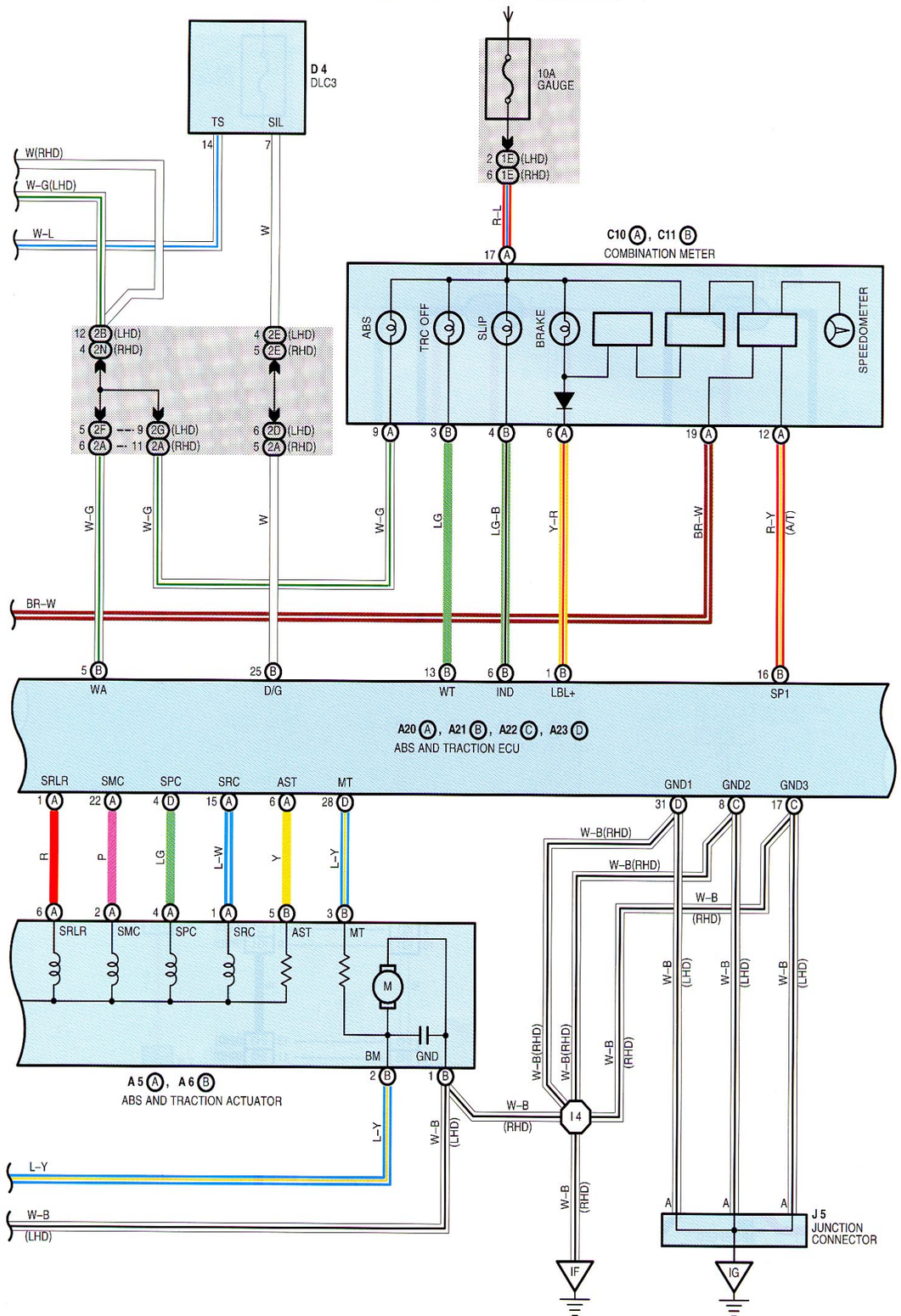
: SPLICE POINTS

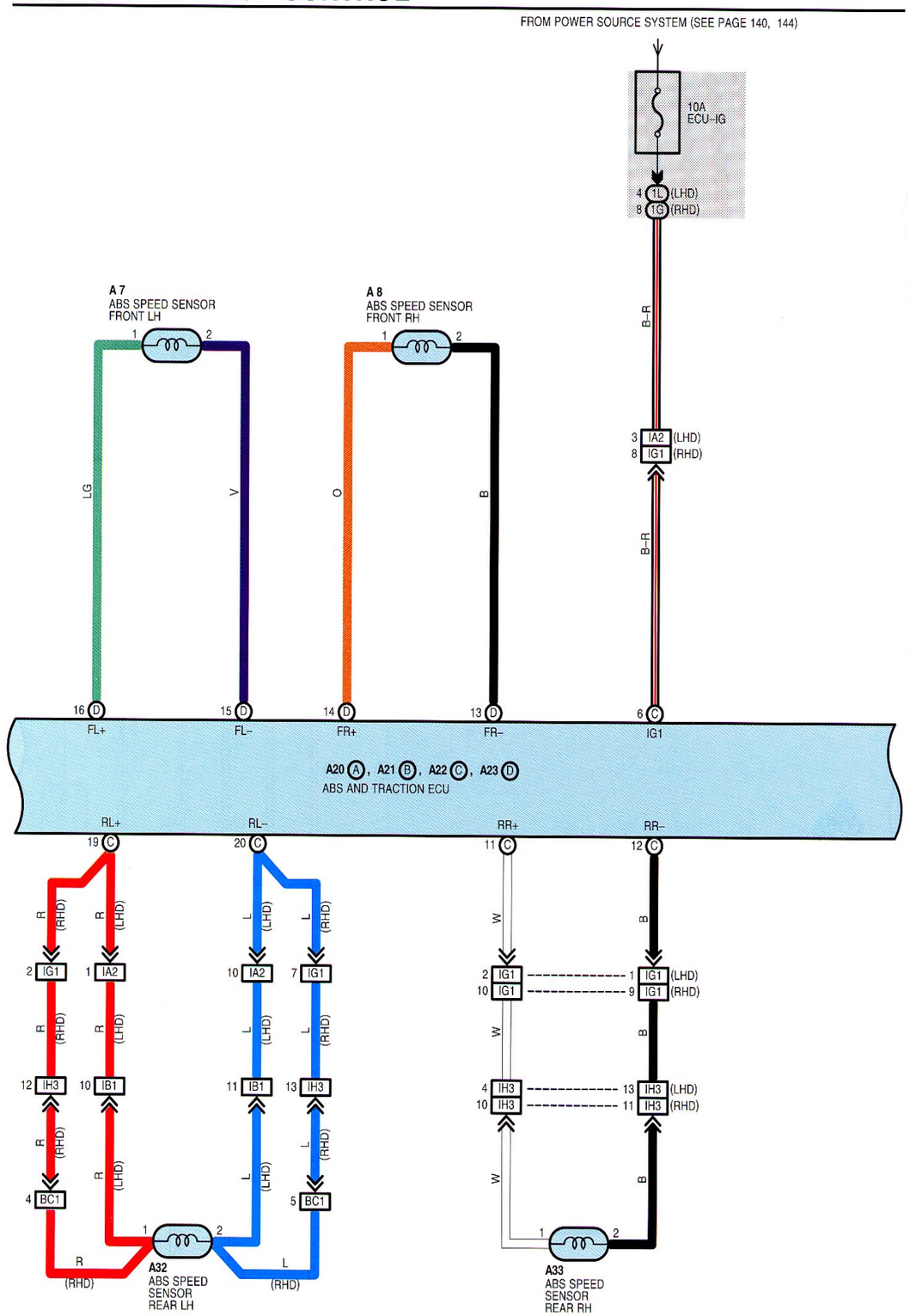
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E7	112 (LHD)	Engine Wire	E8	112 (LHD)	Engine Wire
	122 (RHD)			122 (RHD)	

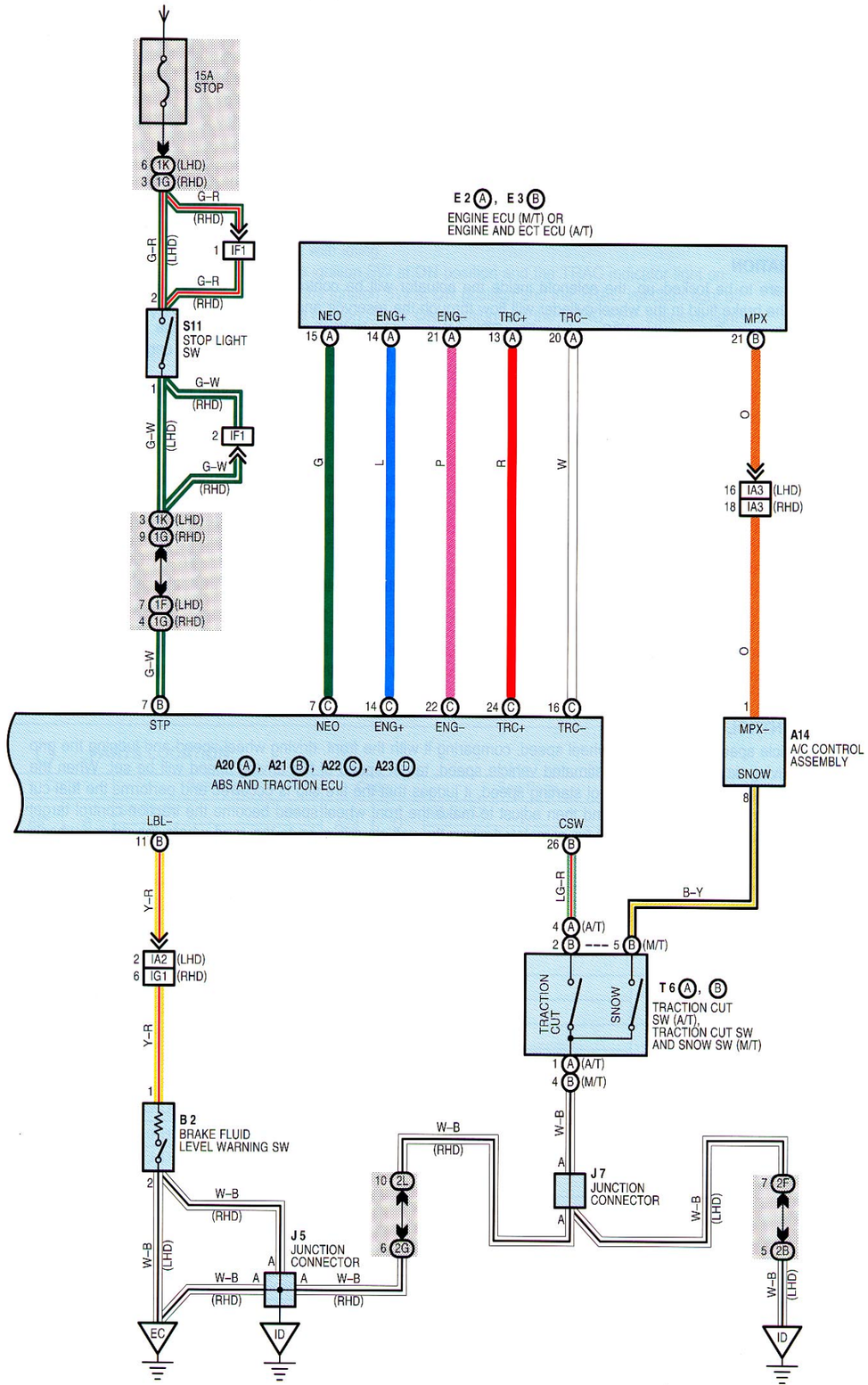
ABS AND TRACTION CONTROL



FROM POWER SOURCE SYSTEM (SEE PAGE 140, 144)




FROM POWER SOURCE SYSTEM (SEE PAGE 140, 144)
10A ECU-IG
4 1L (LHD)
8 1G (RHD)
B-R
3 IA2 (LHD)
8 IG1 (RHD)
B-R
A7
ABS SPEED SENSOR FRONT LH
A8
ABS SPEED SENSOR FRONT RH
LG
V
O
B
16 D FL+
15 D FL-
14 D FR+
13 D FR-
6 C IG1
A20 A, A21 B, A22 C, A23 D
ABS AND TRACTION ECU
RL+
RL-
RR+
RR-
19 C
20 C
11 C
12 C
R (RHD)
R (LHD)
L (LHD)
L (RHD)
W
B
2 IG1
1 IA2
10 IA2
7 IG1
2 IG1
10 IG1
1 IG1 (LHD)
9 IG1 (RHD)
12 IH3
10 IB1
11 IB1
13 IH3
4 IH3
10 IH3
13 IH3 (LHD)
11 IH3 (RHD)
4 BC1
5 BC1
A32
ABS SPEED SENSOR REAR LH
A33
ABS SPEED SENSOR REAR RH


FROM POWER SOURCE SYSTEM (SEE PAGE 140, 144)
15A STOP
6 1K (LHD)
3 1G (RHD)
G-R (RHD)
G-R (LHD)
1 IF1
G-R (RHD)
2
S11
STOP LIGHT SW
1
G-W (RHD)
G-W (LHD)
2 IF1
G-W (RHD)
3 1K (LHD)
9 1G (RHD)
7 1F (LHD)
4 1G (RHD)
G-W
7 B STP
E2 A, E3 B
ENGINE ECU (M/T) OR ENGINE AND ECT ECU (A/T)
NEO
ENG+
ENG-
TRC+
TRC-
MPX
15 A
14 A
21 A
13 A
20 A
21 B
G
L
P
R
W
O
16 IA3 (LHD)
18 IA3 (RHD)
O
1
MPX-
SNOW
A14
A/C CONTROL ASSEMBLY
8
7 C NEO
14 C ENG+
22 C ENG-
24 C TRC+
16 C TRC-
A20 A, A21 B, A22 C, A23 D
ABS AND TRACTION ECU
LBL-
CSW
11 B
26 B
Y-R
LG-R
B-Y
2 IA2 (LHD)
6 IG1 (RHD)
4 A (A/T)
2 B (M/T)
5 B (M/T)
TRACTION CUT
SNOW
T6 A, B
TRACTION CUT SW (A/T), TRACTION CUT SW AND SNOW SW (M/T)
1 A (A/T)
4 B (M/T)
B2
BRAKE FLUID LEVEL WARNING SW
W-B (RHD)
W-B (LHD)
J5
JUNCTION CONNECTOR
J7
JUNCTION CONNECTOR
10 2L
6 2G
7 2F
5 2B
EC
ID
ID

ABS AND TRACTION CONTROL

SYSTEM OUTLINE

(ABS)
ABS is a brake system designed for the purpose to improve the operating ability securing the stability of the vehicle by preventing the looking-up of the vehicle controlling the wheel cylinder pressure of all the four wheels at the time of sudden braking.

1. INPUT SIGNALS

(1) Speed sensor signal
The speed of the wheels is detected and input to TERMINALS FL+, FR+, RL+ and RR+ of the ABS and traction ECU.

(2) Stop light SW signal
A signal is input to TERMINAL STP of the ABS and traction ECU when brake pedal is depressed.

2. SYSTEM OPERATION

When the wheels are to be locked-up, the solenoid inside the actuator will be controlled by the signal from the ABS and traction ECU and the brake fluid in the wheel cylinder will flow through the reservoir and reduce the hydraulic pressure.
While the ABS is in operation, as the ABS and traction ECU always outputs the operation signal to the pump inside the actuator, brake fluid stored inside the reservoir will be suctioned up by the pump inside the actuator and returned to the master cylinder.
When the hydraulic pressure of the wheel cylinder is decompressed or increased until the necessary hydraulic pressure, the solenoid inside the actuator is controlled by the control signal from the ABS and traction ECU and as a result, hydraulic pressure of the wheel cylinder will be closed at both routes of the master cylinder and reservoir sides and the hydraulic pressure of the wheel cylinder will become to be in the holding condition.
If the increase of hydraulic pressure volume of the wheel cylinder becomes necessary, with the control signal from the ABS and traction ECU, the solenoid inside the actuator will be controlled and become the same condition as usual and the brake fluid of the master cylinder will be sent to the wheel cylinder and will increase the hydraulic pressure of the wheel cylinder. At this time, in the case that the brake fluid stays left in the reservoir, it will be sucked up by the pump inside the actuator and will be sent to the wheel cylinder.
Also, increasing speed of the hydraulic pressure is controlled by outputting the increasing and the said holding one after another.
(Traction control)
Traction control system is designed to perform the engine output control by the fuel cut and hydraulic pressure control of driving wheel brake and control the spinning of the driving wheels. By doing this, it improves starting acceleration and operating ability of the vehicle securing the driving ability in accordance with the road surface condition.

3. TRACTION CONTROL OPERATION

Estimating the vehicle speed from the rear wheel speed, comparing it with the front, driving wheel speed and judging the grip condition of the driving wheels. From the estimated vehicle speed, target speed of the driving speed will be set. When the front, driving wheel speed exceeds the control starting speed, it judges that the tire slip is occurred and performs the fuel cut cylinder number control and brake control and then adjust to make the front wheel speed become the traction control target speed. Controlling of the traction control will be completed when the vehicle move on to the road where the driving wheels will not have a tire slip or when the driver decelerate.

SERVICE HINTS

A20 (A), A21 (B), A22 (C),A23(D) ABS AND TRACTION ECU

IG1-GROUND : **10-14** volts with the ignition SW at **ON** position
R+ -SR : **9-14** volts with the ignition SW at **ON** position and the ABS warning light off
R+ -MR : **0-1** volts with the ignition SW at **ON** position
WA-GROUND : **0-2** volts with the ignition SW at **ON** position and the ABS warning light on
: **10-14** volts with the ignition SW at **ON** position and the ABS warning light off
STP-GROUND : **0-1.5** volts with the stop light SW off
: **8-14** volts with the stop light SW on
D/G-GROUND : **10-14** volts with the ignition SW at **ON** position and the ABS warning light on
MT-GROUND : **0-1.5** volts with the ignition SW at **ON** position
NEO-GROUND : Pules generation with idling
IND-GROUND : **0-2** volts with the ignition SW at **ON** position and the TRAC indicator light on
: **10-14** volts with the ignition SW at **ON** position and the TRAC indicator light off
WT-GROUND : **0-2** volts with the ignition SW at **ON** position and the TRAC OFF indicator light on
: **10-14** volts with the ignition SW at **ON** position and the TRAC OFF indicator light off
CSW-GROUND : **0-1.5** volts with the ignition SW at **ON** position and the traction cut SW pushed
: **8-14** volts with the ignition SW at **ON** position and the traction cut SW released
TC, TS-GROUND: **8-14** volts with the ignition SW at **ON** position
TRC+, TRC- -GROUND : Pules generation with the traction control active
ENG+, ENG- -GROUND : Pules generation with the ignition SW at **ON** position
SRLH, SRLR, AST-GROUND : **10-14** volts with the ignition SW at **ON** position and warning light off
SFLH, SRRR, SRRH-GROUND : **10-14** volts with the ignition SW at **ON** position and warning light off
SFRR, SFRH, SFLR-GROUND : **10-14** volts with the ignition SW at **ON** position and warning light off
SRC, SMC, SPC-GROUND : **10-14** Volts with the ignition SW at **ON** position and the TRAC OFF indicator light off

S11 STOP LIGHT SW

2-1 : Closed with the brake pedal depressed

A7, A8 ABS SPEED SENSOR FRONT LH, RH

1-2 : **1.6-1.8** kΩ (**20**°C)

A32, A33 ABS SPEED SENSOR REAR LH, RH

1-2 : **0.9-1.3** kΩ (**20**°C)

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A5 A	96 (LHD) 104 (RHD)	A23 D	98 (LHD) 106 (RHD)	E2 A	96 (LHD) 104 (RHD)
A6 B	96 (LHD) 104 (RHD)	A32	100 (LHD) 108 (RHD)	E3 B	96 (LHD) 104 (RHD)
A7	96 (LHD) 104 (RHD)	A33	100 (LHD) 108 (RHD)	J1	97 (LHD)
A8	96 (LHD) 104 (RHD)	B2	96 (LHD) 104 (RHD)	J5	99 (LHD) 107 (RHD)
A14	98 (LHD) 106 (RHD)	C3	96 (LHD) 104 (RHD)	J7	99 (LHD) 107 (RHD)
A20 A	98 (LHD) 106 (RHD)	C10 A	98 (LHD) 106 (RHD)	S11	99 (LHD) 107 (RHD)
A21 B	98 (LHD) 106 (RHD)	C11 B	98 (LHD) 106 (RHD)	T6 A	99 (LHD) 107 (RHD)
A22 C	98 (LHD) 106 (RHD)	D4	98 (LHD) 106 (RHD)	T6 B	99 (LHD) 107 (RHD)

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)
	81 (RHD)	Engine Room No.1 R/B (Engine Compartment Left)
2	80 (LHD)	Engine Room No.2 R/B (Engine Compartment Right)
	81 (RHD)	Engine Room No.2 R/B (Engine Compartment Left)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1E	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1F	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1G	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1H		
1K	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1L	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
2A	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2D	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2E	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2F	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)
2H	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2L		
2N	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IA3	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
	124 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
IB1	114 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
IF1	126 (RHD)	Instrument Panel No.3 Wire and Instrument Panel Wire (Right Side of the Instrument Panel)
IG1	116 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
	126 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IH3	116 (LHD)	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
	126 (RHD)	Instrument Panel Wire and Floor Wire (Near the Driver Side J/B)
BC1	128 (RHD)	Floor No.2 Wire and Floor Wire (Under the Right Rear Cushion)

: GROUND POINTS

Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
	122 (RHD)	
ID	114 (LHD)	Cowl Side Panel LH
	124 (RHD)	
IF	124 (RHD)	Cowl Side Panel RH
IG	114 (LHD)	
IH	114 (LHD)	Front Floor Panel Center LH
	124 (RHD)	Front Floor Panel Center RH

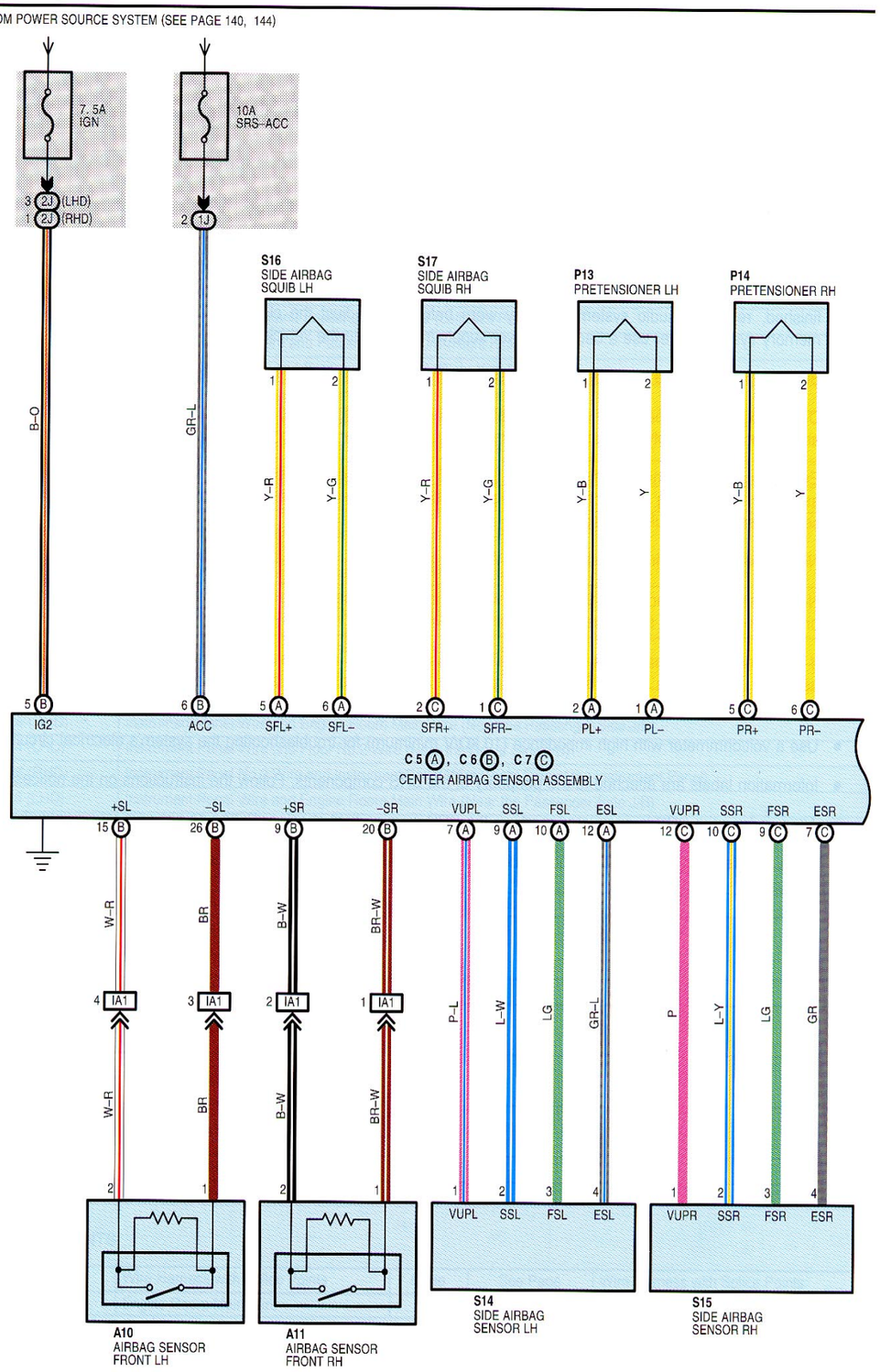
: SPLICE POINTS

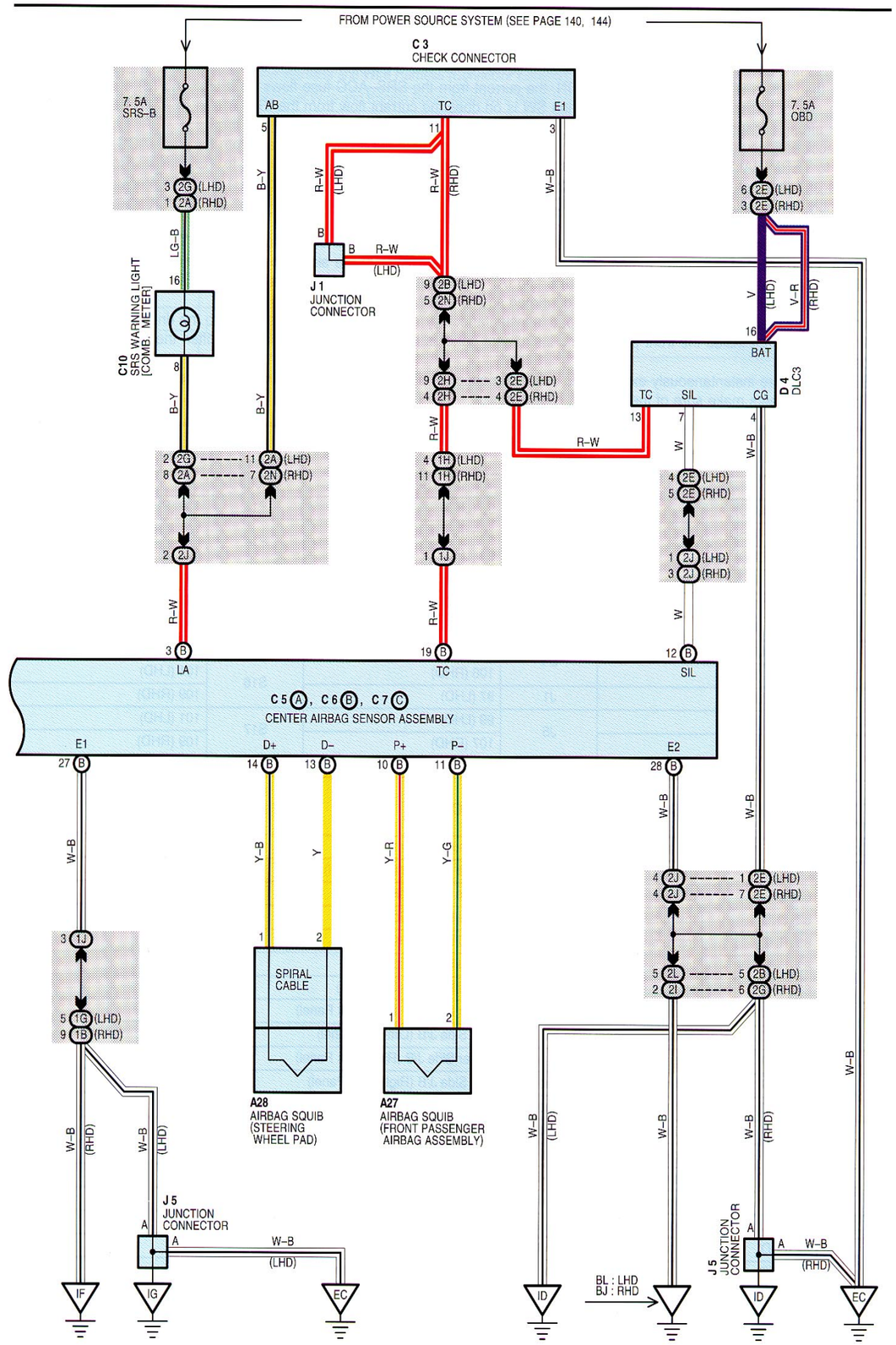
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I4	126 (RHD)	Engine Room Main Wire			

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

SRS


FROM POWER SOURCE SYSTEM (SEE PAGE 140, 144)
7.5A IGN
10A SRS-ACC
3 2J (LHD)
1 2J (RHD)
2 1J
B–O
GR–L
S16 SIDE AIRBAG SQUIB LH
S17 SIDE AIRBAG SQUIB RH
P13 PRETENSIONER LH
P14 PRETENSIONER RH
Y–R
Y–G
Y–B
Y
5 B IG2
6 B ACC
5 A SFL+
6 A SFL–
2 C SFR+
1 C SFR–
2 A PL+
1 A PL–
5 C PR+
6 C PR–
C5 A, C6 B, C7 C
CENTER AIRBAG SENSOR ASSEMBLY
+SL –SL +SR –SR VUPL SSL FSL ESL VUPR SSR FSR ESR
15 B 26 B 9 B 20 B 7 A 9 A 10 A 12 A 12 C 10 C 9 C 7 C
W–R BR B–W BR–W P–L L–W LG GR–L P L–Y LG GR
4 IA1 3 IA1 2 IA1 1 IA1
A10 AIRBAG SENSOR FRONT LH
A11 AIRBAG SENSOR FRONT RH
S14 SIDE AIRBAG SENSOR LH
S15 SIDE AIRBAG SENSOR RH


FROM POWER SOURCE SYSTEM (SEE PAGE 140, 144)
C3 CHECK CONNECTOR
AB TC E1
7.5A SRS-B
7.5A OBD
3 2G (LHD)
1 2A (RHD)
6 2E (LHD)
3 2E (RHD)
LG–B
B–Y
R–W (LHD)
R–W (RHD)
W–B
V (LHD)
V–R (RHD)
J1 JUNCTION CONNECTOR
C10 SRS WARNING LIGHT [COMB METER]
D4 DLC3
BAT TC SIL CG
9 2B (LHD)
5 2N (RHD)
9 2H 3 2E (LHD)
4 2H 4 2E (RHD)
2 2G 11 2A (LHD)
8 2A 7 2N (RHD)
4 1H (LHD)
11 1H (RHD)
4 2E (LHD)
5 2E (RHD)
2 2J
1 1J
1 2J (LHD)
3 2J (RHD)
3 B LA
19 B TC
12 B SIL
C5 A, C6 B, C7 C
CENTER AIRBAG SENSOR ASSEMBLY
E1 D+ D– P+ P– E2
27 B 14 B 13 B 10 B 11 B 28 B
W–B Y–B Y Y–R Y–G W–B
3 1J
5 1G (LHD)
9 1B (RHD)
SPIRAL CABLE
A28 AIRBAG SQUIB (STEERING WHEEL PAD)
A27 AIRBAG SQUIB (FRONT PASSENGER AIRBAG ASSEMBLY)
4 2J 1 2E (LHD)
4 2J 7 2E (RHD)
5 2L 5 2B (LHD)
2 2I 6 2G (RHD)
J5 JUNCTION CONNECTOR
IF IG EC ID
BL : LHD
BJ : RHD

SRS

SYSTEM OUTLINE

The SRS is a driver and front passenger protection device which has a supplemental role to the seat belts.
When the ignition SW is turned to ACC or ON, the current from the SRS-ACC fuse flows to TERMINAL (B) 6 of the center airbag sensor assembly. Only when the ignition SW is on does the current flow from the IGN fuse to TERMINAL (B) 5 of the center airbag sensor assembly.
If an accident occurs while driving, when the frontal impact exceeds a set level, the current from the SRS-ACC or IGN fuse flows to TERMINALS (B) 14, (B) 10, (C) 5 and (A) 2 of the center airbag sensor assembly to TERMINAL 1 of the airbag squibs and the pretensioners to TERMINAL 2 to TERMINALS (B) 13, (B) 11, (C) 6 and (A) 1 of the center airbag sensor assembly to TERMINAL (B) 27, (B) 28 or BODY GROUND to GROUND, so that current flows to the airbag squibs and the pretensioners and causes them to operate.
When the side impact also exceeds a set level, the current from the SRS-ACC or IGN fuse flows to TERMINALS (C) 2, (A) 5, (C) 5 and (A) 2 of the center airbag sensor assembly to TERMINAL 1 of the side airbag squibs and the pretensioners to TERMINAL 2 to TERMINALS (C) 1, (A) 6, (C) 6 and (A) 1 of the center airbag sensor assembly to TERMINAL (B) 27, (B) 28 or BODY GROUND to GROUND, causing side airbag squibs and the pretensioners to operate.
The airbag stored inside the steering wheel pad is instantaneously expanded to soften the shock to the driver.
The airbag stored inside the front 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 pretensioners make sure of the seat belt restrainability.

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A10	96 (LHD)	C6 B	98 (LHD)	P13	109 (RHD)
	104 (RHD)		106 (RHD)	P14	101 (LHD)
A11	96 (LHD)	C7 C	98 (LHD)		109 (RHD)
	104 (RHD)		106 (RHD)	S14	101 (LHD)
A27	98 (LHD)	C10	98 (LHD)		109 (RHD)
	106 (RHD)		106 (RHD)	S15	101 (LHD)
A28	98 (LHD)	D4	98 (LHD)		109 (RHD)
	106 (RHD)		106 (RHD)	S16	101 (LHD)
C3	96 (LHD)	J1	97 (LHD)		109 (RHD)
	104 (RHD)	J5	99 (LHD)	S17	101 (LHD)
C5 A	98 (LHD)		107 (RHD)		109 (RHD)
	106 (RHD)	P13	101 (LHD)		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	88 (RHD)	Engine Room Main Wire and Driver Side J/B (Right Kick Panel)
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1J	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
2A	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2E	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2G	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)
2H	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2I	90 (RHD)	Floor No.2 Wire and Passenger Side J/B (Left Kick Panel)
2J	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2L	84 (LHD)	Floor Wire and Passenger Side J/B (Right Kick Panel)
2N	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)

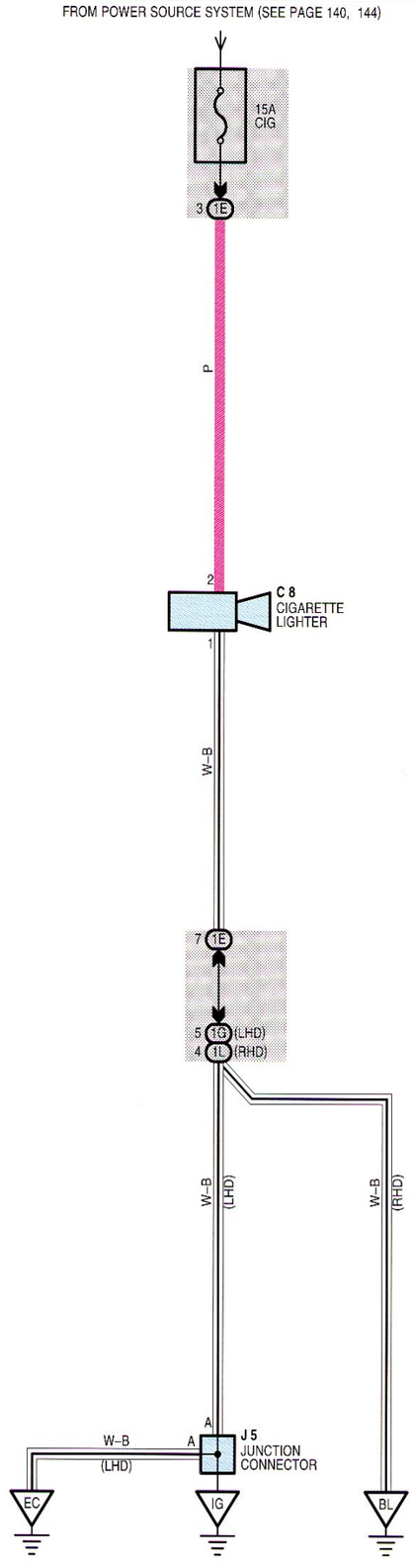
□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
	124 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)

▽ : GROUND POINTS

Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
	122 (RHD)	
ID	114 (LHD)	Cowl Side Panel LH
	124 (RHD)	
IF	124 (RHD)	Cowl Side Panel RH
IG	114 (LHD)	
BJ	128 (RHD)	Front Floor Panel LH
BL	118 (LHD)	Front Floor Panel RH
	128 (RHD)	

CIGARETTE LIGHTER



SERVICE HINTS

C8 CIGARETTE LIGHTER

2-GROUND : Approx. **12** volts with ignition SW at **ACC** or **ON** position
1-GROUND : Always continuity

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C8	98 (LHD)	J5	99 (LHD)		
	106 (RHD)				

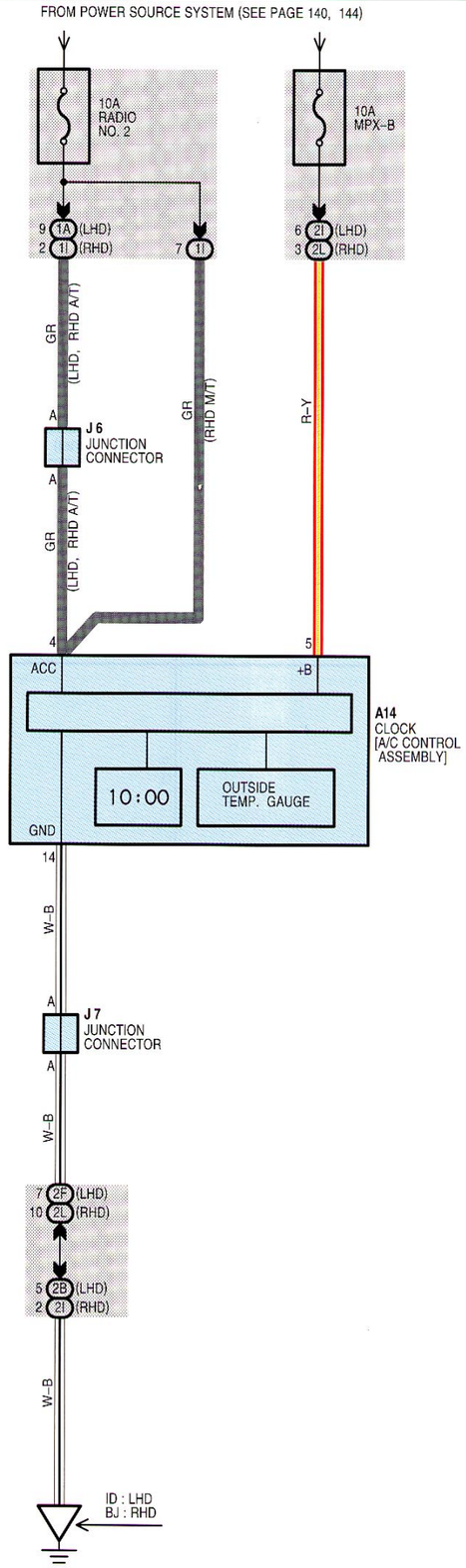
⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1E	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1L	88 (RHD)	Floor Wire and Driver Side J/B (Right Kick Panel)

▽ : GROUND POINTS

Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
IG	114 (LHD)	Cowl Side Panel RH
BL	128 (RHD)	Front Floor Panel RH

CLOCK



SERVICE HINTS

A14 CLOCK [A/C CONTROL ASSEMBLY]

5–GROUND : Always approx. **12** volts (Power for clock)
4–GROUND : Approx. **12** volts with ignition SW at **ACC** or **ON** position (Power for indication)
14–GROUND : Always continuity

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A14	98 (LHD)	J6	99 (LHD)	J7	99 (LHD)
	106 (RHD)		107 (RHD)		107 (RHD)

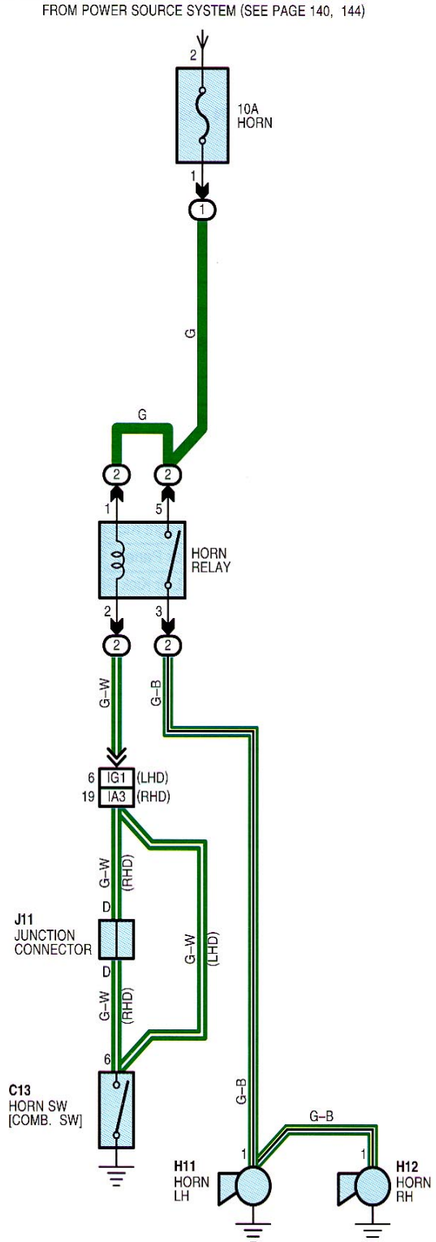
⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1I	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2F	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2I	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Floor No.2 Wire and Passenger Side J/B (Left Kick Panel)
2L	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)

▽ : GROUND POINTS

Code	See Page	Ground Points Location
ID	114 (LHD)	Cowl Side Panel LH
BJ	128 (RHD)	Front Floor Panel LH

HORN



SERVICE HINTS

HORN RELAY

5–3 : Closed horn SW on

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C13	98 (LHD)	H11	105 (RHD)	J11	107 (RHD)
	106 (RHD)	H12	97 (LHD)		
H11	97 (LHD)		105 (RHD)		

▭ : RELAY BLOCKS

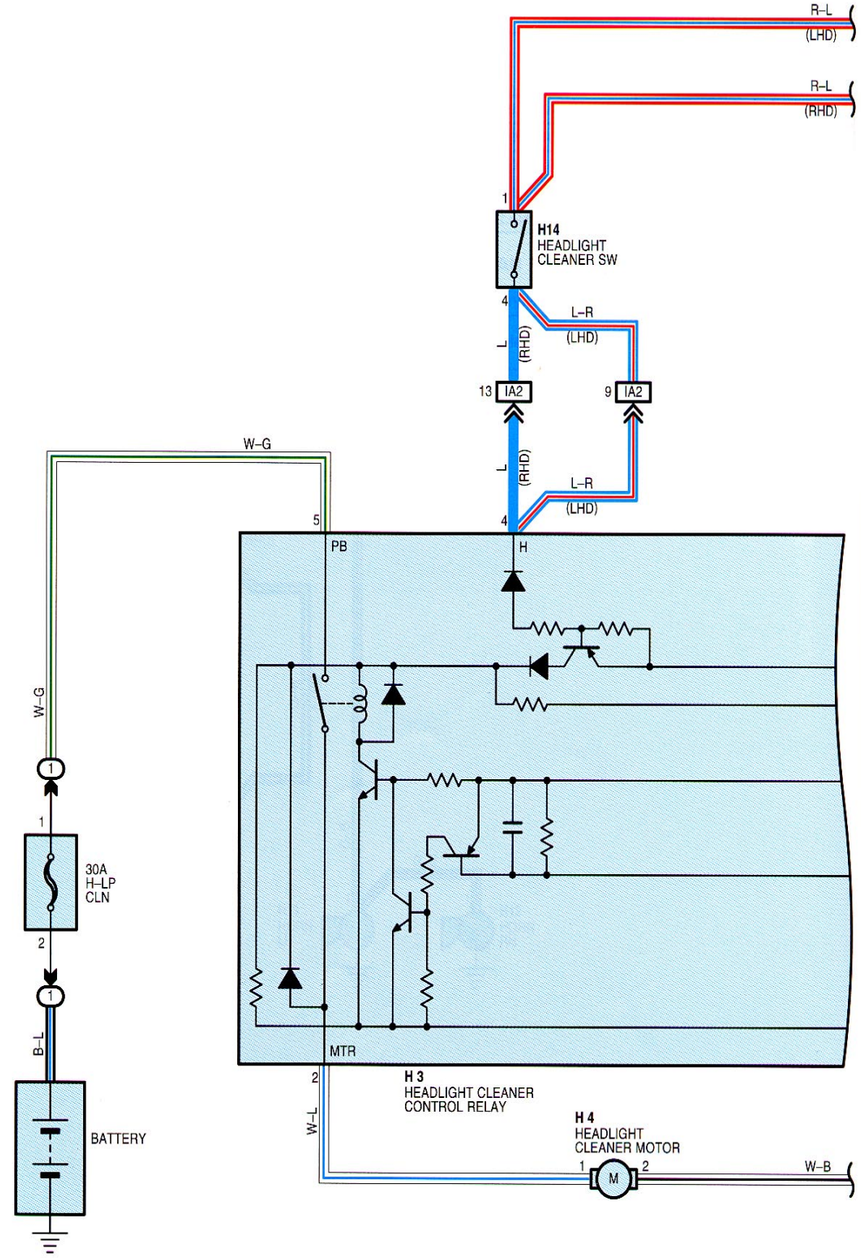
Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)
	81 (RHD)	Engine Room No.1 R/B (Engine Compartment Left)
2	80 (LHD)	Engine Room No.2 R/B (Engine Compartment Right)
	81 (RHD)	Engine Room No.2 R/B (Engine Compartment Left)

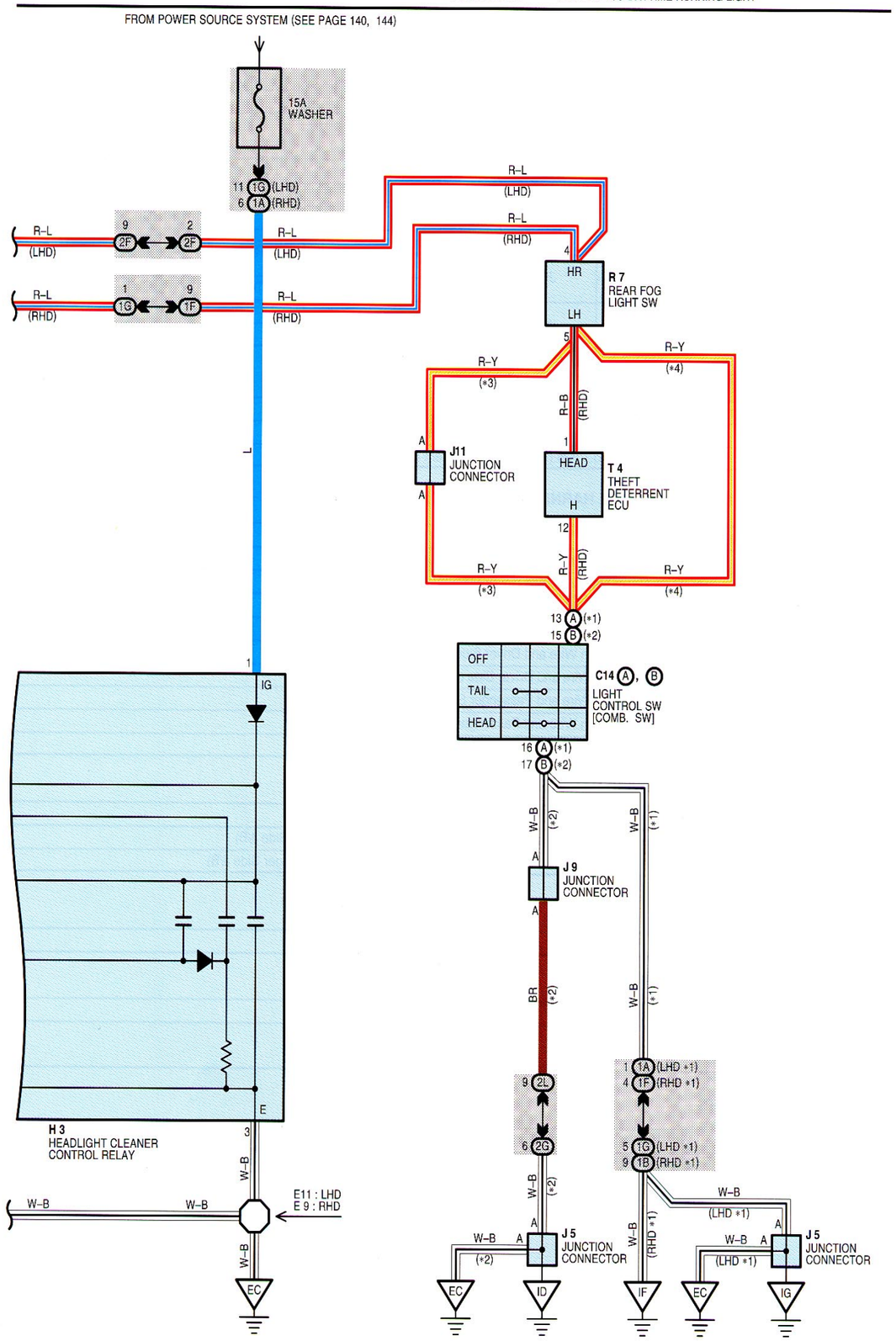
▭ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA3	124 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
IG1	116 (LHD)	

HEADLIGHT CLEANER

* 1 : EUROPE
* 2 : AUSTRALIA
* 3 : LHD W/ DAYTIME RUNNING LIGHT
* 4 : LHD W/O DAYTIME RUNNING LIGHT





HEADLIGHT CLEANER

SERVICE HINTS

H3 HEADLIGHT CLEANER CONTROL RELAY

5-2 : Closed with ignition SW at **ON** position, light control SW at **HEAD** position and headlight cleaner SW on

○ : PARTS LOCATION

Code		See Page	Code	See Page	Code	See Page
C14	A	98 (LHD)	H4	105 (RHD)	J11	99 (LHD)
		106 (RHD)	H14	99 (LHD)		107 (RHD)
	B	98 (LHD)		107 (RHD)	R7	99 (LHD)
		106 (RHD)	J5	99 (LHD)		107 (RHD)
H3		97 (LHD)		107 (RHD)	T4	107 (RHD)
		105 (RHD)	J9	99 (LHD)		
H4		97 (LHD)		107 (RHD)		

▭ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)
	81 (RHD)	Engine Room No.1 R/B (Engine Compartment Left)

▭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
	88 (RHD)	Engine Room Main Wire and Driver Side J/B (Right Kick Panel)
1B	88 (RHD)	Engine Room Main Wire and Driver Side J/B (Right Kick Panel)
1F	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
2F	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)
2L	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)

▭ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
	124 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)

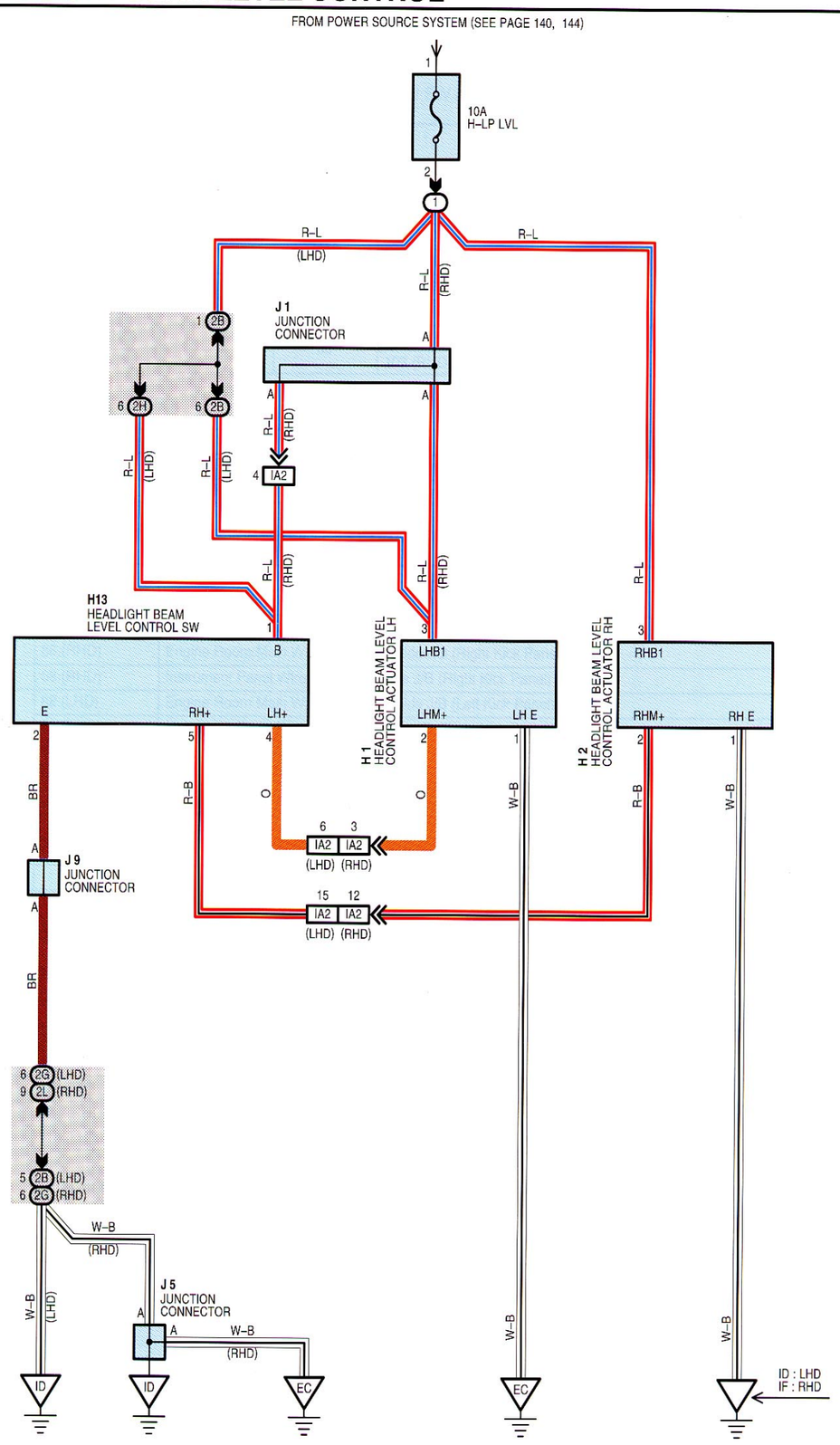
▽ : GROUND POINTS

Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
	122 (RHD)	
ID	124 (RHD)	Cowl Side Panel LH
IF	124 (RHD)	Cowl Side Panel RH
IG	114 (LHD)	

⬡ : SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E9	122 (RHD)	Engine Room Main Wire	E11	112 (LHD)	Engine Room Main Wire

HEADLIGHT BEAM LEVEL CONTROL



SERVICE HINTS

H1, H2 HEADLIGHT BEAM LEVEL CONTROL ACTUATOR LH, RH

3-GROUND : Approx. **12** volts with light control SW at **HEAD** position or dimmer SW at **FLASH** position

1-GROUND : Always continuity

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
H1	97 (LHD)	H13	99 (LHD)	J9	99 (LHD)
	105 (RHD)		107 (RHD)		107 (RHD)
H2	97 (LHD)	J1	105 (RHD)		
	105 (RHD)	J5	107 (RHD)		

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)
	81 (RHD)	Engine Room No.1 R/B (Engine Compartment Left)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2G	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)
2H	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2L	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

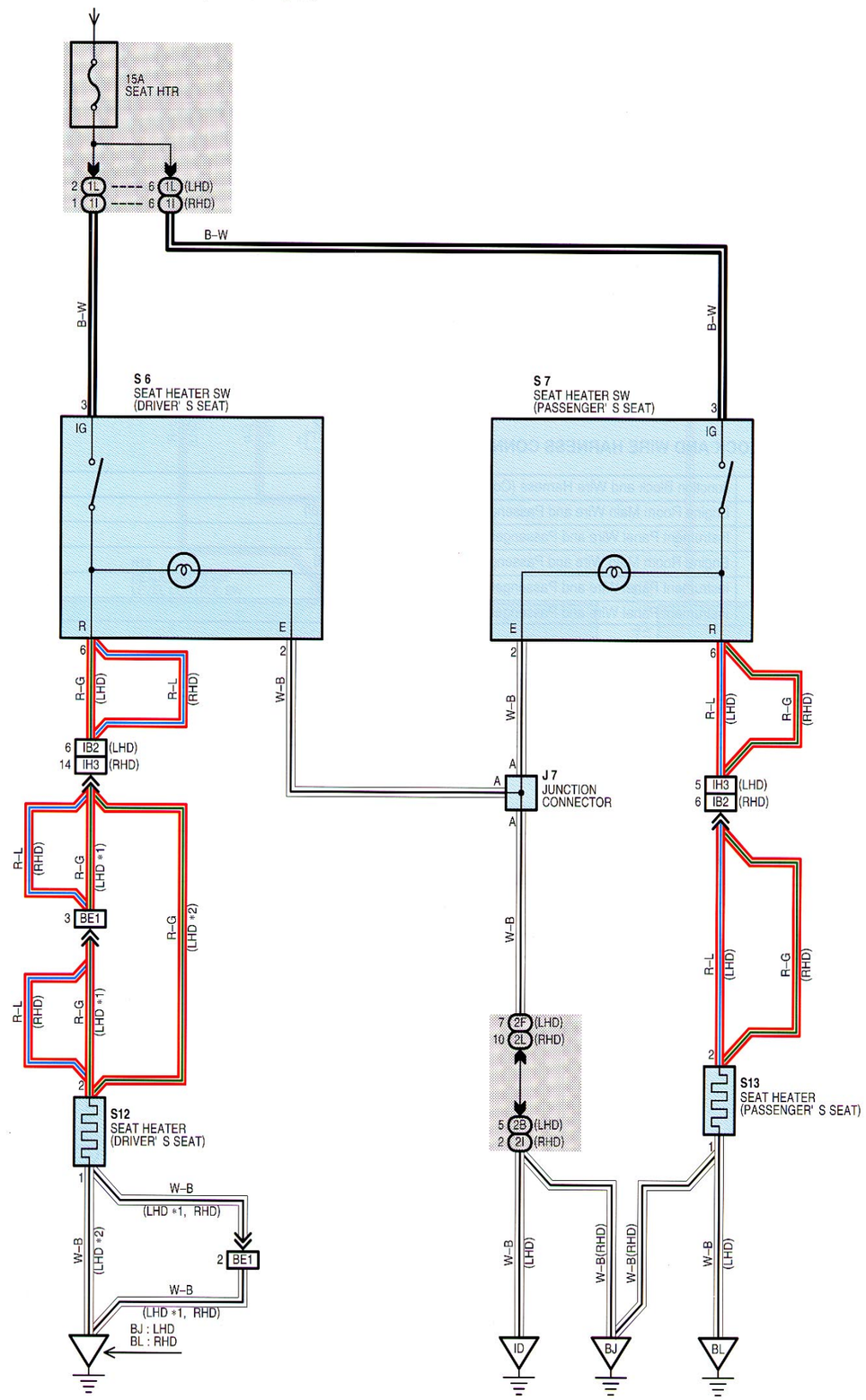
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
	124 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)

: GROUND POINTS

Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
	122 (RHD)	
ID	114 (LHD)	Cowl Side Panel LH
	124 (RHD)	
IF	124 (RHD)	Cowl Side Panel RH

SEAT HEATER

* 1 : W/ POWER SEAT
* 2 : W/O POWER SEAT



SERVICE HINTS

S6, S7 SEAT HEATER SW (DRIVER'S SEAT, PASSENGER'S SEAT)

3–GROUND : Approx. **12** volts with ignition SW at **ON** or **ST** position
2–GROUND : Always continuity

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
J7	99 (LHD)	S7	99 (LHD)	S12	109 (RHD)
	107 (RHD)		107 (RHD)		110 (RHD)
S6	99 (LHD)	S12	101 (LHD)	S13	101 (LHD)
	107 (RHD)		102 (LHD)		109 (RHD)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1I	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1L	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2F	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2I	90 (RHD)	Floor No.2 Wire and Passenger Side J/B (Left Kick Panel)
2L	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)

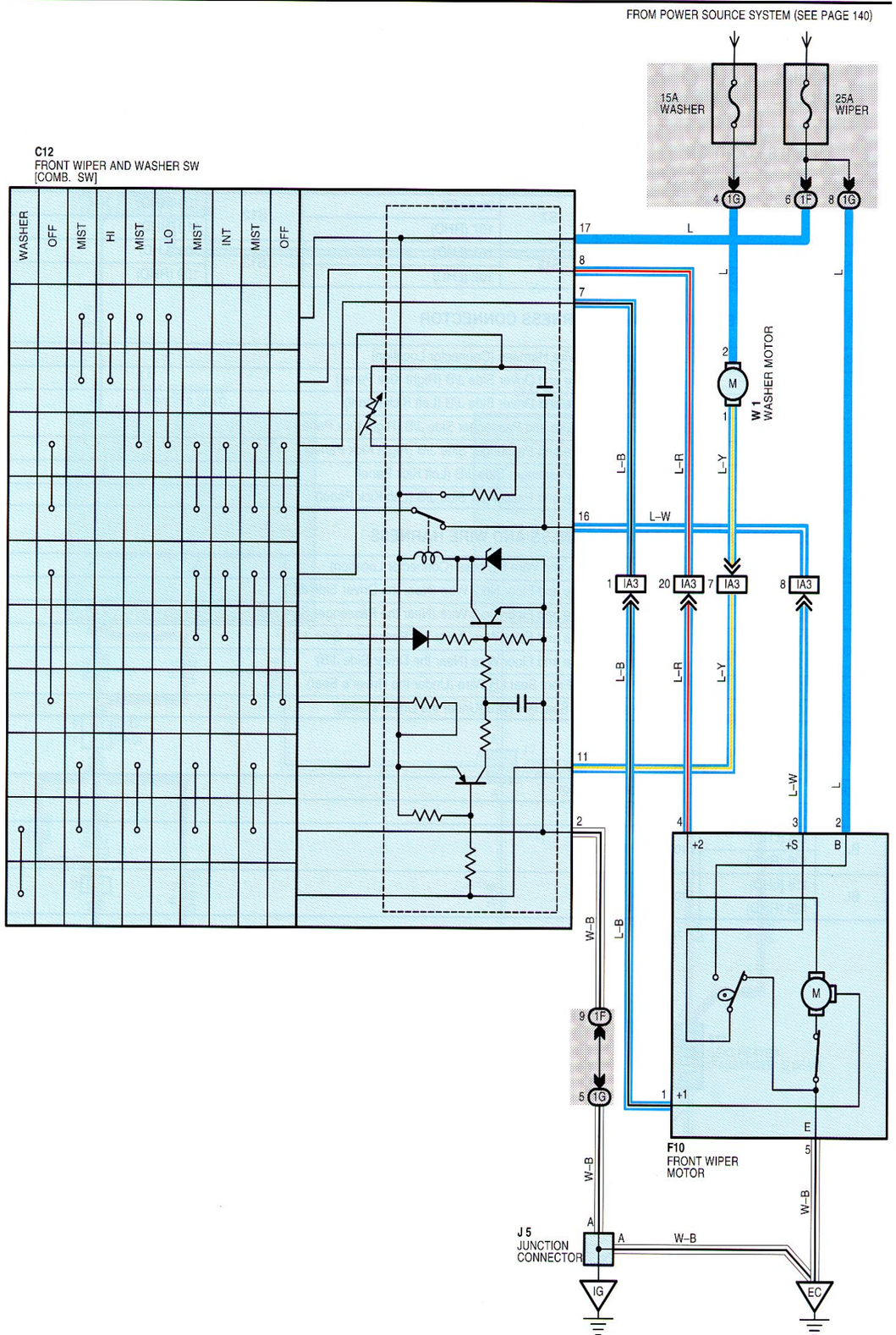
□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB2	114 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
	124 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Passenger Side J/B)
IH3	116 (LHD)	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
	126 (RHD)	Instrument Panel Wire and Floor Wire (Near the Driver Side J/B)
BE1	120 (LHD)	Floor No.2 Wire and Front Seat LH Wire (Under the Driver's Seat)
	130 (RHD)	Floor Wire and Front Seat RH Wire (Under the Driver's Seat)

▽ : GROUND POINTS

Code	See Page	Ground Points Location
ID	114 (LHD)	Cowl Side Panel LH
BJ	118 (LHD)	Front Floor Panel LH
	128 (RHD)	
BL	118 (LHD)	Front Floor Panel RH
	128 (RHD)	

WIPER AND WASHER (LHD)



SYSTEM OUTLINE

With the ignition SW turned on, the current flows to TERMINAL 17 of the front wiper and washer SW, and TERMINAL 2 of the front wiper motor through the WIPER fuse, TERMINAL 2 of washer motor through the WASHER fuse.

1. LOW SPEED POSITION

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

2. HIGH SPEED POSITION

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

3. INT POSITION

With wiper SW turned to INT position, the relay operates and the current which is connected by relay function flows from TERMINAL 17 of the front wiper and washer SW to TERMINAL 2 to GROUND. This flow of current operates the intermittent circuit and the current flows from TERMINAL 17 of the front wiper and washer SW to TERMINAL 7 to TERMINAL 1 of the front wiper motor to TERMINAL 5 to GROUND and operates the wiper.
The intermittent operation is controlled by the charge/discharge function of the condenser installed in the relay, and the intermittent time is controlled by a time control SW to change the charging time of the condenser.

4. MIST POSITION

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

5. WASHER CONTINUOUS OPERATION

With washer SW turned to on, the current flows from TERMINAL 2 of the washer motor to TERMINAL 1 to TERMINAL 11 of the front wiper and washer SW to TERMINAL 2 to GROUND and causes to the washer motor to run, and the window washer emits a water spray. This causes the current to flow to washer continuous operation circuit in TERMINAL 17 of the front wiper and washer SW to TERMINAL 7 to TERMINAL 1 of the front wiper motor to TERMINAL 5 to GROUND and operates the wiper.

SERVICE HINTS

C12 FRONT WIPER AND WASHER SW [COMB. SW]

2–GROUND : Always continuity
17–GROUND : Approx. **12** volts with the ignition SW at **ON** or **ST** position
7–GROUND : Approx. **12** volts with the front wiper and washer SW at **LO** position
Approx. **12** volts approx. **1.6** to **10.7** seconds intermittently with the front wiper and washer SW at **INT** position
16–GROUND : Approx. **12** volts with the ignition SW on unless the front wiper motor at **STOP** position
8–GROUND : Approx. **12** volts with the front wiper and washer SW at **HI** position

F10 FRONT WIPER MOTOR

2–3 : Closed unless the wiper motor at **STOP** position

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C12	98 (LHD)	J5	99 (LHD)		
F10	96 (LHD)	W1	97 (LHD)		

▭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1F	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)

▭ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

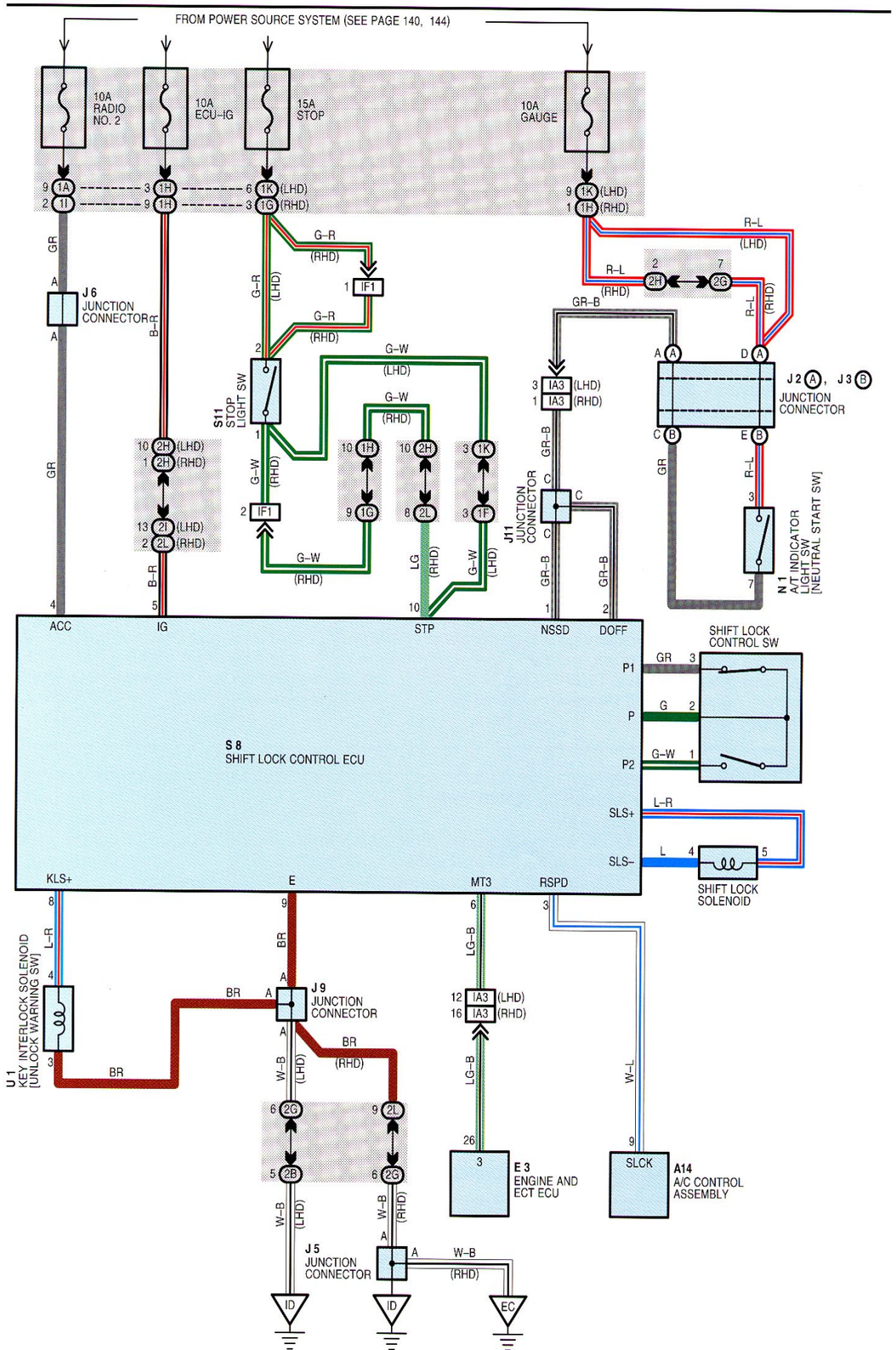
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA3	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)

WIPER AND WASHER (LHD)

▽ : GROUND POINTS

Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
IG	114 (LHD)	Cowl Side Panel RH

SHIFT LOCK



SYSTEM OUTLINE

When the ignition SW is turned to ACC position, the current from the RADIO NO.2 fuse flows to TERMINAL 4 of the shift lock ECU. When the ignition SW is turned to ON position, the current from the ECU-IG fuse flows to TERMINAL 5 of the ECU.

1. SHIFT LOCK MECHANISM

With the ignition SW on, when a signal that the brake pedal is depressed (Stop light SW on) and a signal that the shift lever is put in P position (Continuity between P1 and P of the shift lock control SW) is input to the ECU, the ECU activates and the current flows from TERMINAL 5 of the ECU to TERMINAL SLS+ of the shift lock solenoid to solenoid to TERMINAL SLS- to TERMINAL 9 of the ECU to GROUND. This causes the shift lock solenoid to turn on (Lock plate disengages) and the shift lever can be shifted into other position than the P position

2. KEY INTER LOCK MECHANISM

With the ignition SW ON or ACC position, when the shift lever is put in P position (No continuity between P2 and P of shift lock control SW), the current flowing from TERMINAL 8 of the ECU to the key interlock solenoid is cut off. This causes the key interlock solenoid to turn off (Lock plate disengages from LOCK position) and the ignition key can be turned from ACC to LOCK position.

SERVICE HINTS

S8 SHIFT LOCK ECU

4-GROUND : Approx. **12** volts with the ignition SW at **ACC** or **ON** position
5-GROUND : Approx. **12** volts with the ignition SW at **ON** or **ST** position
9-GROUND : Always continuity
10-GROUND : Approx. **12** volts with the brake pedal depressed

S11 STOP LIGHT SW

2-1 : Closed with the brake pedal depressed

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A14	98 (LHD)	J5	107 (RHD)	N1	105 (RHD)
	106 (RHD)	J6	99 (LHD)	S8	99 (LHD)
E3	96 (LHD)		107 (RHD)		107 (RHD)
	104 (RHD)	J9	99 (LHD)	S11	99 (LHD)
J2 A	97 (LHD)		107 (RHD)		107 (RHD)
	105 (RHD)	J11	99 (LHD)	U1	99 (LHD)
J3 B	97 (LHD)		107 (RHD)		107 (RHD)
	105 (RHD)	N1	97 (LHD)		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1F		
1G	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1H	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1I	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1K	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2G	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)
2H	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2I	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2L	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)

SHIFT LOCK

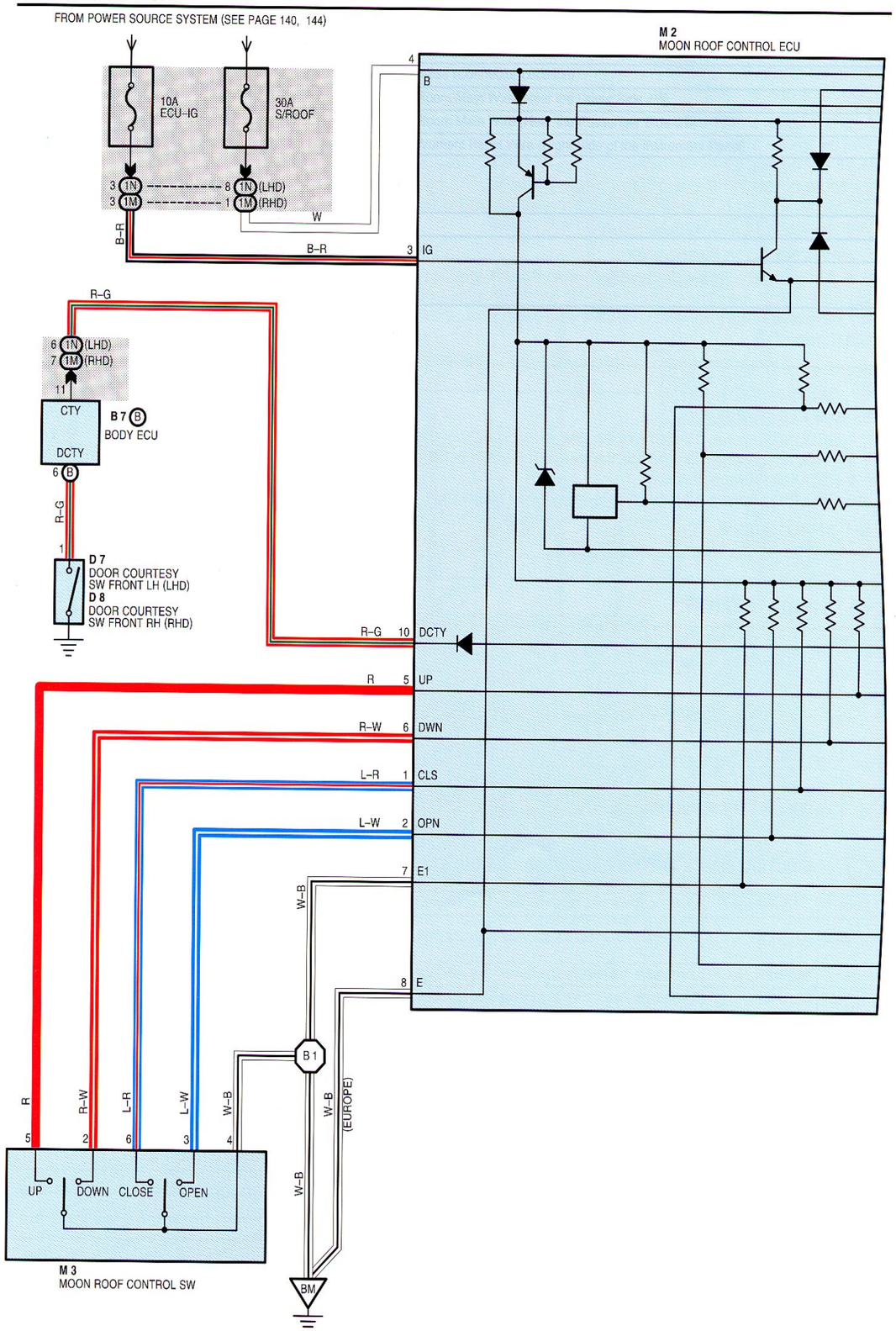
: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

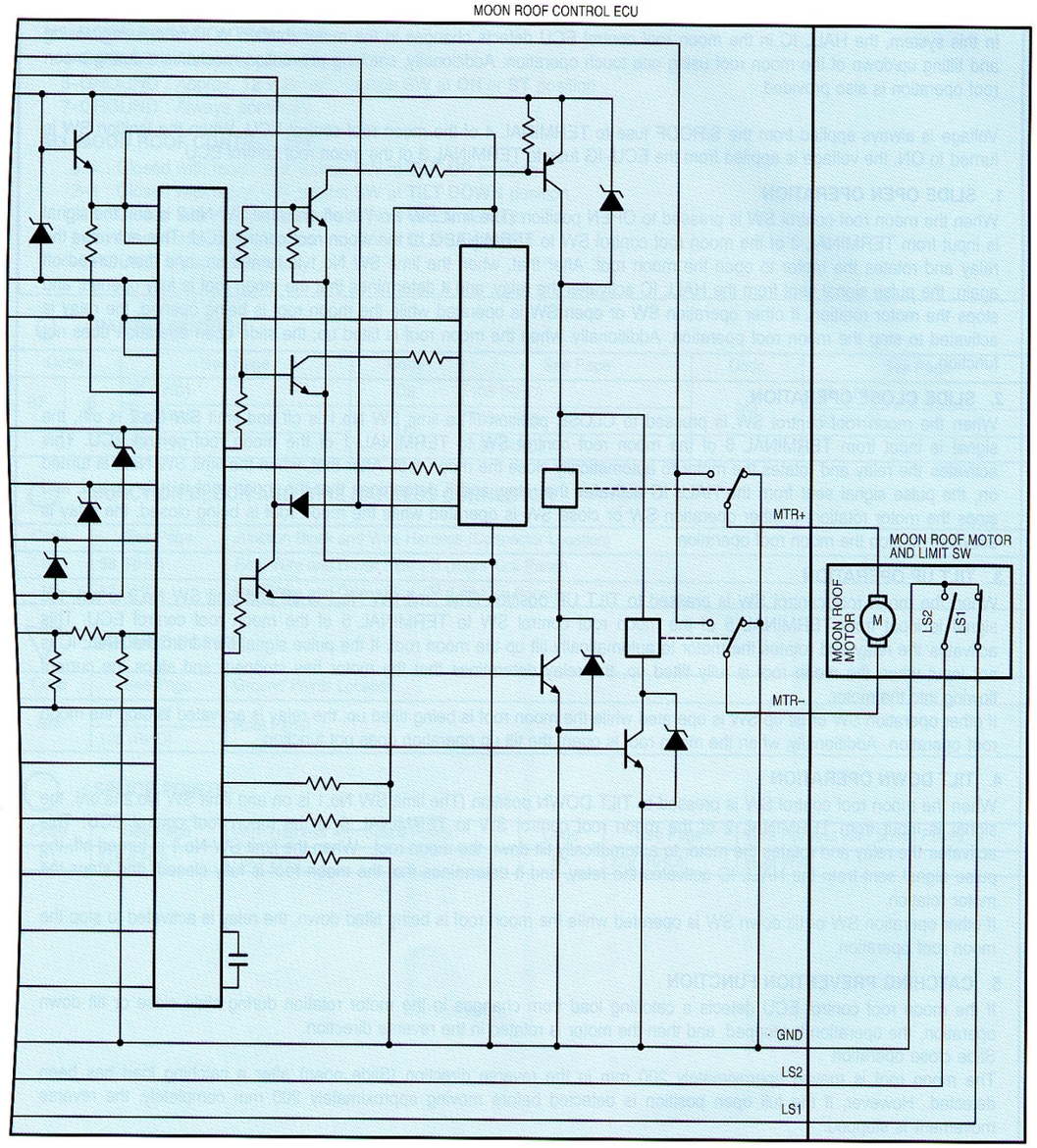
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA3	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
	124 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
IF1	126 (RHD)	Instrument Panel No.3 Wire and Instrument Panel Wire (Right Side of the Instrument Panel)

: GROUND POINTS

Code	See Page	Ground Points Location
EC	122 (RHD)	Left Fender Apron
ID	114 (LHD)	Cowl Side Panel LH
	124 (RHD)	

MOON ROOF


FROM POWER SOURCE SYSTEM (SEE PAGE 140, 144)
10A ECU-IG
30A S/ROOF
3 1N
3 1M
8 1N (LHD)
1 1M (RHD)
W
B–R
B–R
4
B
3 IG
R–G
6 1N (LHD)
7 1M (RHD)
11
CTY
DCTY
B7 B
BODY ECU
6 B
R–G
1
D7
DOOR COURTESY SW FRONT LH (LHD)
D8
DOOR COURTESY SW FRONT RH (RHD)
R–G 10 DCTY
R 5 UP
R–W 6 DWN
L–R 1 CLS
L–W 2 OPN
7 E1
8 E
W–B
B1
R
R–W
L–R
L–W
W–B
5
2
6
3
4
W–B
(EUROPE)
W–B
UP
DOWN
CLOSE
OPEN
M3
MOON ROOF CONTROL SW
BM
M2
MOON ROOF CONTROL ECU


M2
MOON ROOF CONTROL ECU
MTR+
MTR–
GND
LS2
LS1
MOON ROOF MOTOR AND LIMIT SW
MOON ROOF MOTOR
M
LS2
LS1

MOON ROOF

SYSTEM OUTLINE

In this system, the HALL IC in the moon roof control ECU detects changes in the motor rotation to allow opening/closing and tilting up/down of the moon roof using one touch operation. Additionally, catching prevention mechanism during moon roof operation is also provided.

Voltage is always applied from the S/ROOF fuse to TERMINAL 4 of the moon roof control ECU. When the ignition SW is turned to ON, the voltage is applied from the ECU-IG fuse to TERMINAL 3 of the moon roof control ECU.

1. SLIDE OPEN OPERATION

When the moon roof control SW is pressed to OPEN position (The limit SW No.1 is off and limit SW No.2 is on), the signal is input from TERMINAL 3 of the moon roof control SW to TERMINAL 2 of the moon roof control ECU. This activates the relay and rotates the motor to open the moon roof. After that, when the limit SW No.1 is turned on, and then turned off again, the pulse signal sent from the HALL IC activates the relay, and it determines that the moon roof is fully opened, and stops the motor rotation. If other operation SW or open SW is operated while the moon roof is being opened, the relay is activated to stop the moon roof operation. Additionally, when the moon roof is tilted up, the slide open operation does not function.

2. SLIDE CLOSE OPERATION

When the moon roof control SW is pressed to CLOSE position (The limit SW No.1 is off and limit SW No.2 is off), the signal is input from TERMINAL 6 of the moon roof control SW to TERMINAL 1 of the moon roof control ECU. This activates the relay and rotates the motor to automatically close the moon roof. After that, when the limit SW No.2 is turned on, the pulse signal sent from the HALL IC activates the relay, and it determines that the moon roof is fully closed, and stops the motor rotation. If other operation SW or close SW is operated while the moon roof is being closed, the relay is activated to stop the moon roof operation.

3. TILT UP OPERATION

When the moon roof control SW is pressed to TILT UP position (The limit SW No.1 is off and limit SW No.2 is on), the signal is input from TERMINAL 5 of the moon roof control SW to TERMINAL 5 of the moon roof control ECU. This activates the relay and rotates the motor to automatically tilt up the moon roof. If the pulse signal sent from the HALL IC is not input when the moon roof is fully tilted up, the relay determines that the motor has stopped, and stops the current flowing into the motor.
If other operation SW or tilt up SW is operated while the moon roof is being tilted up, the relay is activated to stop the moon roof operation. Additionally, when the moon roof is open, the tilt up operation does not function.

4. TILT DOWN OPERATION

When the moon roof control SW is pressed to TILT DOWN position (The limit SW No.1 is on and limit SW No.2 is on), the signal is input from TERMINAL 2 of the moon roof control SW to TERMINAL 6 of the moon roof control ECU. This activates the relay and rotates the motor to automatically tilt down the moon roof. When the limit SW No.1 is turned off, the pulse signal sent from the HALL IC activates the relay, and it determines that the moon roof is fully closed, and stops the motor rotation.
If other operation SW or tilt down SW is operated while the moon roof is being tilted down, the relay is activated to stop the moon roof operation.

5. CATCHING PREVENTION FUNCTION

If the moon roof control ECU detects a catching load from changes in the motor rotation during slide close or tilt down operation, the operation is stopped, and then the motor is rotated in the reverse direction.
Slide close operation
The moon roof is moved approximately 200 mm in the reverse direction (Slide open) after a catching load has been detected. However, if the full open position is detected before moving approximately 200 mm completely, the reverse movement is stopped.
Tilt down operation
If a catching load is detected during tilt down operation, the moon roof is fully tilted up.

6. KEY OFF MOON ROOF OPERATION

The moon roof can be operated for approximately 45 seconds, when the ignition SW is turned from ON to OFF with all doors closed. However, when the driver side door or front passenger side door is opened during this time, the operation is canceled.

7. FAIL SAFE FUNCTION

If the moon roof is operated continuously in the same operating direction, the current flowing into the motor is cut off when the time shown below has elapsed after the motor operation has been started.
Slide open/close operation with the moon roof control SW Approximately 20 sec.
Tilt up/down operation with the moon roof control SW Approximately 2 sec.
Slide open operation for reverse movement in case of activation of the catching prevention function Approximately 20 sec.
Tilt open operation for reverse movement in case of activation of the catching prevention function Approximately 2 sec.

SERVICE HINTS

M2 MOON ROOF CONTROL ECU

4-GROUND : Always approx. **12** volts
3-GROUND : Approx. **12** volts with ignition SW at **ON** or **ST** position
7-GROUND : Always continuity

M3 MOON ROOF CONTROL SW

5-4 : Closed with moon roof control SW at **TILT UP** position
2-4 : Closed with moon roof control SW at **TILT DOWN** position
3-4 : Closed with moon roof control SW at **OPEN** position
6-4 : Closed with moon roof control SW at **CLOSE** position
4-GROUND : Always continuity

○ : PARTS LOCATION

Code		See Page	Code	See Page	Code	See Page
B7	B	98 (LHD)	D8	108 (RHD)	M3	100 (LHD)
		106 (RHD)	M2	100 (LHD)		108 (RHD)
D7		100 (LHD)		108 (RHD)		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1M	88 (RHD)	Roof Wire and Driver Side J/B (Right Kick Panel)
1N	82 (LHD)	Roof Wire and Driver Side J/B (Left Kick Panel)

▽ : GROUND POINTS

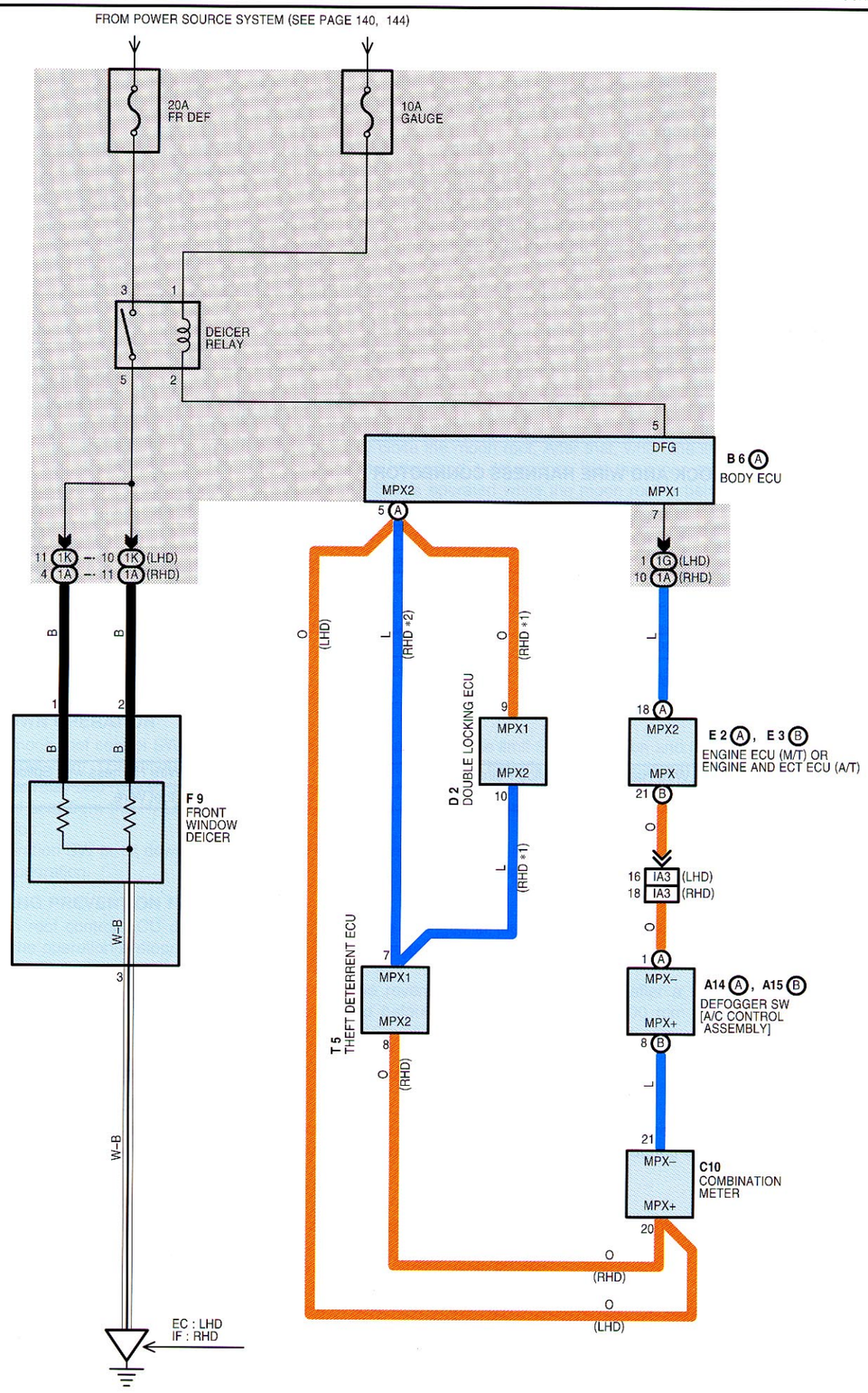
Code	See Page	Ground Points Location
BM	118 (LHD)	Roof Panel
	128 (RHD)	

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	118 (LHD)	Roof Wire	B1	128 (RHD)	Roof Wire

FRONT WINDOW DEICER

* 1 : W/ DOUBLE LOCKING
* 2 : W/O DOUBLE LOCKING



SERVICE HINTS

DEICER RELAY

3–5 : Closed with ignition SW at **ON** position and defogger SW [A/C control assembly] on

○ : PARTS LOCATION

Code		See Page	Code		See Page	Code		See Page
A14	A	98 (LHD)	C10		98 (LHD)	E3	B	104 (RHD)
		106 (RHD)			106 (RHD)	F9		96 (LHD)
A15	B	98 (LHD)	D2		106 (RHD)			104 (RHD)
		106 (RHD)	E2	A	96 (LHD)	T5		107 (RHD)
B6	A	98 (LHD)			104 (RHD)			
		106 (RHD)	E3	B	96 (LHD)			

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	88 (RHD)	Engine Room Main Wire and Driver Side J/B (Right Kick Panel)
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1K		

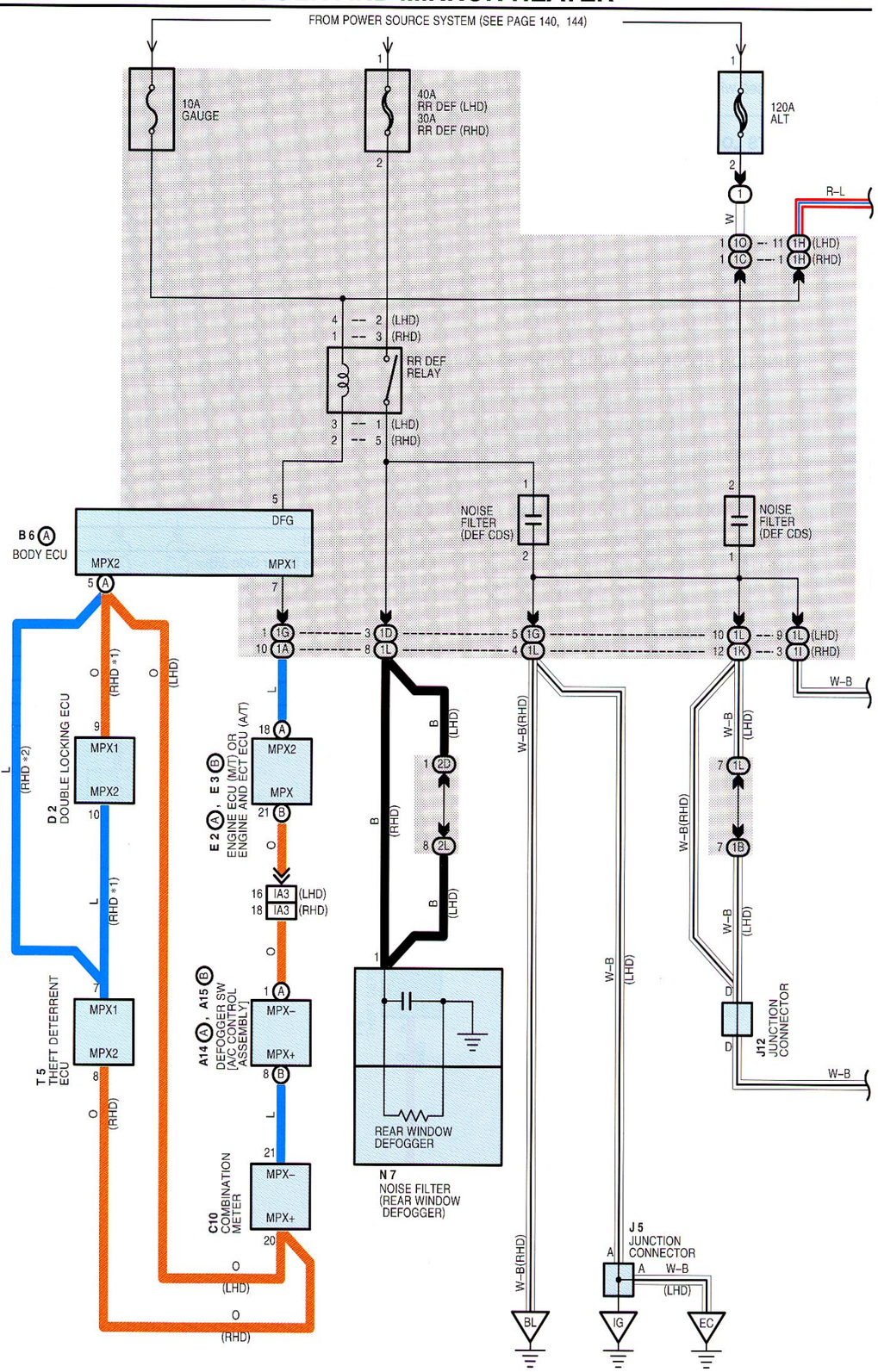
□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA3	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
	124 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)

▽ : GROUND POINTS

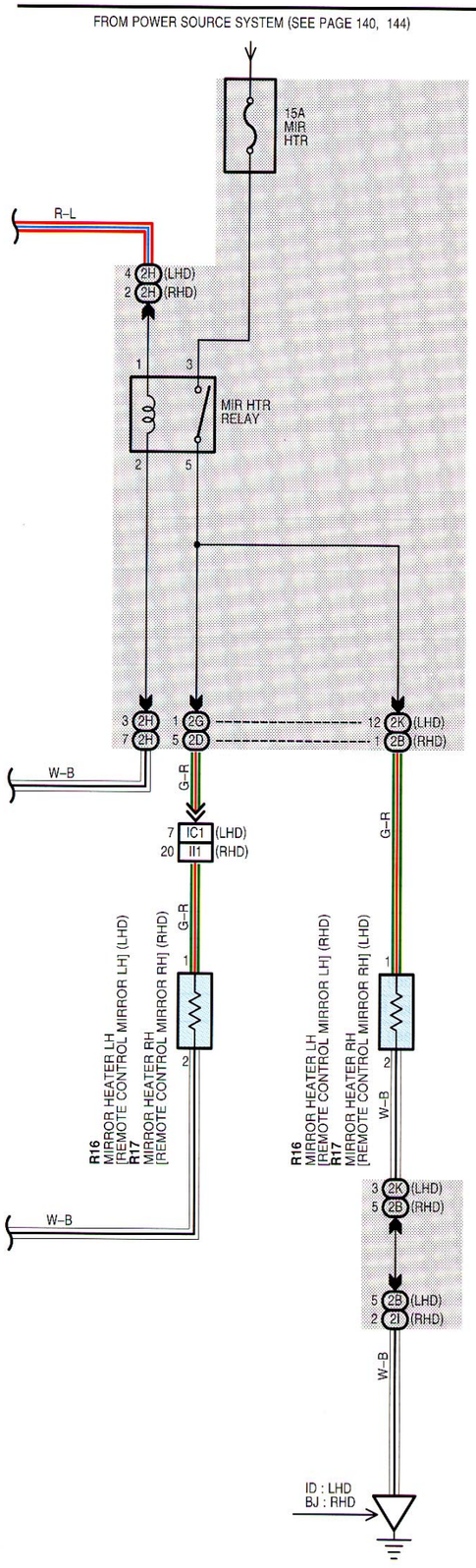
Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
IF	124 (RHD)	Cowl Side Panel RH

REAR WINDOW DEFOGGER AND MIRROR HEATER



410

* 1 : W/ DOUBLE LOCKING
* 2 : W/O DOUBLE LOCKING



411

REAR WINDOW DEFOGGER AND MIRROR HEATER

SERVICE HINTS

RR DEF RELAY

2–1, 3–5 : Closed with ignition SW at **ON** position and defogger SW [A/C control assembly] on

○ : PARTS LOCATION

Code		See Page	Code		See Page	Code	See Page
A14	A	98 (LHD)	D2		106 (RHD)	N7	101 (LHD)
		106 (RHD)	E2	A	96 (LHD)		109 (RHD)
A15	B	98 (LHD)			104 (RHD)	R16	101 (LHD)
		106 (RHD)	E3	B	96 (LHD)		109 (RHD)
B6	A	98 (LHD)			104 (RHD)	R17	101 (LHD)
		106 (RHD)	J5		99 (LHD)		109 (RHD)
C10		98 (LHD)	J12		100 (LHD)	T5	107 (RHD)
		106 (RHD)			108 (RHD)		

⬭ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)
	81 (RHD)	Engine Room No.1 R/B (Engine Compartment Left)

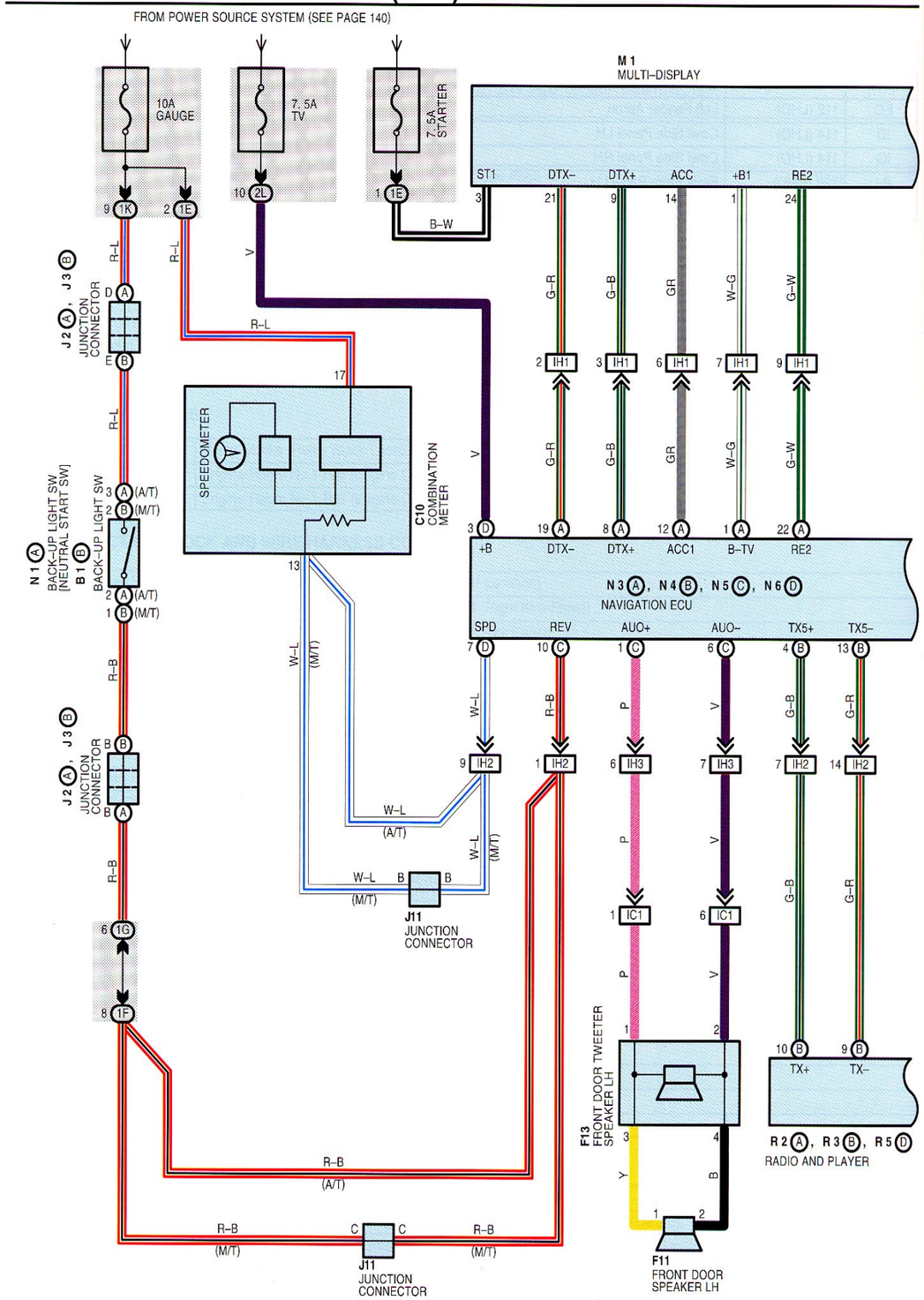
⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	88 (RHD)	Engine Room Main Wire and Driver Side J/B (Right Kick Panel)
1B	82 (LHD)	Front Door LH Wire and Driver Side J/B (Left Kick Panel)
1C	88 (RHD)	Engine Room Main Wire and Driver Side J/B (Right Kick Panel)
1D	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1I	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1K	88 (RHD)	Front Door RH Wire and Driver Side J/B (Right Kick Panel)
1L	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
	88 (RHD)	Floor Wire and Driver Side J/B (Right Kick Panel)
1O	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Front Door LH Wire and Passenger Side J/B (Left Kick Panel)
2D	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2G	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2H	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2I	90 (RHD)	Floor No.2 Wire and Passenger Side J/B (Left Kick Panel)
2K	84 (LHD)	Front Door RH Wire and Passenger Side J/B (Right Kick Panel)
2L	84 (LHD)	Floor Wire and Passenger Side J/B (Right Kick Panel)

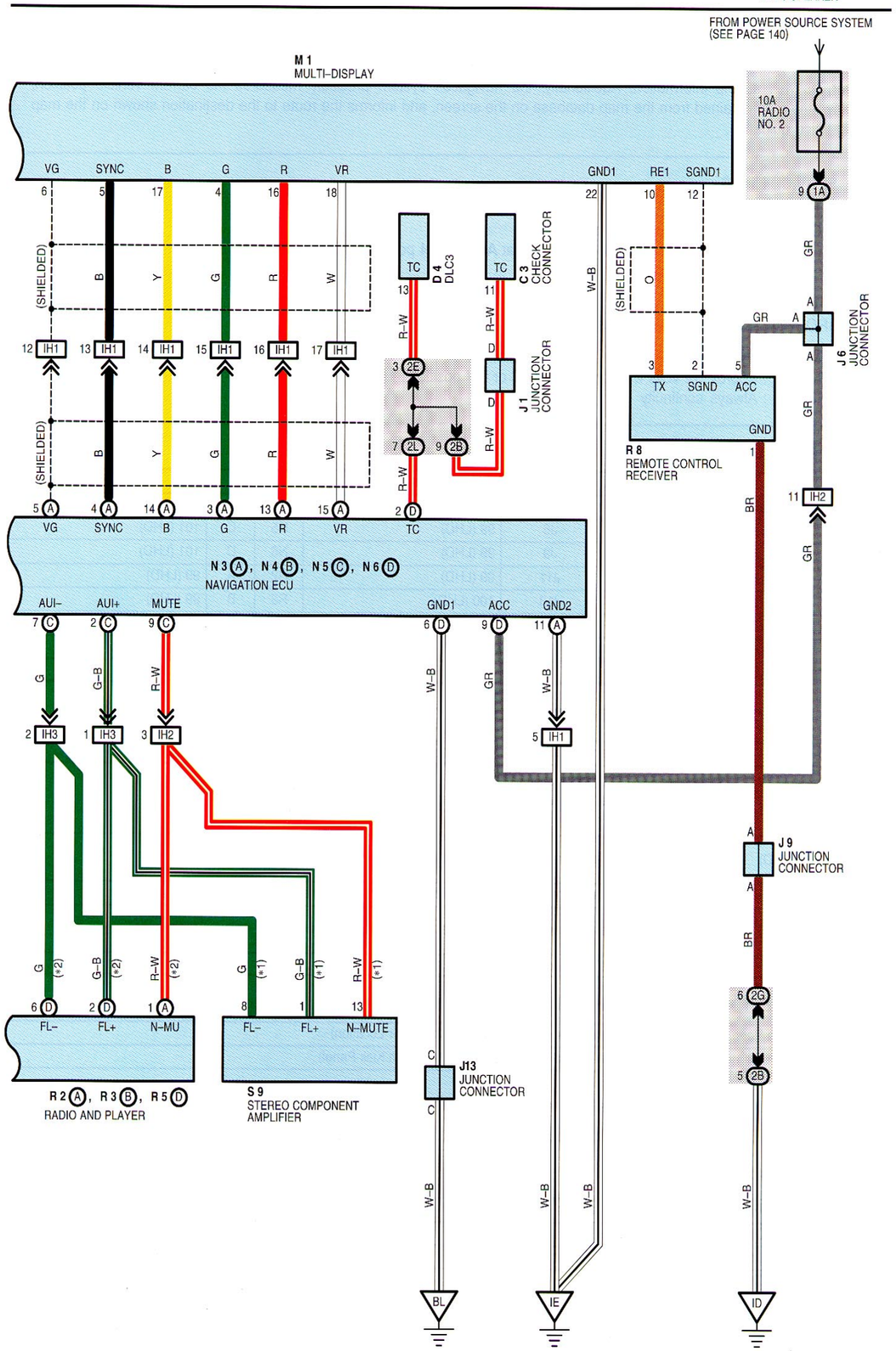
▭ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA3	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
	124 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
IC1	114 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
II1	126 (RHD)	Front Door RH Wire and Instrument Panel Wire (Left Kick Panel)

LEXUS NAVIGATION SYSTEM (LHD)



* 1 : 8 SPEAKER
* 2 : 6 SPEAKER



LEXUS NAVIGATION SYSTEM (LHD)

SYSTEM OUTLINE

The LEXUS navigation system displays the operating status and instructions for the automatic air conditioner or radio and player, as well as trip information. Additionally, the navigation system precisely measures the current vehicle position, displays the map obtained from the map database on the screen, and informs the route to the destination shown on the map using voice guidance.

SERVICE HINTS

N6 (D) NAVIGATION ECU

(D) 3-GROUND : Always approx. **12** volts
(D) 9-GROUND : Approx. **12** volts with ignition SW at **ACC** or **ON** position
(D) 6-GROUND : Always continuity

M1 MULTI-DISPLAY

3-GROUND : Always approx. **12** volts

R8 REMOTE CONTROL RECEIVER

5-GROUND : Approx. **12** volts with ignition at **ACC** or **ON** position
1-GROUND : Always continuity

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
B1 B	96 (LHD)	J3 B	97 (LHD)	N4 B	101 (LHD)
C3	96 (LHD)	J6	99 (LHD)	N5 C	101 (LHD)
C10	98 (LHD)	J9	99 (LHD)	N6 D	101 (LHD)
D4	98 (LHD)	J11	99 (LHD)	R2 A	99 (LHD)
F11	100 (LHD)	J13	100 (LHD)	R3 B	99 (LHD)
F13	100 (LHD)	M1	99 (LHD)	R5 D	99 (LHD)
J1	97 (LHD)	N1 A	97 (LHD)	R8	99 (LHD)
J2 A	97 (LHD)	N3 A	101 (LHD)	S9	99 (LHD)

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1E		
1F		
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1K		
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2E	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G		
2L	84 (LHD)	Floor Wire and Passenger Side J/B (Right Kick Panel)

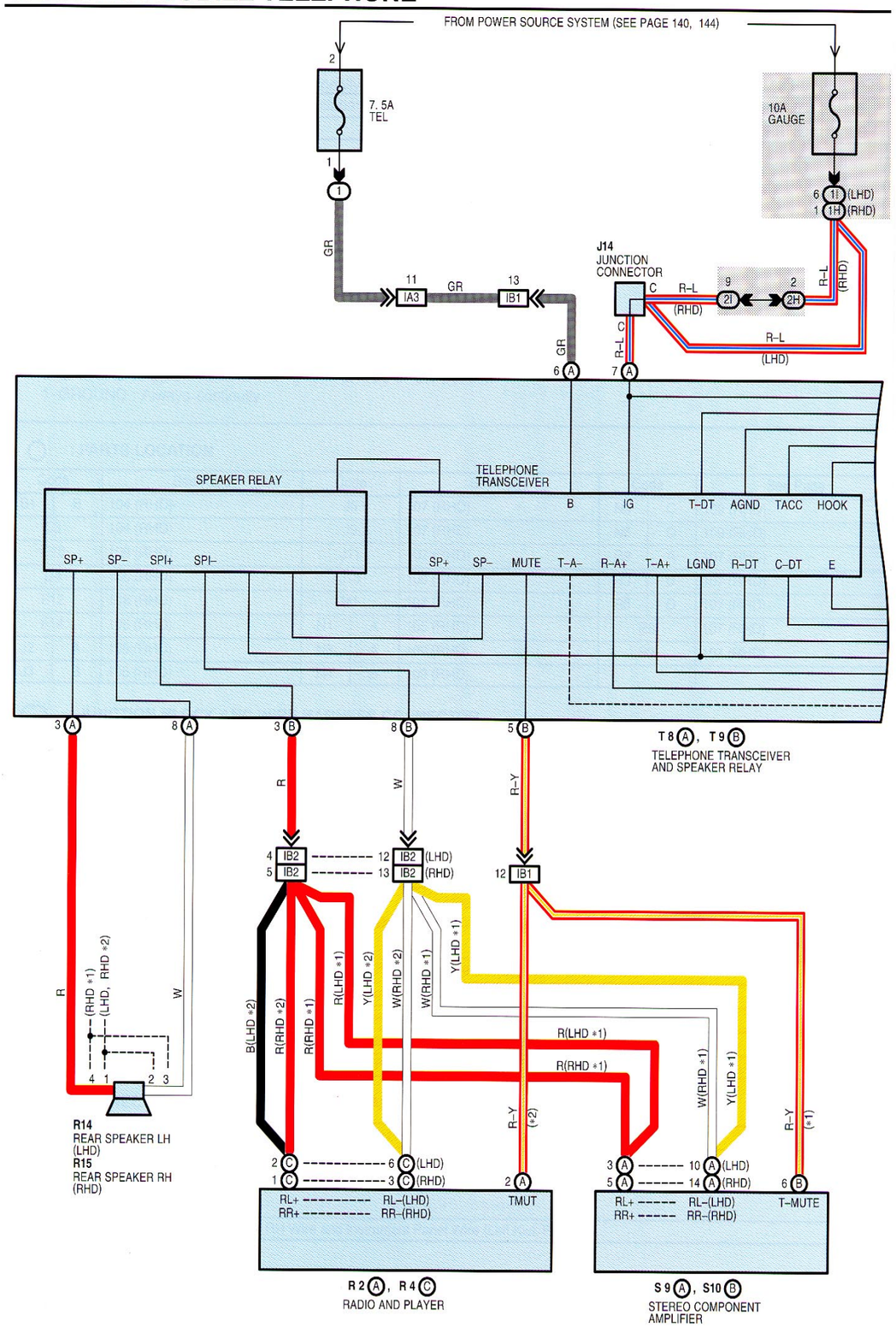
▭ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

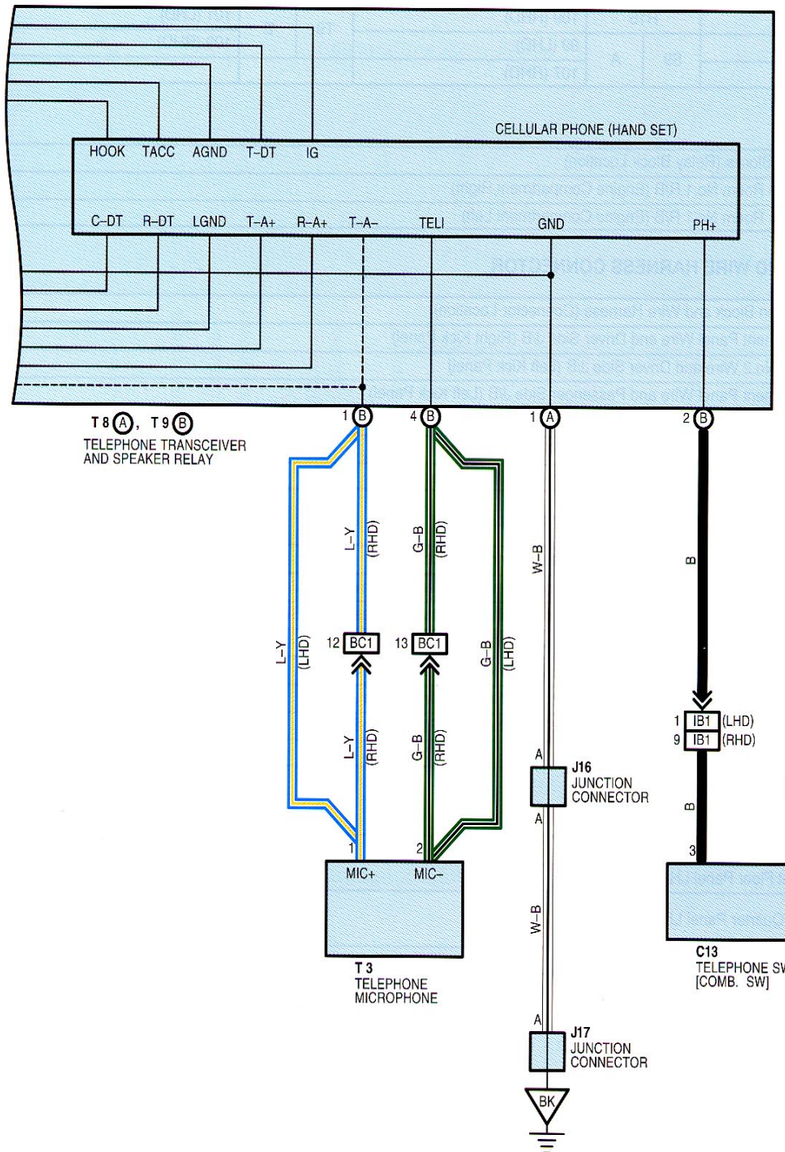
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	114 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IH1	116 (LHD)	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
IH2		
IH3		

▽ : GROUND POINTS

Code	See Page	Ground Points Location
ID	114 (LHD)	Cowl Side Panel LH
IE	114 (LHD)	Instrument Panel Center
BL	118 (LHD)	Front Floor Panel RH

CELLULAR MOBILE TELEPHONE





* 1 : 8 SPEAKER
* 2 : 6 SPEAKER

CELLULAR MOBILE TELEPHONE

SERVICE HINTS

T8 (A) TELEPHONE TRANSCEIVER AND SPEAKER RELAY

(A) 6–GROUND : Always approx. **12** volts
(A) 7–GROUND : Approx. **12** volts with ignition SW at **ON** or **ST** position
(A) 1–GROUND : Always continuity

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C13	98 (LHD)	J17	108 (RHD)	S10 B	99 (LHD)
	106 (RHD)	R2 A	99 (LHD)		107 (RHD)
J9	99 (LHD)		107 (RHD)	T3	99 (LHD)
	107 (RHD)	R4 C	99 (LHD)		107 (RHD)
J14	100 (LHD)		107 (RHD)	T8 A	101 (LHD)
	108 (RHD)	R14	101 (LHD)		109 (RHD)
J16	100 (LHD)	R15	109 (RHD)	T9 B	101 (LHD)
	108 (RHD)	S9 A	99 (LHD)		109 (RHD)
J17	100 (LHD)		107 (RHD)		

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)
	81 (RHD)	Engine Room No.1 R/B (Engine Compartment Left)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1H	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1I	82 (LHD)	Floor No.2 Wire and Driver Side J/B (Left Kick Panel)
2H	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2I	90 (RHD)	Floor No.2 Wire and Passenger Side J/B (Left Kick Panel)
2L	84 (LHD)	Floor Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)

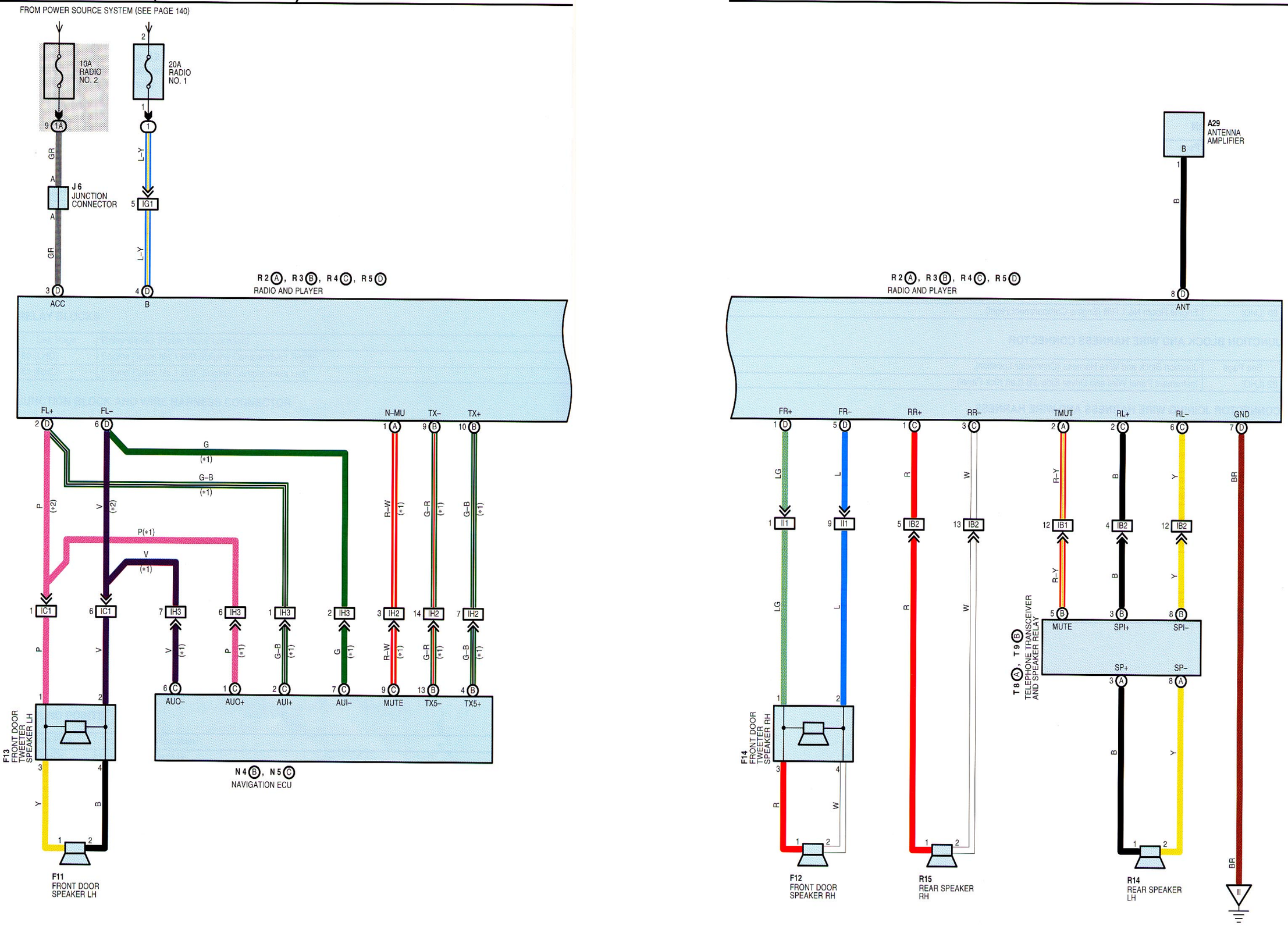
: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA3	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
	124 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
IB1	114 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
	124 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Passenger Side J/B)
IB2	114 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
	124 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Passenger Side J/B)
BC1	128 (RHD)	Floor No.2 Wire and Floor Wire (Under the Right Rear Cushion)

: GROUND POINTS

Code	See Page	Ground Points Location
BJ	128 (RHD)	Front Floor Panel LH
BK	118 (LHD)	Left Quarter Panel LH
	128 (RHD)	
BL	118 (LHD)	Front Floor Panel RH

RADIO AND PLAYER (LHD 6 SPEAKER)



426

* 1 : W/ LEXUS NAVIGATION SYSTEM
* 2 : W/O LEXUS NAVIGATION SYSTEM

427

RADIO AND PLAYER (LHD 6 SPEAKER)

SERVICE HINTS

R5 (D) RADIO AND PLAYER

(D) 4-GROUND : Always approx. **12** volts
(D) 3-GROUND : Approx. **12** votls with the ignition SW at **ACC** or **ON** position
(D) 7-GROUND : Always continuity

○ : PARTS LOCATION

Code	See Page	Code		See Page	Code		See Page
A29	98 (LHD)	N4	B	101 (LHD)	R14		101 (LHD)
F11	100 (LHD)	N5	C	101 (LHD)	R15		101 (LHD)
F12	100 (LHD)	R2	A	99 (LHD)	T8	A	101 (LHD)
F13	100 (LHD)	R3	B	99 (LHD)	T9	B	101 (LHD)
F14	100 (LHD)	R4	C	99 (LHD)			
J6	99 (LHD)	R5	D	99 (LHD)			

▭ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)

▭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)

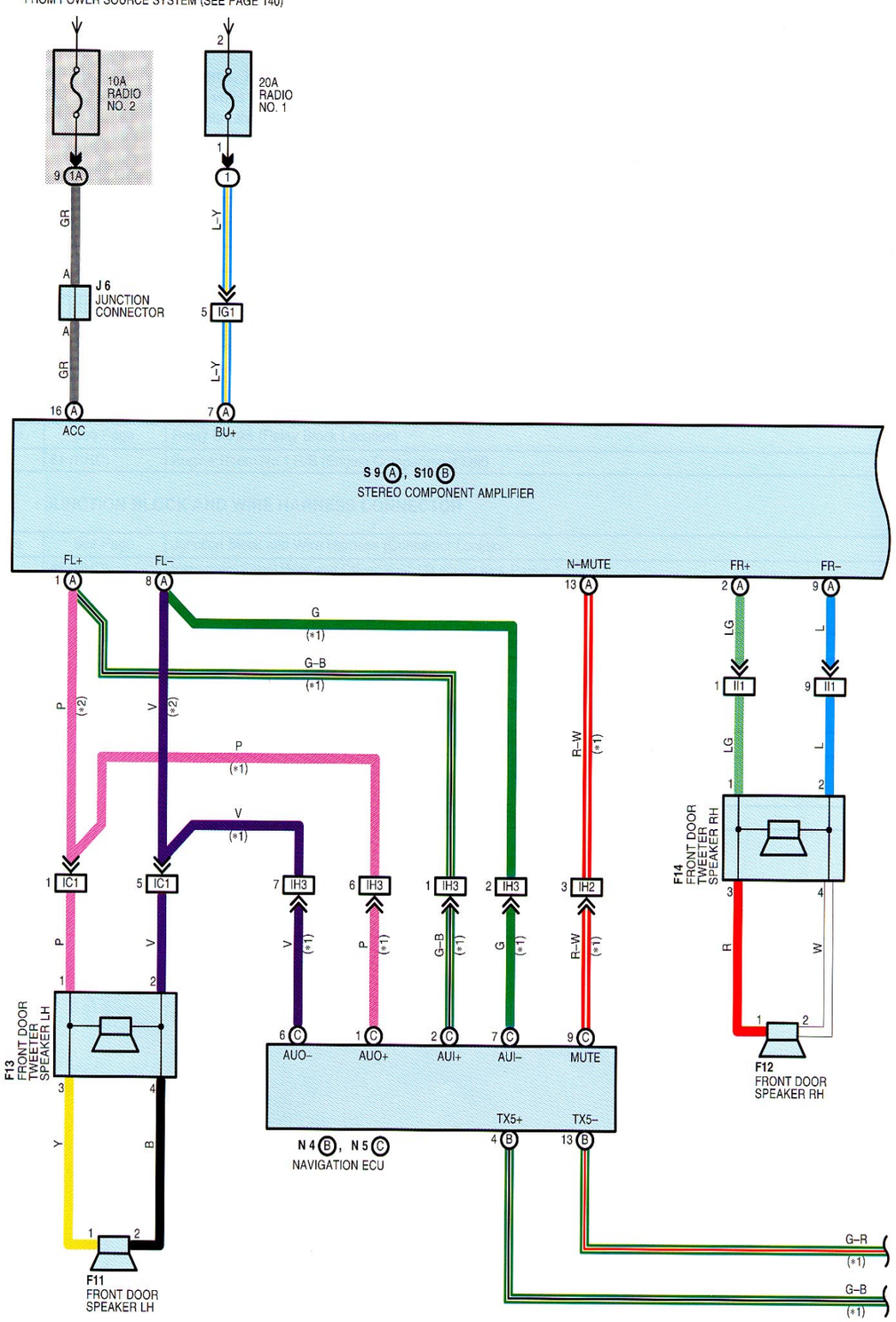
▭ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	114 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
IB2		
IC1	114 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IG1	116 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
IH2	116 (LHD)	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
IH3		
II1	116 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)

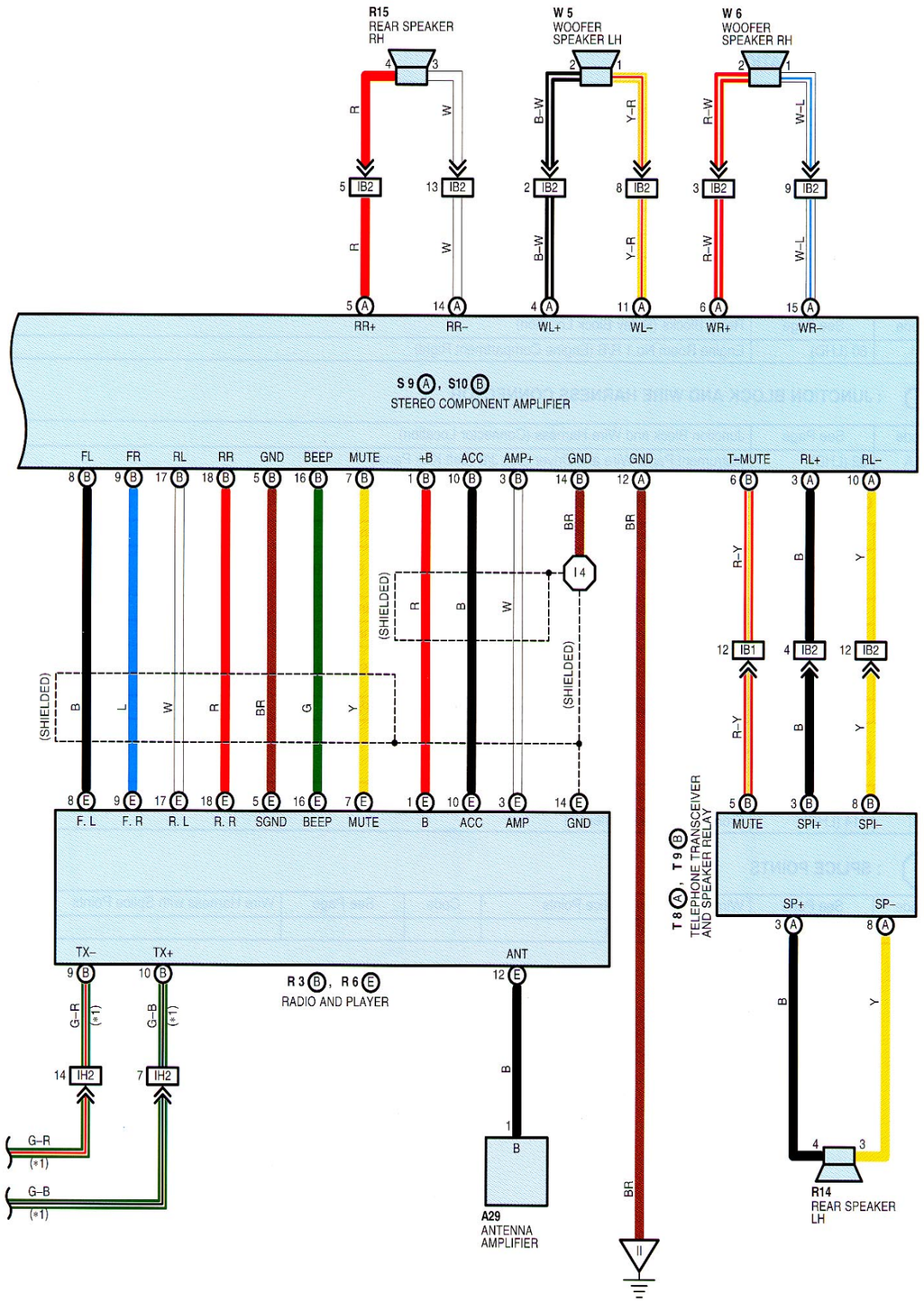
▽ : GROUND POINTS

Code	See Page	Ground Points Location
II	114 (LHD)	Front Floor Panel Center RH

RADIO AND PLAYER (LHD 8 SPEAKER)



* 1 : W/ LEXUS NAVIGATION SYSTEM
* 2 : W/O LEXUS NAVIGATION SYSTEM



RADIO AND PLAYER (LHD 8 SPEAKER)

SERVICE HINTS

S9 (A) STEREO COMPONENT AMPLIFIER

(A) 16–GROUND : Approx. **12** volts with ignition SW at **ACC** or **ON** position
(A) 7–GROUND : Always approx. **12** volts
(A) 12–GROUND : Always continuity

: PARTS LOCATION

Code	See Page	Code		See Page	Code		See Page
A29	98 (LHD)	N4	B	101 (LHD)	S9	A	99 (LHD)
F11	100 (LHD)	N5	C	101 (LHD)	S10	B	99 (LHD)
F12	100 (LHD)	R3	B	99 (LHD)	T8	A	101 (LHD)
F13	100 (LHD)	R6	E	99 (LHD)	T9	B	101 (LHD)
F14	100 (LHD)	R14		101 (LHD)	W5		101 (LHD)
J6	99 (LHD)	R15		101 (LHD)	W6		101 (LHD)

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	114 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
IB2		
IC1	114 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IG1	116 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
IH2	116 (LHD)	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
IH3		
II1	116 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)

: GROUND POINTS

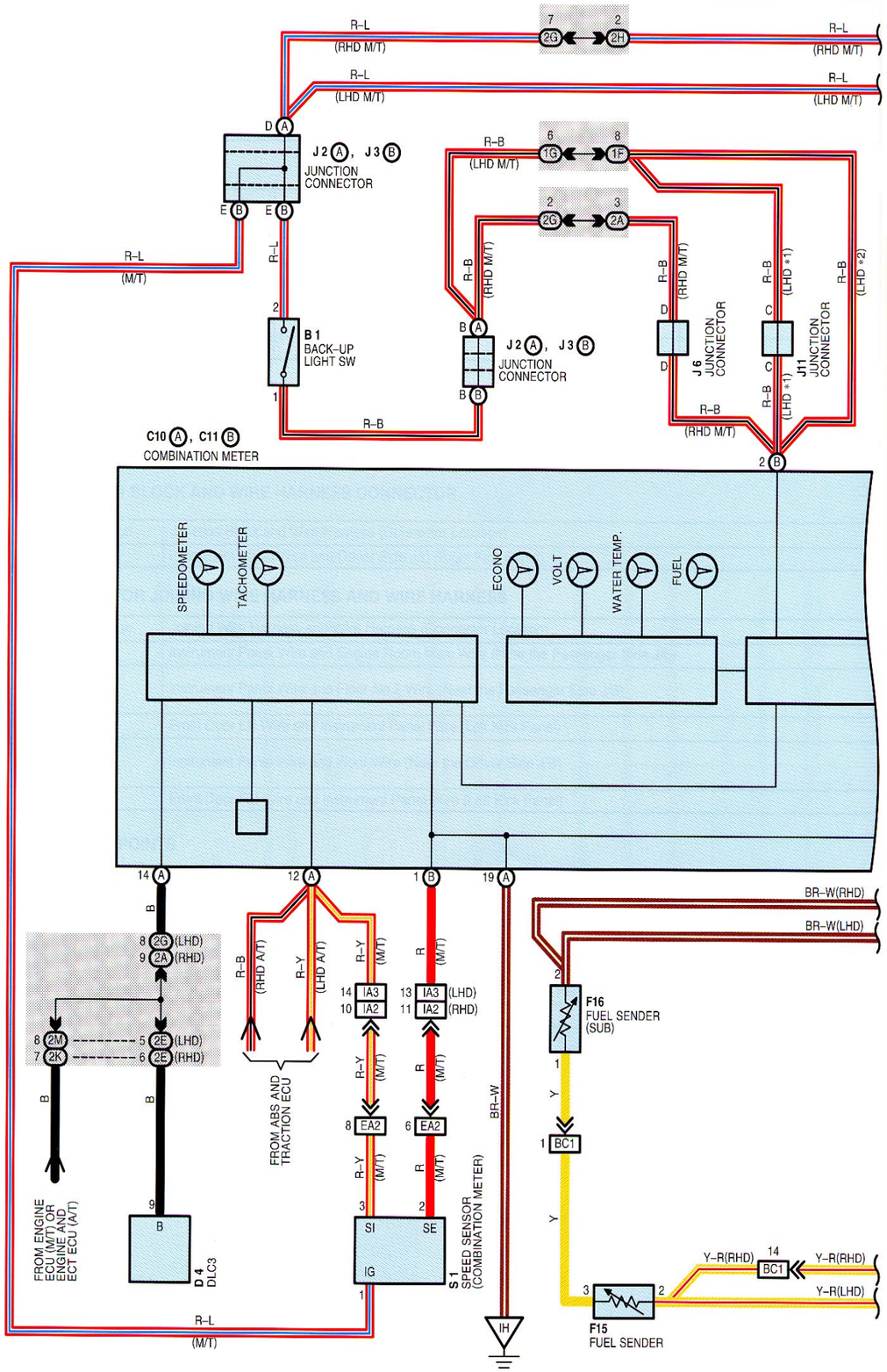
Code	See Page	Ground Points Location
II	114 (LHD)	Front Floor Panel Center RH

: SPLICE POINTS

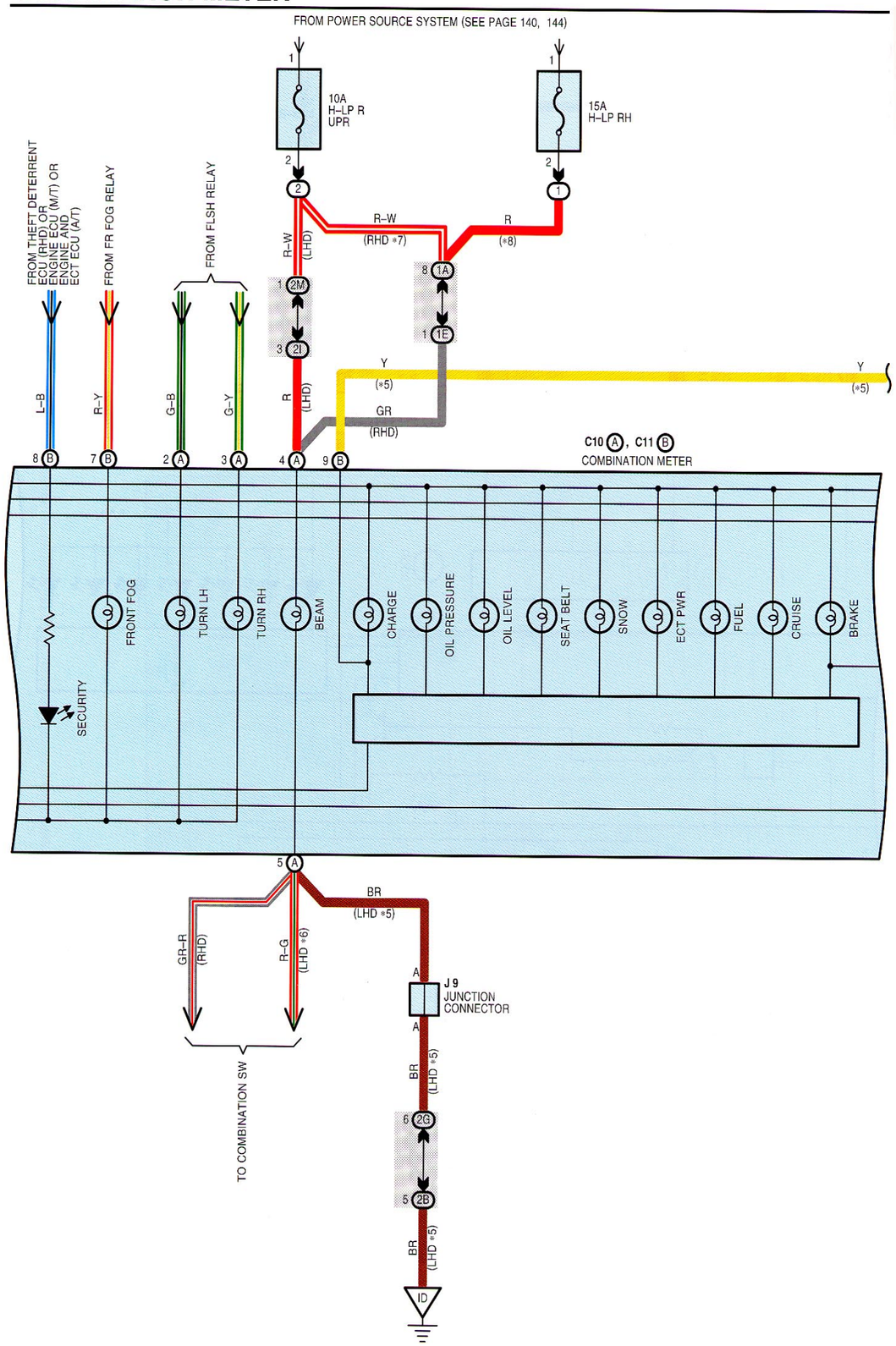
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I4	116 (LHD)	Instrument Panel Wire			

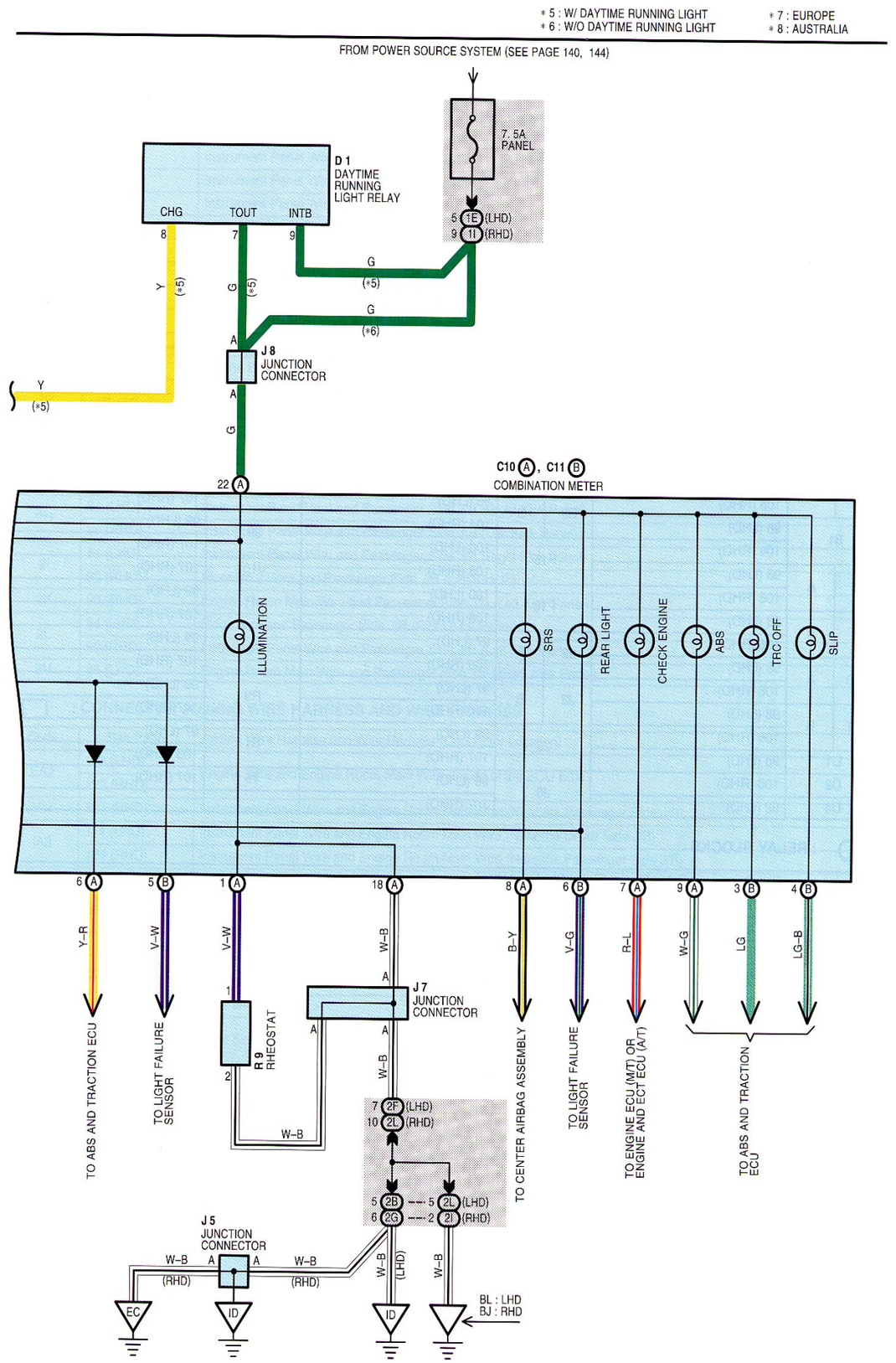
COMBINATION METER

＊1 : M/T W/ LEXUS NAVIGATION SYSTEM
＊2 : M/T W/O LEXUS NAVIGATION SYSTEM
＊3 : W/ DOUBLE LOCKING
＊4 : W/O DOUBLE LOCKING



COMBINATION METER





COMBINATION METER

SERVICE HINTS

P2 PARKING BRAKE SW

1–GROUND : Closed with parking brake lever depressed

F15 FUEL SENDER

2–3 : Approx. **2.0** Ω at fuel full
Approx. **48.7** Ω at fuel empty

C10 (A), C11 (B) COMBINATION METER

(A)17–GROUND : Approx. **12** volts with ignition SW at **ON** or **ST** position
(A)18–GROUND : Always continuity
(A)19–GROUND : Always continuity
(A)15–GROUND : Always approx. **12** volts
(A)16–GROUND : Always approx. **12** volts

○ : PARTS LOCATION

Code		See Page
A14	A	98 (LHD)
		106 (RHD)
A15	B	98 (LHD)
		106 (RHD)
B1		96 (LHD)
		104 (RHD)
B6	A	98 (LHD)
		106 (RHD)
B7	B	98 (LHD)
		106 (RHD)
C10	A	98 (LHD)
		106 (RHD)
C11	B	98 (LHD)
		106 (RHD)
D1		98 (LHD)
D2		106 (RHD)
D4		98 (LHD)

Code		See Page
D4		106 (RHD)
E2	A	96 (LHD)
		104 (RHD)
E3	B	96 (LHD)
		104 (RHD)
F15		100 (LHD)
		108 (RHD)
F16		100 (LHD)
		108 (RHD)
J2	A	97 (LHD)
		105 (RHD)
J3	B	97 (LHD)
		105 (RHD)
J5		99 (LHD)
		107 (RHD)
J6		99 (LHD)
		107 (RHD)

Code	See Page
J7	99 (LHD)
	107 (RHD)
J8	99 (LHD)
	107 (RHD)
J9	99 (LHD)
	107 (RHD)
J10	107 (RHD)
J11	99 (LHD)
	107 (RHD)
P2	99 (LHD)
	107 (RHD)
R9	99 (LHD)
	107 (RHD)
S1	97 (LHD)
	105 (RHD)
T5	107 (RHD)

⬭ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)
	81 (RHD)	Engine Room No.1 R/B (Engine Compartment Left)
2	80 (LHD)	Engine Room No.2 R/B (Engine Compartment Right)
	81 (RHD)	Engine Room No.2 R/B (Engine Compartment Left)

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	88 (RHD)	Engine Room Main Wire and Driver Side J/B (Right Kick Panel)
1E	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1F	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1I	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
1K	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2A	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2E	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2F	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)
2H	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2I	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Floor No.2 Wire and Passenger Side J/B (Left Kick Panel)
2K	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)
2L	84 (LHD)	Floor Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2M	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)

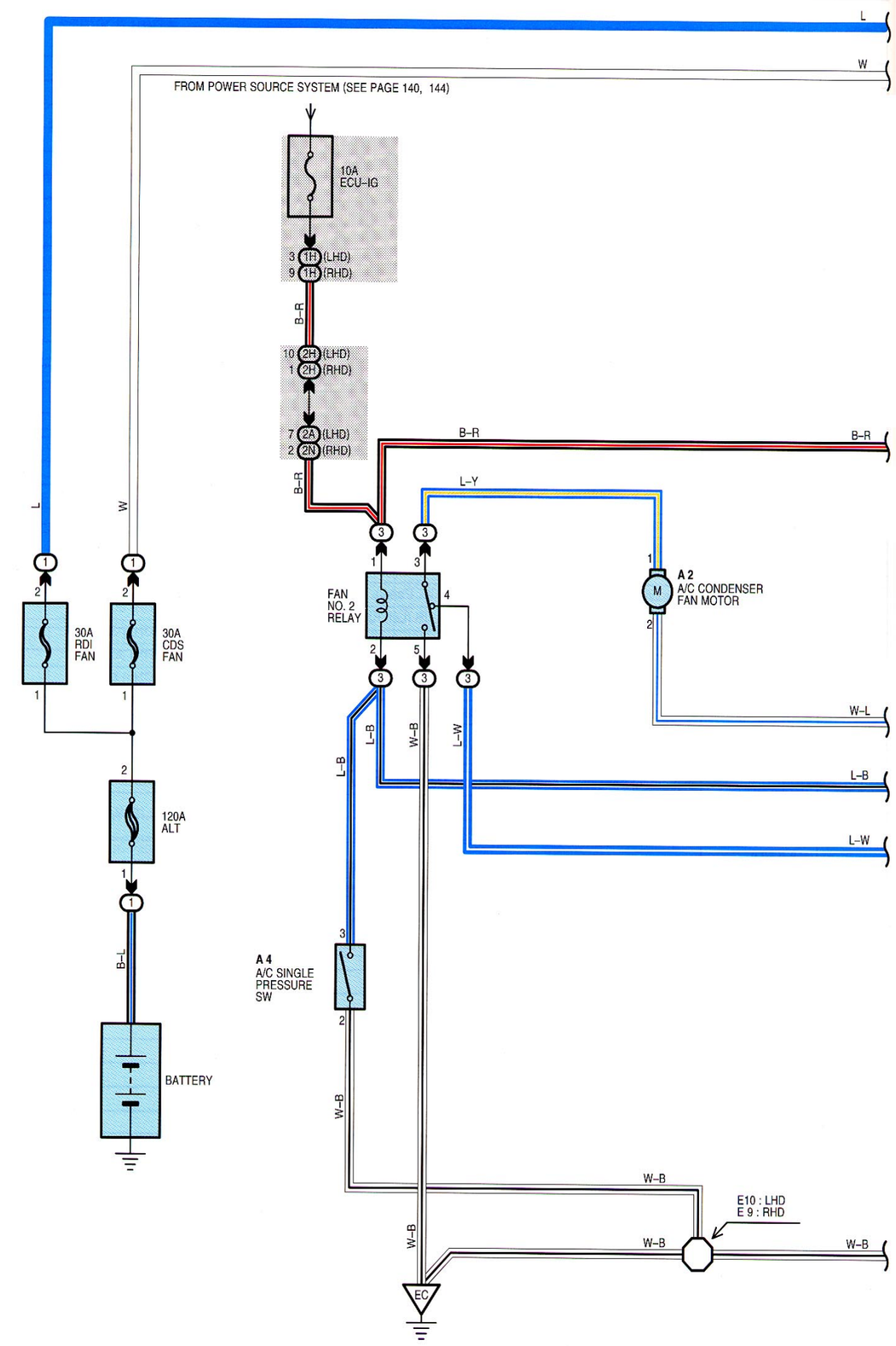
▭ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

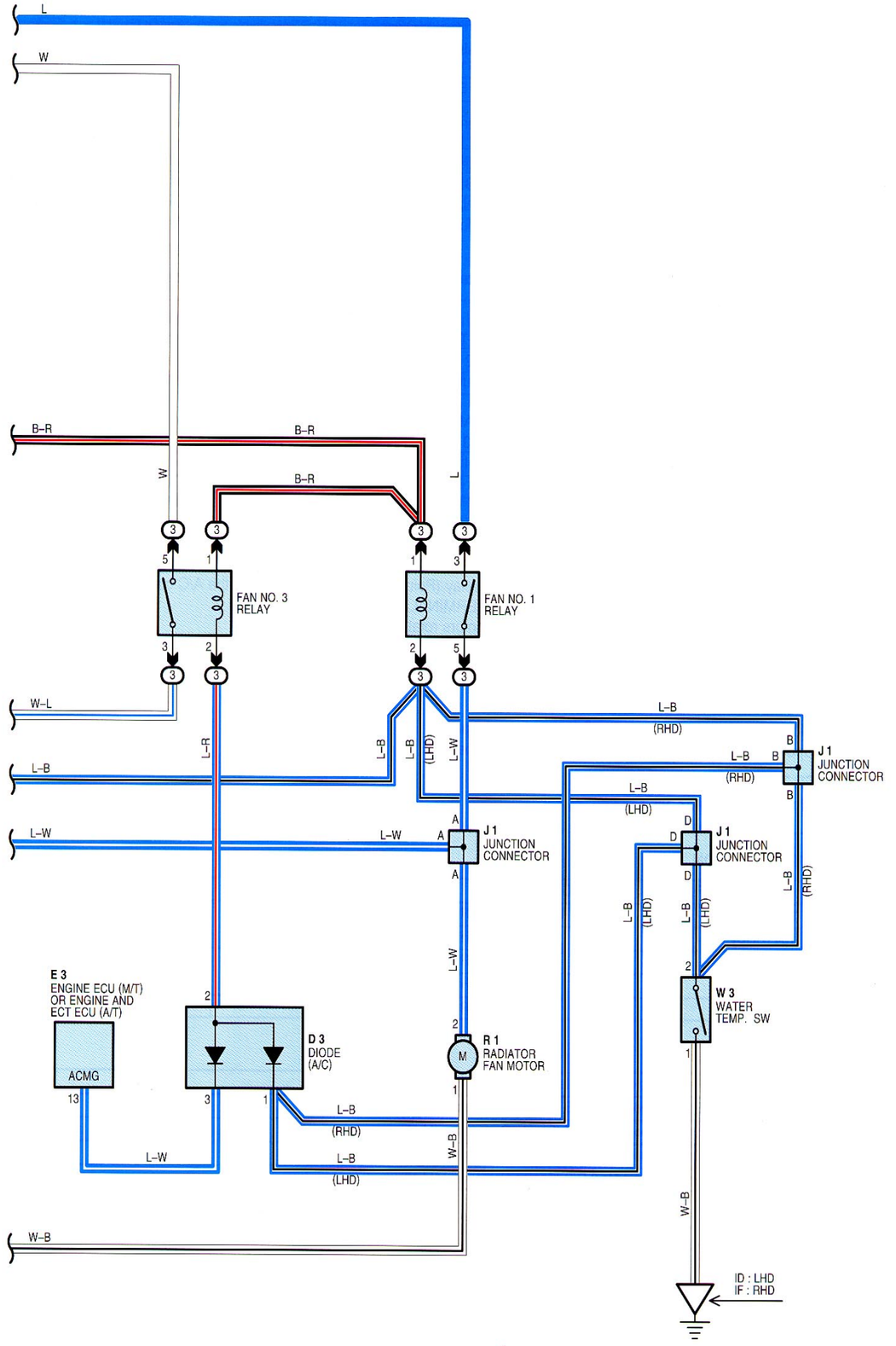
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA2	112 (LHD)	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
	122 (RHD)	
IA2	124 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
IA3	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
	124 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
BC1	118 (LHD)	Floor No.2 Wire and Floor Wire (Under the Right Rear Cushion)
	128 (RHD)	

▽ : GROUND POINTS

Code	See Page	Ground Points Location
EC	122 (RHD)	Left Fender Apron
ID	114 (LHD)	Cowl Side Panel LH
	124 (RHD)	
IH	114 (LHD)	Front Floor Panel Center LH
	124 (RHD)	Front Floor Panel Center RH
BJ	128 (RHD)	Front Floor Panel LH
BL	118 (LHD)	Front Floor Panel RH

RADIATOR FAN AND CONDENSER FAN





RADIATOR FAN AND CONDENSER FAN

SYSTEM OUTLINE

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 (A/C) to TERMINAL 3 to TERMINAL 13 of the engine ECU (M/T) or engine and ECT ECU (A/T), causing the FAN NO.3 relay to turn on. As a result, the current through the CDS FAN 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 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 A/C single pressure SW is turned on and/or the water temp. SW is turned on, the A/C condenser fan motor and the radiator fan motor rotate at high speed.
When the A/C single 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 A/C single 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 (A/C) to TERMINAL 1 to TERMINAL 3 of the A/C single 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 FAN 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 FAN 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 water temp. 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 2 of the water temp. SW to TERMINAL 1 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 (A/C) to TERMINAL 1 to TERMINAL 2 of the water temp. SW to TERMINAL 1 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 FAN 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 FAN 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

A4 A/C SINGLE PRESSURE SW

3-2 : Close above approx. **15.5** kgf/cm^2 (**220** psi, **1520** kpa)
Open below approx. **12.5** kgf/cm^2 (**178** psi, **1226** kpa)

W3 WATER TEMP. SW

1-2 : Close above approx. **95**°C

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A2	96 (LHD)	D3	106 (RHD)	R1	97 (LHD)
	104 (RHD)	E3	96 (LHD)		105 (RHD)
A4	96 (LHD)		104 (RHD)	W3	97 (LHD)
	104 (RHD)	J1	97 (LHD)		105 (RHD)
D3	98 (LHD)		105 (RHD)		

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)
	81 (RHD)	Engine Room No.1 R/B (Engine Compartment Left)
3	94 (LHD)	Engine Room No.3 R/B (Engine Compartment Right)
	94 (RHD)	Engine Room No.3 R/B (Engine Compartment Left)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1H	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
	88 (RHD)	Instrument Panel Wire and Driver Side J/B (Right Kick Panel)
2A	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2H	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
	90 (RHD)	Instrument Panel Wire and Passenger Side J/B (Left Kick Panel)
2N	90 (RHD)	Engine Room Main Wire and Passenger Side J/B (Left Kick Panel)

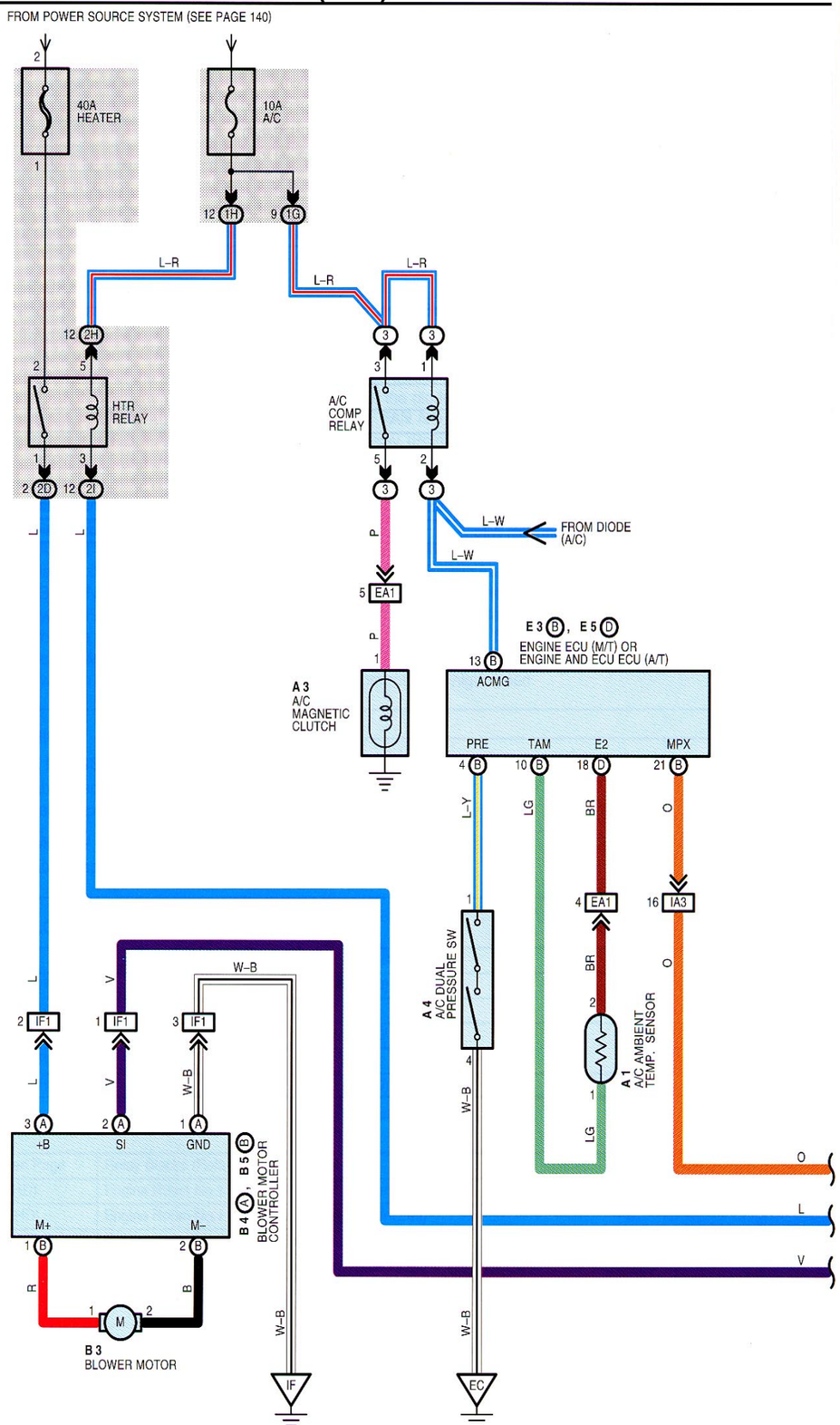
: GROUND POINTS

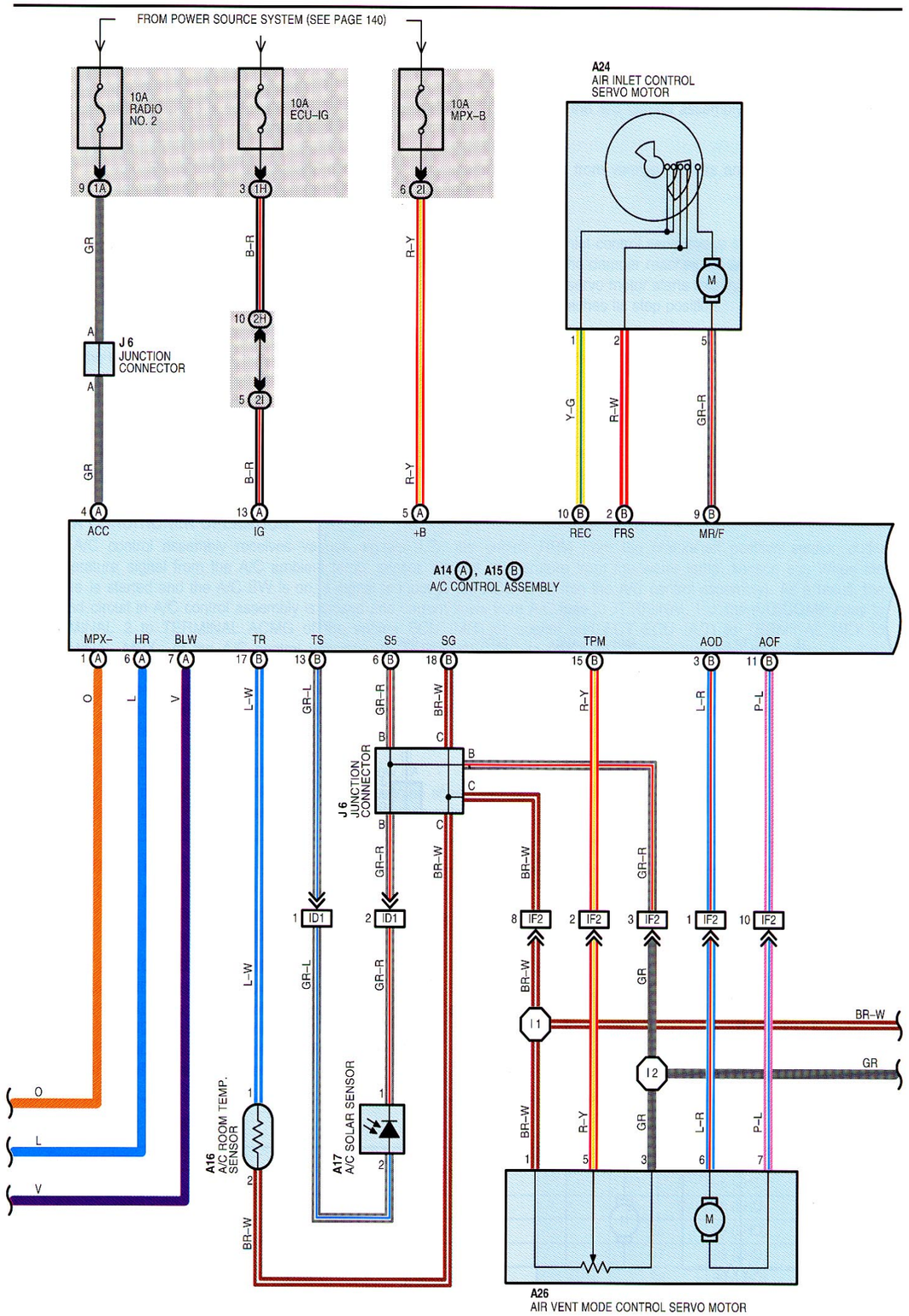
Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
	122 (RHD)	
ID	114 (LHD)	Cowl Side Panel LH
IF	124 (RHD)	Cowl Side Panel RH

: SPLICE POINTS

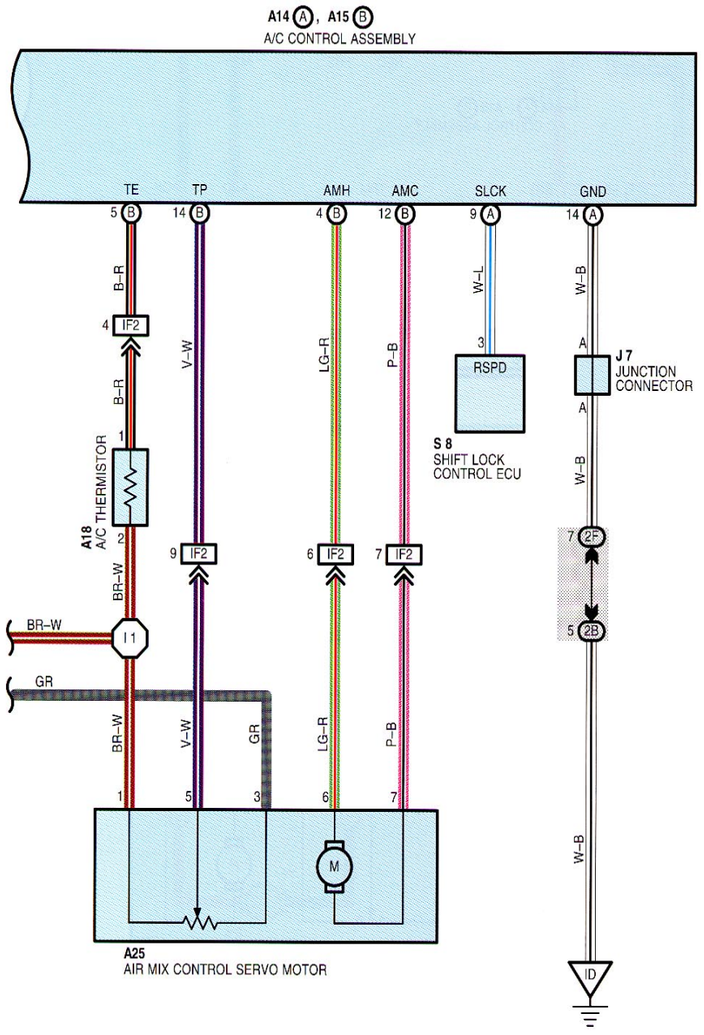
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E9	122 (RHD)	Engine Room Main Wire	E10	112 (LHD)	Engine Room Main Wire

AUTOMATIC AIR CONDITIONER (LHD)





AUTOMATIC AIR CONDITIONER (LHD)



SYSTEM OUTLINE

1. HEATER BLOWER OPERATION

Manual 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.

Auto operation

When the auto SW is turned on, the A/C control assembly sends the signals from various sensors and temperature SW to the blower control to automatically control the blower motor speed.

2. AIR INLET CONTROL SERVO MOTOR CONTROL

When the FRESH/RECIRC select SW is set to RECIRC, the motor in the air inlet control servo motor starts rotating to move the damper toward the RECIRC side. 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. The motor is continuously rotated until the damper reaches its stop position.

3. AIR VENT MODE CONTROL SERVO MOTOR CONTROL

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

4. AIR MIX CONTROL SERVO MOTOR CONTROL

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

5. AIR CONDITIONER OPERATION

The A/C control assembly receives various signals, I.E., the engine RPM from the crankshaft position sensor, outlet temperature signal from the A/C ambient temp. sensor, coolant temperature from the water temp. sensor, etc. When the engine is started and the A/C SW is on, a signal is input to the ECU (Built into the A/C control assembly). As a result, the ground circuit in A/C control assembly is closed and current flows from A/C fuse to TERMINAL 1 of the A/C COMP relay to TERMINAL 2 to TERMINAL ACMG of the engine ECU (M/T) or engine and ECT ECU (A/T) to TERMINAL MPX to TERMINAL MPX- of the A/C control assembly to TERMINAL GND to GROUND, turning the relay on so that the A/C magnetic clutch is on and the A/C compressor operates. At the same time, the engine ECU (M/T) or engine and ECT ECU (A/T) detects the magnetic clutch is on and the A/C compressor operates and rotates the motor to the open direction to avoid lowering the engine RPM during A/C operation. When any of the following signals are input to the A/C control assembly, the A/C control assembly operates to turn off the air conditioner.

* Coolant temp. signal is high.
* A signal that the temperature at the air outlet is low.
* A signal that there is a large difference between engine speed and compressor speed.
* A signal that the refrigerant pressure is abnormally high or low.

SERVICE HINTS

A4 A/C DUAL PRESSURE SW

1-4 : Open with the refrigerant pressure at less than approx. **216** kpa (**2.2** kgf/cm^2, **31** psi) or more than approx. **3138** kpa (**32** kgf/cm^2, **455** psi)

A14 (A) A/C CONTROL ASSEMBLY

+B-GROUND : Always approx. **12** volts
ACC-GROUND : Approx. **12** volts with ignition SW at **ACC** or **ON** position
FRS-GROUND : Approx. **12** volts with FRESH SW on
REC-GROUND : Approx. **12** volts with RECIRC SW on
GND-GROUND : Always continuity

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A1	96 (LHD)	A18	98 (LHD)	E3 B	96 (LHD)
A3	96 (LHD)	A24	98 (LHD)	E5 D	96 (LHD)
A4	96 (LHD)	A25	98 (LHD)	J6	99 (LHD)
A14 A	98 (LHD)	A26	98 (LHD)	J7	99 (LHD)
A15 B	98 (LHD)	B3	98 (LHD)	S8	99 (LHD)
A16	98 (LHD)	B4 A	98 (LHD)		
A17	98 (LHD)	B5 B	98 (LHD)		

AUTOMATIC AIR CONDITIONER (LHD)

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
3	94 (LHD)	Engine Room No.3 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2D	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2F		
2H		
2I		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	112 (LHD)	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
IA3	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
ID1	114 (LHD)	Instrument Panel No.2 Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
IF1	116 (LHD)	Instrument Panel Wire and A/C Sub Wire (Left Side of the Blower Unit)
IF2		

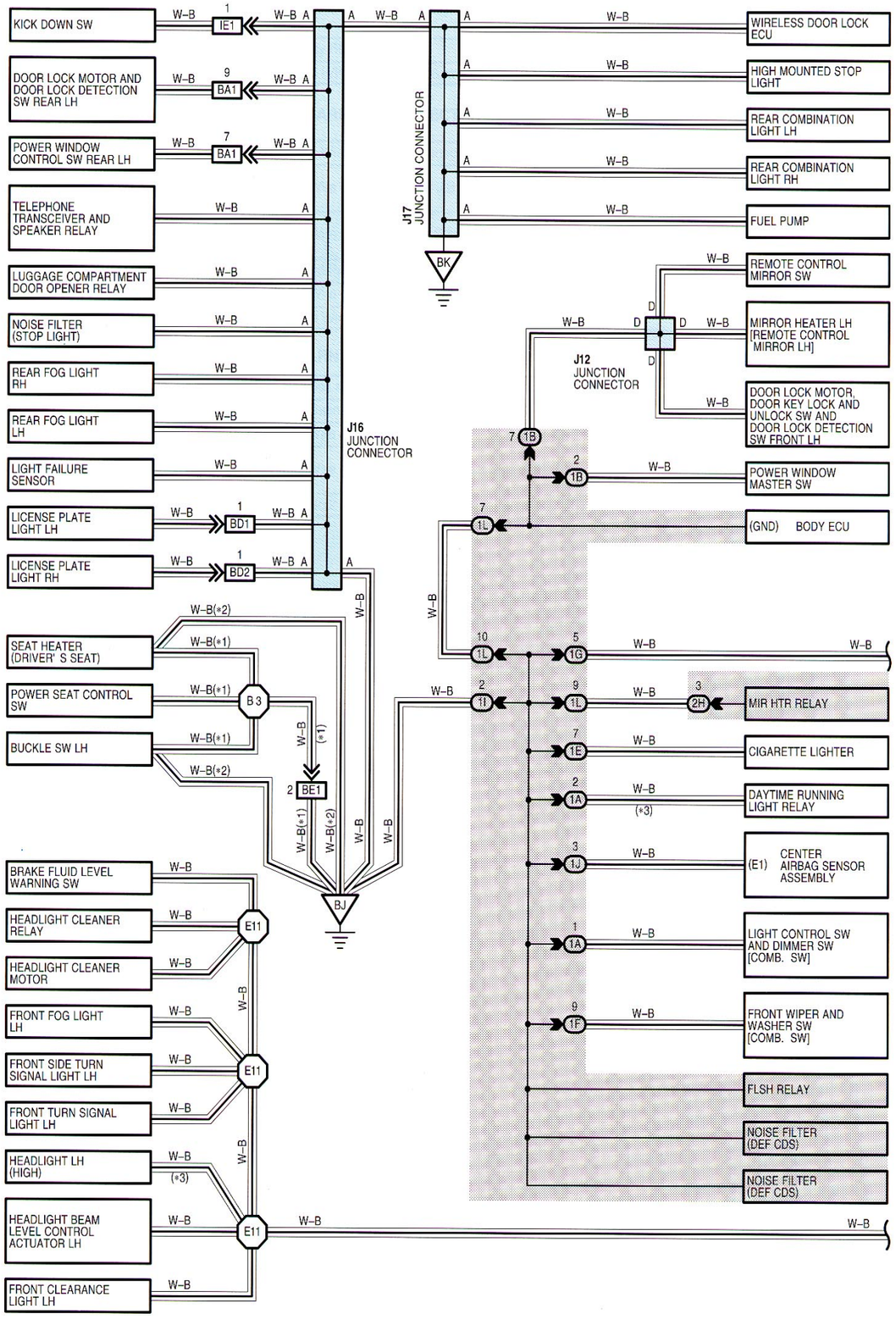
: GROUND POINTS

Code	See Page	Ground Points Location
EC	112 (LHD)	Left Fender Apron
ID	114 (LHD)	Cowl Side Panel LH
IF	114 (LHD)	Instrument Panel Reinforcement RH

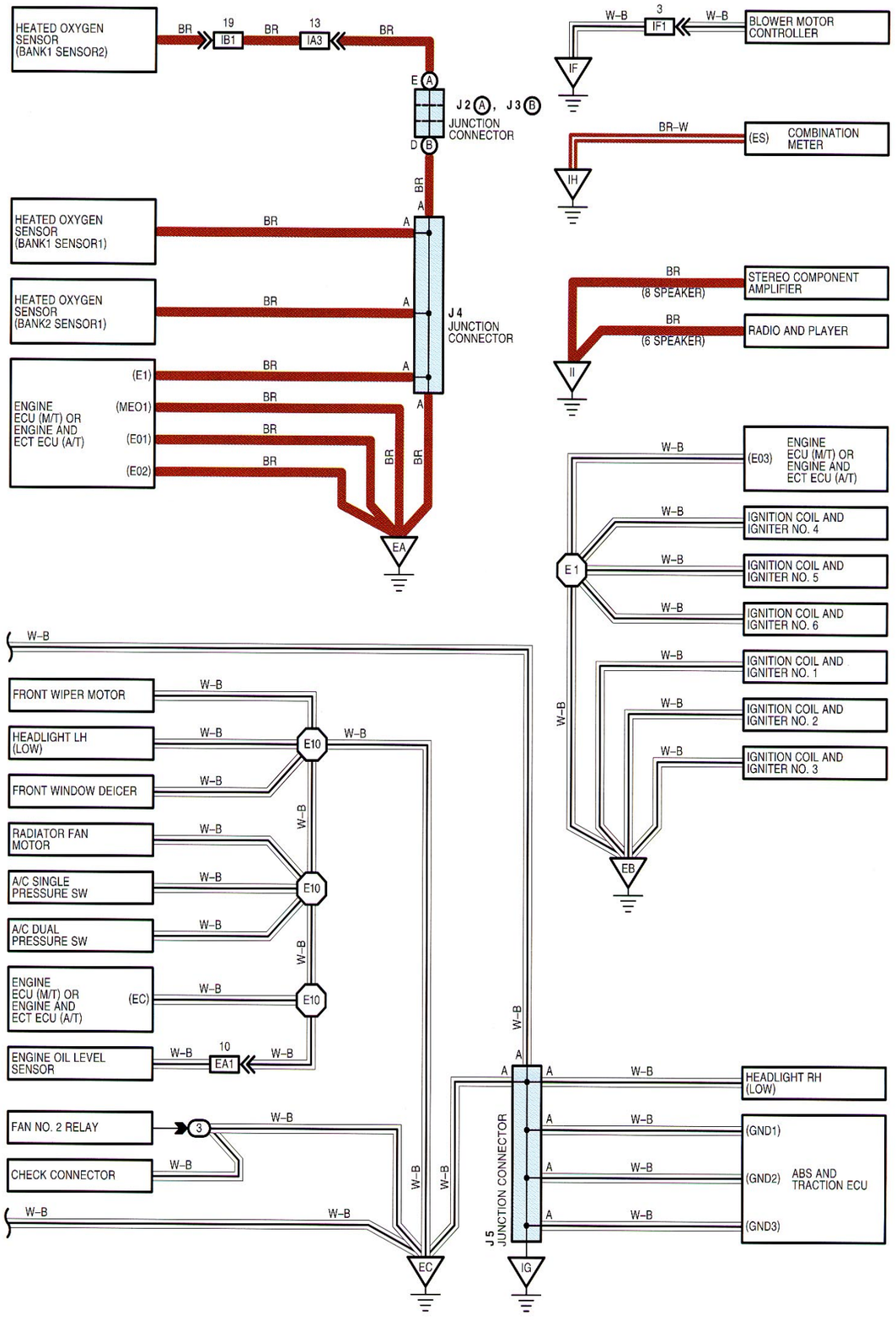
: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I1	116 (LHD)	A/C Sub Wire	I2	116 (LHD)	A/C Sub Wire

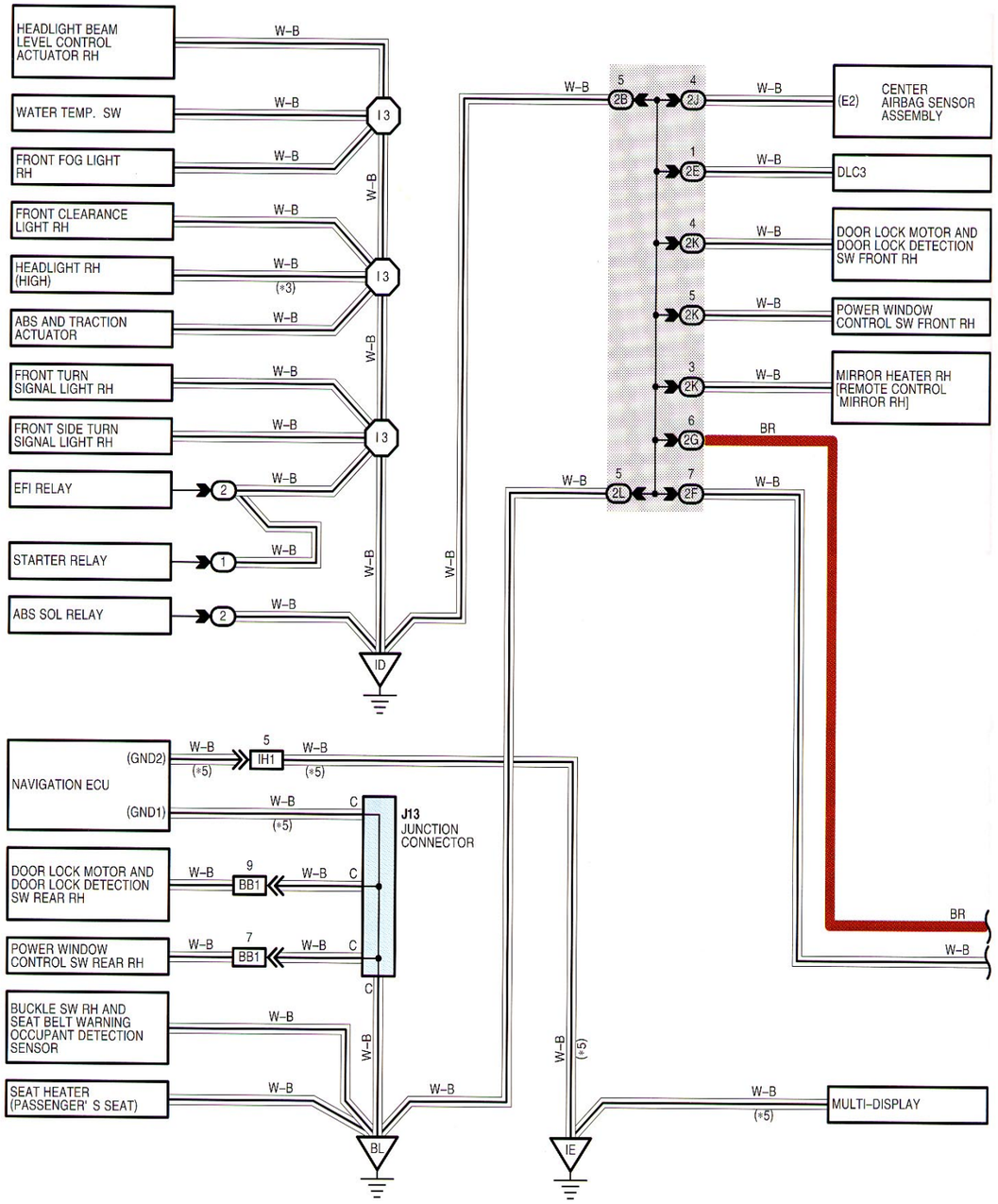
I GROUND POINT (LHD)



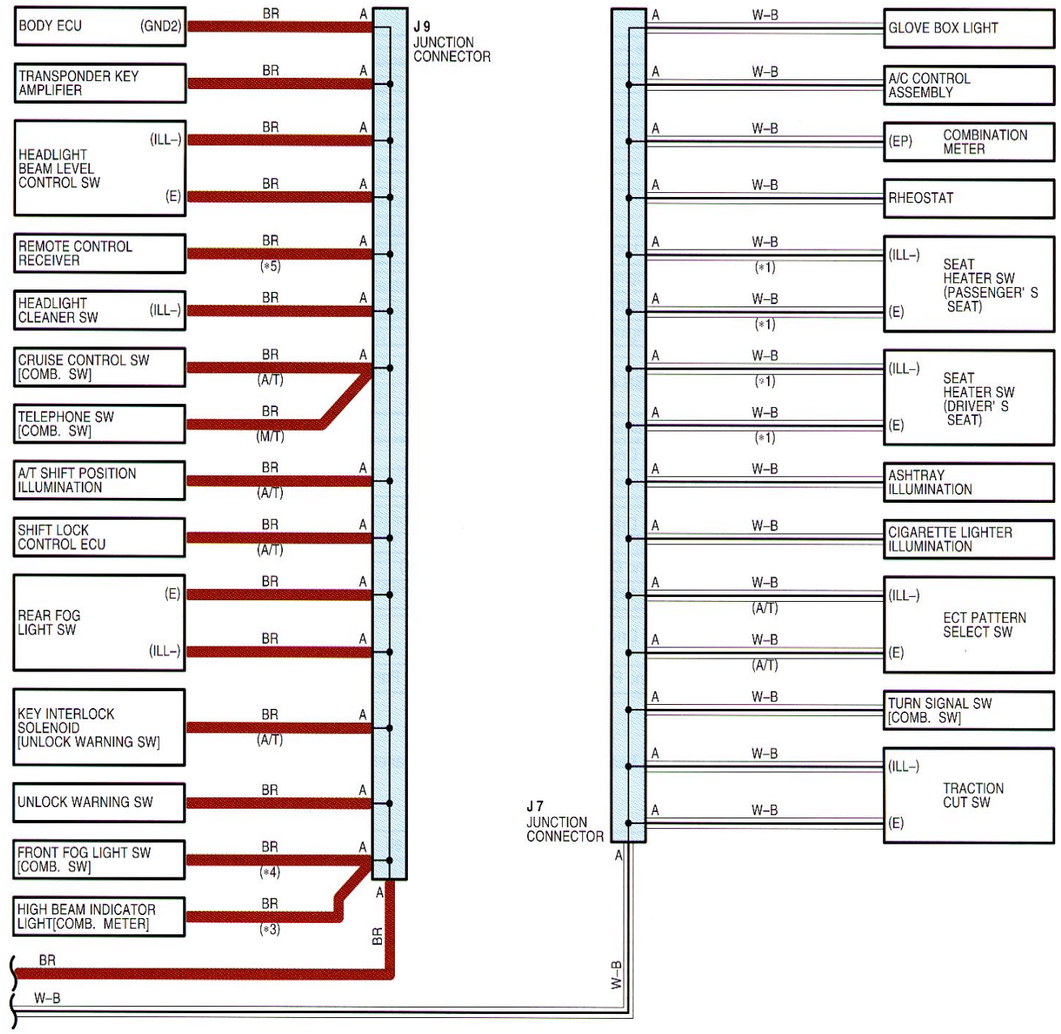
＊1 : W/ POWER SEAT
＊2 : W/O POWER SEAT
＊3 : W/ DAYTIME RUNNING LIGHT

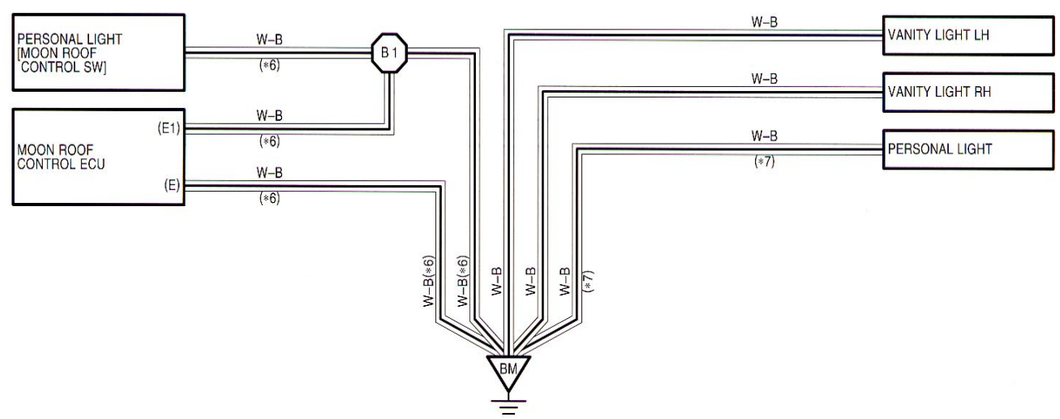


I GROUND POINT (LHD)



* 1 : W/ POWER SEAT
* 3 : W/ DAYTIME RUNNING LIGHT
* 4 : W/O DAYTIME RUNNING LIGHT
* 5 : W/ LEXUS NAVIGATION SYSTEM
* 6 : W/ MOON ROOF
* 7 : W/O MOON ROOF





I GROUND POINT (LHD)

○ : PARTS LOCATION

Code		See Page	Code	See Page	Code	See Page
J2	A	97 (LHD)	J7	99 (LHD)	J16	100 (LHD)
J3	B	97 (LHD)	J9	99 (LHD)	J17	100 (LHD)
J4		97 (LHD)	J12	100 (LHD)		
J5		99 (LHD)	J13	100 (LHD)		

▭ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	80 (LHD)	Engine Room No.1 R/B (Engine Compartment Right)
2	80 (LHD)	Engine Room No.2 R/B (Engine Compartment Right)
3	94 (LHD)	Engine Room No.3 R/B (Engine Compartment Right)

▭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1B	82 (LHD)	Front Door LH Wire and Driver Side J/B (Left Kick Panel)
1E	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1F		
1G	82 (LHD)	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1I	82 (LHD)	Floor No.2 Wire and Driver Side J/B (Left Kick Panel)
1J	82 (LHD)	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1L		
2B	84 (LHD)	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2E	84 (LHD)	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2F		
2G		
2H		
2J		
2K	84 (LHD)	Front Door RH Wire and Passenger Side J/B (Right Kick Panel)
2L	84 (LHD)	Floor Wire and Passenger Side J/B (Right Kick Panel)

▭ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	112 (LHD)	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
IA3	114 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IB1	114 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
IE1	116 (LHD)	Floor No.3 Wire and Floor No.2 Wire (Near the Steering Column)
IF1	116 (LHD)	Instrument Panel Wire and A/C Sub Wire (Left Side of the Blower Unit)
IH1	116 (LHD)	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
BA1	118 (LHD)	Rear Door No.2 Wire and Floor No.2 Wire (Left Center Pillar)
BB1	118 (LHD)	Rear Door No.1 Wire and Floor Wire (Right Center Pillar)
BD1	118 (LHD)	Floor No.2 Wire and Luggage Room Wire (Right Side of the Luggage Door)
BD2		
BE1	120 (LHD)	Floor No.2 Wire and Front Seat LH Wire (Under the Driver's Seat)

▽ : GROUND POINTS

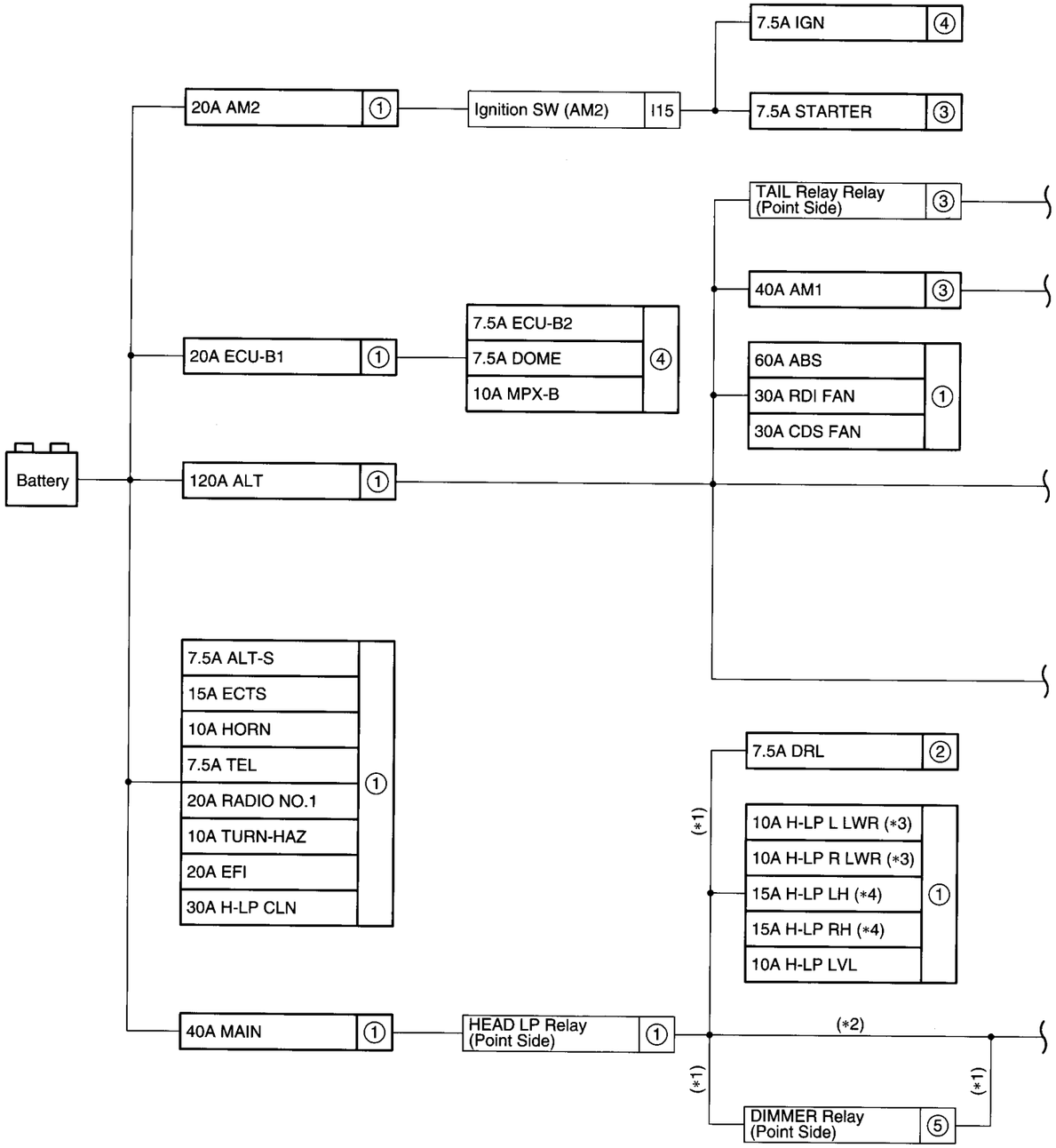
Code	See Page	Ground Points Location
EA	112 (LHD)	Front Side of Cylinder Head
EB	112 (LHD)	Rear Side of Cylinder Head
EC	112 (LHD)	Left Fender Apron
ID	114 (LHD)	Cowl Side Panel LH
IE	114 (LHD)	Instrument Panel Center
IF	114 (LHD)	Instrument Panel Reinforcement RH
IG	114 (LHD)	Cowl Side Panel RH
IH	114 (LHD)	Front Floor Panel Center LH
II	114 (LHD)	Front Floor Panel Center RH
BJ	118 (LHD)	Front Floor Panel LH
BK	118 (LHD)	Left Quarter Panel LH
BL	118 (LHD)	Front Floor Panel RH
BM	118 (LHD)	Roof Panel

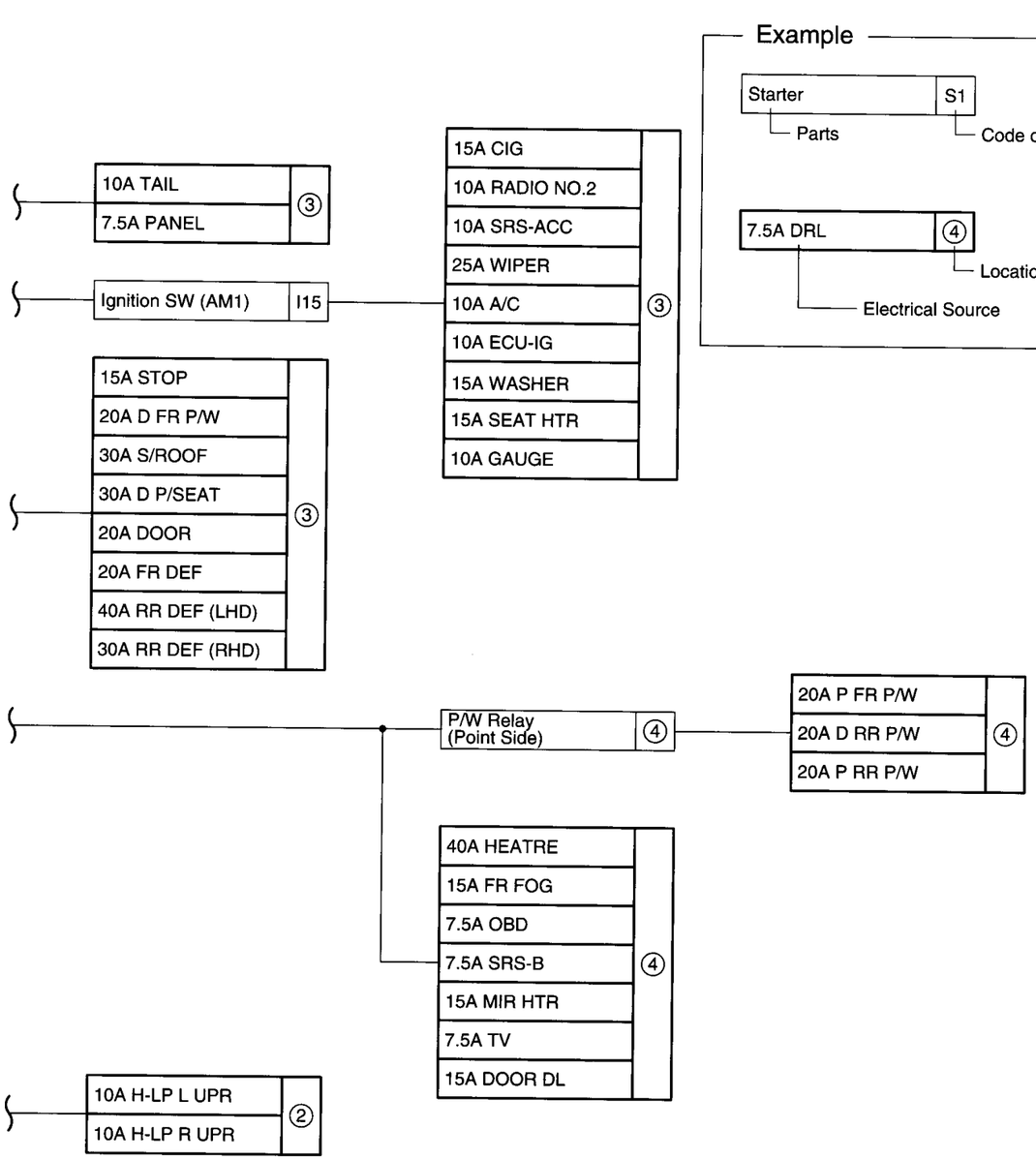
⬡ : SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	112 (LHD)	Engine Wire	I3	116 (LHD)	Engine Room Main Wire
E10	112 (LHD)	Engine Room Main Wire	B1	118 (LHD)	Roof Wire
E11			B3	120 (LHD)	Front Seat LH Wire

J POWER SOURCE (Current Flow Chart)

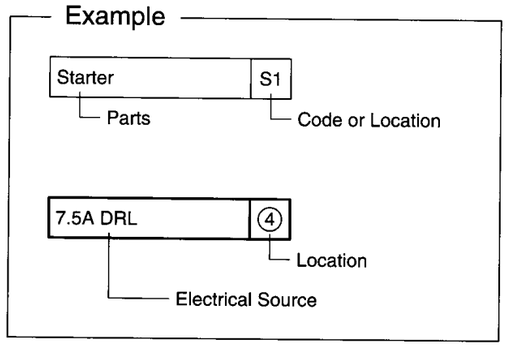
The chart below shows the route by which current flows from the battery to each electrical source (Fusible Link, Circuit Breaker, Fuse, etc.) and other Parts.





*1 : w/ Daytime Running Light
*2 : w/o Daytime Running Light
*3 : Except Australia
*4 : Australia

Example



[LOCATION] ① : Engine Room No.1 R/B (See page 80 (LHD) or 81 (RHD))
② : Engine Room No.2 R/B (See page 80 (LHD) or 81 (RHD))
③ : Driver Side J/B (See page 82 (LHD) or 88 (RHD))
④ : Passenger Side J/B (See page 84 (LHD) or 90 (RHD))
⑤ : Engine Room No.3 R/B (See Page 94)

J POWER SOURCE (Current Flow Chart)

Engine Room No.1 R/B (See Page 80 (LHD) or 81 (RHD))

Fuse		System	Page
7.5A	ALT-S	Charging	154
7.5A	TEL	Cellular Mobile Telephone	422
10A	H-LP L LWR	Headlight (LHD w/ Daytime Running Light)	186
		Headlight (LHD w/o Daytime Running Light)	190
		Headlight (RHD)	194
10A	H-LP LVL	Headlight Beam Level Control	388
10A	H-LP R LWR	Headlight (LHD w/ Daytime Running Light)	186
		Headlight (LHD w/o Daytime Running Light)	190
		Headlight (RHD)	194
10A	HORN	Horn	382
		Theft Deterrent (RHD)	306
10A	TURN-HAZ	Turn Signal and Hazard Warning Light (LHD)	222
		Turn Signal and Hazard Warning Light (RHD)	224
15A	ETCS	Cruise Control	360
		ECT and A/T Indicator	352
		Engine Control (LHD)	158
		Engine Control (RHD)	170
15A	H-LP LH	Headlight (RHD)	194
15A	H-LP RH	Combination Meter	442
		Headlight (RHD)	194
20A	AM2	Engine Control (LHD)	158
		Engine Control (RHD)	170
		Ignition	150
		Starting	148
20A	EFI	Cruise Control	360
		ECT and A/T Indicator	352
		Engine Control (LHD)	158
		Engine Control (RHD)	170
		Engine Immobiliser System	182
20A	RADIO NO.1	Radio and Player (LHD 6 Speaker)	426
		Radio and Player (RHD 6 Speaker)	430
		Radio and Player (LHD 8 Speaker)	434
		Radio and Player (RHD 8 Speaker)	438
30A	CDS FAN	Radiator Fan and Condenser Fan	448
30A	H-LP CLN	Headlight Cleaner	384
30A	RDI FAN	Radiator Fan and Condenser Fan	448
40A	MAIN	Automatic Light Control (RHD)	274
		Headlight (LHD w/ Daytime Running Light)	186
		Headlight (LHD w/o Daytime Running Light)	190
		Headlight (RHD)	194
		Headlight Cleaner	384

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

Fuse		System	Page
40A	MAIN	Rear Fog Light (LHD)	202
		Rear Fog Light (RHD)	206
		Starting	148
		Theft Deterrent (RHD)	306
60A	ABS	ABS and Traction Control	366
120A	ALT	ABS and Traction Control	366
		Automatic Light Control (RHD)	274
		Charging	154
		Headlight (LHD w/ Daytime Running Light)	186
		Illumination (LHD)	214
		Illumination (RHD)	218
		Light Reminder (LHD)	338
		Light Reminder (RHD)	342
		Multiplex Communication System (LHD)	232
		Multiplex Communication System (RHD)	248
		Power Window (LHD)	318
		Power Window (RHD)	324
		Radiator Fan and Condenser Fan	448
		Rear Window Defogger and Mirror Heater	410
		Taillight	210
		Theft Deterrent (RHD)	306

Engine Room No.2 R/B (See Page 80 (LHD) or 81 (RHD))

Fuse		System	Page
7.5A	DRL	Headlight (LHD w/ Daytime Running Light)	186
10A	H-LP L UPR	Headlight (LHD w/ Daytime Running Light)	186
		Headlight (LHD w/o Daytime Running Light)	190
		Headlight (RHD)	194
10A	H-LP R UPR	Combination Meter	442
		Headlight (LHD w/ Daytime Running Light)	186
		Headlight (LHD w/o Daytime Running Light)	190
		Headlight (RHD)	194

Driver Side J/B (See Page 82 (LHD) or 88 (RHD))

Fuse		System	Page
7.5A	PANEL	Combination Meter	442
		Headlight (LHD w/ Daytime Running Light)	186
		Illumination (LHD)	214
		Illumination (RHD)	218
		Light Reminder (LHD)	338
		Light Reminder (RHD)	342
		Multiplex Communication System (LHD)	232
		Multiplex Communication System (RHD)	248

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

Fuse		System	Page
7.5A	PANEL	Rear Fog Light (LHD)	202
		Rear Fog Light (RHD)	206
		Theft Deterrent (RHD)	306
7.5A	STARTER	ECT and A/T Indicator	352
		Engine Control (LHD)	158
		Engine Control (RHD)	170
		LEXUS Navigation System (LHD)	414
		LEXUS Navigation System (RHD)	418
		Starting	148
10A	A/C	Automatic Air Conditioner (LHD)	452
		Automatic Air Conditioner (RHD)	458
10A	ECU-IG	ABS and Traction Control	366
		Automatic Air Conditioner (LHD)	452
		Automatic Air Conditioner (RHD)	458
		Automatic Light Control (RHD)	274
		Door Lock Control (LHD)	278
		Door Lock Control (RHD)	284
		Double Locking (RHD)	312
		Headlight (LHD w/ Daytime Running Light)	186
		Interior Light (LHD)	262
		Interior Light (RHD)	268
		Light Reminder (LHD)	338
		Light Reminder (RHD)	342
		Moon Roof	404
		Multiplex Communication System (LHD)	232
		Multiplex Communication System (RHD)	248
		Power Window (LHD)	318
		Power Window (RHD)	324
		Radiator Fan and Condenser Fan	448
		Seat Belt Warning (LHD)	330
		Seat Belt Warning (RHD)	334
		Shift Lock	400
		Theft Deterrent (RHD)	306
		Wireless Door Lock Control (LHD)	290
		Wireless Door Lock Control (RHD)	298
10A	GAUGE	ABS and Traction Control	366
		Back-Up Light	226
		Cellular Mobile Telephone	422
		Charging	154
		Combination Meter	442
		Cruise Control	360
		ECT and A/T Indicator	352
		Engine Control (LHD)	158
		Engine Control (RHD)	170

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

Fuse		System	Page
10A	GAUGE	Front Window Deicer	408
		LEXUS Navigation System (LHD)	414
		LEXUS Navigation System (RHD)	418
		Light Reminder (LHD)	338
		Light Reminder (RHD)	342
		Multiplex Communication System (LHD)	232
		Multiplex Communication System (RHD)	248
		Power Window (LHD)	318
		Power Window (RHD)	324
		Rear Window Defogger and Mirror Heater	410
		Seat Belt Warning (LHD)	330
		Seat Belt Warning (RHD)	334
		Shift Lock	400
		Stop Light	228
		Taillight	210
		Turn Signal and Hazard Warning Light (LHD)	222
		Turn Signal and Hazard Warning Light (RHD)	224
10A	RADIO NO.2	Automatic Air Conditioner (LHD)	452
		Automatic Air Conditioner (RHD)	458
		Clock	380
		Door Lock Control (LHD)	278
		Door Lock Control (RHD)	284
		Double Locking (RHD)	312
		Interior Light (LHD)	262
		Interior Light (RHD)	268
		LEXUS Navigation System (LHD)	414
		LEXUS Navigation System (RHD)	418
		Light Reminder (LHD)	338
		Light Reminder (RHD)	342
		Multiplex Communication System (LHD)	232
		Multiplex Communication System (RHD)	248
		Power Window (LHD)	318
		Power Window (RHD)	324
		Radio and Player (LHD 6 Speaker)	426
		Radio and Player (RHD 6 Speaker)	430
		Radio and Player (LHD 8 Speaker)	434
		Radio and Player (RHD 8 Speaker)	438
		Remote Control Mirror (LHD)	346
		Remote Control Mirror (RHD)	348
		Seat Belt Warning (LHD)	330
		Seat Belt Warning (RHD)	334
		Shift Lock	400
		Theft Deterrent (RHD)	306
		Wireless Door Lock Control (LHD)	290

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

Fuse		System	Page
10A	RADIO NO.2	Wireless Door Lock Control (RHD)	298
10A	SRS-ACC	SRS	373
10A	TAIL	Front Fog Light (LHD)	198
		Front Fog Light (RHD)	200
		Taillight	210
15A	CIG	Cigarette Lighter	378
15A	SEAT HTR	Seat Heater	390
15A	STOP	ABS and Traction Control	366
		Cruise Control	360
		ECT and A/T Indicator	352
		Engine Control (LHD)	158
		Engine Control (RHD)	170
		Shift Lock	400
		Stop Light	228
15A	WASHER	Headlight Cleaner	384
		Wiper and Washer (LHD)	392
		Wiper and Washer (RHD)	396
20A	D FR P/W	Multiplex Communication System (LHD)	232
		Multiplex Communication System (RHD)	248
		Power Window (LHD)	318
		Power Window (RHD)	324
20A	DOOR	Door Lock Control (LHD)	278
		Door Lock Control (RHD)	284
		Double Locking (RHD)	312
		Interior Light (LHD)	262
		Interior Light (RHD)	268
		Light Reminder (LHD)	338
		Light Reminder (RHD)	342
		Multiplex Communication System (LHD)	232
		Multiplex Communication System (RHD)	248
		Power Window (LHD)	318
		Power Window (RHD)	324
		Seat Belt Warning (LHD)	330
		Seat Belt Warning (RHD)	334
		Theft Deterrent (RHD)	306
		Wireless Door Lock Control (LHD)	290
		Wireless Door Lock Control (RHD)	298
20A	FR DEF	Front Window Deicer	408
25A	WIPER	Wiper and Washer (LHD)	392
		Wiper and Washer (RHD)	396
30A	D P/SEAT	Power Seat	350
30A	RR DEF	Rear Window Defogger and Mirror Heater	410

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

Passenger Side J/B (See Page 84 (LHD) or 90 (RHD))

Fuse		System	Page
30A	S/ROOF	Moon Roof	404
40A	RR DEF	Rear Window Defogger and Mirror Heater	410
7.5A	DOME	Interior Light (LHD)	262
		Interior Light (RHD)	268
		Multiplex Communication System (LHD)	232
		Multiplex Communication System (RHD)	248
		Wireless Door Lock Control (LHD)	290
		Wireless Door Lock Control (RHD)	298
7.5A	ECU-B2	Headlight (LHD w/ Daytime Running Light)	186
		Rear Fog Light (LHD)	202
		Rear Fog Light (RHD)	206
		Theft Deterrent (RHD)	306
7.5A	IGN	Cruise Control	360
		ECT and A/T Indicator	352
		Engine Control (LHD)	158
		Engine Control (RHD)	170
		SRS	373
7.5A	OBD	Engine Control (LHD)	158
		Engine Control (RHD)	170
		SRS	373
7.5A	SRS-B	Combination Meter	442
		Interior Light (LHD)	262
		Interior Light (RHD)	268
		Multiplex Communication System (LHD)	232
		Multiplex Communication System (RHD)	248
		SRS	373
7.5A	TV	LEXUS Navigation System (LHD)	414
		LEXUS Navigation System (RHD)	418
10A	MPX-B	Automatic Air Conditioner (LHD)	452
		Automatic Air Conditioner (RHD)	458
		Automatic Light Control (RHD)	274
		Clock	380
		Combination Meter	442
		Door Lock Control (LHD)	278
		Door Lock Control (RHD)	284
		Double Locking (RHD)	312
		Interior Light (LHD)	262
		Interior Light (RHD)	268
		Light Reminder (LHD)	338
		Light Reminder (RHD)	342
		Multiplex Communication System (LHD)	232
		Multiplex Communication System (RHD)	248

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

J POWER SOURCE (Current Flow Chart)

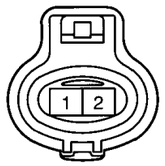
Fuse		System	Page
10A	MPX-B	Power Window (LHD)	318
		Power Window (RHD)	324
		Seat Belt Warning (LHD)	330
		Seat Belt Warning (RHD)	334
		Theft Deterrent (RHD)	306
		Wireless Door Lock Control (LHD)	290
		Wireless Door Lock Control (RHD)	298
15A	DOOR DL	Double Locking (RHD)	312
15A	FR FOG	Front Fog Light (LHD)	198
		Front Fog Light (RHD)	200
15A	MIR HTR	Rear Window Defogger and Mirror Heater	410
20A	D RR P/W	Multiplex Communication System (LHD)	232
		Multiplex Communication System (RHD)	248
		Power Window (LHD)	318
		Power Window (RHD)	324
20A	P FR P/W	Multiplex Communication System (LHD)	232
		Multiplex Communication System (RHD)	248
		Power Window (LHD)	318
		Power Window (RHD)	324
40A	HEATER	Automatic Air Conditioner (LHD)	452
		Automatic Air Conditioner (RHD)	458

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

K CONNECTOR LIST

A1 BLACK

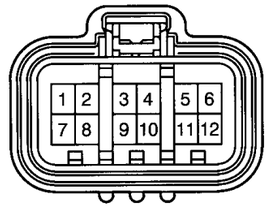
A2 GRAY



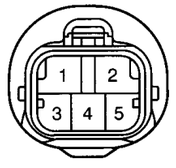
A3 GRAY

A4 BLACK

A5 BLACK



A6 GRAY



A7 GRAY

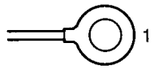
A8 GRAY

A9 BLACK

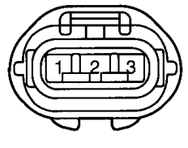
A10 YELLOW

A11 YELLOW

A12



A13 BLACK



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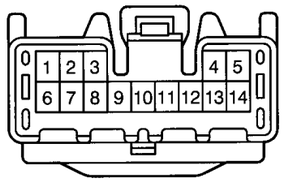

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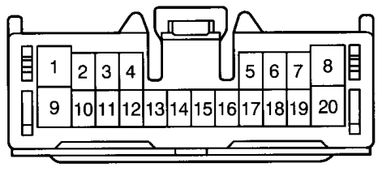
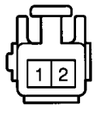


A16 BLACK

A17 BLACK

A18



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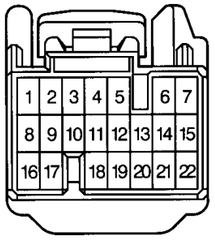

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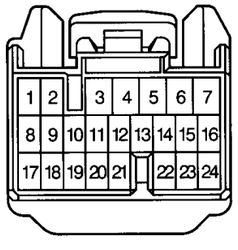
A22



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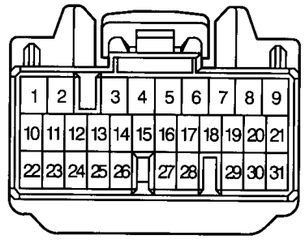

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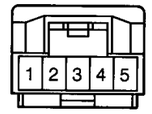

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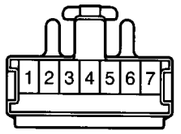

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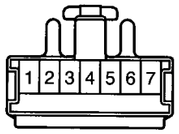
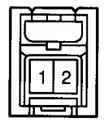
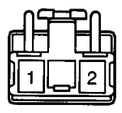


A27 YELLOW



A28 YELLOW



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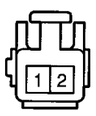
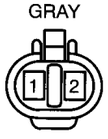


A31

A32 GRAY

A33

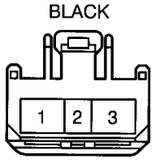
B1 GRAY



B2 GRAY

B3 BLACK

B4 BLACK



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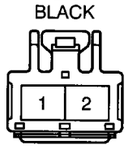

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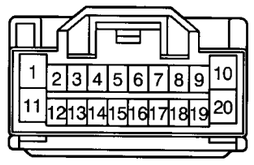
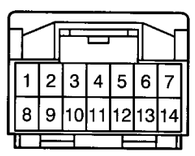


B7

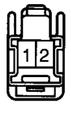


B8 (w/ Power Seat)

B8 (w/o Power Seat)

B9 (w/ Power Seat)

B9 (w/o Power Seat)



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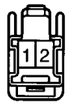
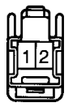


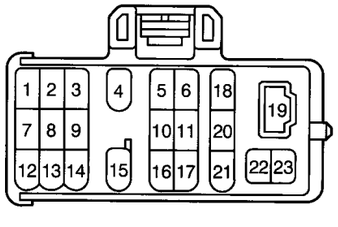
B11



C1 BLACK

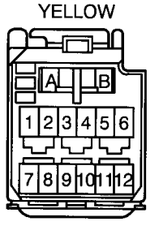
C2 BLACK

C3 BLACK

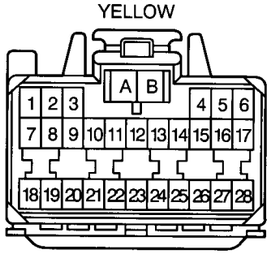


C4 DARK GRAY

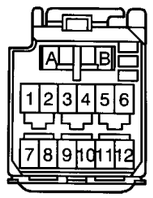
C5 YELLOW



C6 YELLOW



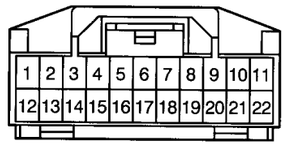
C7
YELLOW



C8

C9
GRAY

C10



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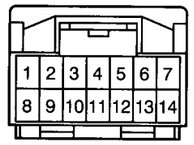

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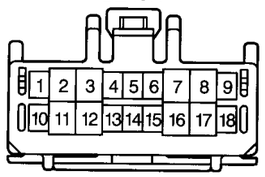

C13
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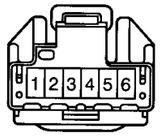
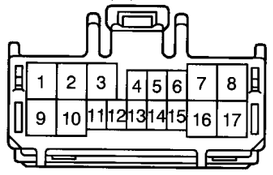
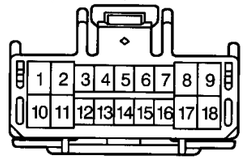


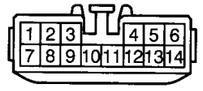
C14
(Europe) BLACK



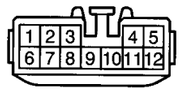
C14
(Australia) BLACK



D1
BLUE

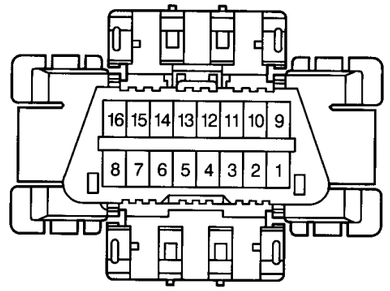


D2



D3

D4



D5

D6

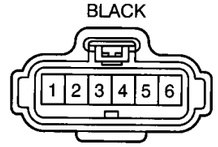
D7

D8

D9

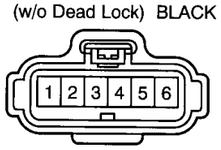
D10

D11
BLACK



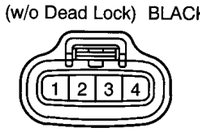
D12
(w/ Dead Lock)

D12
(w/o Dead Lock) BLACK



D13
(w/ Dead Lock)

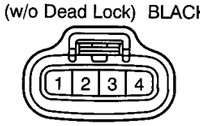
D13
(w/o Dead Lock) BLACK



D14
BLACK

D15
(w/ Dead Lock)

D15
(w/o Dead Lock) BLACK

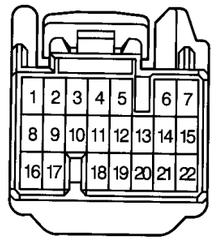


D16
(w/ Dead Lock)

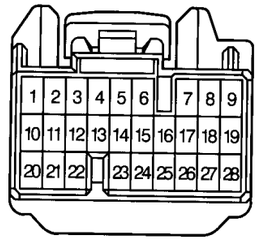
D16
(w/o Dead Lock) BLACK

E1
GRAY

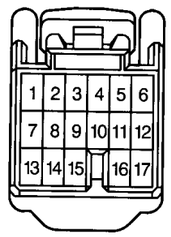
E2



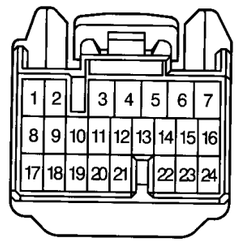
E3



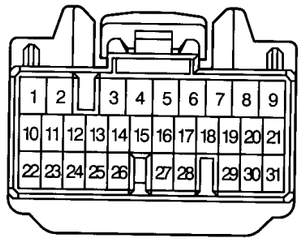
E4



E5



E6

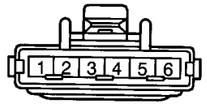


E7
BLACK

E8
GRAY

E9
GRAY

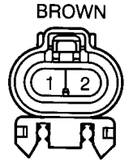
E10
BLACK



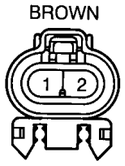
F1
GRAY

F2
GRAY

F3
BROWN



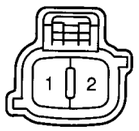
F4
BROWN



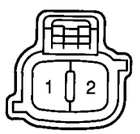
F5
GRAY

F6
GRAY

F7
GRAY



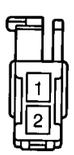
F8
GRAY



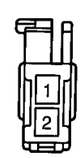
F9
GRAY

F10
BLACK

F11



F12



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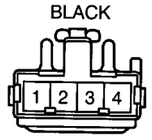
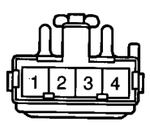


F14



F15
DARK GRAY

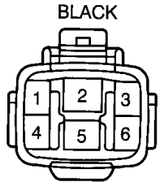
F16

G1

H1
GRAY

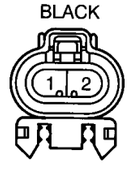
H2
GRAY

H3
BLACK



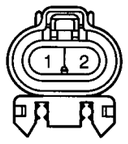
H4
BLACK

H5
BLACK

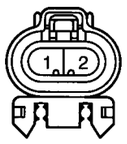


K CONNECTOR LIST

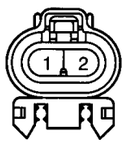
H6 BROWN



H7 BLACK



H8 BROWN



H9 DARK GRAY

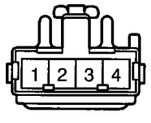
H10 DARK GRAY

H11 BLACK

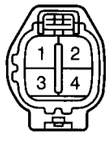
H12 BLACK

H13

H14 BLACK



H15 DARK GRAY



H16

I1 GRAY

I2 BROWN

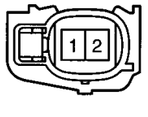
I3 GRAY

I4 BROWN

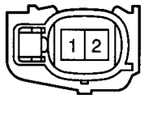
I5 GRAY

I6 BROWN

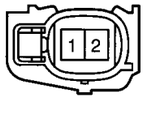
I7 GRAY



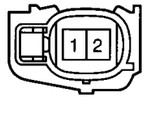
I8 BROWN



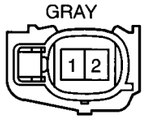
I9 GRAY



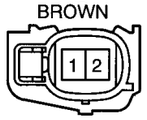
I10 BROWN



I11 GRAY



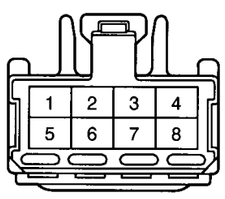
I12 BROWN



I13 BLACK

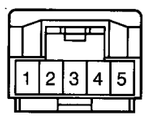
I14

I15

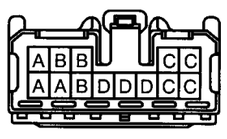


I16

I17



J1



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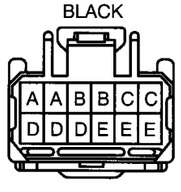
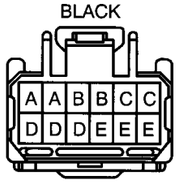
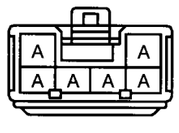


J3 BLACK

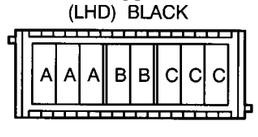


J4

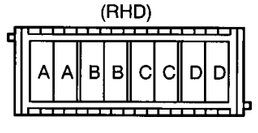
J5



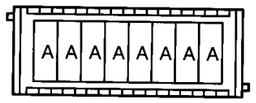
J6 (LHD) BLACK



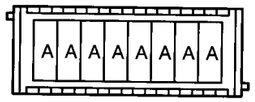
J6 (RHD)



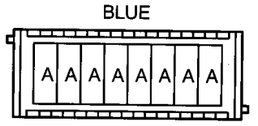
J7 BLUE



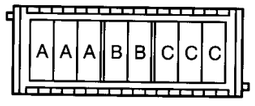
J8 BLUE



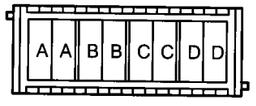
J9 BLUE



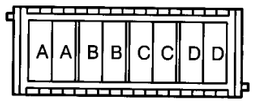
J10 BLACK



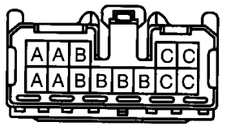
J11



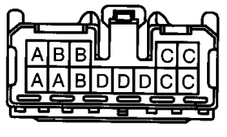
J12



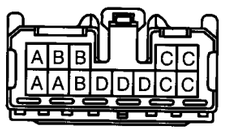
J13



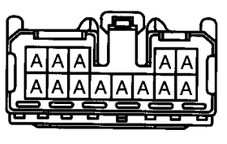
J14



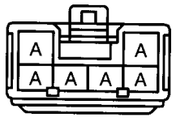
J15 GRAY



J16



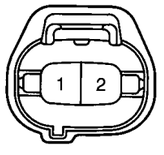
J17



K1 DARK GRAY

K2 DARK GRAY

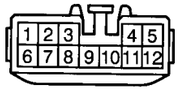
K3 BLACK



L1 GRAY

L2 GRAY

L3



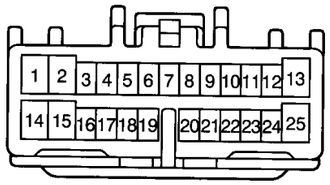
L4 BLACK

L5

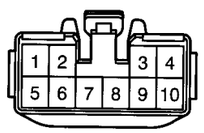
L6

L7 GRAY

M1

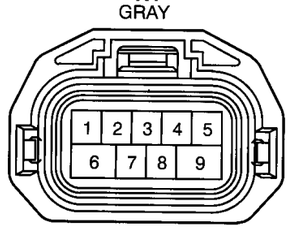


M2



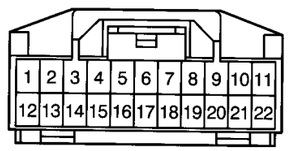
M3

N1 GRAY

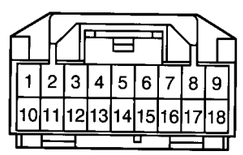


N2 GRAY

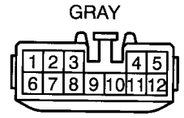
N3



N4

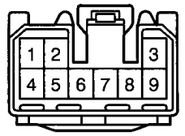


N5 GRAY



K CONNECTOR LIST

N6
ORANGE



N7

N8

P1
BLACK

P2
BLACK

P3

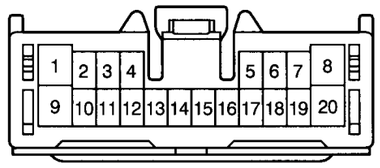
P4

P5

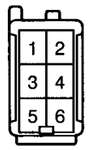
P6

P7

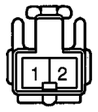
P8



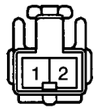
P9
(LHD)



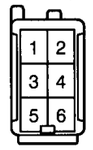
P9
(RHD)



P10
(LHD)



P10
(RHD)



P11

P12

P13
YELLOW

P14
YELLOW

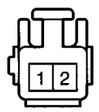
P15

P16
BLACK

P17

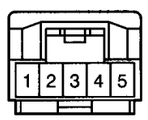
P18

P19

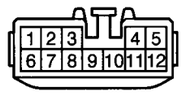


R1
GRAY

R2

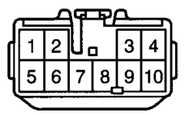


R3

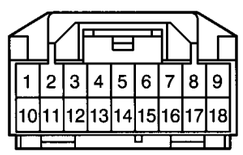


R4

R5

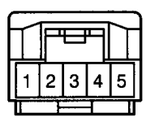


R6

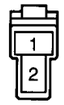


R7
BLACK

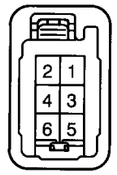
R8



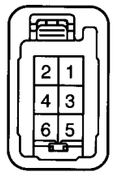
R9



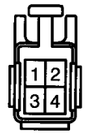
R10



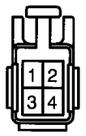
R11



R12



R13



R14

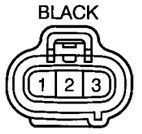
R15

R16

R17

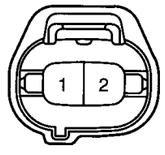
R18

S1
BLACK



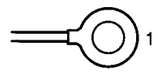
S2
BLACK

S3
BLACK



S4
BLACK

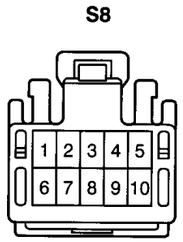
S5



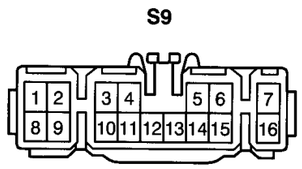
S6
BLUE

S7

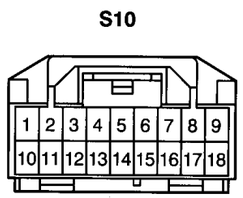
S8



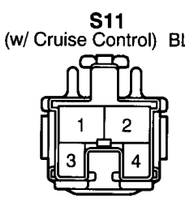
S9



S10



S11
(w/ Cruise Control) BLUE



S11
(w/o Cruise Control)

S12

S13

S14
YELLOW

S15
YELLOW

S16
YELLOW

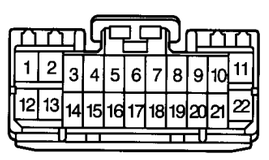
S17
YELLOW

T1
GRAY

T2
BLACK

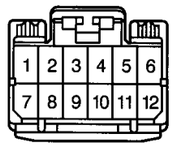
T3

T4

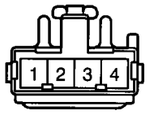


K CONNECTOR LIST

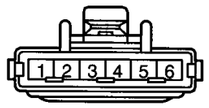
T5



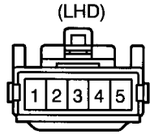
T6
(A/T) BLACK



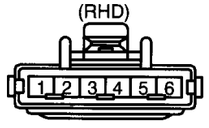
T6
(M/T) BLACK



T7
(LHD)



T7
(RHD)

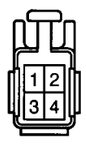


T8

T9

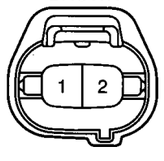
T10
GRAY

U1

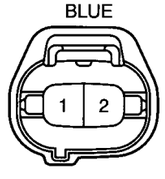


V1
BLACK

V2
BROWN



V3
BLUE



V4

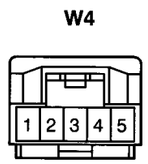
V5

W1
BLACK

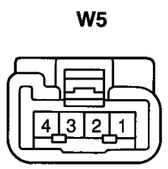
W2
GREEN

W3
DARK GRAY

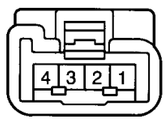
W4



W5



W6



M PART NUMBER OF CONNECTORS

Code	Part Name	Part Number
A 1	A/C Ambient Temp. Sensor	90980-11070
A 2	A/C Condenser Fan Motor	90980-10928
A 3	A/C Magnetic Clutch	90980-11271
A 4	A/C Triple Pressure SW (A/C Dual and Single Pressure SW)	90980-10943
A 5	ABS and Traction Actuator	90980-11698
A 6	ABS and Traction Actuator	90980-11413
A 7	ABS Speed Sensor Front LH	90980-11002
A 8	ABS Speed Sensor Front RH	
A 9	Accel Position Sensor	90980-10711
A10	Airbag Sensor Front LH	90980-11856
A11	Airbag Sensor Front RH	
A12	Alternator	90980-09213
A13	Alternator	90980-11349
A14	A/C Control Assembly	90980-11556
A15	A/C Control Assembly	90980-11469
A16	A/C Room Temp. Sensor	90980-10825
A17	A/C Solar Sensor	90980-11918
A18	A/C Thermistor	90980-10825
A19	A/T Shift Position Illumination	90980-11493
A20	ABS and Traction ECU	90980-11638
A21	ABS and Traction ECU	90980-11637
A22	ABS and Traction ECU	90980-11476
A23	ABS and Traction ECU	90980-11421
A24	Air Inlet Control Servo Motor	90980-11909
A25	Air Mix Control Servo Motor	90980-11165
A26	Air Vent Mode Control Servo Motor	
A27	Airbag Squib (Front Passenger Airbag Assembly)	90980-11886
A28	Airbag Squib (Steering Wheel Pad)	90980-10850
A29	Antenna Amplifier	90980-10871
A30	Ashtray Illumination	90980-10825
A31	Automatic Light Control Sensor	90980-11107
A32	ABS Speed Sensor Rear LH	90980-11060
A33	ABS Speed Sensor Rear RH	90980-11299
B 1	Back-Up Light SW	90980-11142
B 2	Brake Fluid Level Warning SW	90980-11207
B 3	Blower Motor	90980-10214
B 4	Blower Motor Controller	90980-11667
B 5	Blower Motor Controller	90980-11579
B 6	Body ECU	90980-11971
B 7	Body ECU	90980-11911
B 8	Buckle SW LH (w/ Power Seat)	90980-10825
	Buckle SW LH (w/o Power Seat)	90980-11212
B 9	Buckle SW RH (w/ Power Seat)	90980-10825
	Buckle SW RH (w/o Power Seat)	90980-11212
B10	Buckle SW LH and Seat Belt Warning Occupant Detection Sensor	
B11	Buckle SW RH and Seat Belt Warning Occupant Detection Sensor	
C 1	Camshaft Position Sensor	90980-10947
C 2	Camshaft Timing Oil Control Valve	90980-11162
C 3	Check Connector	90980-11195
C 4	Crankshaft Position Sensor	90980-10947
C 5	Center Airbag Sensor Assembly	90980-11869
C 6	Center Airbag Sensor Assembly	90980-11872
C 7	Center Airbag Sensor Assembly	90980-11867
C 8	Cigarette Lighter	90980-10760
C 9	Cigarette Lighter Illumination	90980-11148
C10	Combination Meter	90980-11915
C11	Combination Meter	90980-11911
C12	Combination SW	90980-11594
C13	Combination SW	90980-11616
C14	Combination SW (Eurpoe)	90980-11672
	Combination SW (Australia)	90980-11595
D 1	Daytime Running Light Relay	90980-10807
D 2	Double Locking ECU	90980-10803
D 3	Diode (A/C)	90980-11251
D 4	DLC3	90980-11665
D 5	Door Courtesy Light Front LH	90980-11148
D 6	Door Courtesy Light Front RH	
D 7	Door Courtesy SW Front LH	90980-10871
D 8	Door Courtesy SW Front RH	
D 9	Door Courtesy SW Rear LH	
D10	Door Courtesy SW Rear RH	
D11	Door Lock Motor, Door Key Lock and Unlock SW and Door Lock Detection SW Front LH	90980-11858
D12	Door Lock Motor and Door Lock Detection SW Front RH (w/ Dead Lock)	90980-10799
	Door Lock Motor, Door Key Lock and Unlock SW and Door Lock Detection SW Front RH (w/o Dead Lock)	90980-11858
D13	Door Lock Motor and Door Lock Detection SW Front LH (w/ Dead Lock)	90980-10799
	Door Lock Motor and Door Lock Detection SW Front LH (w/o Dead Lock)	90980-11150
D14	Door Lock Motor and Door Lock Detection SW Front RH	90980-11150
D15	Door Lock Motor and Door Lock Detection SW Rear LH (w/ Dead Lock)	90980-10799
	Door Lock Motor and Door Lock Detection SW Rear LH (w/o Dead Lock)	90980-11150
D16	Door Lock Motor and Door Lock Detection SW Rear RH (w/ Dead Lock)	90980-10799
	Door Lock Motor and Door Lock Detection SW Rear RH (w/o Dead Lock)	90980-11150
E 1	ECT Solenoid	90980-10891
E 2	Engine ECU (M/T) or Engine and ECT ECU (A/T)	90980-11638
E 3	Engine ECU (M/T) or Engine and ECT ECU (A/T)	90980-11637
E 4	Engine and ECT ECU	90980-11586
E 5	Engine ECU (M/T) or Engine and ECT ECU (A/T)	90980-11476
E 6	Engine ECU (M/T) or Engine and ECT ECU (A/T)	90980-11421
E 7	Engine Hood Courtesy SW	90980-11189
E 8	Engine Oil Level Sensor	90980-10532
E 9	Engine Oil Pressure SW	90980-11363
E10	ECT Pattern Select SW	90980-10933
F 1	Front Clearance Light LH	90980-11162
F 2	Front Clearance Light RH	
F 3	Front Fog Light LH	90980-11660
F 4	Front Fog Light RH	
F 5	Front Side Turn Signal Light LH	90980-11162
F 6	Front Side Turn Signal Light RH	
F 7	Front Turn Signal Light LH	90980-11019
F 8	Front Turn Signal Light RH	
F 9	Front Window Deicer	90980-11295
F10	Front Wiper Motor	90980-11599
F11	Front Door Speaker LH	90980-10935
F12	Front Door Speaker RH	
F13	Front Door Tweeter Speaker LH	90980-11013
F14	Front Door Tweeter Speaker RH	
F15	Fuel Pump and Sender	90980-11077
F16	Fuel Sender (Sub)	90980-11140
G 1	Glove Box Light	90980-11098
H 1	Headlight Beam Level Control Actuator LH	90980-11016
H 2	Headlight Beam Level Control Actuator RH	
H 3	Headlight Cleaner Control Relay	90980-10939
H 4	Headlight Cleaner Motor	90980-11410
H 5	Headlight LH (High)	90980-11659
H 6	Headlight LH (Low)	90980-11660
H 7	Headlight RH (High)	90980-11659
H 8	Headlight RH (Low)	90980-11660
H 9	Heated Oxygen Sensor (Bank 1 Sensor 1)	90980-11028
H10	Heated Oxygen Sensor (Bank 2 Sensor 1)	
H11	Horn LH	90980-10619
H12	Horn RH	
H13	Headlight Beam Level Control SW	90980-10797
H14	Headlight Cleaner SW	90980-11013
H15	Heated Oxygen Sensor (Bank 1 Sensor 2)	90980-11028
H16	High Mounted Stop Light	90980-11148
I 1	Ignition Coil and Igniter No.1	90980-11885
I 2	Ignition Coil and Igniter No.2	
I 3	Ignition Coil and Igniter No.3	
I 4	Ignition Coil and Igniter No.4	
I 5	Ignition Coil and Igniter No.5	
I 6	Ignition Coil and Igniter No.6	
I 7	Injector No.1	90980-11875
I 8	Injector No.2	
I 9	Injector No.3	
I10	Injector No.4	
I11	Injector No.5	
I12	Injector No.6	
I13	Intake Air Temp. Sensor	90980-11163
I14	Ignition Key Cylinder Light	90980-10906
I15	Ignition SW	90980-11615
I16	Interior Light	90980-10935
I17	Interior Light and Radar Sensor	90980-11909
J 1	Junction Connector	90980-11542
J 2	Junction Connector	90980-11661
J 3	Junction Connector	
J 4	Junction Connector	90980-10803
J 5	Junction Connector	90980-10976
J 6	Junction Connector	-
J 7	Junction Connector	
J 8	Junction Connector	
J 9	Junction Connector	
J10	Junction Connector	
J11	Junction Connector	
J12	Junction Connector	
J13	Junction Connector	90980-11542
J14	Junction Connector	
J15	Junction Connector	
J16	Junction Connector	
J17	Junction Connector	90980-10976

Note : Not all of the above part numbers of the connector are established for the supply. In case of ordering a connector or terminal with wire, please confirm in advance if there is supply for it using "Parts Catalog News" (published by Parts Engineering Administration Dept.).

Nota : Toutes les références du connecteur ne sont pas définies pour la fourniture. Pour passer une commande d'un connecteur ou d'une borne avec fil, prière de vérifier préalablement si cette pièce est bien disponible en se reportant à "Parts Catalog News" (publié par le Département de la Gestion de l'Ingénierie).

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M PART NUMBER OF CONNECTORS

Code	Part Name	Part Number
K 1	Knock Sensor 1	90980-11166
K 2	Knock Sensor 2	
K 3	Kick Down SW	90980-11156
L 1	License Plate Light LH	90980-11148
L 2	License Plate Light RH	
L 3	Light Failure Sensor	90980-10803
L 4	Luggage Compartment Door Courtesy SW and Opener Motor	90980-10825
L 5	Luggage Compartment Door Key Unlock SW	90980-11368
L 6	Luggage Compartment Door Opener Relay	90980-10171
L 7	Luggage Compartment Light	90980-11148
M 1	Multi-Display	90980-11877
M 2	Moon Roof Control ECU	90980-10801
M 3	Moon Roof Control SW and Personal Light	90980-10367
N 1	Neutral Start SW	90980-11784
N 2	Noise Filter (Ignition)	90980-10843
N 3	Navigation ECU	90980-11915
N 4	Navigation ECU	90980-11913
N 5	Navigation ECU	90980-10803
N 6	Navigation ECU	90980-11535
N 7	Noise Filter (Rear Window Defogger)	90980-11259
N 8	Noise Filter (Stop Light)	90980-10825
P 1	Power Steering Oil Pressure SW	90980-11428
P 2	Parking Brake SW	90980-10871
P 3	Personal Light	90980-10935
P 4	Power Window Control SW Front LH	90980-10797
P 5	Power Window Control SW Front RH	
P 6	Power Window Control SW Rear LH	
P 7	Power Window Control SW Rear RH	
P 8	Power Window Master SW	90980-11469
P 9	Power Window Motor Front LH (LHD)	90980-11011
	Power Window Motor Front LH (RHD)	90980-10860
P10	Power Window Motor Front RH (LHD)	
	Power Window Motor Front RH (RHD)	90980-11011
P11	Power Window Motor Rear LH	90980-10860
P12	Power Window Motor Rear RH	
P13	Pretensioner LH	90980-11862
P14	Pretensioner RH	
P15	Power Seat Control SW	90980-10997
P16	Power Seat Motor (Driver's Seat Front Vertical Control)	90980-10825
P17	Power Seat Motor (Driver's Seat Rear Vertical Control)	
P18	Power Seat Motor (Driver's Seat Reclining Control)	90980-10825
P19	Power Seat Motor (Driver's Seat Slide Control)	
R 1	Radiator Fan Motor	90980-10928
R 2	Radio and Player	90980-11909
R 3	Radio and Player	90980-10803
R 4	Radio and Player	90980-10996
R 5	Radio and Player	90980-10997
R 6	Radio and Player	90980-11913
R 7	Rear Fog Light SW	90980-11533
R 8	Remote Control Receiver	90980-11909
R 9	Rheostat	90980-10214
R10	Rear Combination Light LH	90980-11587
R11	Rear Combination Light RH	
R12	Rear Fog Light LH	90980-10795
R13	Rear Fog Light RH	
R14	Rear Speaker LH	90980-11060
R15	Rear Speaker RH	
R16	Remote Control Mirror LH	90980-11532
R17	Remote Control Mirror RH	
R18	Remote Control Mirror SW	90980-11450
S 1	Speed Sensor (Combination Meter)	90980-11143
S 2	Speed Sensor (Transmission Input)	90980-11156
S 3	Speed Sensor (Transmission Output)	
S 4	Starter	90980-11400
S 5	Starter	90980-09506
S 6	Seat Heater SW (Driver's Seat)	90980-10797
S 7	Seat Heater SW (Passenger's Seat)	
S 8	Shift Lock Control ECU	90980-11581
S 9	Stereo Component Amplifier	90980-10848
S10	Stereo Component Amplifier	90980-11913
S11	Stop Light SW	90980-11118
S12	Seat Heater (Driver's Seat)	90980-10905
S13	Seat Heater (Passenger's Seat)	
S14	Side Airbag Sensor LH	90980-11857
S15	Side Airbag Sensor RH	
S16	Side Airbag Squib LH	90980-11864
S17	Side Airbag Squib RH	
T 1	Throttle Control Motor	90980-10942
T 2	Throttle Position Sensor	90980-10711
T 3	Telephone Microphone	90980-11369
T 4	Theft Deterrent ECU	90980-11392
T 5	Theft Deterrent ECU	90980-11424
T 6	Traction Cut SW (A/T)	90980-11013
	Traction Cut SW and Snow SW (M/T)	90980-10933
T 7	Transponder Key Amplifier (LHD)	90980-10789
	Transponder Key Amplifier (RHD)	90980-10933
T 8	Telephone Transceiver and Speaker Relay	90980-10799
T 9	Telephone Transceiver and Speaker Relay	90980-10798
T10	Theft Warning Siren	90980-10942
U 1	Unlock Warning SW and Key Interlock Solenoid	90980-10795
V 1	Vacuum Sensor	90980-10845
V 2	VSV (ACIS)	90980-11149
V 3	VSV (EVAP)	90980-11156
V 4	Vanity Light LH	90980-10621
V 5	Vanity Light RH	
W 1	Washer Motor	90980-10981
W 2	Water Temp. Sensor	90980-10737
W 3	Water Temp. SW	90980-11235
W 4	Wireless Door Lock ECU	90980-11909
W 5	Woofer Speaker LH	90980-11012
W 6	Woofer Speaker RH	

Note : Not all of the above part numbers of the connector are established for the supply. In case of ordering a connector or terminal with wire, please confirm in advance if there is supply for it using "Parts Catalog News" (published by Parts Engineering Administration Dept.).

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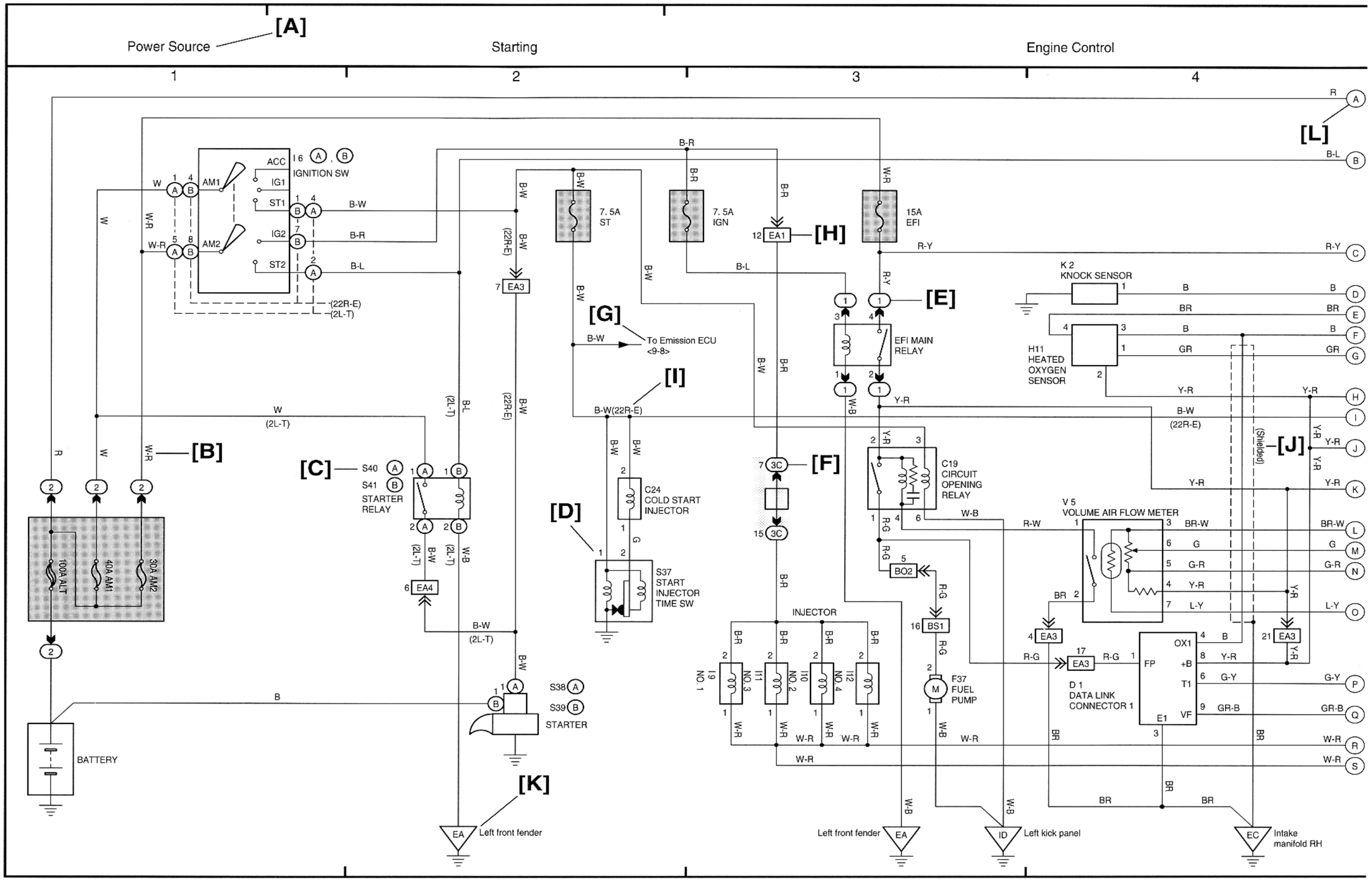
HOW TO READ THIS SECTION

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



[A] : System Title

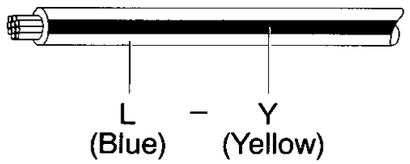
[B] : Indicates the wiring color.

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.

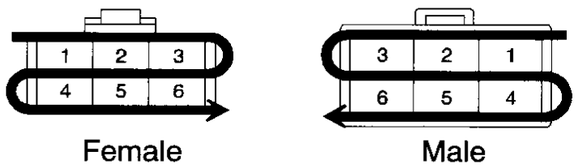
Example: L – Y



[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



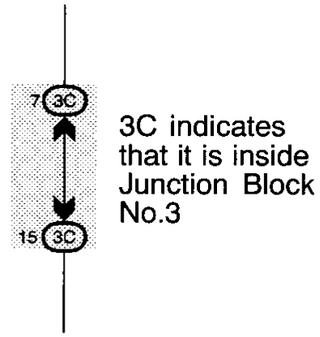
The numbering system for the overall wiring diagram is the same as above.

[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: (1) Indicates Relay Block No.1

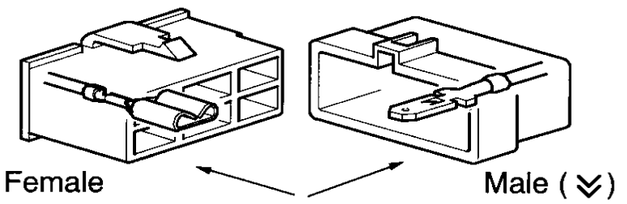
[F] : Junction Block (The number in the circle is the J/B No. and the connector code is shown beside it).
Junction Blocks are shaded to clearly separate them from other parts.

Example:



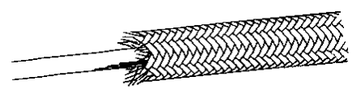
[G] : Indicates related system.

[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 occuring on the next page indicates that the wire harness is continuous.

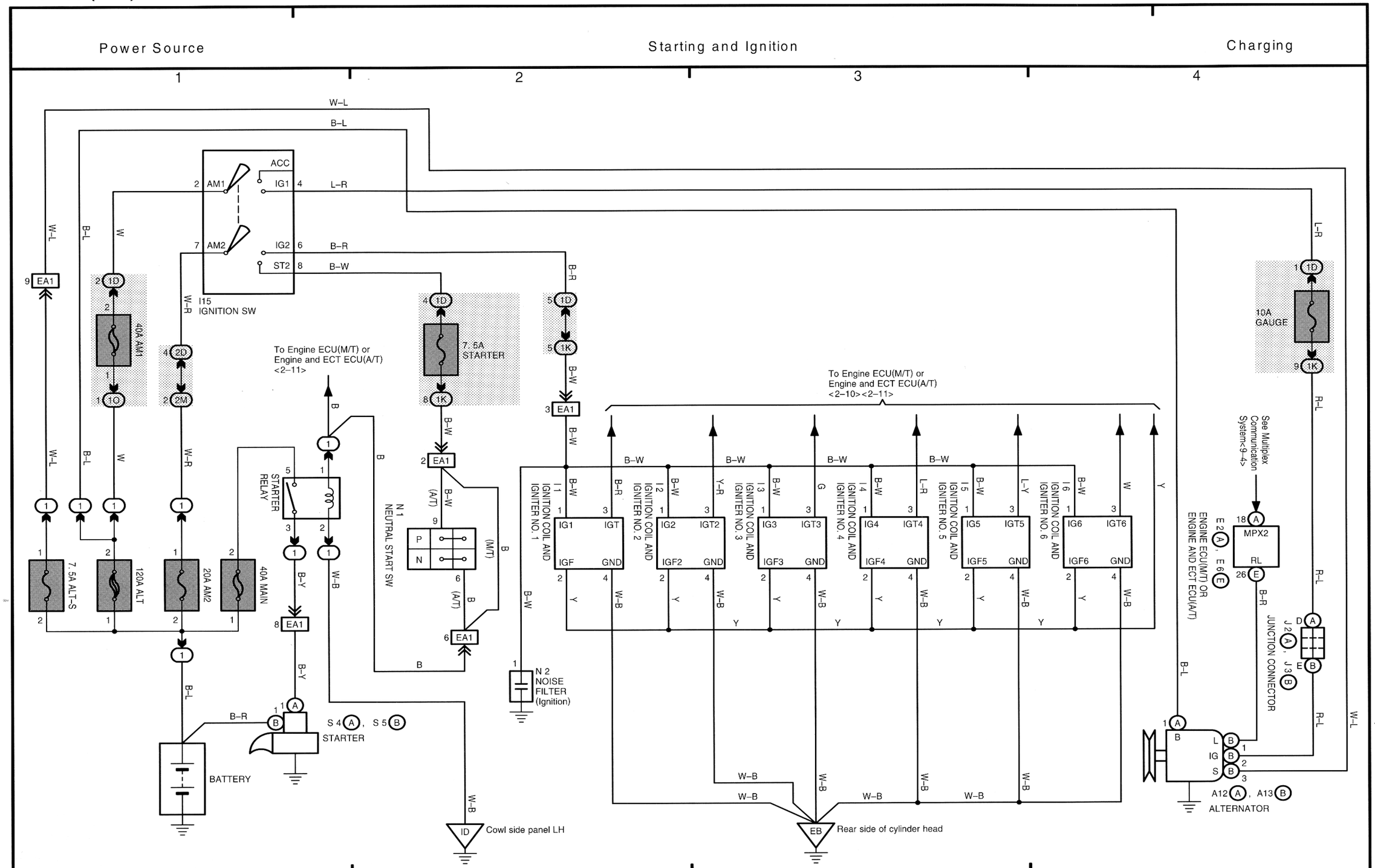
SYSTEM INDEX (LHD)

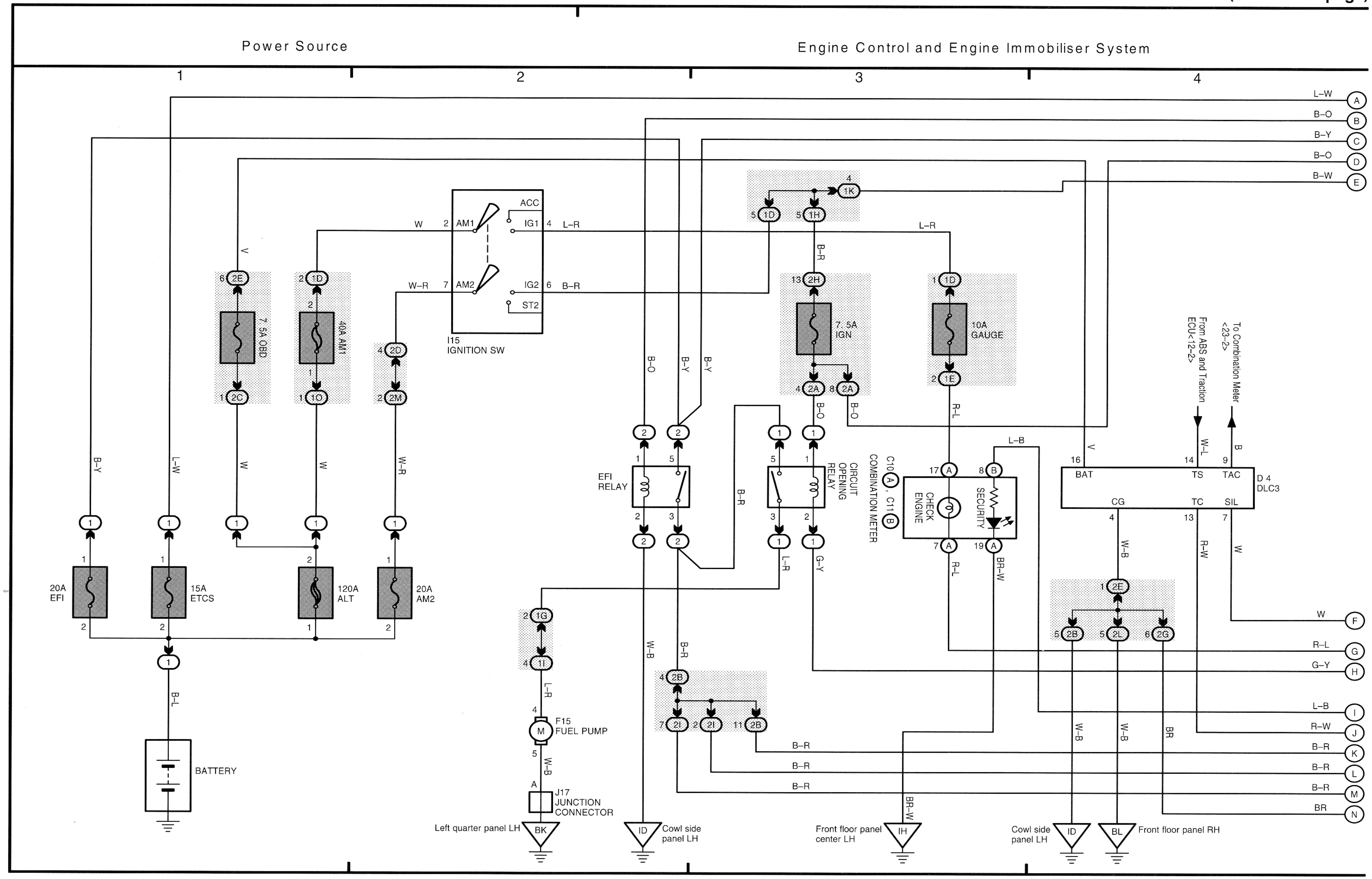
SYSTEMS	LOCATION
ABS and Traction Control	12–1
Automatic Air Conditioner	25–2
Back–Up Light	5–4
Cellular Mobile Telephone	17–1
Charging	1–4
Cigarette Lighter	19–2
Clock	19–4
Combination Meter	23–2
Cruise Control	11–2
ECT and A/T Indicator	10–2
Engine Control and Engine Immobiliser System	2–2
Front Fog Light	4–4
Front Window Deicer	18–1
Headlight (w/ Daytime Running Light)	3–2
Headlight (w/o Daytime Running Light)	4–1
Headlight Beam Level Control	8–3
Headlight Cleaner	8–4
Horn	14–4
Illumination	6–1
LEXUS Navigation System	20–2
Moon Roof	15–1
Multiplex Communication System	9–3
Power Seat	16–2
Power Source	1~25–1
Radiator Fan and Condenser Fan	24–2
Radio and Player (6 Speaker)	21–2
Radio and Player (8 Speaker)	22–1
Rear Fog Light	8–2
Rear Window Defogger and Mirror Heater	18–2
Remote Control Mirror	15–2
Seat Heater	16–3
Shift Lock	18–4
SRS	13–1
Starting and Ignition	1–2
Taillight and Stop Light	5–1
Turn Signal and Hazard Warning Light	7–2
Wiper and Washer	14–1

SYSTEM INDEX (RHD)

SYSTEMS	LOCATION
ABS and Traction Control	37–1
Automatic Air Conditioner	50–2
Automatic Light Control	34–1
Back–Up Light	29–4
Cellular Mobile Telephone	42–1
Charging	26–4
Cigarette Lighter	44–2
Clock	44–4
Combination Meter	48–2
Cruise Control	36–2
Double Locking	51–2
ECT and A/T Indicator	35–2
Engine Control and Engine Immobiliser System	27–2
Front Fog Light	28–4
Front Window Deicer	43–1
Headlight	28–1
Headlight Beam Level Control	32–3
Headlight Cleaner	32–4
Horn	39–4
Illumination	30–1
LEXUS Navigation System	45–2
Moon Roof	40–1
Multiplex Communication System	33–3
Power Seat	41–2
Power Source	26~51–1
Radiator Fan and Condenser Fan	49–2
Radio and Player (6 Speaker)	46–2
Radio and Player (8 Speaker)	47–1
Rear Fog Light	32–2
Rear Window Defogger and Mirror Heater	43–2
Remote Control Mirror	40–2
Seat Heater	41–3
Shift Lock	43–4
SRS	38–1
Starting and Ignition	26–2
Taillight and Stop Light	29–1
Theft Deterrent	34–2
Turn Signal and Hazard Warning Light	31–2
Wiper and Washer	39–1

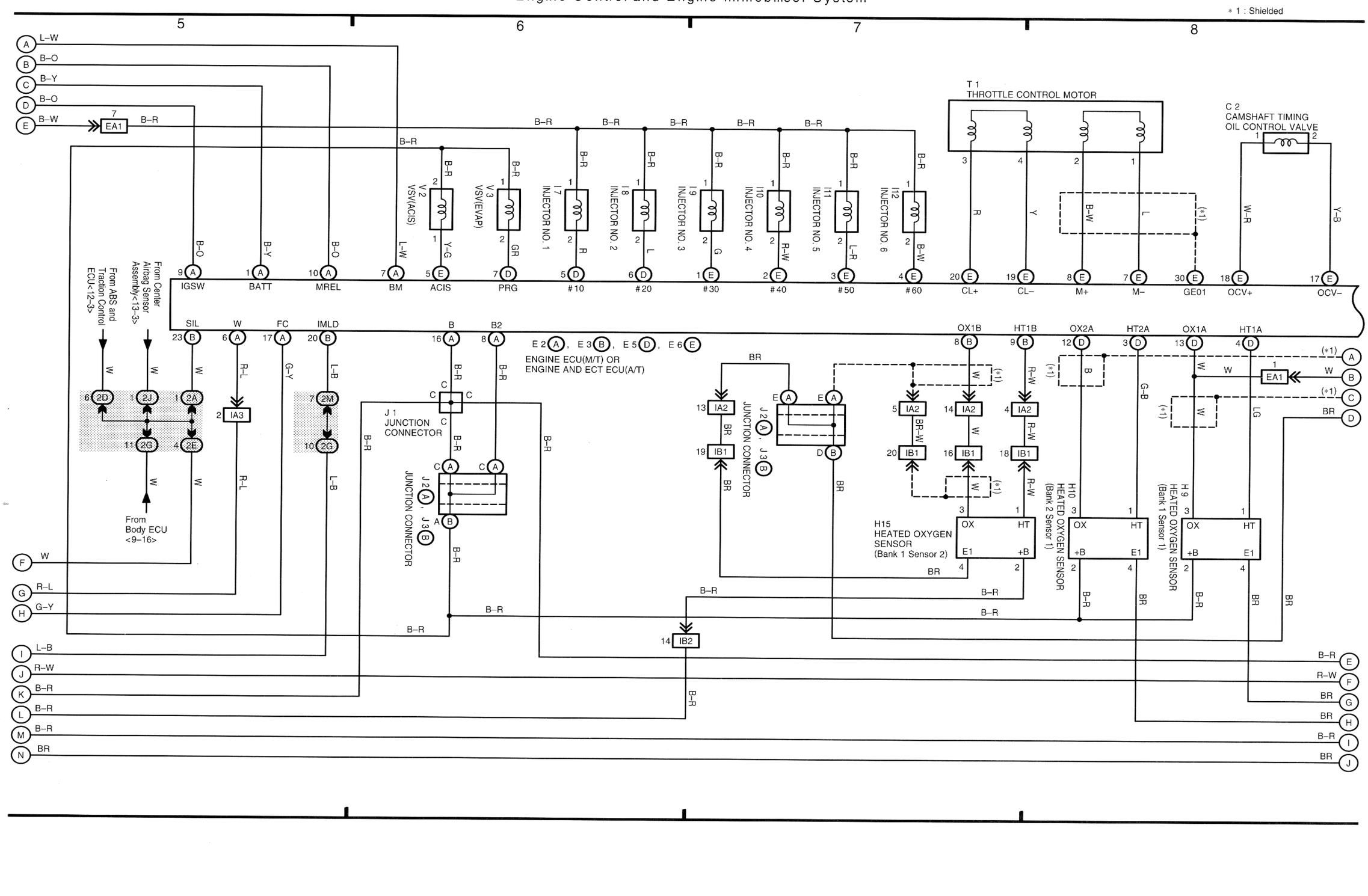
1 IS 200 (LHD) ELECTRICAL WIRING DIAGRAM




Power Source
Engine Control and Engine Immobiliser System
1
2
3
4
ACC
AM1
IG1
AM2
IG2
ST2
I15
IGNITION SW
7.5A OBD
40A AM1
20A EFI
15A ETCS
120A ALT
20A AM2
BATTERY
EFI RELAY
CIRCUIT OPENING RELAY
7.5A IGN
10A GAUGE
C10 A, C11 B
COMBINATION METER
CHECK ENGINE
SECURITY
BAT
TS
TAC
CG
TC
SIL
D 4
DLC3
From ABS and Traction ECU<12-2>
To Combination Meter <23-2>
F15
FUEL PUMP
J17
JUNCTION CONNECTOR
Left quarter panel LH
Cowl side panel LH
Front floor panel center LH
Cowl side panel LH
Front floor panel RH
L-W
B-O
B-Y
B-O
B-W
W
R-L
G-Y
L-B
R-W
B-R
B-R
B-R
BR

(Cont. next page)

Engine Control and Engine Immobiliser System



Engine Control and Engine Immobiliser System

* 1 : Shielded

9 10 11 12

BR BR BR BR

I13 INTAKE AIR TEMP. SENSOR

W 2 WATER TEMP. SENSOR

V 1 VACUUM SENSOR (E2, VC, PIM)

T 2 THROTTLE POSITION SENSOR (E2, VC, VTA1, VTA2)

A 9 ACCEL POSITION SENSOR (E2, VC, VPA1, VPA2)

From Ignition Coil and Igniters<1–2><1–3><1–4>

From Stop Light SW<5–4>

From Neutral Start SW(A/T) or "STARTER" Fuse(M/T) <1–1>

From A/C COMP Relay <25–2>

To Combination Meter <23–2>

From ABS and Traction ECU<12–4>

To ABS and Traction ECU<12–4>

To Combination Meter <23–2>

See Multiplex Communication System<9–4>

To Unlock Warning SW<9–15>

18 D	22 D	14 D	2 D	9 D	23 D	24 D	15 D	16 D	11 E	12 E	13 E	14 E	15 E	16 E	25 E	6 B	2 B	13 B	28 B	13 A	20 A	14 A	21 A	15 A
E2	THA	THW	VC	PIM	VTA	VTA2	VPA	VPA2	IGT	IGT2	IGT3	IGT4	IGT5	IGT6	IGF	STP	STA	ACMG	SPD	TRC+	TRC–	ENG+	ENG–	NEO

12 A	21 B	18 A	24 B	E 2 A, E 3 B, E 5 D, E 6 E																				
TACH	MPX	MPX2	KSW	ENGINE ECU(M/T) OR ENGINE AND ECT ECU(A/T)																				

TC	TXCT	RXCK	CODE	KNK1	KNK2	NE+	NE–	G2	E1	E03	MOL	EC	MOPS	PS	ME01	E01	E02							
5 B	19 B	18 B	14 B	28 E	27 E	23 E	22 E	10 E	17 D	29 E	6 E	22 A	1 D	8 D	9 E	21 E	31 E							

(*1) A W B (*1) C (*1) BR D

J 1 JUNCTION CONNECTOR

C 3 CHECK CONNECTOR (OX1 TC, +B E1 AB)

From Center Airbag Sensor Assembly <13–3>

From ABS and Traction ECU<12–2>

From Navigation ECU<20–2>

T 7 TRANSPONDER KEY AMPLIFIER (TXCT RXCK CODE, +B GND ANT1 ANT2)

TRANSPONDER KEY COIL

J 9 JUNCTION CONNECTOR

K 1 KNOCK SENSOR 1

K 2 KNOCK SENSOR 2

C 4 CRANKSHAFT POSITION SENSOR

C 1 CAMSHAFT POSITION SENSOR

J 4 JUNCTION CONNECTOR

E 8 ENGINE OIL LEVEL SENSOR (OIL TEMP., OIL LEVEL)

E 9 ENGINE OIL PRESSURE SW

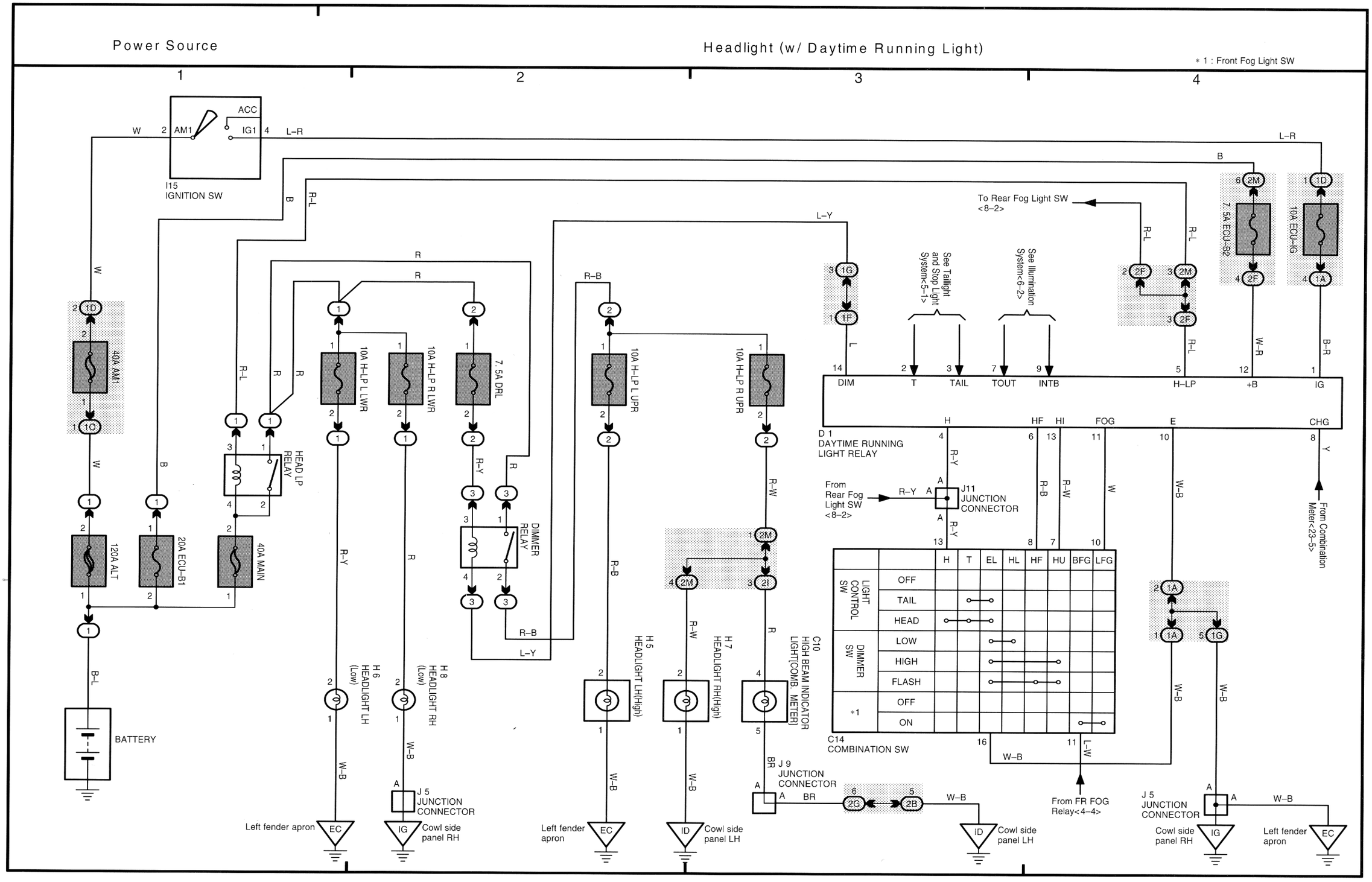
P 1 POWER STEERING OIL PRESSURE SW

EC Left fender apron

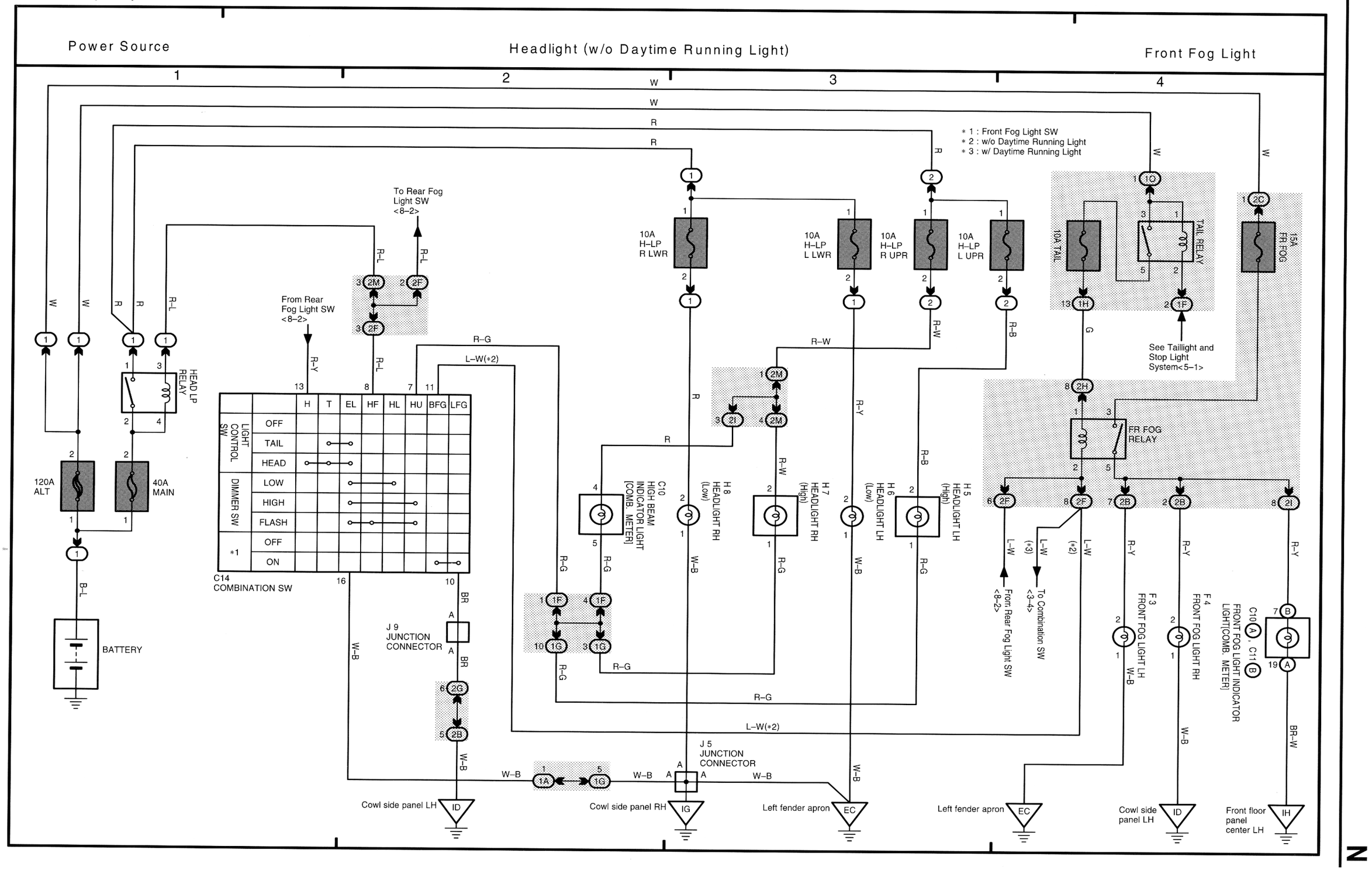
EA Front side of cylinder head

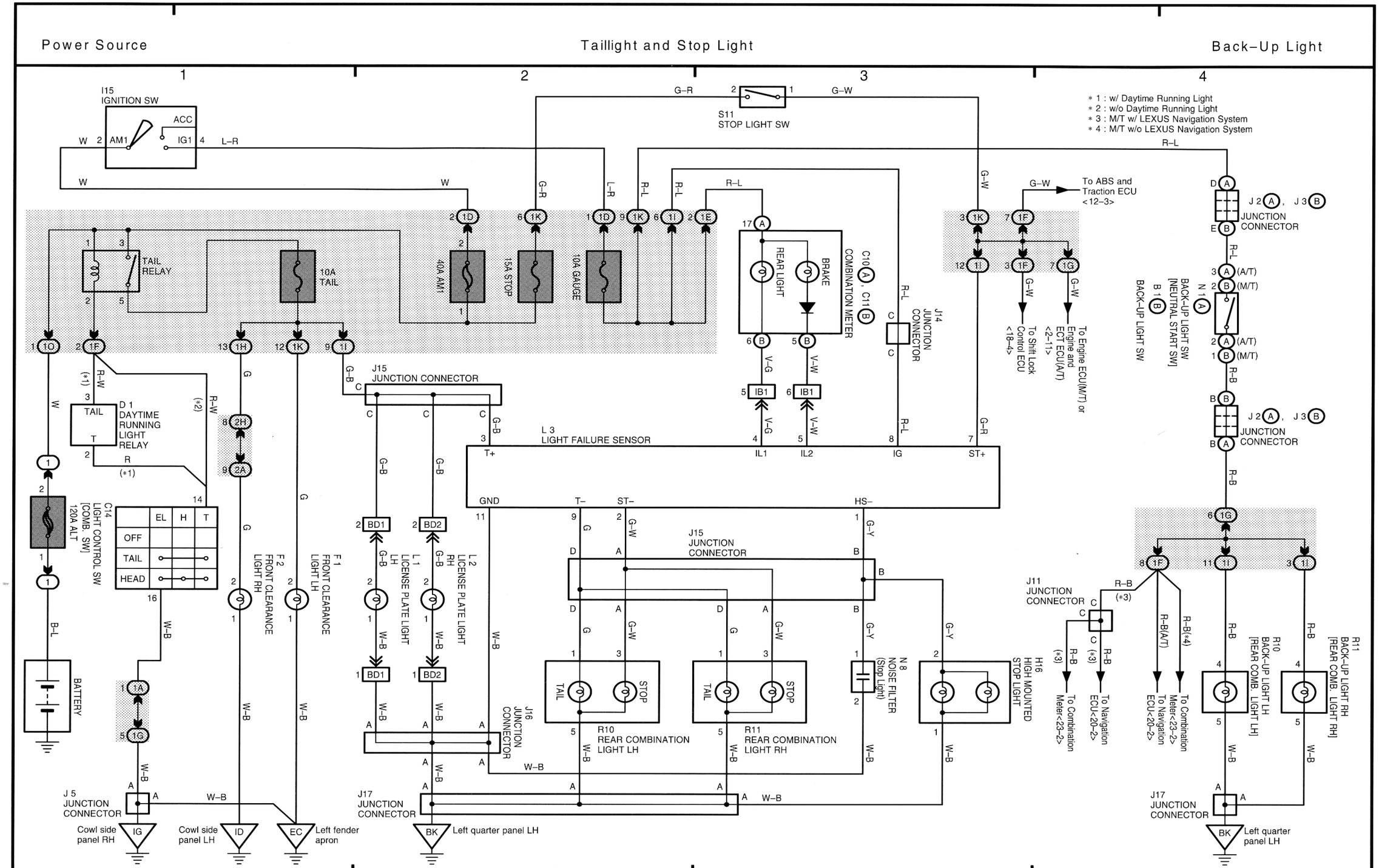
EB Rear side of cylinder head

3 IS 200 (LHD)


Power Source
Headlight (w/ Daytime Running Light)
* 1 : Front Fog Light SW
1
2
3
4
ACC
IG1
AM1
W
L–R
I15
IGNITION SW
B
R–L
R
L–Y
R–B
To Rear Fog Light SW
<8–2>
See Taillight and Stop Light System<5–1>
See Illumination System<6–2>
7. 5A ECU–B2
10A ECU–IG
40A AM1
10A H–LP L LWR
10A H–LP R LWR
7. 5A DRL
10A H–LP L UPR
10A H–LP R UPR
HEAD LP RELAY
DIMMER RELAY
DIM
T
TAIL
TOUT
INTB
H–LP
+B
IG
D 1
DAYTIME RUNNING LIGHT RELAY
H
HF
HI
FOG
E
CHG
R–Y
R–W
W
W–B
Y
From Rear Fog Light SW <8–2>
J11 JUNCTION CONNECTOR
From Combination Meter<23–5>
120A ALT
20A ECU–B1
40A MAIN
B–L
BATTERY
H 6 HEADLIGHT LH (Low)
H 8 HEADLIGHT RH (Low)
H 5 HEADLIGHT LH(High)
H 7 HEADLIGHT RH(High)
C10 HIGH BEAM INDICATOR LIGHT[COMB. METER]
J 9 JUNCTION CONNECTOR
J 5 JUNCTION CONNECTOR
C14 COMBINATION SW
LIGHT CONTROL SW
DIMMER SW
OFF
TAIL
HEAD
LOW
HIGH
FLASH
*1
ON
H
T
EL
HL
HF
HU
BFG
LFG
From FR FOG Relay<4–4>
Left fender apron
Cowl side panel RH
Cowl side panel LH
EC
IG
ID

4 IS 200 (LHD)


Power Source
Headlight (w/o Daytime Running Light)
Front Fog Light
1
2
3
4
＊1 : Front Fog Light SW
＊2 : w/o Daytime Running Light
＊3 : w/ Daytime Running Light
120A ALT
40A MAIN
BATTERY
B-L
HEAD LP RELAY
To Rear Fog Light SW <8–2>
From Rear Fog Light SW <8–2>
C14 COMBINATION SW
LIGHT CONTROL SW
DIMMER SW
OFF
TAIL
HEAD
LOW
HIGH
FLASH
H EL HF HL HU BFG LFG
J 9 JUNCTION CONNECTOR
J 5 JUNCTION CONNECTOR
10A H-LP R LWR
10A H-LP L LWR
10A H-LP R UPR
10A H-LP L UPR
10A TAIL
15A FR FOG
TAIL RELAY
FR FOG RELAY
C10 HIGH BEAM INDICATOR LIGHT [COMB. METER]
H 8 HEADLIGHT RH (Low)
H 7 HEADLIGHT RH (High)
H 6 HEADLIGHT LH (Low)
H 5 HEADLIGHT LH (High)
See Taillight and Stop Light System<5–1>
From Rear Fog Light SW <8–2>
To Combination SW <3–4>
F 3 FRONT FOG LIGHT LH
F 4 FRONT FOG LIGHT RH
C10 , C11 FRONT FOG LIGHT INDICATOR LIGHT[COMB. METER]
Cowl side panel LH
Cowl side panel RH
Left fender apron
Left fender apron
Cowl side panel LH
Front floor panel center LH
W
R
R-L
R-Y
R-G
L-W(＊2)
R-W
R-B
G
L-W
W-B
BR
BR-W


Power Source
Taillight and Stop Light
Back–Up Light
1
2
3
4
I15
IGNITION SW
ACC
AM1
IG1
W
L–R
S11
STOP LIGHT SW
G–R
G–W
* 1 : w/ Daytime Running Light
* 2 : w/o Daytime Running Light
* 3 : M/T w/ LEXUS Navigation System
* 4 : M/T w/o LEXUS Navigation System
R–L
TAIL RELAY
10A TAIL
40A AM1
15A STOP
10A GAUGE
REAR LIGHT
BRAKE
COMBINATION METER
C10 (A), C11 (B)
J14 JUNCTION CONNECTOR
To ABS and Traction ECU <12–3>
J 2 (A), J 3 (B) JUNCTION CONNECTOR
D 1 DAYTIME RUNNING LIGHT RELAY
TAIL
R–W
(*1)
(*2)
G
G–B
J15 JUNCTION CONNECTOR
L 3 LIGHT FAILURE SENSOR
T+
IL1
IL2
IG
ST+
V–G
V–W
To Shift Lock Control ECU <18–4>
To Engine and ECT ECU(A/T) <2–11>
To Engine ECU(M/T) or
BACK–UP LIGHT SW [NEUTRAL START SW]
BACK–UP LIGHT SW
(A/T)
(M/T)
R–B
C14 LIGHT CONTROL SW [COMB. SW] 120A ALT
EL
H
T
OFF
TAIL
HEAD
W–B
BATTERY
B–L
GND
T–
ST–
HS–
J15 JUNCTION CONNECTOR
G–Y
F 2 FRONT CLEARANCE LIGHT RH
F 1 FRONT CLEARANCE LIGHT LH
L 1 LICENSE PLATE LIGHT LH
L 2 LICENSE PLATE LIGHT RH
BD1
BD2
J16 JUNCTION CONNECTOR
R10 REAR COMBINATION LIGHT LH
R11 REAR COMBINATION LIGHT RH
TAIL
STOP
N 8 NOISE FILTER (Stop Light)
H16 HIGH MOUNTED STOP LIGHT
J11 JUNCTION CONNECTOR
R–B (*3)
R–B(A/T)
R–B(*4)
To Navigation ECU<20–2>
To Combination Meter<23–2>
To Combination Meter<23–2>
To Navigation ECU<20–2>
R10 BACK–UP LIGHT LH [REAR COMB. LIGHT LH]
R11 BACK–UP LIGHT RH [REAR COMB. LIGHT RH]
J 5 JUNCTION CONNECTOR
J17 JUNCTION CONNECTOR
Cowl side panel RH
Cowl side panel LH
Left fender apron
Left quarter panel LH
IG
ID
EC
BK

Power Source

Illumination

＊1 : A/T
＊2 : M/T
＊3 : 8 Speaker
＊4 : 6 Speaker
＊5 : w/ LEXUS Navigation System
＊6 : w/ Daytime Running Light
＊7 : w/o Daytime Running Light

1 2 3 4

IH2 4
G (＊1 ＊5)
G–O(＊6)
G(＊7)
G(＊1 ＊5)
INTB 9
TOUT 7
D 1 DAYTIME RUNNING LIGHT RELAY
G(＊6)
J11 JUNCTION CONNECTOR
5 1E 5 1F
7.5A PANEL
TAIL RELAY
3 1 5 2
1 1O 2 1F
W
See Taillight and Stop Light System <5–1>
R 8 REMOTE CONTROL RECEIVER
120A ALT
B–L
BATTERY
G(＊2 ＊5)
J 8 JUNCTION CONNECTOR
A19 A/T SHIFT POSITION ILLUMINATION
R 7 REAR FOG LIGHT SW
H13 HEADLIGHT BEAM LEVEL CONTROL SW
H14 HEADLIGHT CLEANER SW
E10 ECT PATTERN SELECT SW
T6 (A), (B) TRACTION CUT SW
S6 SEAT HEATER SW(Driver's Seat)
S7 SEAT HEATER SW(Passenger's Seat)
A30 ASHTRAY ILLUMINATION
C9 CIGARETTE LIGHTER ILLUMINATION
A14 A/C CONTROL ASSEMBLY
G1 GLOVE BOX LIGHT
C10 METER ILLUMINATION(COMB. METER)
R4 (C), R6 (B) RADIO AND PLAYER
R 9 RHEOSTAT
S9 (A), S10 (B) STEREO COMPONENT AMPLIFIER
J 9 JUNCTION CONNECTOR
J 7 JUNCTION CONNECTOR
2G 7 2F 6 5 2B 5 2L
Cowl side panel LH ID
Front floor panel RH BL
N 3 (A), N 6 (D) NAVIGATION ECU
ILL+ 5 D
ILL 2 A
GND2 11 A
GND1 6 D
G–Y
IH1 8
M 1 MULTI-DISPLAY
J13 JUNCTION CONNECTOR
(Shielded)
GND 14 B
GND 12 A
Front floor panel center RH II
Instrument panel center IE
Front floor panel RH BL

Power Source

Turn Signal and Hazard Warning Light

1 2 3 4

W

ACC
2 AM1 IG1 4
I15
IGNITION SW

L–R

W

2 1D
2
40A
AM1
1
1 1O

W

1
1
10A
TURN–HAZ
2

2
120A
ALT
1

1
B–L
BATTERY

1 1D
10A
GAUGE
1
IG

W

1 1K
4
B

FLSH RELAY

E
7
5 1G
W–B

LR
2
7 1K
G–B

LL
3
8 1H
G–Y

4 1E
G–Y

6 1E
G–B

8 1I
G–Y

10 1I
G–B

2 1K
G–B

G–Y

11 2H
6 2A
2 2A
G–Y

To Body ECU
<9–16>
G–W
10 1A

To A/C Control
Assembly<25–7>
G–W
3 1L

8
HAZ

TL TR TB
LH
RH
C14
TURN SIGNAL SW
[COMB. SW]
1 3 2

P–G
7 1A
5
EL

G–Y
6 1A
6
ER

W–B

A
J 7
JUNCTION
CONNECTOR
A

W–B

W–B
7 2F
5 2B

W–B

J 5
JUNCTION
CONNECTOR
W–B A
A

F 7
FRONT TURN
SIGNAL LIGHT LH
2
1
W–B

F 8
FRONT TURN
SIGNAL LIGHT RH
2
1
G–Y
W–B

3 2
RH LH
19
C10
TURN SIGNAL
INDICATOR
LIGHT
[COMB. METER]
BR–W

6
5
R11
REAR TURN SIGNAL LIGHT RH
[REAR COMB. LIGHT RH]
W–B

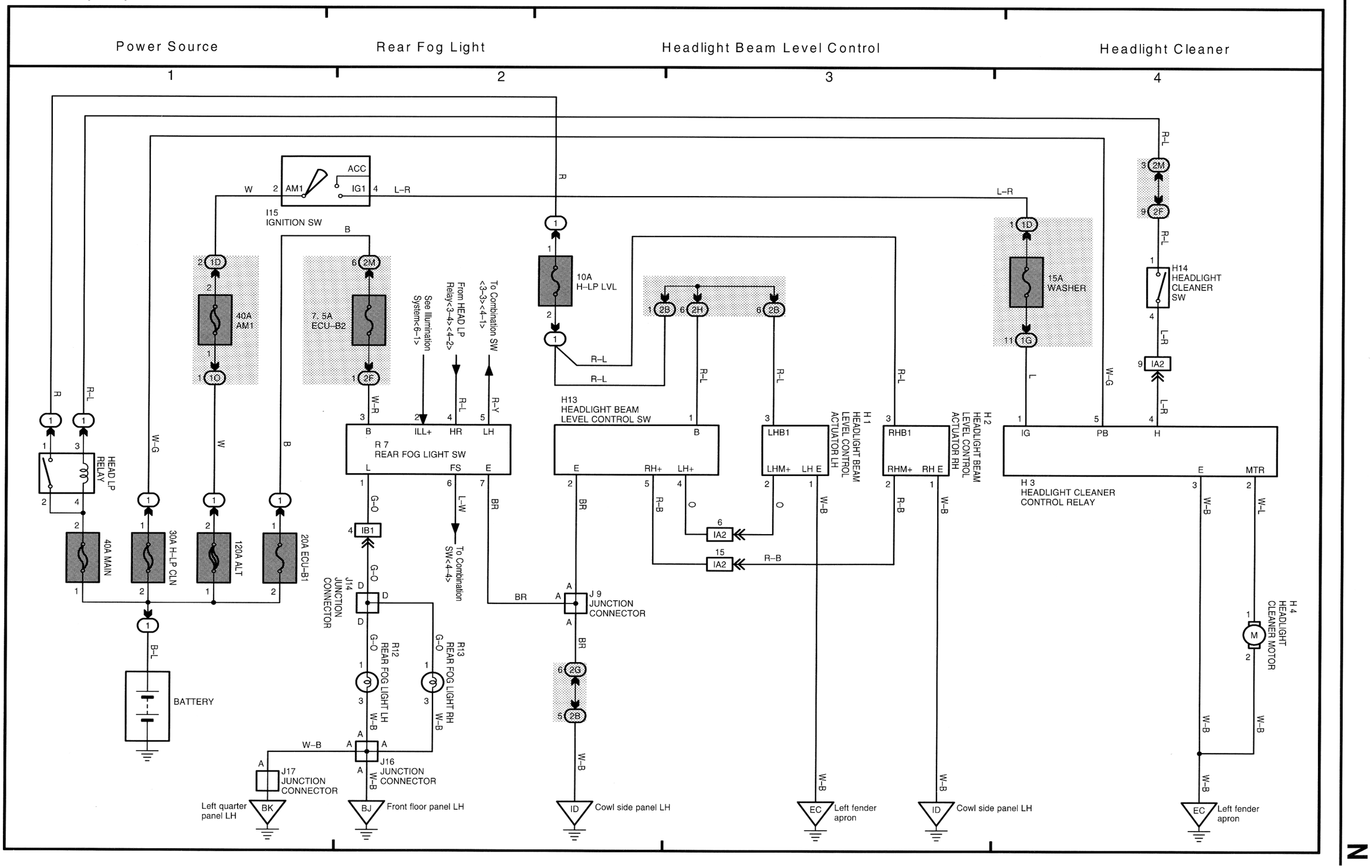
6
5
R10
REAR TURN SIGNAL LIGHT LH
[REAR COMB. LIGHT LH]
W–B

J17
JUNCTION
CONNECTOR
A A

F 5
FRONT SIDE TURN
SIGNAL LIGHT LH
2
1
G–B
W–B

F 6
FRONT SIDE TURN
SIGNAL LIGHT RH
2
1
G–Y
W–B

Left fender apron EC
Cowl side panel RH IG
Left fender apron EC
ID Cowl side panel LH
IH Front floor panel center LH
BK Left quarter panel LH
Left fender apron EC
ID Cowl side panel LH
ID Cowl side panel LH


Power Source
Rear Fog Light
Headlight Beam Level Control
Headlight Cleaner
1
2
3
4
I15
IGNITION SW
ACC
AM1
IG1
W
L–R
B
R
40A
AM1
7. 5A
ECU–B2
10A
H–LP LVL
15A
WASHER
H14
HEADLIGHT
CLEANER
SW
See Illumination
System<6–1>
From HEAD LP
Relay<3–4><4–2>
To Combination SW
<3–3><4–1>
R–L
W–R
R–Y
R 7
REAR FOG LIGHT SW
B
ILL+
HR
LH
L
FS
E
G–O
L–W
To Combination
SW<4–4>
IB1
IA2
H13
HEADLIGHT BEAM
LEVEL CONTROL SW
RH+
LH+
R–B
O
LHB1
LHM+
LH E
W–B
H 1
HEADLIGHT BEAM
LEVEL CONTROL
ACTUATOR LH
RHB1
RHM+
RH E
H 2
HEADLIGHT BEAM
LEVEL CONTROL
ACTUATOR RH
W–G
L
IG
PB
H
H 3
HEADLIGHT CLEANER
CONTROL RELAY
MTR
W–L
H 4
HEADLIGHT
CLEANER MOTOR
HEAD LP
RELAY
40A MAIN
30A H–LP CLN
120A ALT
20A ECU–B1
B–L
BATTERY
J14
JUNCTION
CONNECTOR
R12
REAR FOG LIGHT LH
R13
REAR FOG LIGHT RH
J16
JUNCTION
CONNECTOR
J17
JUNCTION
CONNECTOR
J 9
JUNCTION
CONNECTOR
BR
W–B
Left quarter
panel LH
BK
BJ
Front floor panel LH
ID
Cowl side panel LH
EC
Left fender
apron

(Cont. next page)

Power Source

Multiplex Communication System

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

1 2 3 4

B 6 (A), B 7 (B)
BODY ECU

BSUB 1
TAIL 2 (A)
ACC 4
IG 3
MPX1 7
MPX2 5 (A)

J 8 JUNCTION CONNECTOR
I15 IGNITION SW
D 1 DAYTIME RUNNING LIGHT RELAY
TAIL RELAY
P/W RELAY

20A D FR P/W
20A D DOOR
40A AM1
7. 5A PANEL
10A RADIO NO. 2
10A GAUGE
10A ECU-IG
7. 5A DOME
10A MPX-B
20A D RR P/W
20A P RR P/W
20A P FR P/W

120A ALT
20A ECU-B1
BATTERY

ENGINE ECU(M/T) OR ENGINE AND ECT ECU(A/T) E2 (A), E3 (B)
A/C CONTROL ASSEMBLY A14 (A), A15 (B)
C10 COMBINATION METER

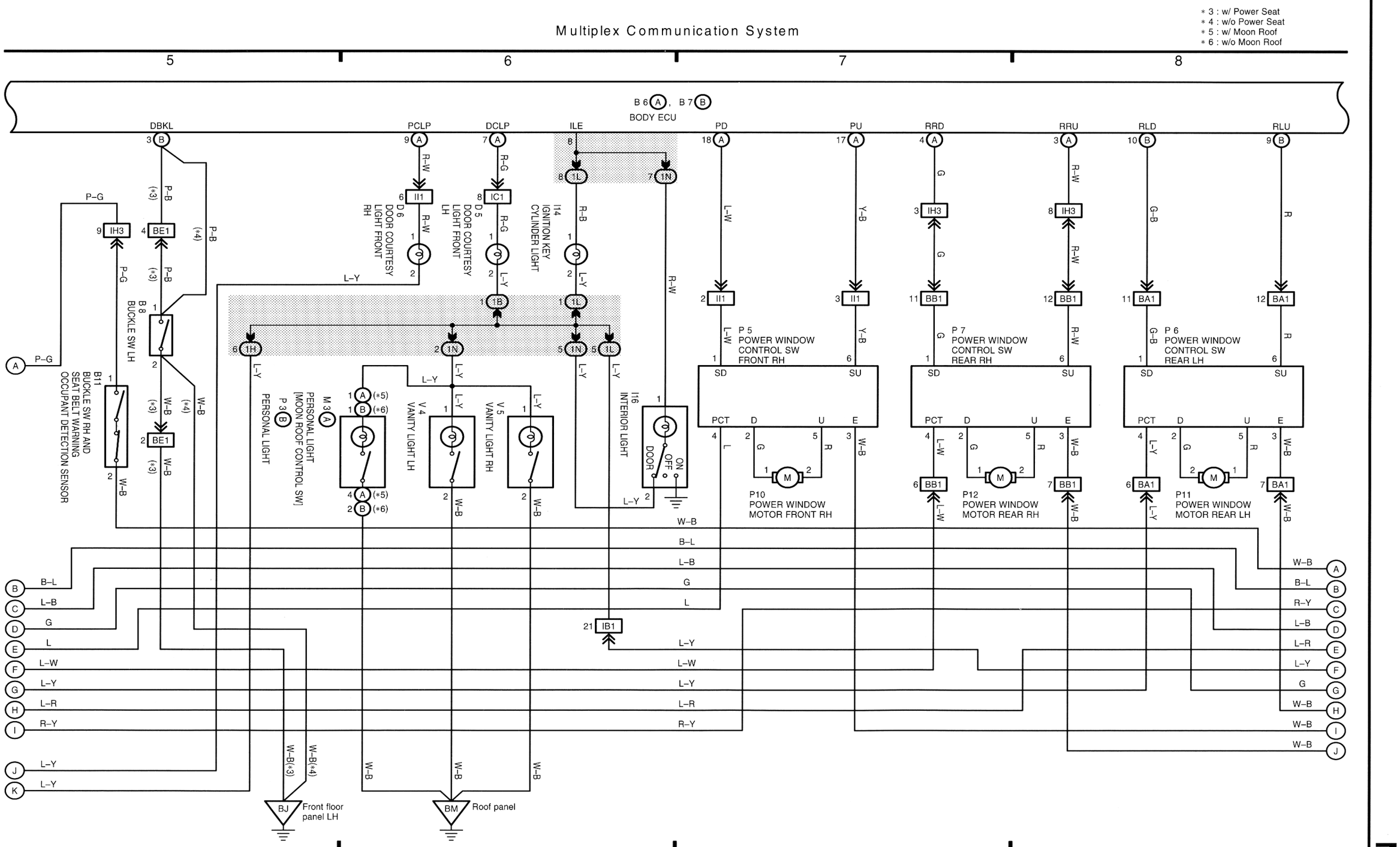
See Taillight and Stop Light System <5-1>

B-L (B)
L-B (C)
G (D)
L (E)
L-W (F)
L-Y (G)
L-R (H)
R-Y (I)
L-Y (J)
L-Y (K)

(Cont. next page)

Multiplex Communication System

* 3 : w/ Power Seat
* 4 : w/o Power Seat
* 5 : w/ Moon Roof
* 6 : w/o Moon Roof



N

(Cont. next page)

Multiplex Communication System

* 3 : w/ Power Seat
* 4 : w/o Power Seat

9 10 11 12

B 6 (A), B 7 (B)
BODY ECU

BECU 2
GND1 12
CTY 11
MPX3 6
ACT+ 9
ACT– 10
LSWP 4 (B)

7 (1H) R–Y
5 (1B) R–Y
7 (1L) W–B
7 (1B) W–B
2 (1B) W–B
6 (1N)
8 (1B) R–G
10 (1B) Y–R
9 (1B) G–Y
3 (1B) R–W
10 (1H) G–Y
9 (1H) R–W
1 (1I)
5 (1I)
13 BC1 L–R

To Moon Roof Control ECU <15–2>
R–G

P 8
POWER WINDOW MASTER SW
5 BDM
9 E
16 DCTY
18 TX

PW 4 B–L
PWR 1 L–B
PWL 2 L–R
D 20 G
U 8 R
LMT 13 W–G
PLS 12 W
SGND 11 BR–W

KL 6 G–R
KUL 15 G–B
LSWD 10 L–R

J13 JUNCTION CONNECTOR
B B B
L–R
10 IH3 L–R
14 BC1 L
5 II1 L–R
8 BA1 L–R

2 (2H) 1 (2H)
2 (2L) 1 (2L) 1 (2K) 2 (2K)
3 BB1 4 BB1 8 BB1
G–Y R–W L–R
3 BA1 4 BA1
G–Y R–W

10 (1L) W–B
5 (1G) W–B

P 9
POWER WINDOW MOTOR FRONT LH
2 1 4 3 5
LIMIT SW
PULSE SENSOR

D11
DOOR LOCK MOTOR, DOOR KEY LOCK AND UNLOCK SW AND DOOR LOCK DETECTION SW FRONT LH
4 3 1 5 6
LOCK
UNLOCK
LOCK DETECTION
2 W–B
D D
J12 JUNCTION CONNECTOR

D16
DOOR LOCK MOTOR AND DOOR LOCK DETECTION SW REAR RH
1 2 4 3
LOCK DETECTION
9 BB1

D14
DOOR LOCK MOTOR AND DOOR LOCK DETECTION SW FRONT RH
1 2 4 3
LOCK DETECTION

D15
DOOR LOCK MOTOR AND DOOR LOCK DETECTION SW REAR LH
3 4 1 2
LOCK DETECTION

A W–B
B B–L
C R–Y
D L–B
E L–R
F L–Y
G G
H W–B
I W–B
J W–B

W–B
L–Y
G

J 5
JUNCTION CONNECTOR
A A W–B
IG Cowl side panel RH
EC Left fender apron

C C C
J13 JUNCTION CONNECTOR
BL Front floor panel RH

9 BA1
J16 JUNCTION CONNECTOR
A A A W–B
J17 JUNCTION CONNECTOR
A A W–B
Left quarter panel LH
BK

Multiplex Communication System

13 14 15 16

B 6 (A), B 7 (B) BODY ECU

PRG 1 (B) R-B
RDA 2 (B) GR-L
TR+ 8 (B) L-R
LCTY 7 (B) R-Y
GND2 19 (A) BR
KSW 6 (A) B-Y
PCTY 8 (A) R-B
DCTY 6 (B) R-G
RCTY 5 (B) R-W
DFG 5 From DEICER Relay or RR DEF Relay <18-2>
HZD 10 (A) G-W From FLSH Relay <7-3>
OBD2 14 (A) W To DLC3 <2-5>
FE 13 (B)
FR 14 (B) See Combination Meter System <23-3>

W 4 WIRELESS DOOR LOCK ECU
PRG 3, RDA 2, GND 1, +B 5
W-B, L-Y

L 6 LUGGAGE COMPARTMENT DOOR OPENER RELAY
1, 4, 3, 2
W-B, G

L 4 LUGGAGE COMPARTMENT DOOR COURTESY SW AND OPENER MOTOR
G-Y, M

J14 JUNCTION CONNECTOR
B B B
R-Y

L 7 LUGGAGE COMPARTMENT LIGHT
2, 1
R-Y, L-Y

J14 JUNCTION CONNECTOR
A A A
L-Y

J9 JUNCTION CONNECTOR
A A
BR

2G, 2I, 2M
B-Y

U 1 UNLOCK WARNING SW
2, 1
BR

From Engine ECU(M/T) or Engine and ECT ECU(A/T) <2-12>

2G, 2K, 2K, 2B, 2L
W-B

IH3 14
R-B

D 8 DOOR COURTESY SW FRONT RH
1

D 7 DOOR COURTESY SW FRONT LH
1

BC1 7
R-L

J13 JUNCTION CONNECTOR
A A A
R-L

BC1 6
R-L

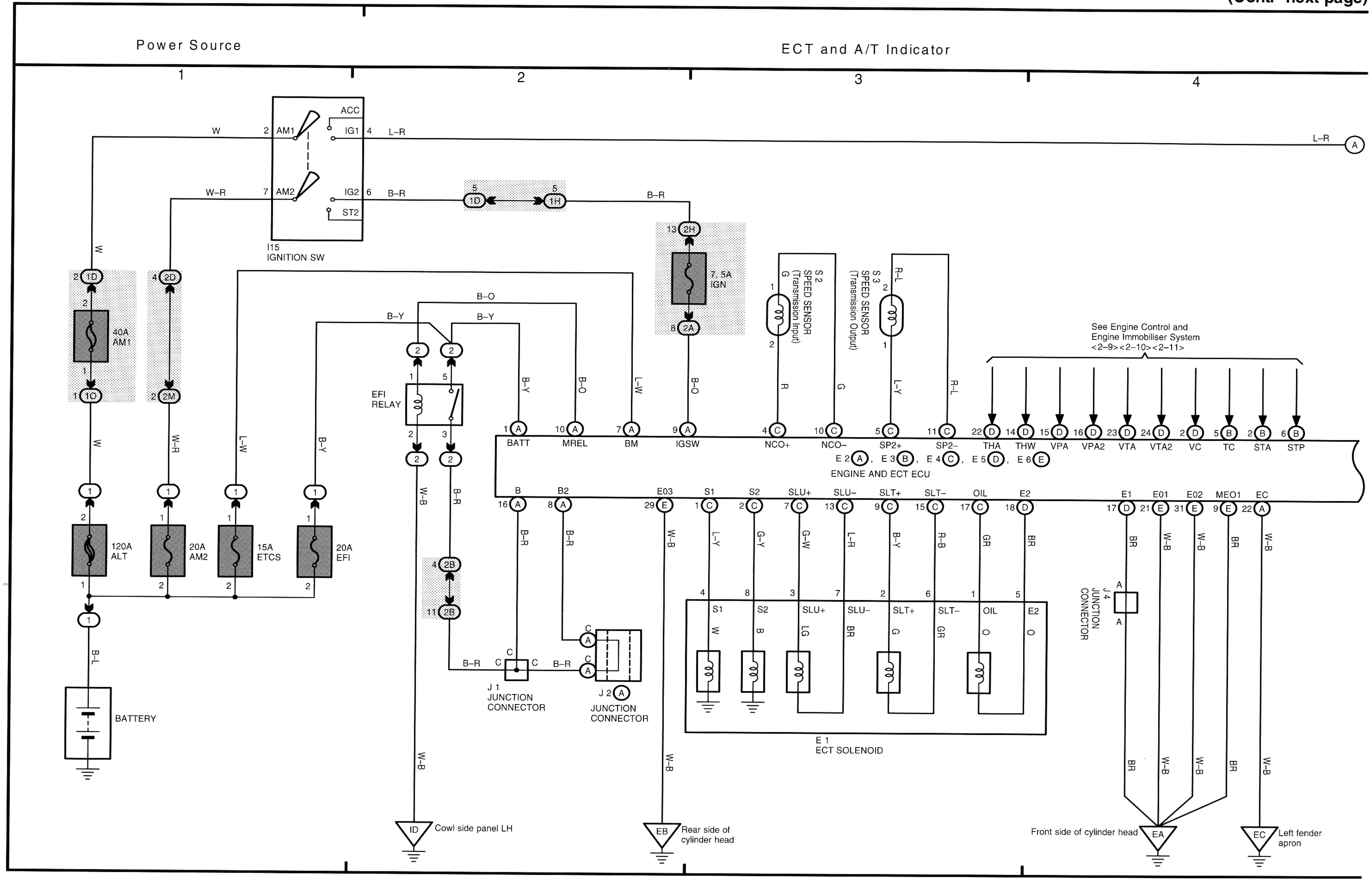
D10 DOOR COURTESY SW REAR RH
1

D 9 DOOR COURTESY SW REAR LH
1

A W-B
B W-B
C L-Y
D G
E W-B
F W-B
G W-B

Cowl side panel LH ID
BL Front floor panel RH
W-B, W-B, W-B

N


Power Source
ECT and A/T Indicator
1
2
3
4
ACC
AM1
IG1
AM2
IG2
ST2
I15
IGNITION SW
40A
AM1
7. 5A
IGN
EFI
RELAY
120A
ALT
20A
AM2
15A
ETCS
20A
EFI
BATTERY
S 2
SPEED SENSOR
(Transmission Input)
S 3
SPEED SENSOR
(Transmission Output)
See Engine Control and
Engine Immobiliser System
<2-9><2-10><2-11>
BATT
MREL
BM
IGSW
NCO+
NCO–
SP2+
SP2–
THA
THW
VPA
VPA2
VTA
VTA2
VC
TC
STA
STP
E 2 (A), E 3 (B), E 4 (C), E 5 (D), E 6 (E)
ENGINE AND ECT ECU
B
B2
E03
S1
S2
SLU+
SLU–
SLT+
SLT–
OIL
E2
E1
E01
E02
MEO1
EC
J 1
JUNCTION
CONNECTOR
J 2 (A)
JUNCTION
CONNECTOR
E 1
ECT SOLENOID
J 4
JUNCTION
CONNECTOR
Cowl side panel LH
Rear side of
cylinder head
Front side of cylinder head
Left fender
apron

10 IS 200 (LHD) (Cont' d)

ECT and A/T Indicator

5 6 7 8

A L–R

L–R

R–L

R–L

3 RB

N 1
A/T INDICATOR LIGHT SW
[NEUTRAL START SW]

PL 1 | RL 2 | NL 5 | DL 7 | 2L 4 | LL 8

J 2 A , J 3 B
JUNCTION CONNECTOR
E B
D A

1 1D
10A GAUGE
9 1K
2 1E

R–L

R–L

R–L

17

G

R–B

G–R

GR

GR–B

3 IA3 GR–B

12 IA2 LG–B

To Shift Lock Control ECU <18–4>

G–W

Y–G

LG–B

GR–B

R–B

J 3 B
JUNCTION CONNECTOR

J 2 A , J 3 B
JUNCTION CONNECTOR

10 D P | 19 D R | 24 E N | 11 B D | 20 D 2 | 21 D L | 26 B 3

E 2 A , E 3 B , E 4 C , E 5 D , E 6 E
ENGINE AND ECT ECU

KD 3 A | MPX2 18 A | MPX 21 B

A14
A/C CONTROL ASSEMBLY
MPX– 1 | PWR 3 | SNOW 8

O

L–W

B–Y

2 | 5

PWR | SNOW

E10
ECT PATTERN SELECT SW

4

W–B

A
J 7
JUNCTION CONNECTOR
A

W–B

7 2F
5 2B | 5 2L

W–B

W–B

Cowl side panel LH ID

BL Front floor panel RH

SNOW | ECT PWR

L 2 3 D N R P

C10
COMBINATION METER

19

BR–W

IH Front floor panel center LH

GR–L

17 IA3

GR–L

22 IB1

GR–L

2 IE1

GR–L

K 3
KICK DOWN SW

1 IE1

W–B

W–B

1

2

GR–L

W–B

A
J16
JUNCTION CONNECTOR
A

W–B

A
J17
JUNCTION CONNECTOR

BK Left quarter panel LH

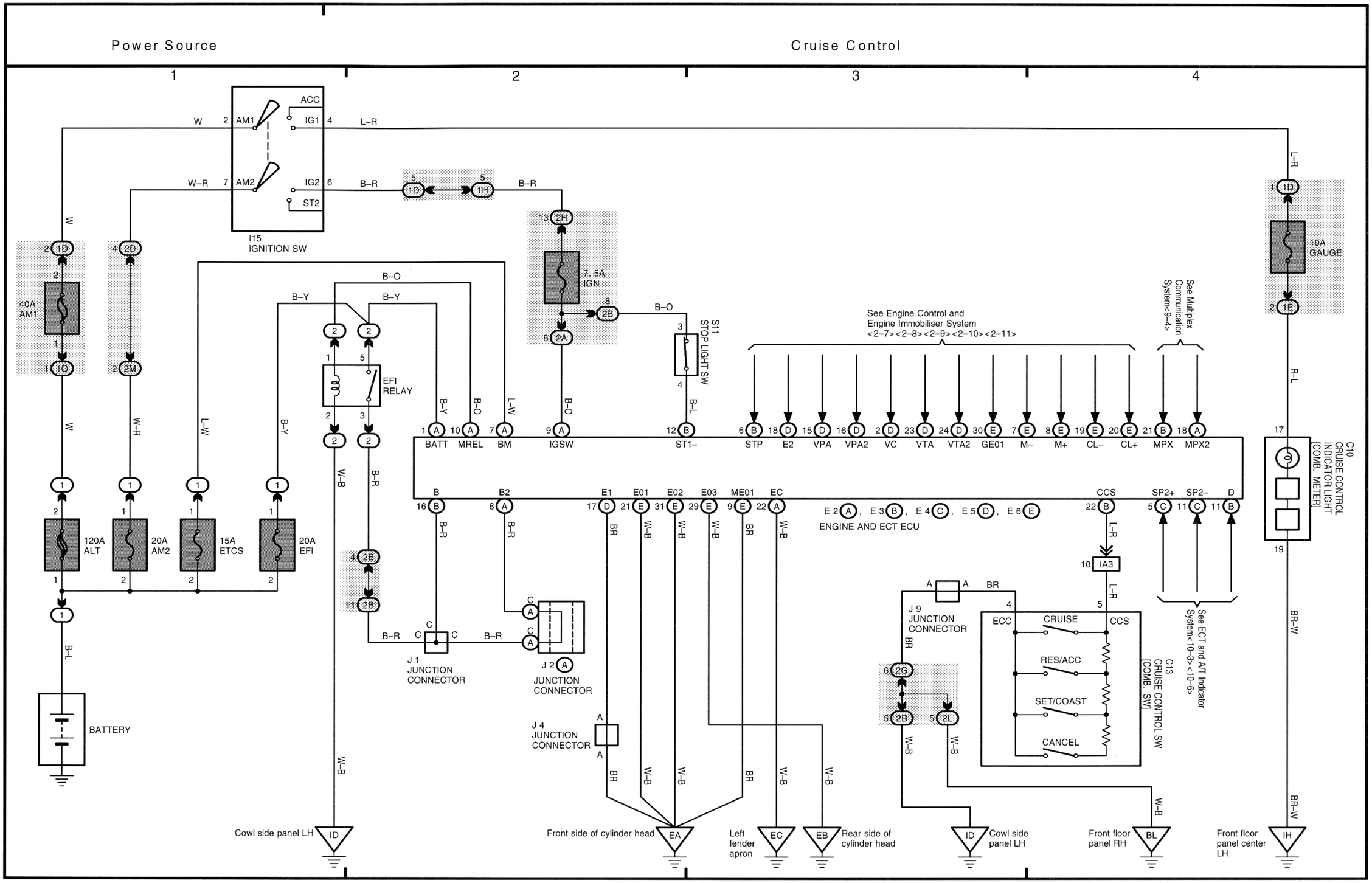
See Multiplex Communication System <9–4>

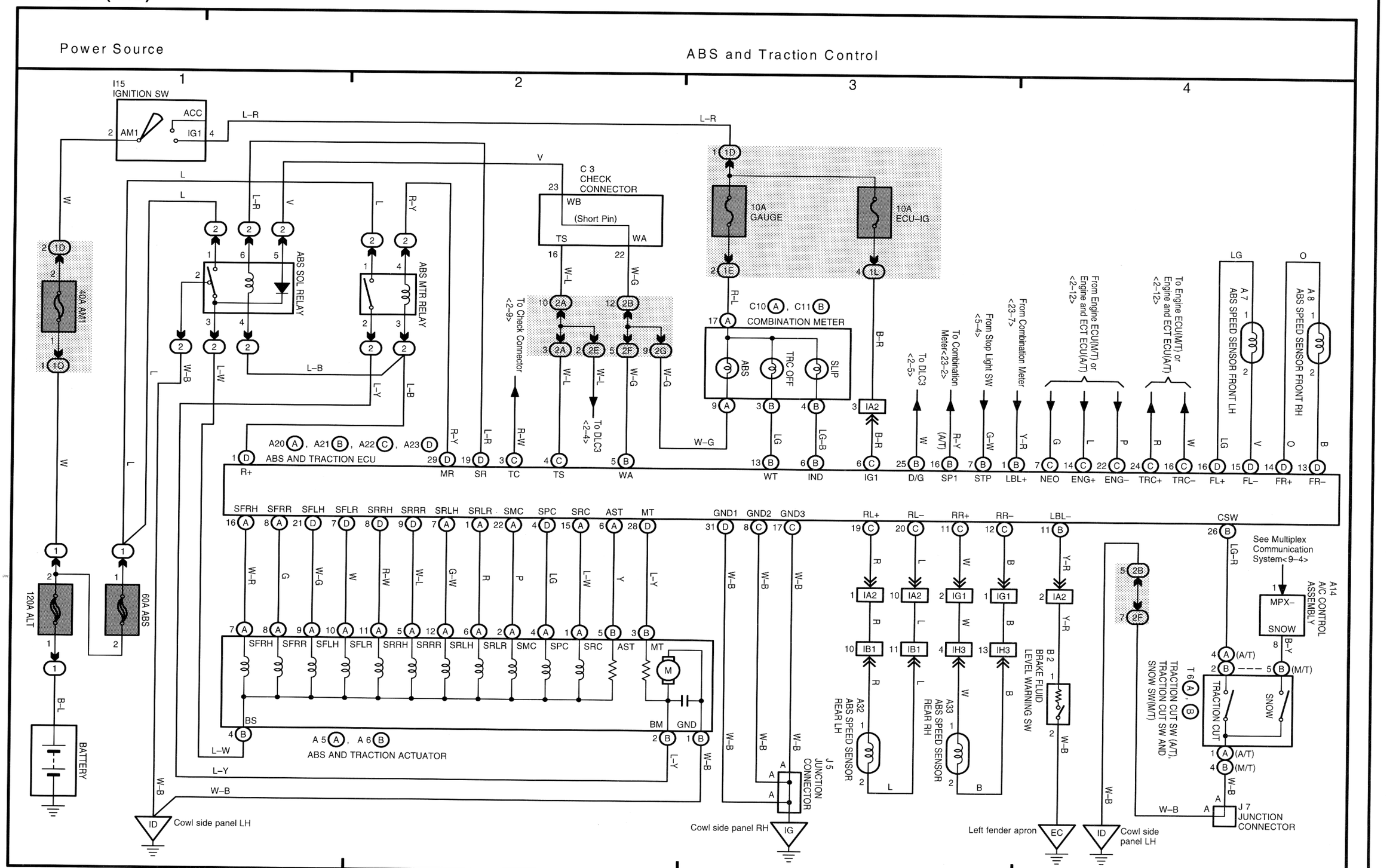
16 IA3

O

O

N


Power Source
Cruise Control
1
2
3
4
ACC
AM1
IG1
AM2
IG2
ST2
I15
IGNITION SW
W
W–R
L–R
B–R
40A AM1
120A ALT
20A AM2
15A ETCS
20A EFI
BATTERY
B–L
W–B
B–Y
B–O
L–W
EFI RELAY
7. 5A IGN
S11 STOP LIGHT SW
B–L
BATT
MREL
BM
IGSW
ST1–
See Engine Control and Engine Immobiliser System <2–7><2–8><2–9><2–10><2–11>
See Multiplex Communication System<9–4>
STP
E2
VPA
VPA2
VC
VTA
VTA2
GE01
M–
M+
CL–
CL+
MPX
MPX2
10A GAUGE
R–L
C10 CRUISE CONTROL INDICATOR LIGHT [COMB. METER]
BR–W
B
B2
E1
E01
E02
E03
ME01
EC
CCS
SP2+
SP2–
D
E 2 (A), E 3 (B), E 4 (C), E 5 (D), E 6 (E)
ENGINE AND ECT ECU
IA3
J 1 JUNCTION CONNECTOR
J 2 JUNCTION CONNECTOR
J 4 JUNCTION CONNECTOR
J 9 JUNCTION CONNECTOR
BR
ECC
CRUISE
RES/ACC
SET/COAST
CANCEL
C13 CRUISE CONTROL SW [COMB. SW]
See ECT and A/T Indicator System<10–3><10–6>
Cowl side panel LH
ID
Front side of cylinder head
EA
Left fender apron
EC
Rear side of cylinder head
EB
Cowl side panel LH
ID
Front floor panel RH
BL
Front floor panel center LH
IH


Power Source
ABS and Traction Control
1
2
3
4
I15
IGNITION SW
ACC
IG1
AM1
L–R
W
V
L
R–Y
C 3
CHECK
CONNECTOR
23
WB
(Short Pin)
TS
WA
16
22
W–L
W–G
10A
GAUGE
10A
ECU–IG
1D
1E
1L
R–L
B–R
C10 (A), C11 (B)
COMBINATION METER
ABS
TRC OFF
SLIP
40A AM1
ABS SOL RELAY
ABS MTR RELAY
W–B
L–W
L–B
L–Y
To Check Connector
<2–9>
To DLC3
<2–4>
A20 (A), A21 (B), A22 (C), A23 (D)
ABS AND TRACTION ECU
R+
MR
SR
TC
TS
WA
R–W
L–R
R–Y
W–G
LG
LG–B
B–R
IA2
To DLC3
<2–5>
To Combination
Meter<23–2>
From Stop Light SW
<5–4>
From Combination Meter
<23–7>
From Engine ECU(M/T) or
Engine and ECT ECU(A/T)
<2–12>
To Engine ECU(M/T) or
Engine and ECT ECU(A/T)
<2–12>
LG
O
A 7
ABS SPEED SENSOR FRONT LH
A 8
ABS SPEED SENSOR FRONT RH
WT
IND
IG1
D/G
SP1
STP
LBL+
NEO
ENG+
ENG–
TRC+
TRC–
FL+
FL–
FR+
FR–
SFRH
SFRR
SFLH
SFLR
SRRH
SRRR
SRLH
SRLR
SMC
SPC
SRC
AST
MT
GND1
GND2
GND3
RL+
RL–
RR+
RR–
LBL–
CSW
See Multiplex
Communication
System<9–4>
W–R
G
W–G
W
R–W
W–L
G–W
R
P
LG
L–W
Y
L–Y
W–B
BS
BM
GND
A 5 (A), A 6 (B)
ABS AND TRACTION ACTUATOR
J 5
JUNCTION
CONNECTOR
A32
ABS SPEED SENSOR
REAR LH
A33
ABS SPEED SENSOR
REAR RH
B 2
BRAKE FLUID
LEVEL WARNING SW
A14
A/C CONTROL
ASSEMBLY
MPX–
SNOW
B–Y
T 6 (A), (B)
TRACTION CUT SW (A/T),
TRACTION CUT SW AND
SNOW SW(M/T)
TRACTION CUT
SNOW
(A/T)
(M/T)
J 7
JUNCTION
CONNECTOR
120A ALT
60A ABS
B–L
BATTERY
ID
Cowl side panel LH
IG
Cowl side panel RH
EC
Left fender apron
ID
Cowl side
panel LH

Power Source

SRS

1 2 3 4

LG–B

ACC 3 R

2 AM1

IG1

7 AM2

IG2 6 B–R

ST2

I15
IGNITION SW

5 1D – 5 1H B–R

LG–B

W

W–R

3 2G 7. 5A SRS–B 1 2C

2 1D 2J 40A AM1 1 1O

4 2D 2 2M

W

W

W–R

1 120A ALT 2

1 20A AM2 2

1 B–L

BATTERY

13 2H 7. 5A IGN 3 2J B–O

6 1D 10A SRS–ACC 2 1J GR–L

16 C10 SRS WARNING LIGHT [COMB. METER] 8 B–Y

2 2G I1 2A B–Y

2 2J B–Y

R

LG–B

B–Y

R–W

W

To Check Connector <2–9>

To DLC3 <2–5>

P13 PRETENSIONER LH 1 2 Y–B Y

P14 PRETENSIONER RH 1 2 Y–B Y

C 5 (A), C 6 (B), C 7 (C)
CENTER AIRBAG SENSOR ASSEMBLY

5 B IG2 | 6 B ACC | 3 B LA | 19 B TC | 12 B SIL | 2 A PL+ | 1 A PL– | 5 C PR+ | 6 C PR–

E2 28 B W–B | +SL 15 B W–R | –SL 26 B BR | +SR 9 B B–W | –SR 20 B BR–W | VUPL 7 A P–L | SSL 9 A L–W | FSL 10 A LG | ESL 12 A GR–L | VUPR 12 C P | SSR 10 C L–Y | FSR 9 C LG | ESR 7 C GR | E1 27 B W–B | D+ 14 B Y–B | D– 13 B Y | P+ 10 B Y–R | P– 11 B Y–G | SFL+ 5 A Y–R | SFL– 6 A Y–G | SFR+ 2 C Y–R | SFR– 1 C Y–G

4 2J 5 2B W–B

5 2L W–B

4 IA1 W–R 2 | 3 IA1 BR 1

2 IA1 B–W 2 | 1 IA1 BR–W 1

A10 AIRBAG SENSOR FRONT LH

A11 AIRBAG SENSOR FRONT RH

1 VUPL | 2 SSL | 3 FSL | 4 ESL
S14 SIDE AIRBAG SENSOR LH

1 VUPR | 2 SSR | 3 FSR | 4 ESR
S15 SIDE AIRBAG SENSOR RH

3 1J 5 1G W–B

SPIRAL CABLE 1 2
A28 AIRBAG SQUIB (Steering Wheel Pad)

1 2
A27 AIRBAG SQUIB (Front Passenger Airbag Assembly)

1 2
S16 SIDE AIRBAG SQUIB LH

1 2
S17 SIDE AIRBAG SQUIB RH

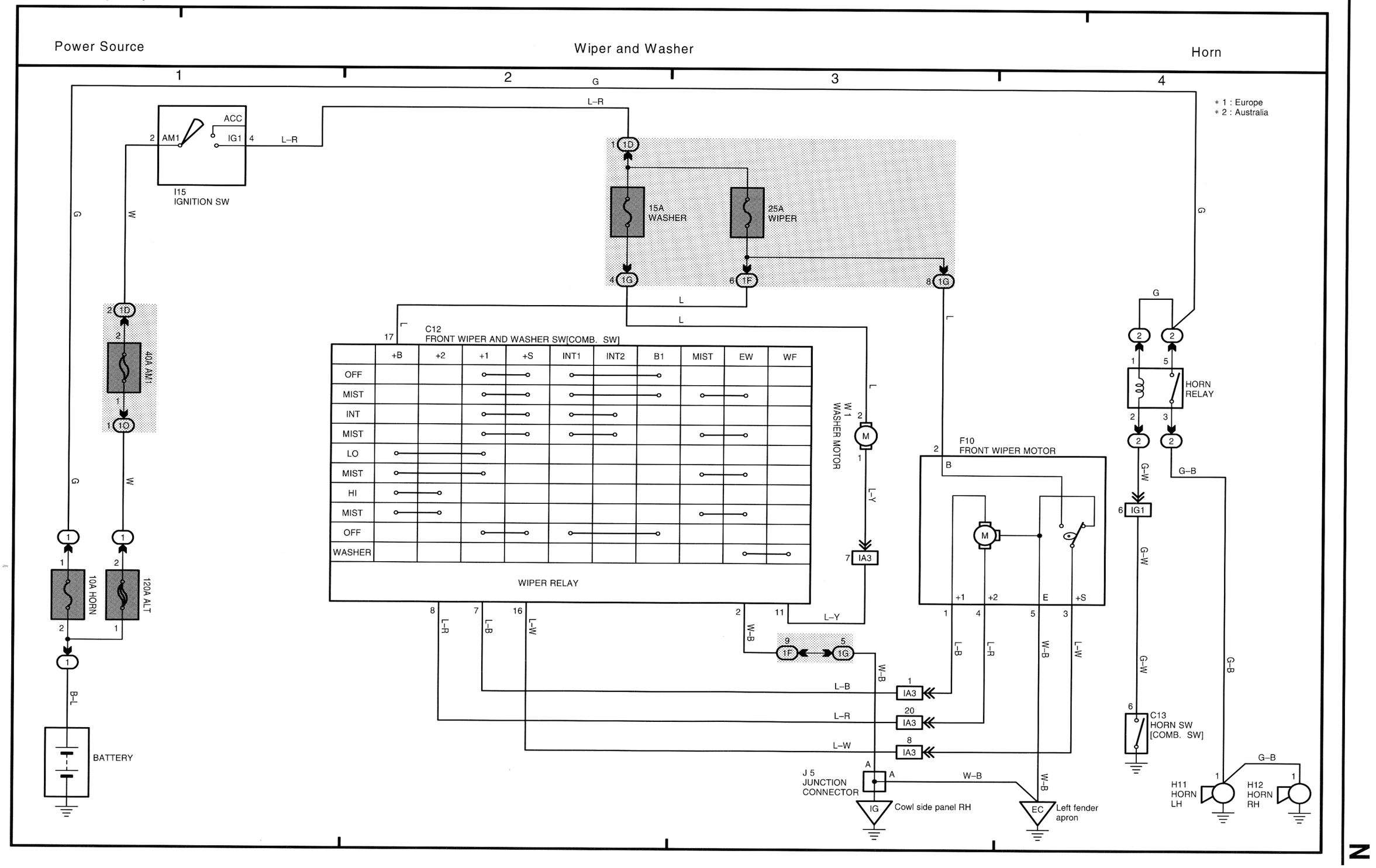
A
W–B A J 5 JUNCTION CONNECTOR

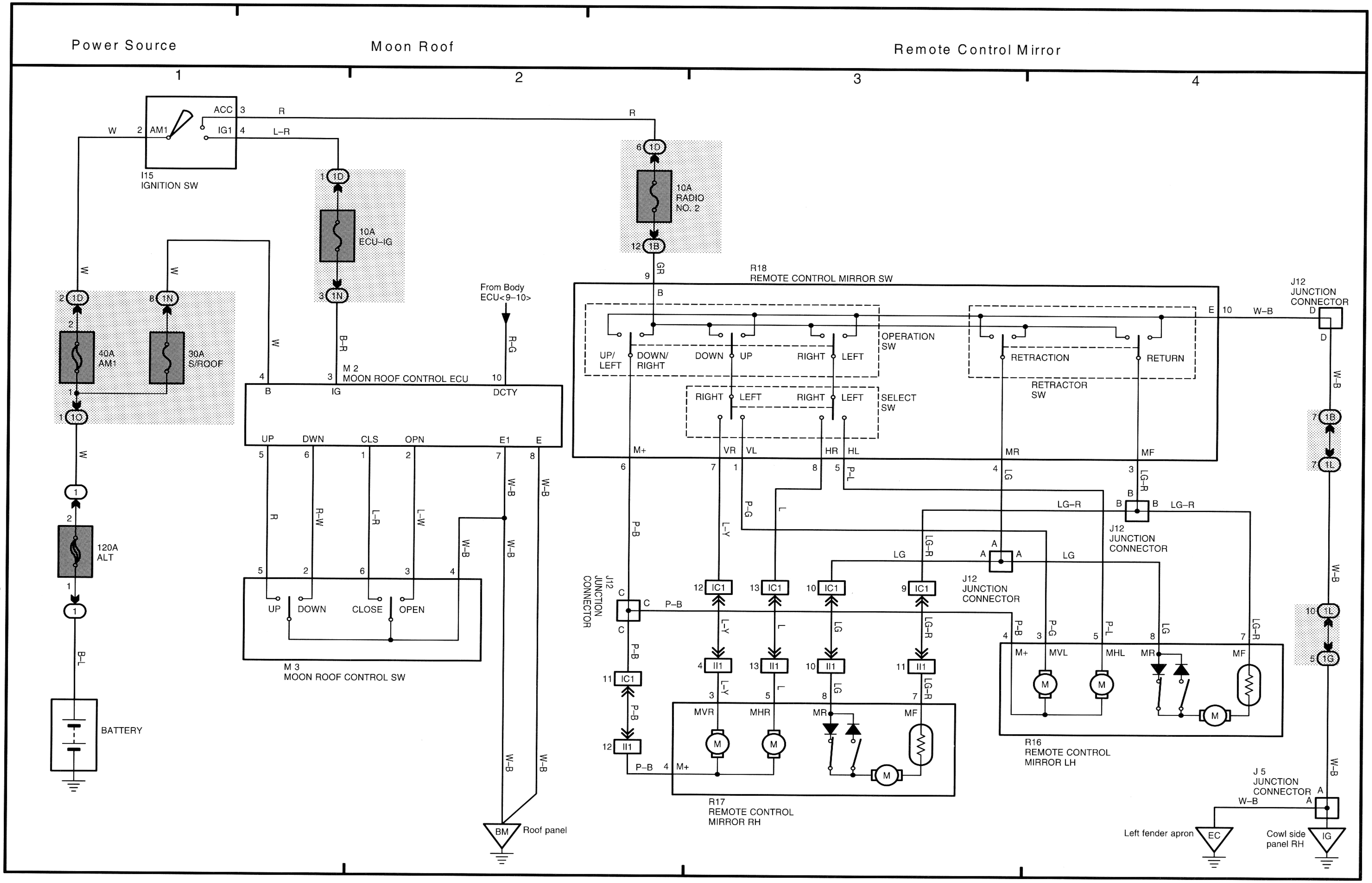
Cowl side panel LH ID

BL Front floor panel RH

EC Left fender apron

IG Cowl side panel RH


Power Source
Wiper and Washer
Horn
1
2
3
4
* 1 : Europe
* 2 : Australia
I15
IGNITION SW
ACC
AM1
IG1
L–R
G
W
1D
15A
WASHER
25A
WIPER
1G
1F
C12
FRONT WIPER AND WASHER SW[COMB. SW]
+B
+2
+1
+S
INT1
INT2
B1
MIST
EW
WF
OFF
INT
LO
HI
WASHER
WIPER RELAY
W 1
WASHER MOTOR
L–Y
IA3
F10
FRONT WIPER MOTOR
+1
+2
E
+S
HORN
RELAY
IG1
G–W
G–B
C13
HORN SW
[COMB. SW]
H11
HORN
LH
H12
HORN
RH
40A AM1
10A HORN
120A ALT
BATTERY
L–B
L–R
L–W
W–B
B–L
J 5
JUNCTION
CONNECTOR
IG
Cowl side panel RH
EC
Left fender
apron


Power Source
Moon Roof
Remote Control Mirror
1
2
3
4
ACC
AM1
IG1
I15
IGNITION SW
10A
ECU-IG
10A
RADIO
NO. 2
40A
AM1
30A
S/ROOF
120A
ALT
BATTERY
From Body
ECU<9-10>
M 2
MOON ROOF CONTROL ECU
B
IG
DCTY
UP
DWN
CLS
OPN
E1
E
UP
DOWN
CLOSE
OPEN
M 3
MOON ROOF CONTROL SW
BM
Roof panel
R18
REMOTE CONTROL MIRROR SW
UP/
LEFT
DOWN/
RIGHT
DOWN
UP
RIGHT
LEFT
OPERATION
SW
RETRACTION
RETURN
RETRACTOR
SW
RIGHT
LEFT
RIGHT
LEFT
SELECT
SW
M+
VR
VL
HR
HL
MR
MF
J12
JUNCTION
CONNECTOR
J12
JUNCTION
CONNECTOR
J12
JUNCTION
CONNECTOR
J12
JUNCTION
CONNECTOR
MVR
MHR
MR
MF
R17
REMOTE CONTROL
MIRROR RH
M+
MVL
MHL
MR
MF
R16
REMOTE CONTROL
MIRROR LH
J 5
JUNCTION
CONNECTOR
Left fender apron
EC
Cowl side
panel RH
IG

Power Source | Power Seat | Seat Heater

1 | 2 | 3 | 4

* 1 : w/ Power Seat
* 2 : w/o Power Seat

I15
IGNITION SW

P15
POWER SEAT CONTROL SW

P19
POWER SEAT MOTOR
(Driver' s Seat
Slide Control)

P16
POWER SEAT MOTOR
(Driver' s Seat Front
Vertical Control)

P17
POWER SEAT MOTOR
(Driver' s Seat Rear
Vertical Control)

P18
POWER SEAT MOTOR
(Driver' s Seat
Reclining Control)

S 6
SEAT HEATER SW
(Driver' s Seat)

S 7
SEAT HEATER SW
(Passenger' s Seat)

S12
SEAT HEATER
(Driver' s
Seat)

S13
SEAT HEATER
(Passenger' s
Seat)

J 7
JUNCTION
CONNECTOR

40A
AM1

30A
D P/SEAT

120A
ALT

15A
SEAT HTR

BATTERY

Front floor panel LH

Front floor panel LH

Cowl side
panel LH

Front floor
panel RH

Power Source

Cellular Mobile Telephone

1 2 3 4

GR

L–R

ACC

IG1

AM1

2

4

1D

10A GAUGE

6 1I

I15 IGNITION SW

W

GR

11 IA3

GR

13 IB1

GR

J14 JUNCTION CONNECTOR C

R–L

R–L

C

C

R–L

7 A

6 A

T 8 A , T 9 B

TELEPHONE TRANSCEIVER AND SPEAKER RELAY

2 1D

2

40A AM1

1

1 1O

GR

W

1

1

1

2

7.5A TEL

120A ALT

2

1

1

B–L

BATTERY

SPEAKER RELAY

SP+ SP– SPI+ SPI–

TELEPHONE TRANSCEIVER

IG B T–DT AGND TACC HOOK

SP+ SP– MUTE T–A– R–A+ T–A+ LGND R–DT C–DT E

CELLULAR PHONE(Hand Set)

HOOK TACC AGND T–DT IG

C–DT R–DT LGND T–A+ R–A+ T–A– TELI PH+ GND

3 A 8 A 3 B 8 B 5 B

See Radio and Player System<21–3><21–4><22–4>

1 B 4 B 2 B 1 A

L–Y G–B B W–B

1 IB1

A J16 JUNCTION CONNECTOR

B

3

A W–B

1 2

MIC+ MIC–

T 3 TELEPHONE MICROPHONE

C13 TELEPHONE SW [COMB. SW]

4

5 2L 6 2G

BR A A BR

J 9 JUNCTION CONNECTOR

A J17 JUNCTION CONNECTOR

W–B

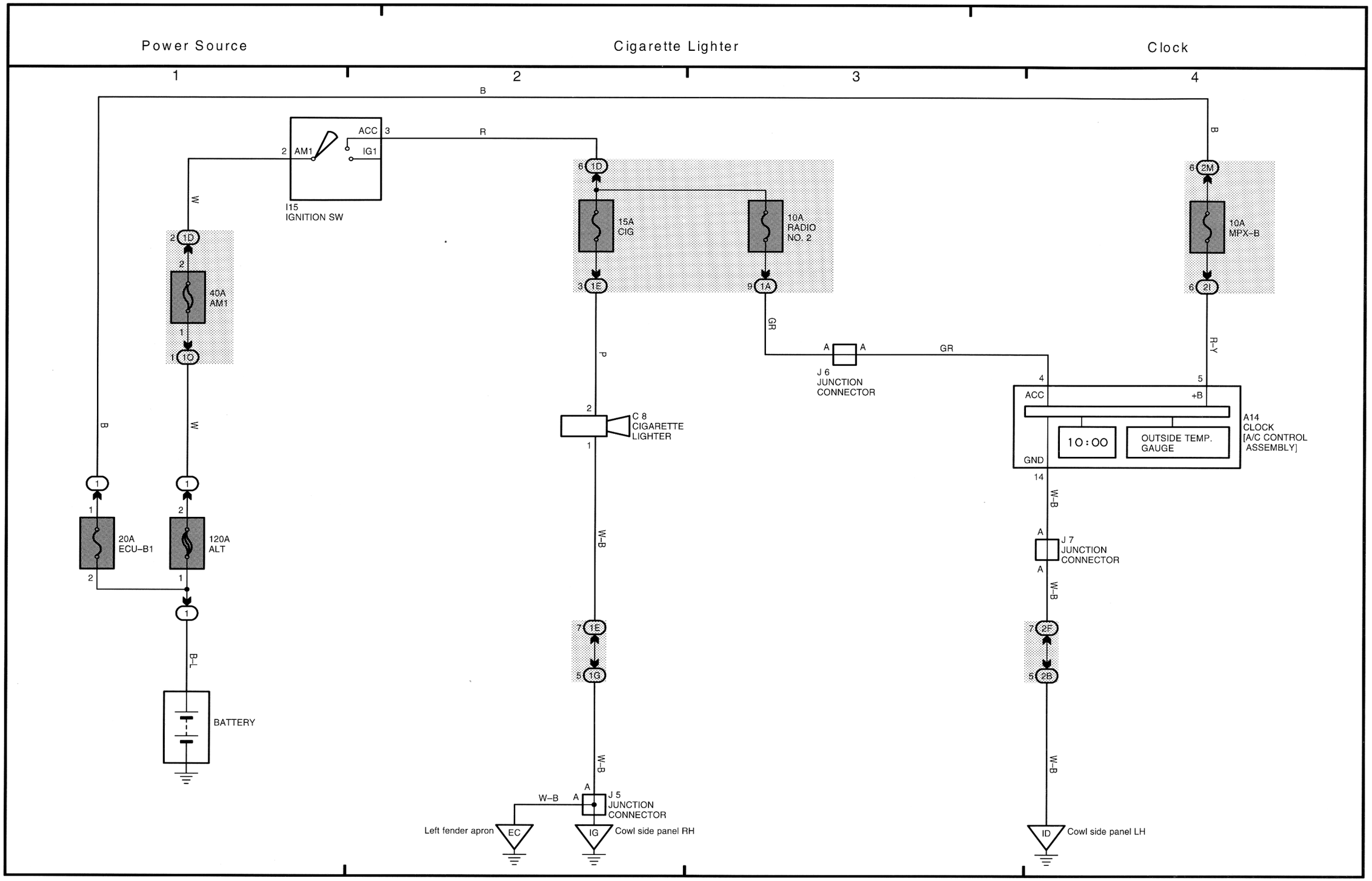
BL Front floor panel RH

Left quarter panel LH BK

Power Source | Front Window Deicer | Rear Window Defogger and Mirror Heater | Shift Lock

1 2 3 4

I15 IGNITION SW
ACC 3
AM1 2
IG1 4
R
L–R
W
B–R
R–L
W
B–R
R
10A GAUGE
10A ECU–IG
15A MIR HTR
10A RADIO NO. 2
40A AM1
40A RR DEF
20A FR DEF
DEICER RELAY
RR DEF RELAY
NOISE FILTER (DEF CDS)
NOISE FILTER (DEF CDS)
MIR HTR RELAY
To Body ECU <9–16>
J 6 JUNCTION CONNECTOR
To A/C Control Assembly<25–8>
From Stop Light SW<5–3>
From A/T Indicator Light SW [Neutral Start SW] <10–6>
J11 JUNCTION CONNECTOR
From Engine and ECT ECU <10–6>
IG
ACC
RSPD
STP
DOFF
NSSD
MT3
SHIFT LOCK CONTROL SW
P1
P
P2
GR
G
G–W
L–R
SLS+
SLS–
L
SHIFT LOCK SOLENOID
120A ALT
BATTERY
B–L
F 9 FRONT WINDOW DEICER
B
W–B
Left fender apron
EC
REAR WINDOW DEFOGGER
N 7 NOISE FILTER (Rear Window Defogger)
J 5 JUNCTION CONNECTOR
Cowl side panel RH
IG
J12 JUNCTION CONNECTOR
IC1
G–R
R16 LH
MIRROR HEATER [REMOTE CONTROL MIRROR]
R17 RH
Left fender apron
EC
Cowl side panel LH
ID
S 8 SHIFT LOCK CONTROL ECU
KLS+
U 1 KEY INTERLOCK SOLENOID [UNLOCK WARNING SW]
BR
J 9 JUNCTION CONNECTOR


Power Source
Cigarette Lighter
Clock
1
2
3
4
B
ACC
IG1
AM1
3
2
I15
IGNITION SW
R
W
2 1D
2
40A
AM1
1
1 1O
W
B
1
1
1
2
20A
ECU-B1
120A
ALT
2
1
1
B-L
BATTERY
6 1D
15A
CIG
10A
RADIO
NO. 2
3 1E
9 1A
GR
P
2
C 8
CIGARETTE
LIGHTER
1
W-B
7 1E
5 1G
W-B
A
W-B
A
J 5
JUNCTION
CONNECTOR
Left fender apron
EC
IG
Cowl side panel RH
A
A
GR
J 6
JUNCTION
CONNECTOR
B
6 2M
10A
MPX-B
6 2I
R-Y
4
5
ACC
+B
10:00
OUTSIDE TEMP.
GAUGE
A14
CLOCK
[A/C CONTROL
ASSEMBLY]
GND
14
W-B
A
J 7
JUNCTION
CONNECTOR
A
W-B
7 2F
5 2B
W-B
ID
Cowl side panel LH

Power Source

LEXUS Navigation System

* 1 : 8 Speaker
* 2 : 6 Speaker

1 2 3 4

I15 IGNITION SW

ACC 3, AM1 2, AM2 7, IG1, IG2, ST2 8

40A AM1 | 7.5A TV | 7.5A STARTER | 20A AM2 | 120A ALT

BATTERY

ST1 3, GND1 22, DTX– 21, DTX+ 9, ACC 14, +B1 1, RE2 24, VG 6, SYNC 5, B 17, G 4, R 16, VR 18

M 1 MULTI–DISPLAY

SGND1 12, RE1 10

From Stereo Component Amplifier <22–3>

From Radio and Player <21–2>

To Radio and Player <21–4><22–1>

R 8 REMOTE CONTROL RECEIVER

SGND, TX, ACC, GND

10A RADIO NO. 2

J 6 JUNCTION CONNECTOR

J 9 JUNCTION CONNECTOR

J13 JUNCTION CONNECTOR

3D +B, 19A DTX–, 8A DTX+, 12A ACC1, 1A B–TV, 22A RE2, 5A VG, 4A SYNC, 14A B, 3A G, 13A R, 15A VR, 7C AUI–, 2C AUI+, 4B TX5+, 13B TX5–, 9D ACC

GND2 11A, MUTE 9C, TC 2D, SPD 7D, REV 10C, GND1 6D

N 3 A, N 4 B, N 5 C, N 6 D NAVIGATION ECU

AUO+ 1C, AUO– 6C

To Stereo Component Amplifier <22–4> To Radio and Player <21–3>

To Check Connector <2–9>

To Combination Meter <23–2>

From Back–Up Light SW [Neutral Start SW] (A/T) or Back–Up Light SW (M/T)<5–4>

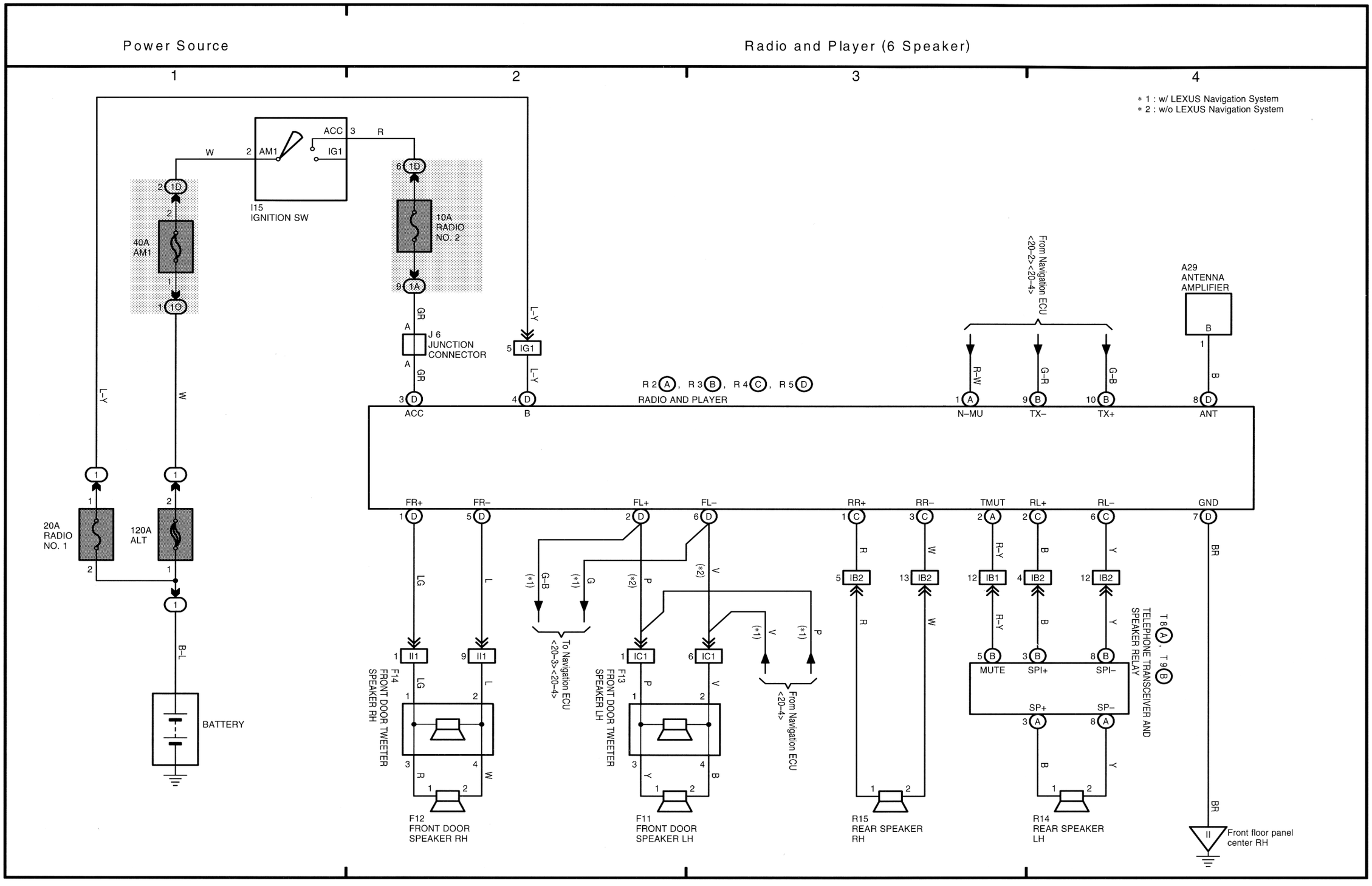
To Front Door Tweeter Speaker LH<21–3><22–3>

Instrument panel center IE

Front floor panel RH BL

Cowl side panel LH ID

N


Power Source
Radio and Player (6 Speaker)
1
2
3
4
* 1 : w/ LEXUS Navigation System
* 2 : w/o LEXUS Navigation System
ACC
AM1
IG1
I15
IGNITION SW
40A
AM1
10A
RADIO
NO. 2
J 6
JUNCTION
CONNECTOR
20A
RADIO
NO. 1
120A
ALT
BATTERY
R 2 A , R 3 B , R 4 C , R 5 D
RADIO AND PLAYER
ACC
B
From Navigation ECU
<20-2><20-4>
A29
ANTENNA
AMPLIFIER
N–MU
TX–
TX+
ANT
FR+
FR–
FL+
FL–
RR+
RR–
TMUT
RL+
RL–
GND
To Navigation ECU
<20-3><20-4>
From Navigation ECU
<20-4>
F14
FRONT DOOR TWEETER
SPEAKER RH
F13
FRONT DOOR TWEETER
SPEAKER LH
F12
FRONT DOOR
SPEAKER RH
F11
FRONT DOOR
SPEAKER LH
R15
REAR SPEAKER
RH
R14
REAR SPEAKER
LH
MUTE
SPI+
SPI–
SP+
SP–
T 8 A , T 9 B
TELEPHONE TRANSCEIVER AND
SPEAKER RELAY
Front floor panel
center RH

Power Source

Radio and Player (8 Speaker)

1 2 3 4

* 1 : w/ LEXUS Navigation System
* 2 : w/o LEXUS Navigation System

I15 IGNITION SW

ACC 3 R
W 2 AM1
IG1

2 1D
2
40A AM1
1
1 1Q

6 1D
10A RADIO NO. 2
9 1A

GR
A
J 6 JUNCTION CONNECTOR
A
GR

16 A ACC

L-Y
5 IG1
L-Y
7 A BU+

L-Y
W

S 9 A , S10 B
STEREO COMPONENT AMPLIFIER

W 5 WOOFER SPEAKER LH
2 1
B-W
Y-R
2 IB2
8 IB2
B-W
Y-R
4 A WL+
11 A WL-

W 6 WOOFER SPEAKER RH
2 1
R-W
W-L
3 IB2
9 IB2
R-W
W-L
6 A WR+
15 A WR-

From Navigation ECU <20-2>
R-W
13 A N-MUTE

1 1
1 2
20A RADIO NO. 1
120A ALT
2 1
1
B-L
BATTERY

FL FR RL RR GND BEEP MUTE +B ACC AMP+ GND
8 B 9 B 17 B 18 B 5 B 16 B 7 B 1 B 10 B 3 B 14 B
B L W R BR G Y R B W BR
(Shielded) (Shielded)
8 E 9 E 17 E 18 E 5 E 16 E 7 E 1 E 10 E 3 E 14 E
F. L F. R R. L R. R SGND BEEP MUTE B ACC AMP GND

TX- TX+
9 B 10 B
G-R G-B
From Navigation ECU<20-4>

R 3 B , R 6 E
RADIO AND PLAYER

ANT
12 E
B
1
B
A29 ANTENNA AMPLIFIER

FR+ FR-
2 A 9 A
LG L
1 II1 9 II1
LG L
1 2
3 4
R W
1 2
F14 FRONT DOOR TWEETER SPEAKER RH
F12 FRONT DOOR SPEAKER RH

FL+ FL-
1 A 8 A
G-B G
(*1) (*1)
To Navigation ECU <20-3>
P V
(*2) (*2)
1 IC1 6 IC1
P V
1 2
3 4
Y B
1 2
F13 FRONT DOOR TWEETER SPEAKER LH
F11 FRONT DOOR SPEAKER LH
V P
(*1) (*1)
From Navigation ECU <20-4>

RR+ RR-
5 A 14 A
R W
5 IB2 13 IB2
R W
4 3
R15 REAR SPEAKER RH

T-MUTE RL+ RL- GND
6 B 3 A 10 A 12 A
R-Y B Y BR
12 IB1 4 IB2 12 IB2
R-Y B Y
5 B 3 B 8 B
MUTE SPI+ SPI-
SP+ SP-
3 A 8 A
B Y
4 3
R14 REAR SPEAKER LH
T 8 A , T 9 B
TELEPHONE TRANSCEIVER AND SPEAKER RELAY
BR
Front floor panel center RH

(Cont. next page)

Power Source

Combination Meter

1 2 3 4

* 1 : A/T
* 2 : M/T w/ LEXUS Navigation System
* 3 : M/T w/o LEXUS Navigation System

LG–B
R–Y
L–R
R–L(M/T)
W
B
B–L
R–L
BR–W
R–B(*2)
R–B(*3)
W–L(*1)
W–L(*2)
W–L(*3)
W–L
Y
Y–R
O
L
P
B
R
G
V
LG
GR
SB
W

ACC
IG1
AM1
I15
IGNITION SW

7. 5A SRS–B
10A MPX–B
40A AM1
10A GAUGE
20A ECU–B1
120A ALT
BATTERY

J11 JUNCTION CONNECTOR
J2, J3 JUNCTION CONNECTOR

From Navigation ECU<20–2>
From Engine ECU<2–11>
From Back–Up Light SW<5–4>
From ABS and Traction ECU<12–3>
From DLC3 <2–4>
From Engine ECU(M/T) or Engine and ECT ECU (A/T)<2–12>

S1 SPEED SENSOR (Combination Meter)

SPEEDOMETER
TACHOMETER
ECONO
VOLT
WATER TEMP.
FUEL
DOOR

F16 FUEL SENDER (Sub)
F15 FUEL SENDER

BODY ECU
A/C CONTROL ASSEMBLY
P 2 PARKING BRAKE SW

B 6 (A), B 7 (B)
C10 (A), C11 (B) COMBINATION METER

IH Front floor panel center LH

8 7 6 5

Combination Meter

* 4 : w/ Daytime Running Light

SLIP
TRC OFF
ABS
CHECK ENGINE
REAR LIGHT
SRS
ILLUMINATION
BRAKE
CRUISE
FUEL
ECT PWR
SNOW
SEAT BELT
OIL LEVEL
OIL PRESSURE
CHARGE
BEAM
TURN RH
TURN LH
FRONT FOG
SECURITY

C10 (A), C11 (B) COMBINATION METER

4 B
3 B
9 A
7 A
6 B
8 A
18 A
22 A
1 A
5 B
6 A
9 B
5 A
4 A
3 A
2 A
7 B
8 B

See ABS and Traction Control System<12–3>
See Engine Control and Engine Immobiliser System <2–3>
See Taillight and Stop Light System<5–3>
See SRS System <13–2>
See Illumination System<6–3>
See Taillight and Stop Light System<5–3>
To ABS and Traction ECU<12–4>
To Daytime Running Light Relay<3–4>
See Headlight System<3–3><4–2>
See Turn Signal and Hazard Warning Light System <7–2><7–3>
See Front Fog Light System<4–4>
See Engine Control and Engine Immobiliser System <2–3>

J 7 JUNCTION CONNECTOR
A A
W–B W–B
7 2F 5 2B 5 2J

W–B
Y
Y–R
(*4)

Front floor panel RH
BL
Cowl side panel LH
ID

Power Source

Radiator Fan and Condenser Fan

1 2 3 4

L

W

L–R

ACC

2 AM1 IG1 4 L–R

I15
IGNITION SW

1 1D

10A
ECU–IG

3 1H

B–R

10 2H

7 2A

B–R

2 1D

2

40A
AM1

1

1 1Q

W

L

W

1

2

30A
RDI
FAN

1

2

30A
CDS
FAN

1

2

120A
ALT

1

1

B–L

BATTERY

B–R

L–Y

B–R

B–R

W

L

3 3

1 3

FAN NO. 2
RELAY

2 5 4

3 3 3

L–B W–B L–W

A 2
A/C CONDENSER
FAN MOTOR

1 M 2

W–L

5 1

FAN NO. 3
RELAY

3 2

3 3

L–R

D 3
DIODE(A/C)

2 1 3

To A/C COMP
Relay<25–2>

L–W

L–B

1 3

FAN NO. 1
RELAY

2 5

3 3

L–W

L–B

L–B

A
A
A

J 1
JUNCTION
CONNECTOR

L–W

L–B

D
D
D

J 1
JUNCTION
CONNECTOR

L–B

L–W

2 M 1

R 1
RADIATOR
FAN MOTOR

W–B

L–B

2

W 3
WATER TEMP.
SW

1

W–B

3

A 4
A/C SINGLE
PRESSURE SW

2

W–B

L–B

W–B

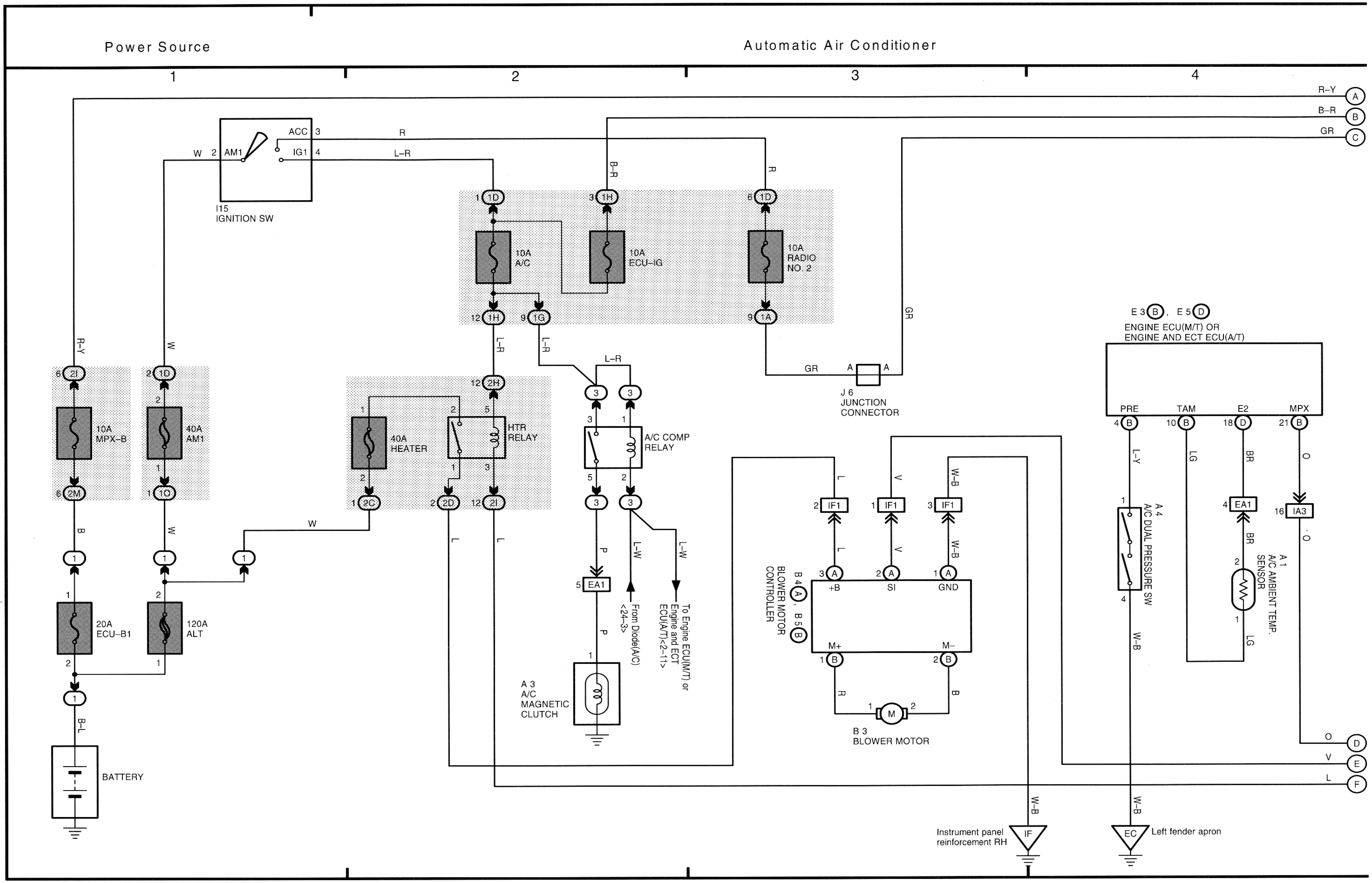
W–B

W–B

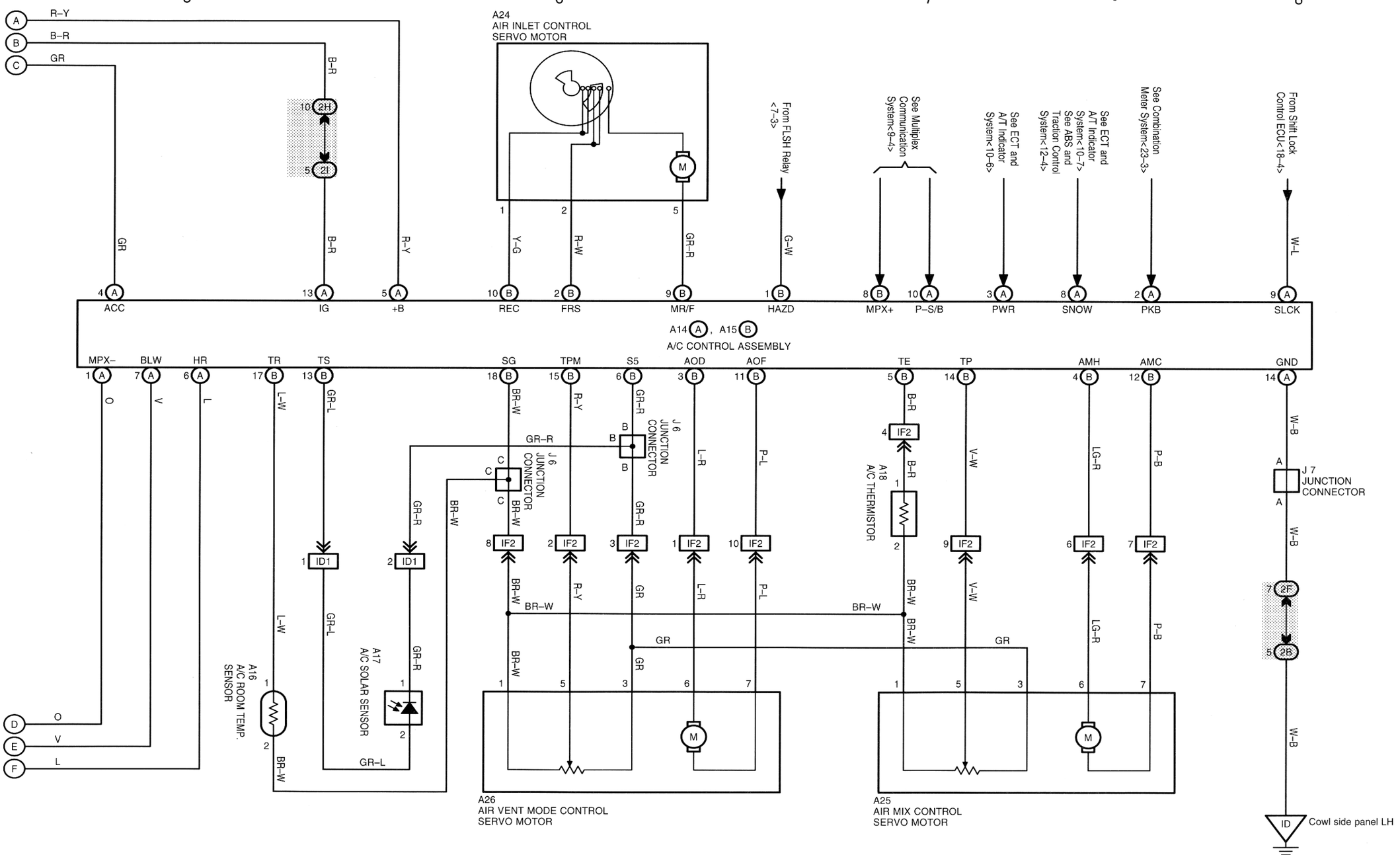
W–B

Left fender apron EC

Cowl side panel LH ID


Power Source
Automatic Air Conditioner
1
2
3
4
I15
IGNITION SW
ACC
IG1
AM1
10A
A/C
10A
ECU–IG
10A
RADIO
NO. 2
10A
MPX–B
40A
AM1
40A
HEATER
HTR
RELAY
A/C COMP
RELAY
20A
ECU–B1
120A
ALT
BATTERY
A 3
A/C
MAGNETIC
CLUTCH
From Diode(A/C)
<24–3>
To Engine ECU(M/T) or
Engine and ECT
ECU(A/T)<2–11>
J 6
JUNCTION
CONNECTOR
B 4 (A), B 5 (B)
BLOWER MOTOR
CONTROLLER
+B
SI
GND
M+
M–
B 3
BLOWER MOTOR
E 3 (B), E 5 (D)
ENGINE ECU(M/T) OR
ENGINE AND ECT ECU(A/T)
PRE
TAM
E2
MPX
A 4
A/C DUAL PRESSURE SW
A 1
A/C AMBIENT TEMP.
SENSOR
Instrument panel
reinforcement RH
Left fender apron
IF
EC
R–Y
B–R
GR
O
V
L

Automatic Air Conditioner



OVERSEAS SERVICE DIVISION
TOYOTA MOTOR CORPORATION

PRINTED IN JAPAN