## FOREWORD

This wiring diagram manual has been prepared to provide information on the electrical system of the 2000 MR2.

Applicable models: ZZW30 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.
<ul> <li>2000 MR2 Repair Manual</li> </ul>	RM760U
<ul> <li>2000 MR2 New Car Features</li> </ul>	NCF179U

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.

## A INTRODUCTION

This manual consists of the following 13 sections:

No.	Section	Description
A	INDEX	Index of the contents of this manual.
A	INTRODUCTION	Brief explanation of each section.
В	HOW TO USE THIS MANUAL	Instructions on how to use this manual.
с	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.
	INDEX	Index of the system circuits.
Н	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.
к	CONNECTOR LIST	Describes the form of the connectors for the parts appeared in this book. This section is closely related to the system circuit.
L	PART NUMBER OF CONNECTORS	Indicates the part number of the connectors used in this manual.
М	OVERALL ELECTRICAL WIRING DIAGRAM	Provides circuit diagrams showing the circuit connections.

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

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

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

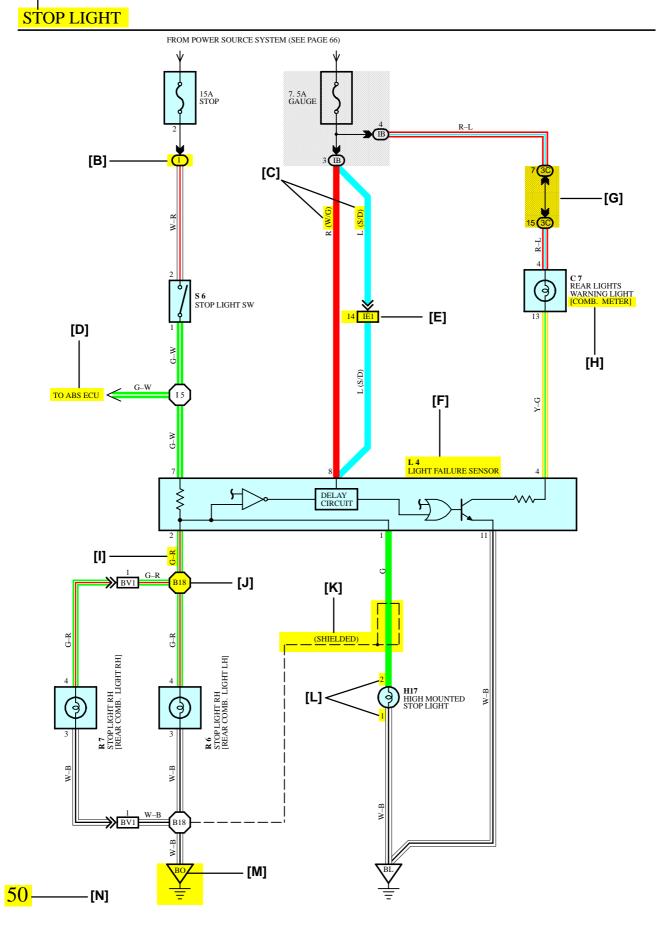
When the circuit operation is understood, begin troubleshooting of the problem circuit to isolate the cause. Use Relay Location and Electrical Wiring Routing sections to find each part, junction block and wiring harness connectors, wiring harness and wiring harness connectors, splice points, and ground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

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

### **B HOW TO USE THIS MANUAL**

[A]





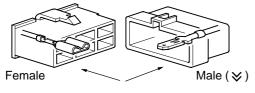
2000 MR2 (EWD408U)

- [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

- ) is used to indicate different wiring and [C] : ( 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 (  $\ge$  ).

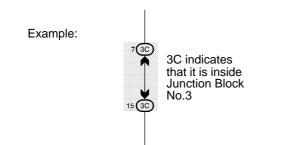
Outside numerals are pin numbers.



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.



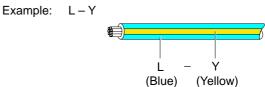
[H] : When 2 parts both use one connector in common, the parts connector name used in the wire routing section is shown in square brackets [ Ι.

[]] : Indicates the wiring color.

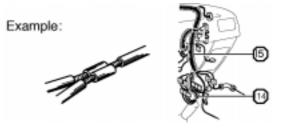
Wire colors are indicated by an alphabetical code.

В	= Black	W	= White	BR = Brown
L	= Blue	V	= Violet	SB = Sky Blue
R	= Red	G	= Green	LG = Light Green
Ρ	= Pink	Υ	= Yellow	GR = Gray
0	= Orange			

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



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

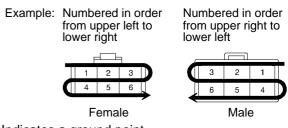


The Location of splice Point I 5 is indicated by the shaded section.

[K] : Indicates a shielded cable.



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



[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**

#### 

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.

#### 

#### 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] O : PARTS LOCATION

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

#### 

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

#### [S] O : 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)

#### : GROUND POINTS

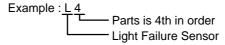
[U]

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

#### [V] () : SPLICE POINTS

C	Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
	15	44	Cowl Wire	B18	50	Luggage Room Wire

- **[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.



- [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.

## **B HOW TO USE THIS MANUAL**

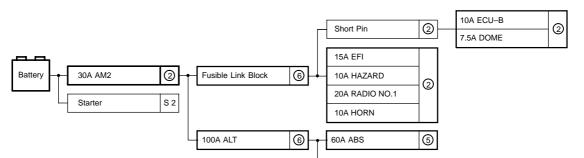
The ground points circuit diagram shows the connections from all major parts to the respective ground points. When troubleshooting a faulty ground point, checking the system circuits which use a common ground may help you identify the problem ground quickly. The relationship between ground points ( $\nabla^{e_A}$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

- I GROUND POINT W-B HEATER CONTROL ASSEMBLY W–B W–B FAN MAIN RELAY CIGARETTE LIGHTER W–B HEATER SERVO FAN MAIN RELAY O/D MAIN SW I 6 W–B W-B A/C FAN RELAY NO.2 CLOCK BLOWER SW I 6 W-B W-B A/C FAN RELAY NO.3 PARKING BRAKE SW **(**5) E 3 J 1 JUNCTION CONNECTOR W-B RADIATOR FAN MOTOF W–B W–B RETRACT CONTROL RELAY - CB COMBINATION METER W-B W-B HORN SW [COMB. SW] RETRACT MOTOR RH E 4 W-B W-B DIMMER SW [COMB. SW] RETRACT MOTOR LH Е 5 I 2 W–B W–B W-B FRONT TURN SIGNAL LIGHT RH FRONT SIDE MARKER LIGHT RH CRUISE CONTROL MIRROR SW E4 E 4 (3D) FRONT SIDE MARKER LIGHT LH W-B W–B W–B W-B REMOTE CONTROL MIRROR SW PARKING LIGHT RH Е 5 (31 FRONT TURN SIGNAL LIGHT LH W–B W–B W-B BRAKE FLUID LEVEL WARNING SW E 6 36 TURN SIGNAL FLASHER W–B W-F W-B REAR WINDOW DEFOGGER SW PARKING LIGHT LH Œ W–B W–B W–B DOOR LOCK CONTROL SW RH LIGHT CONTROL SV [COMB. SW] IA1 ) BB в4 I 4 1.2 W–B W–B DOOR KEY LOCK SW RH WIPER AND WASHE **B**4 W-B DOOR LOCK MOTOR W–B W-B UNLOCK WARNING SW I 5 **B** 4 DOOR LOCK CONTROL RELAY W–B 15 POWER WINDOW MASTER SW **D**1 B 5 POWER WINDOW CONTROL RELAY В 5 W–B W-B BLOWER RESISTOR DOOR KEY LOCK SW LI B 5 W-B W-B ELECTRICAL IDLE CUT RELAY (M/T) DOOR LOCK CONTROL IB1 W–B A/C AMPLIFIER DOOR LOCK MOTOR LH W–B (4A-GZE) FUEL CONTROL SW W-B W–B BF RADIO AND PLAYER ➤ IC3 WOOFER AMPLIFIER 4 W–B BR COMBINATION METER HEATER RELAY  $\mathbf{X}_{4}$ BR BR BR BR AUTO ANTENNA MOTOR BA1  $\overline{4}$ 13 13 COMBINATION METER щ BR × FUEL SENDER
- \* 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)

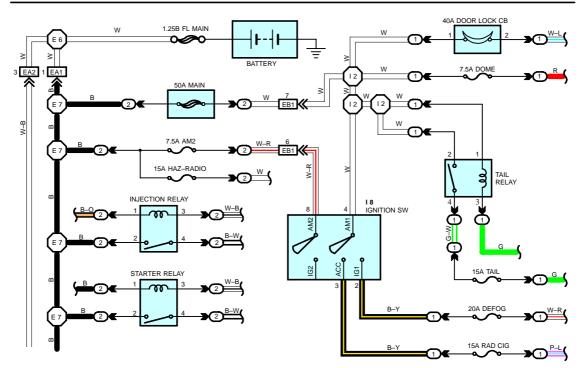
The chart below shows the route by which current flows from the battery to each electrical source (Fusible Link, Circuit Breaker, Fuse, etc.) and other parts.



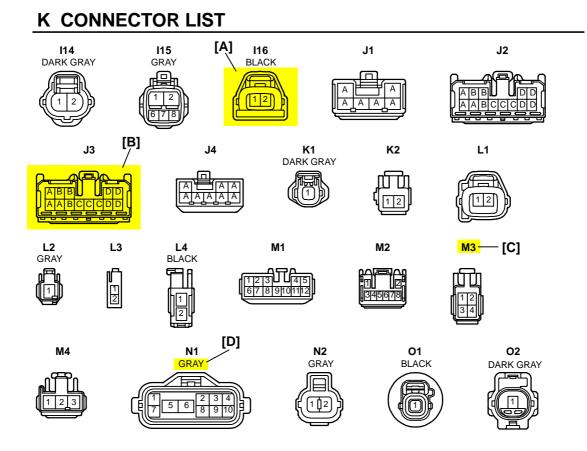
### Engine Room R/B (See Page 20)

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

### **POWER SOURCE**

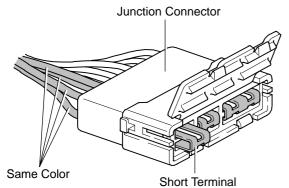


\* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the SYSTEM CIRCUITS SECTION.



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

Indicates a connector which is connected to a short terminal.



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

Wire harness sharing the same short terminal grouping have the same color.

[C] : Parts Code

The first letter of the code is taken from the first letter of part, and the numbers indicates its order in parts which start with the same letter.

[D] : Connector Color

Connectors not indicated are milky white in color.

Code	Part Name	Part Number	Code	Part Name	Part Number
A 1	A/C Ambient Temp. Sensor	90980–11070	D 4	Diode (Door Courtesy Light)	90980–11608
A 2	A/C Condenser Fan Motor	90980–11237	D 5	Diode (Key Off Operation)	90980-10962
A 3	A/C Condenser Fan Relay	90980–10940	D 6	Diode (Luggage Compartment Light)	90980–11608
	A/C Triple Pressure SW (A/C Dual and	00000 40040	D 7	Door Lock Control Relay	90980–10848
A 4	Single Pressure SW)	<mark>90980–10943</mark>	D 8	Door Courtesy Light LH	
[A]	A/T Oil Temp. Sensor [B]	905 <b>[C]</b> 413	D 9	Door Courtesy Light RH	90980–11148
A 6	ABS Actuator	90980–11151	D10	Door Courtesy SW LH	00080 11007
Α7	ABS Actuator	90980–11009	D11	Door Courtesy SW RH	90980–11097
A 8	ABS Speed Sensor Front LH	90980–10941	D12	Door Courtesy SW Front LH	
A 9	ABS Speed Sensor Front RH	90980-11002	D13	Door Courtesy SW Front RH	
A10	Airbag Sensor Front LH	00000 44050		Door Courtesy SW Rear LH	90980–11156
A11	Airbag Sensor Front RH	90980–11856	D15	Door Courtesy SW Rear RH	
A12-		90980–11194	Dia	Unlock SW LH	00000 44470
~		90980			90980-11170

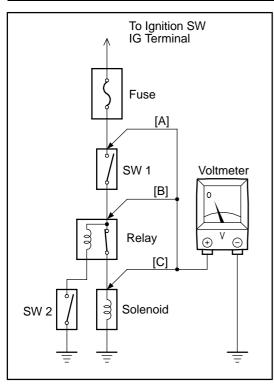
### L PART NUMBER OF CONNECTORS

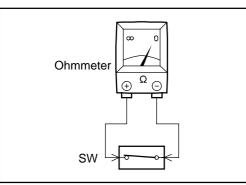
- [A] : Part Code
- [B] : Part Name
- [C] : Part Number

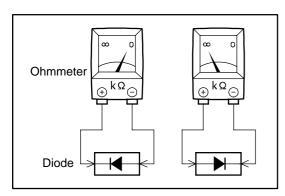
Toyota Part Number are indicated.

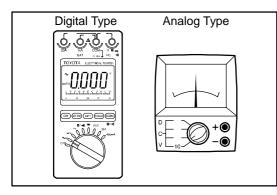
Not all of the above part numbers of the connector are established for the supply. In case of ordering a connector or terminal with wire, please confirm in advance if there is supply for it using "Parts Catalog News" (published by Parts Engineering Administration Dept.).

# C TROUBLESHOOTING









### VOLTAGE CHECK

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

Example:

- [A]
- ÌВÌ
- Ignition SW on
  Ignition SW and SW 1 on
  Ignition SW, SW 1 and Relay on (SW 2 off) [C]
- (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

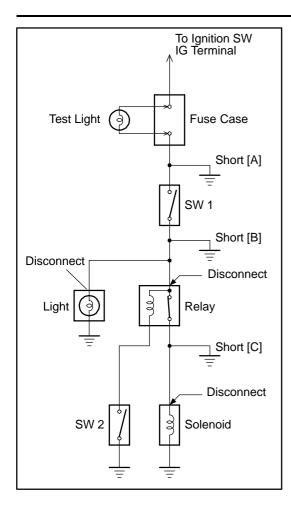
- (a) Disconnect the battery terminal or wire so there is no voltage between the check points.
- (b) Contact the two leads of an ohmmeter to each of the check points.

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 k $\Omega$ /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
  - \_
  - Ignition SW and SW 1 on Ignition SW, SW 1 and Relay on (Connect the Relay) and SW 2 off (or Disconnect SW 2) [В] [С]

С

- (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.

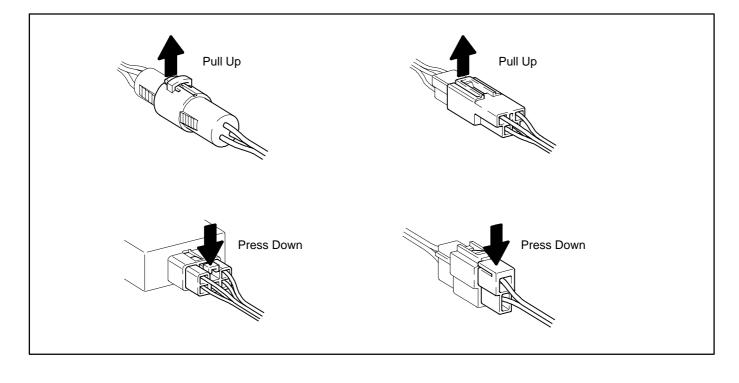
#### CAUTION:

- (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).

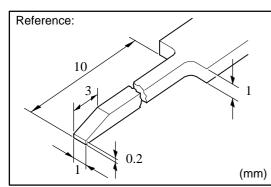
#### DISCONNECTION OF MALE AND FEMALE CONNECTORS

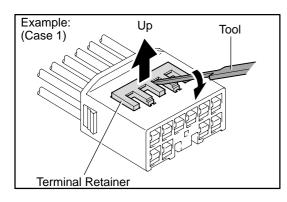
To pull apart the connectors, pull on the connector itself, not the wire harness.

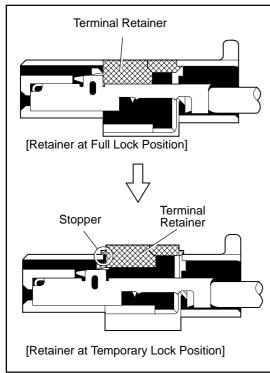
HINT: Check to see what kind of connector you are disconnecting before pulling apart.

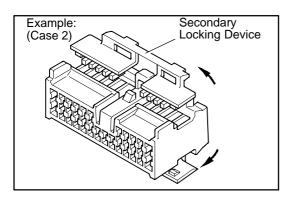


# C TROUBLESHOOTING









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

- 1. PREPARE THE SPECIAL TOOL
  - HINT : To remove the terminal from the connector, please construct and use the special tool or like object shown on the left.
- 2. DISCONNECT CONNECTOR
- 3. DISENGAGE THE SECONDARY LOCKING DEVICE OR TERMINAL RETAINER.
  - (a) Locking device must be disengaged before the terminal locking clip can be released and the terminal removed from the connector.
  - (b) Use a special tool or the terminal pick to unlock the secondary locking device or terminal retainer.

#### NOTICE:

### Do not remove the terminal retainer from connector body.

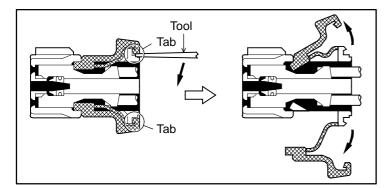
- [A] For Non–Waterproof Type Connector
  - HINT : The needle insertion position varies according to the connector's shape (number of terminals etc.), so check the position before inserting it.

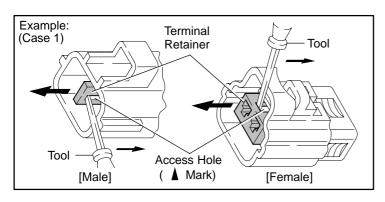
"Case 1"

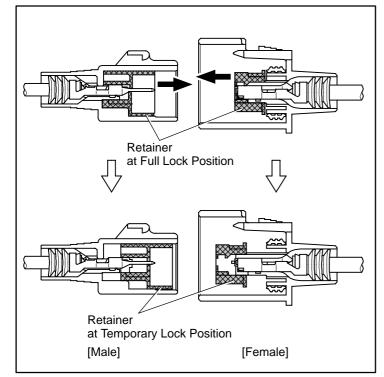
Raise the terminal retainer up to the temporary lock position.

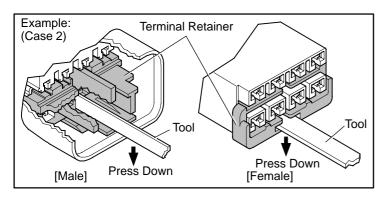
"Case 2"

Open the secondary locking device.









- [B] For Waterproof Type Connector
  - HINT: Terminal retainer color is different according to connector body.

Example: <u>Terminal Retainer</u> : <u>Connector Body</u> 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.

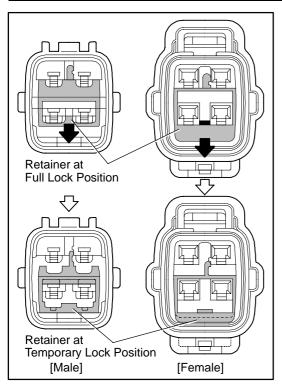
HINT: The needle insertion position varies according to the connector's shape (Number of terminals etc.), so check the position before inserting it.

"Case 2"

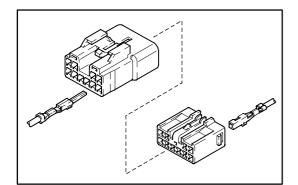
Type which cannot be pulled as far as Power Lock insert the tool straight into the access hole of terminal retainer as shown.

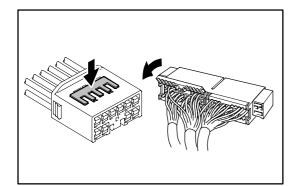
С

## C TROUBLESHOOTING



Locking Lug Tool





Push the terminal retainer down to the temporary lock position.

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

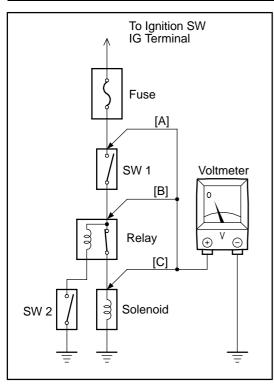
4. INSTALL TERMINAL TO CONNECTOR

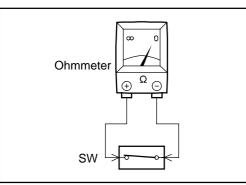
(a) Insert the terminal.

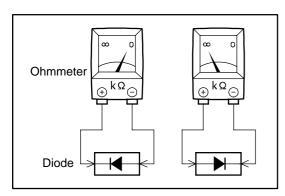
HINT:

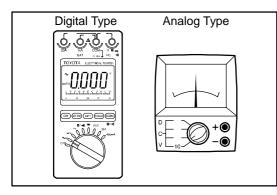
- Make sure the terminal is positioned correctly.
   Insert the terminal until the locking lug locks firmly.
   Insert the terminal with terminal retainer in the temporary lock position.
- (b) Push the secondary locking device or terminal retainer in to the full lock position.
- 5. CONNECT CONNECTOR

# C TROUBLESHOOTING









### VOLTAGE CHECK

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

Example:

- [A]
- ÌВÌ
- Ignition SW on
  Ignition SW and SW 1 on
  Ignition SW, SW 1 and Relay on (SW 2 off) [C]
- (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

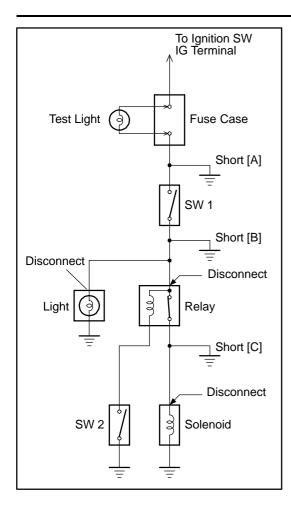
- (a) Disconnect the battery terminal or wire so there is no voltage between the check points.
- (b) Contact the two leads of an ohmmeter to each of the check points.

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 k $\Omega$ /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
  - \_
  - Ignition SW and SW 1 on Ignition SW, SW 1 and Relay on (Connect the Relay) and SW 2 off (or Disconnect SW 2) [В] [С]

С

- (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.

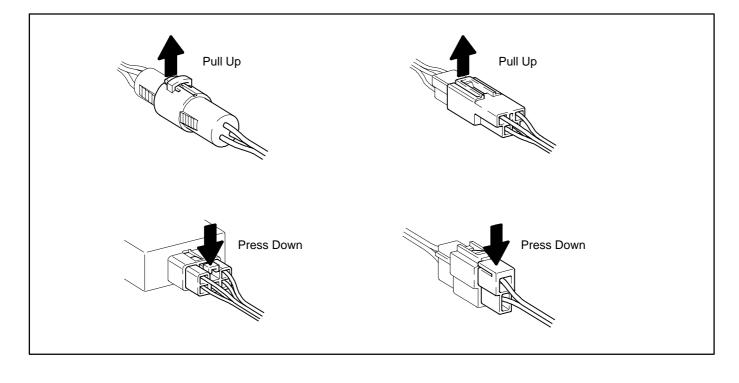
#### CAUTION:

- (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).

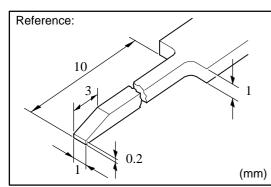
#### DISCONNECTION OF MALE AND FEMALE CONNECTORS

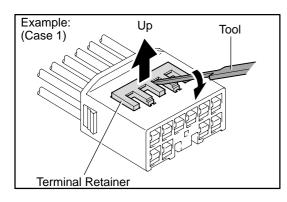
To pull apart the connectors, pull on the connector itself, not the wire harness.

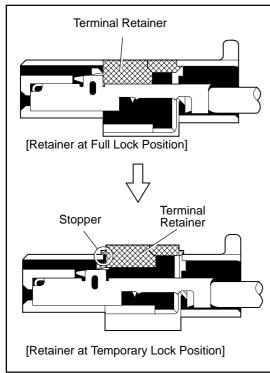
HINT: Check to see what kind of connector you are disconnecting before pulling apart.

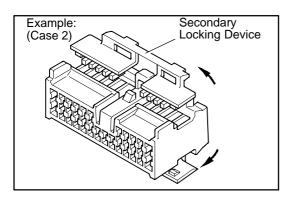


# C TROUBLESHOOTING









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

- 1. PREPARE THE SPECIAL TOOL
  - HINT : To remove the terminal from the connector, please construct and use the special tool or like object shown on the left.
- 2. DISCONNECT CONNECTOR
- 3. DISENGAGE THE SECONDARY LOCKING DEVICE OR TERMINAL RETAINER.
  - (a) Locking device must be disengaged before the terminal locking clip can be released and the terminal removed from the connector.
  - (b) Use a special tool or the terminal pick to unlock the secondary locking device or terminal retainer.

#### NOTICE:

### Do not remove the terminal retainer from connector body.

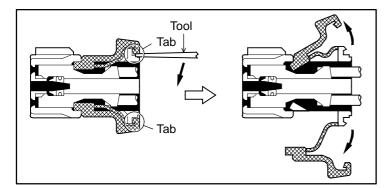
- [A] For Non–Waterproof Type Connector
  - HINT : The needle insertion position varies according to the connector's shape (number of terminals etc.), so check the position before inserting it.

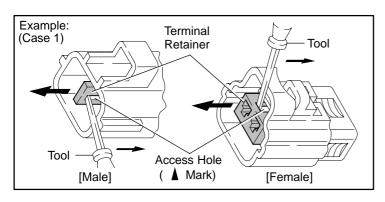
"Case 1"

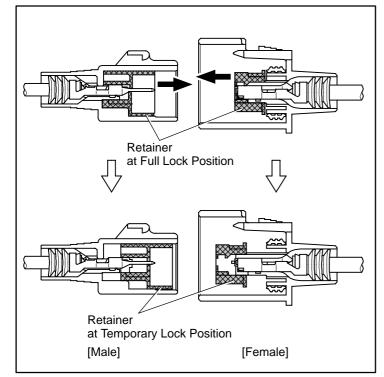
Raise the terminal retainer up to the temporary lock position.

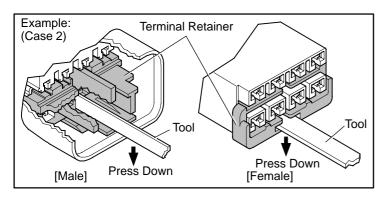
"Case 2"

Open the secondary locking device.









- [B] For Waterproof Type Connector
  - HINT: Terminal retainer color is different according to connector body.

Example: <u>Terminal Retainer</u> : <u>Connector Body</u> 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.

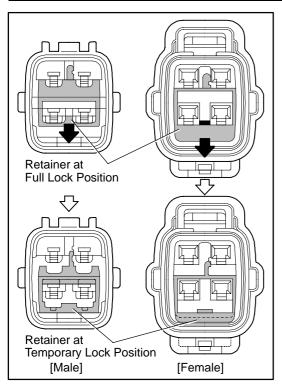
HINT: The needle insertion position varies according to the connector's shape (Number of terminals etc.), so check the position before inserting it.

"Case 2"

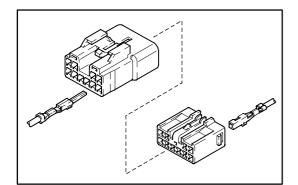
Type which cannot be pulled as far as Power Lock insert the tool straight into the access hole of terminal retainer as shown.

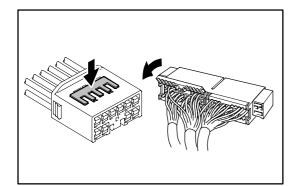
С

## C TROUBLESHOOTING



Locking Lug Tool





Push the terminal retainer down to the temporary lock position.

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

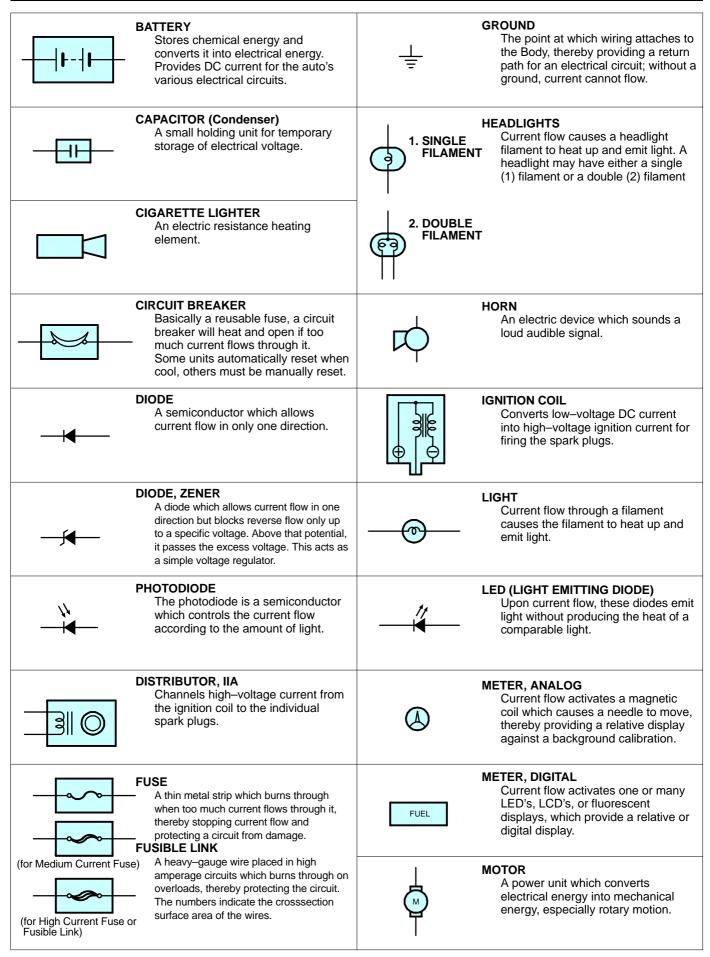
4. INSTALL TERMINAL TO CONNECTOR

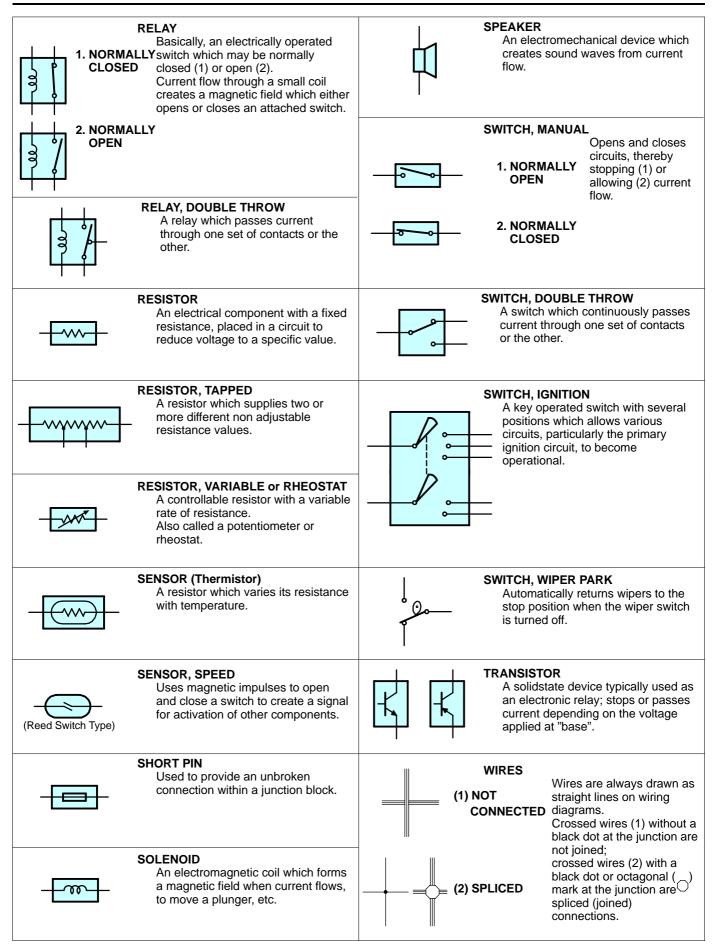
(a) Insert the terminal.

HINT:

- Make sure the terminal is positioned correctly.
   Insert the terminal until the locking lug locks firmly.
   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

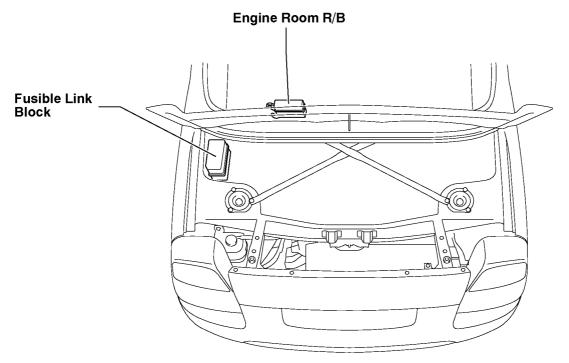
## E GLOSSARY OF TERMS AND SYMBOLS



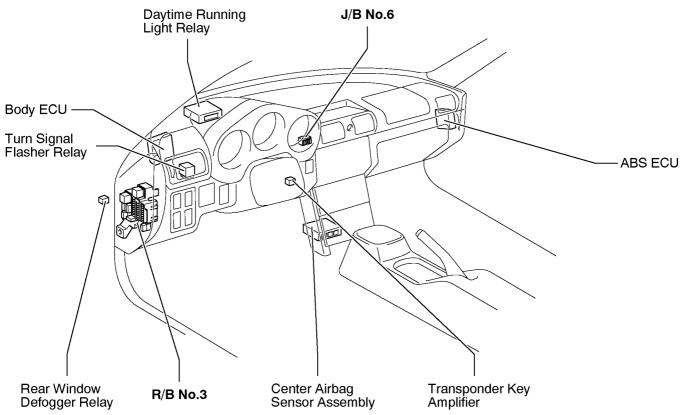


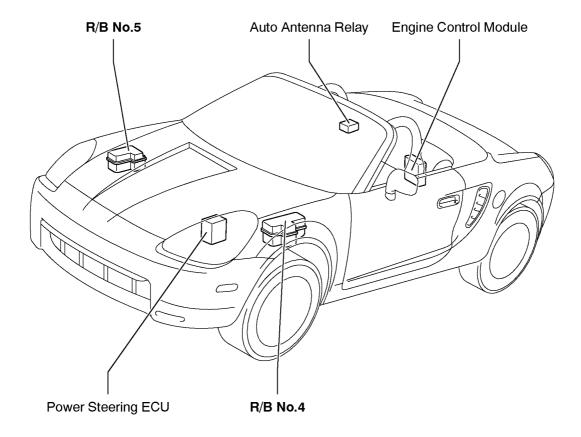
## **F** RELAY LOCATIONS

## [Engine Compartment]



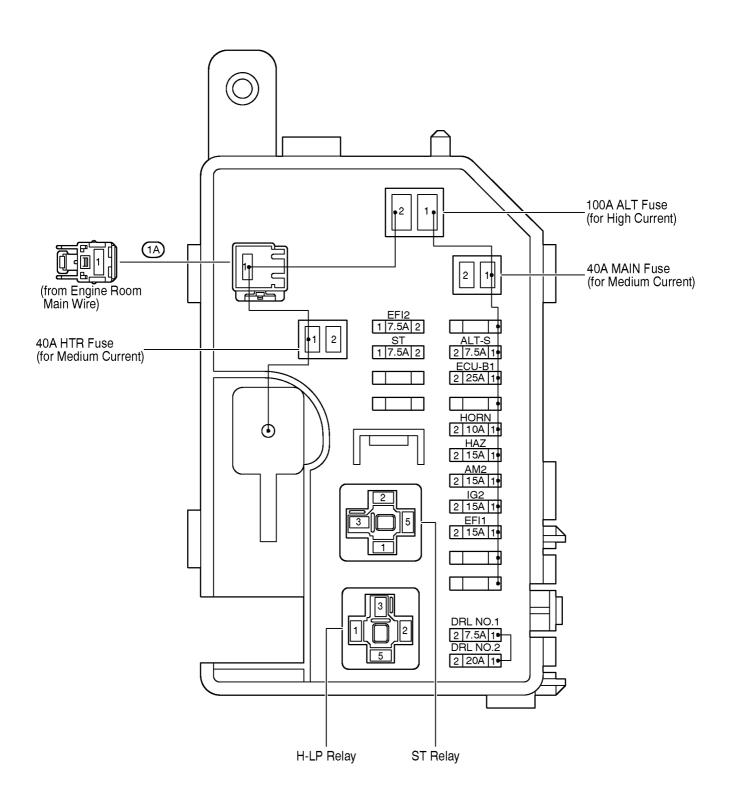
[Instrument Panel]

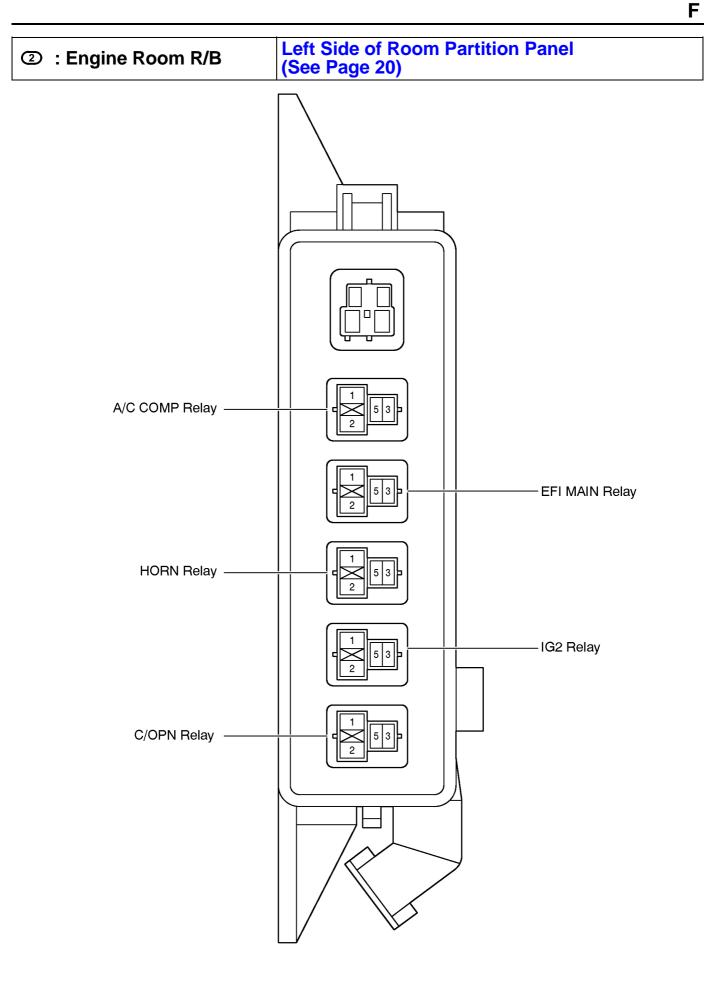




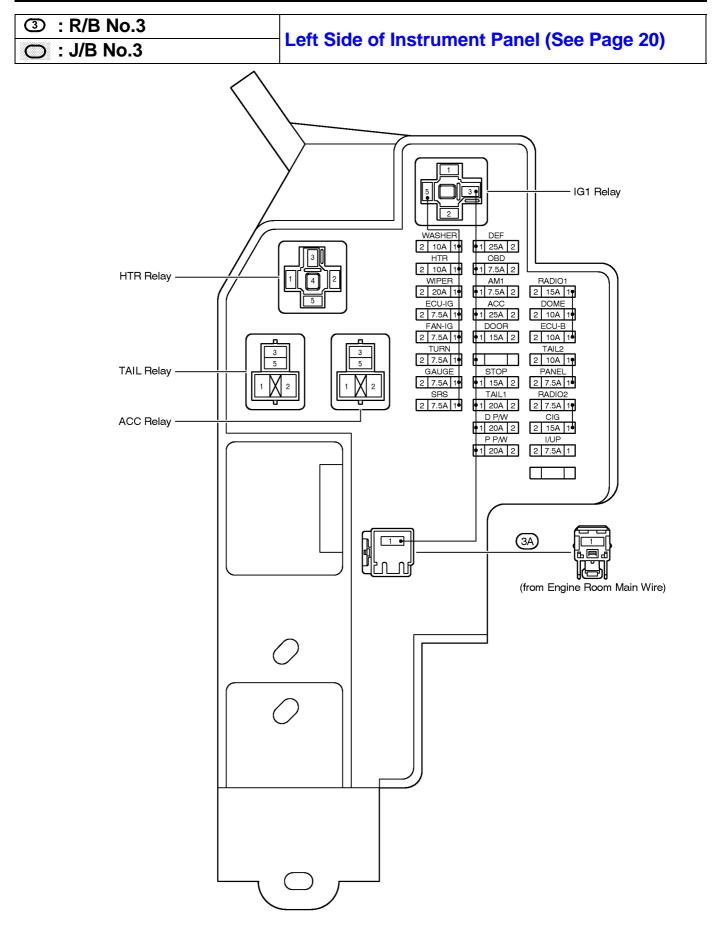
## **F** RELAY LOCATIONS

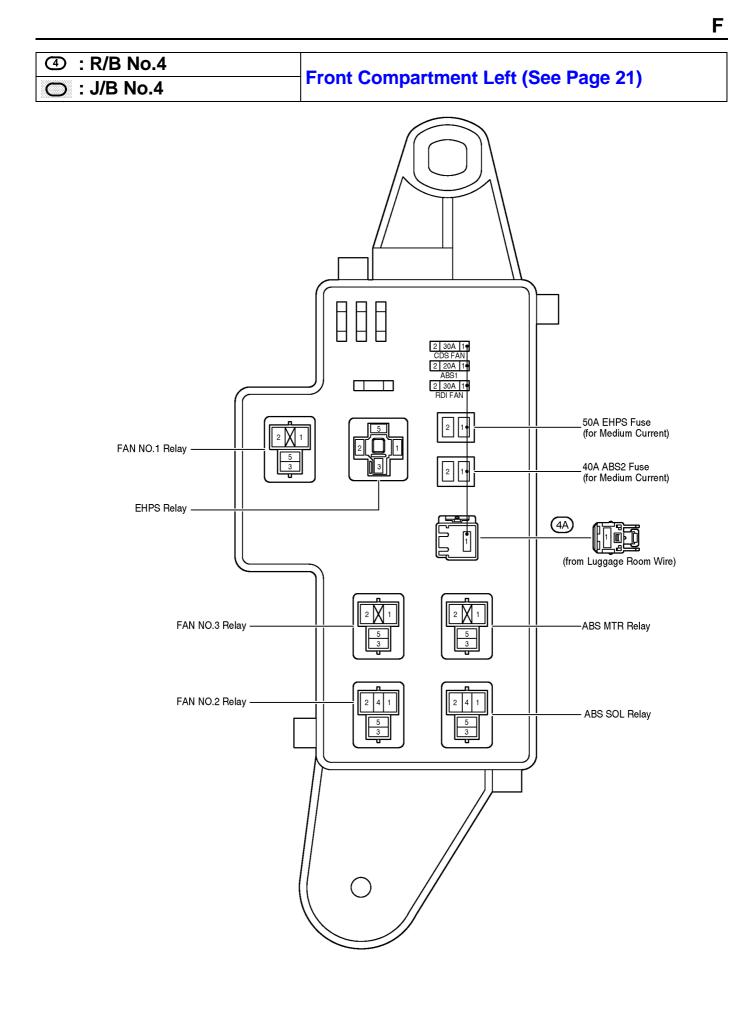
① : Fusible Link Block	Engine Comportment Loft (See Dage 20)
O: J/B No.1	Engine Compartment Left (See Page 20)





## **F** RELAY LOCATIONS

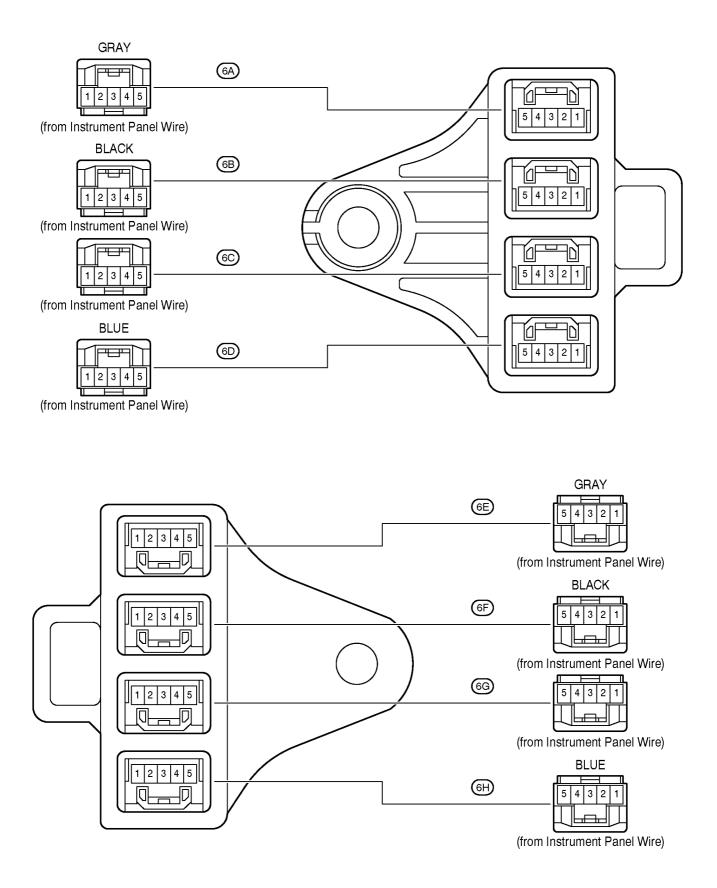




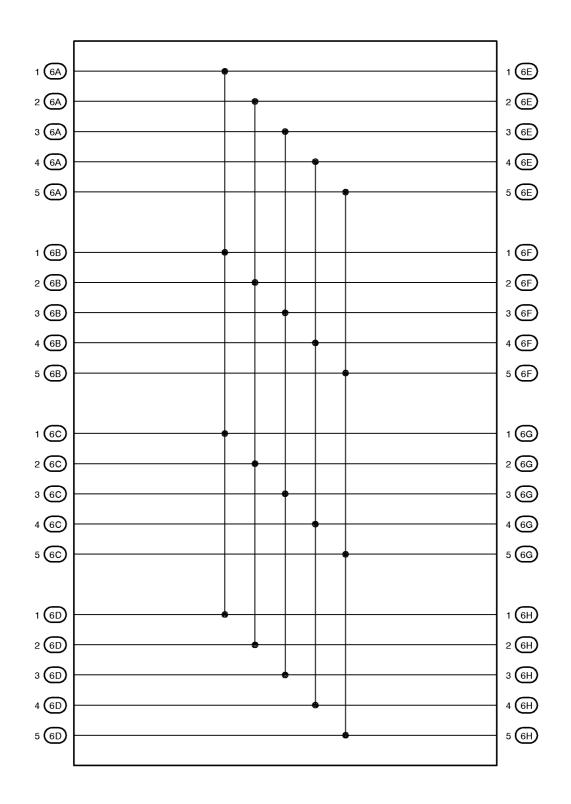
2000 MR2 (EWD408U)

### : J/B No.6

## Instrument Panel Brace LH (See Page 20)

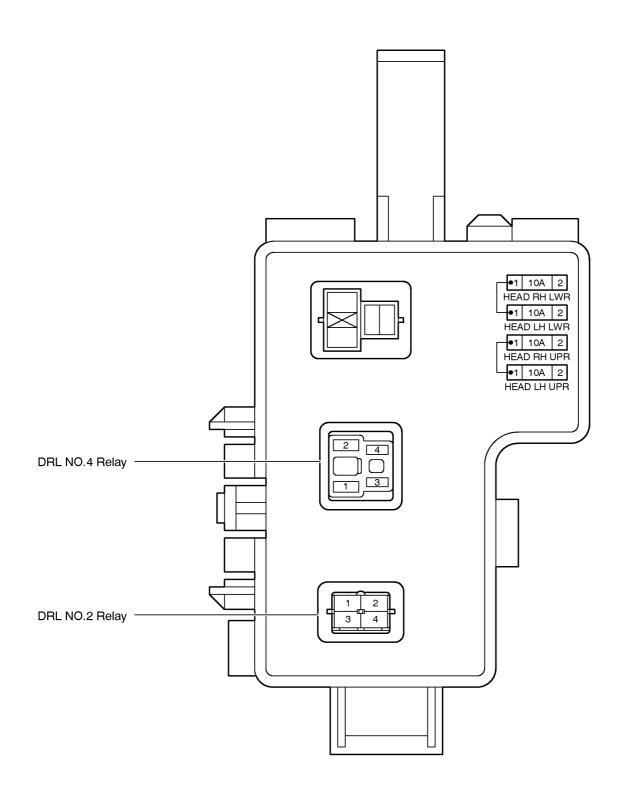


# [J/B No.6 Inner Circuit]

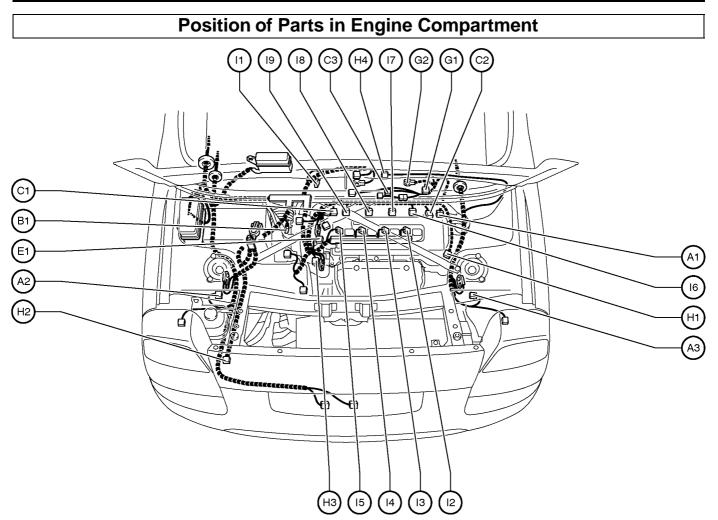


### ⑤ : R/B No.5

Front Compartment Right (See Page 21)

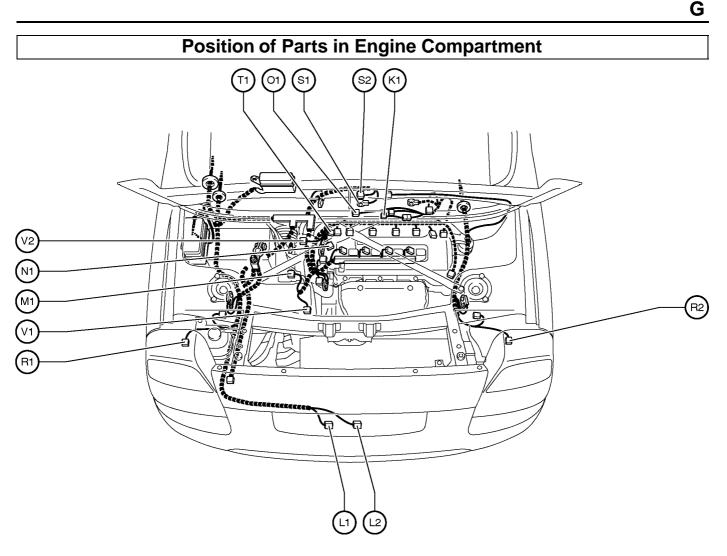


## **G ELECTRICAL WIRING ROUTING**



- A 1 A/C Magnetic Clutch and Lock Sensor
- A 2 ABS Speed Sensor Rear LH
- A 3 ABS Speed Sensor Rear RH
- B 1 Back–Up Light SW
- C 1 Camshaft Position Sensor
- C 2 Camshaft Timing Oil Control Valve
- C 3 Crankshaft Position Sensor
- E 1 Engine Coolant Temp. Sensor
- G 1 Generator
- G 2 Generator

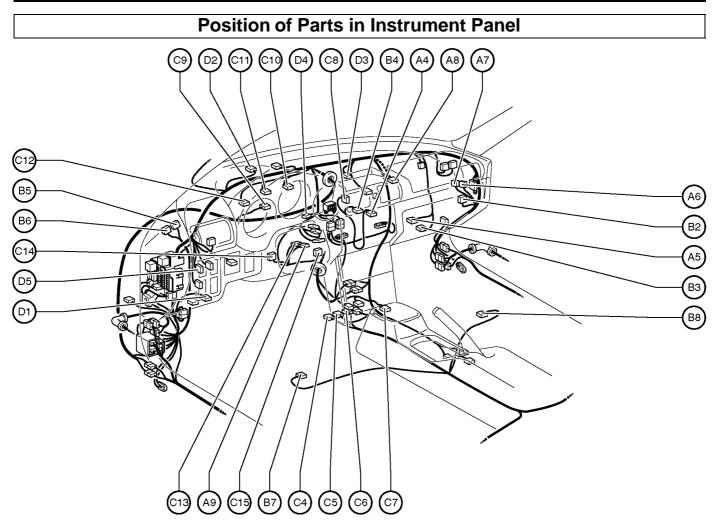
- H 1 Heated Oxygen Sensor (Bank 1 Sensor 1)
- H 2 Heated Oxygen Sensor (Bank 1 Sensor 2)
- H 3 Heated Oxygen Sensor (Bank 2 Sensor 1)
- H 4 High Mounted Stop Light
- I 1 Idle Air Control Valve
- I 2 Ignition Coil and Igniter No.1
- I 3 Ignition Coil and Igniter No.2
- I 4 Ignition Coil and Igniter No.3
- I 5 Ignition Coil and Igniter No.4
- I 6 Injector No.1
- I 7 Injector No.2
- I 8 Injector No.3
- I 9 Injector No.4



- K 1 Knock Sensor
- L 1 License Plate Light LH
- L 2 License Plate Light RH
- M 1 Mass Air Flow Meter
- N 1 Noise Filter (Ignition)
- O 1 Oil Pressure SW

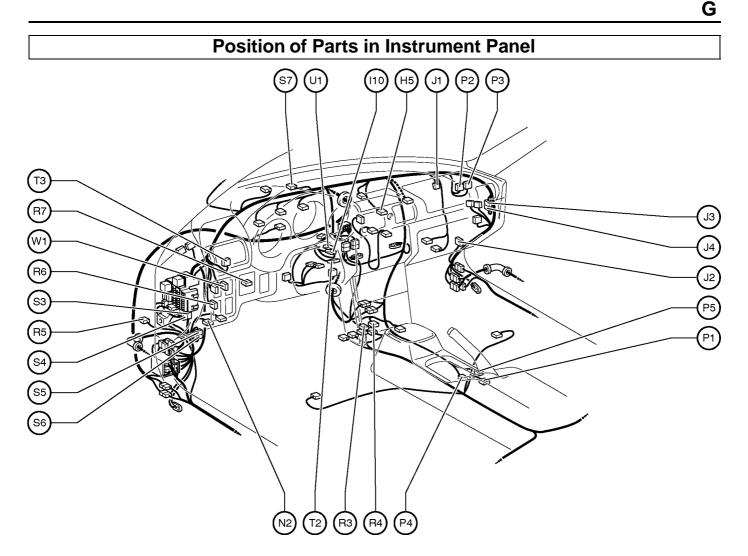
- R 1 Rear Combination Light LH
- R 2 Rear Combination Light RH
- S 1 Starter
- S 2 Starter
- T 1 Throttle Position Sensor
- V 1 VSV (Canister Closed Valve)
- V 2 VSV (EVAP)

## **G ELECTRICAL WIRING ROUTING**



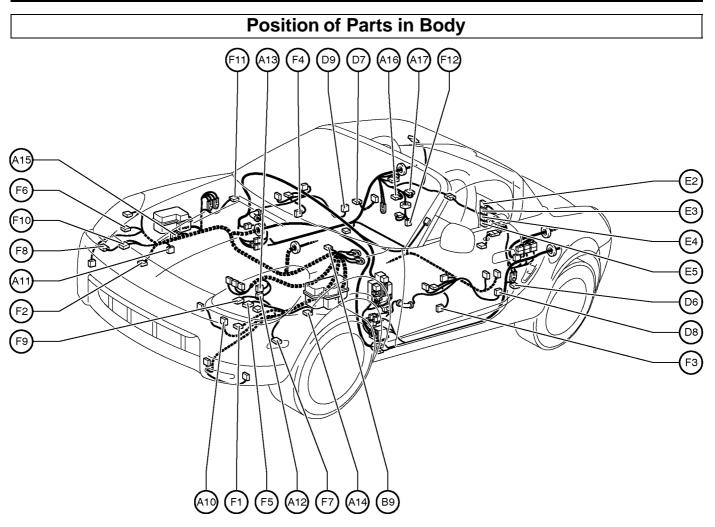
- A 4 A/C SW
- A 5 A/C Thermistor
- A 6 ABS ECU
- A 7 ABS ECU
- A 8 Airbag Squib (Passenger's Airbag Assembly)
- A 9 Airbag Squib (Steering Wheel Pad)
- B 2 Blower Motor
- B 3 Blower Resistor
- B 4 Blower SW
- B 5 Body ECU
- B 6 Body ECU
- B 7 Buckle SW and Tension Reducer LH
- B 8 Buckle SW RH and Seat Belt Warning Occupant Detection Sensor

- C 4 Center Airbag Sensor Assembly
- C 5 Center Airbag Sensor Assembly
- C 6 Center Airbag Sensor Assembly
- C 7 Cigarette Light
- C 8 Clock
- C 9 Clutch Start SW
- C10 Combination Meter
- C11 Combination Meter
- C12 Combination Meter
- C13 Combination SW
- C14 Combination SW
- C15 Combination SW
- D 1 Data Link Connector 3
- D 2 Daytime Running Light Relay
- D 3 Diode (Door Courtesy)
- D 4 Diode (DRL)
- D 5 Door Lock Control SW



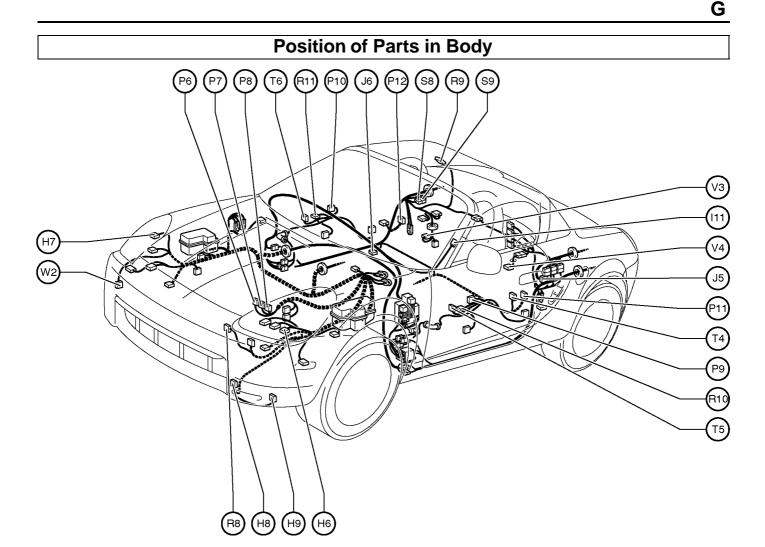
- H 5 Hazard SW
- I 10 Ignition SW
- J 1 Junction Connector
- J 2 Junction Connector
- J 3 Junction Connector
- J 4 Junction Connector
- N 2 Noise Filter (Rear Window Defogger)
- P 1 Parking Brake SW
- P 2 Passenger Airbag Manual ON/OFF SW
- P 3 Passenger Airbag Manual ON/OFF SW
- P 4 Power Window Control SW LH
- P 5 Power Window Control SW RH

- R 3 Radio and Player
- R 4 Radio and Player
- R 5 Rear Window Defogger Relay
- R 6 Rheostat
- R 7 Remote Control Mirror SW
- S 3 Short Connector (SRS No.1)
- S 4 Short Connector (SRS No.1)
- S 5 Short Connector (SRS No.2)
- S 6 Short Connector (SRS No.2)
- S 7 Stop Light SW
- T 2 Transponder Key Amplifier
- T 3 Turn Signal Flasher Relay
- U 1 Unlock Warning SW
- W 1 Window Lock SW



- A10 A/C Condenser Fan Motor
- A 11 A/C Triple Pressure SW
  - (A/C Dual and Single Pressure SW)
- A12 ABS Actuator
- A13 ABS Actuator
- A14 ABS Speed Sensor Front LH
- A15 ABS Speed Sensor Front RH
- A16 Auto Antenna Motor
- A17 Auto Antenna Relay
- B 9 Brake Fluid Level Warning SW
- D 6 Door Courtesy SW LH
- D 7 Door Courtesy SW RH
- D 8 Door Lock Motor, Door Key Lock and Unlock SW and Door Unlock Detection SW LH
- D 9 Door Lock Motor, Door Key Lock and Unlock SW and Door Unlock Detection SW RH

- E 2 Engine Control Module
- E 3 Engine Control Module
- E 4 Engine Control Module
- E 5 Engine Control Module
- F 1 Front Airbag Sensor LH
- F 2 Front Airbag Sensor RH
- F 3 Front Door Speaker LH
- F 4 Front Door Speaker RH
- F 5 Front Parking Light LH
- F 6 Front Parking Light RH
- F 7 Front Side Marker Light LH
- F 8 Front Side Marker Light RH
- F 9 Front Turn Signal Light LH
- F10 Front Turn Signal Light RH
- F 11 Front Wiper Motor
- F12 Fuel Pump and Fuel Sender

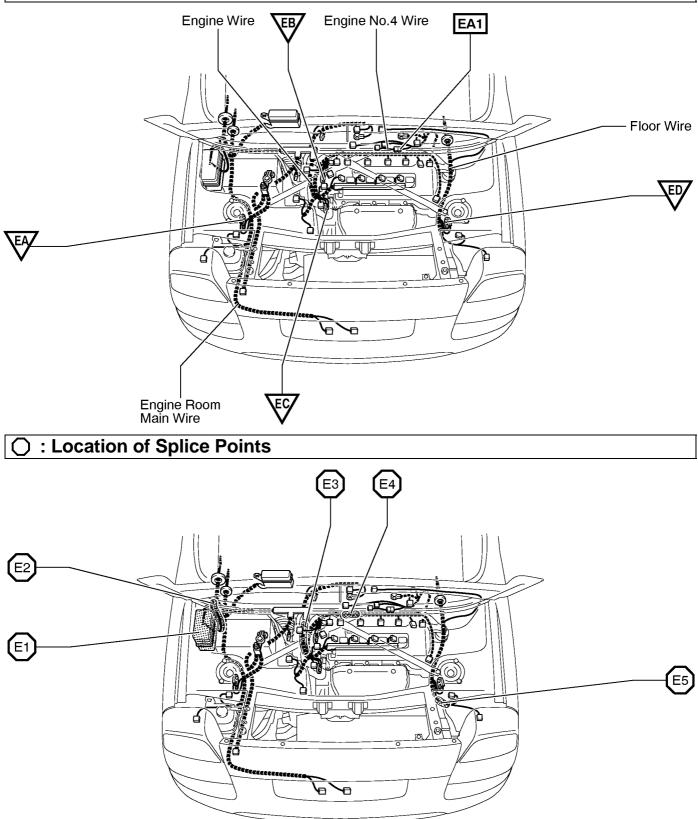


- H 6 Headlight LH
- H 7 Headlight RH
- H 8 Horn LH
- H 9 Horn RH
- I 11 Interior Light
- J 5 Junction Connector
- J 6 Junction Connector
- P 6 Power Steering ECU
- P 7 Power Steering ECU
- P 8 Power Steering ECU
- P 9 Power Window Motor LH
- P10 Power Window Motor RH
- P 11 Pretensioner LH
- P12 Pretensioner RH

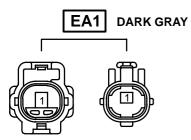
- R 8 Radiator Fan Motor
- R 9 Rear Window Defogger
- R10 Remote Control Mirror LH
- R 11 Remote Control MIrror RH
- S 8 Short Connector (Rear Window Defogger)
- S 9 Short Connector (Rear Window Defogger)
- T 4 Tension Reducer Solenoid LH
- T 5 Tweeter LH
- T 6 Tweeter RH
- V 3 Vapor Pressure Sensor
- V 4 VSV(Pressure Switching Valve)
- W 2 Washer Motor

# : Location of Connector Joining Wire Harness and Wire Harness

# $\nabla$ : Location of Ground Points

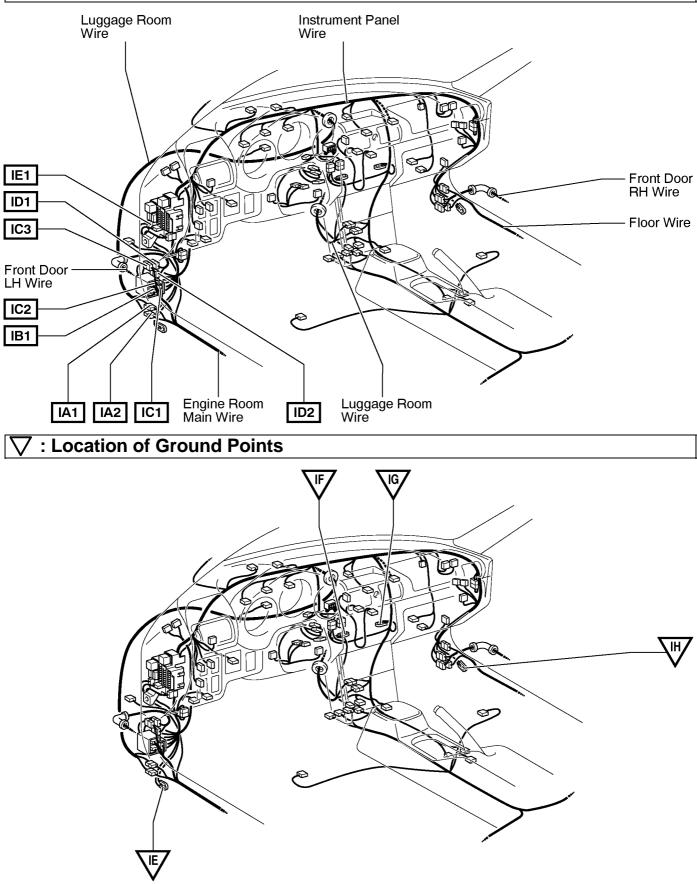


# **Connector Joining Wire Harness and Wire Harness**

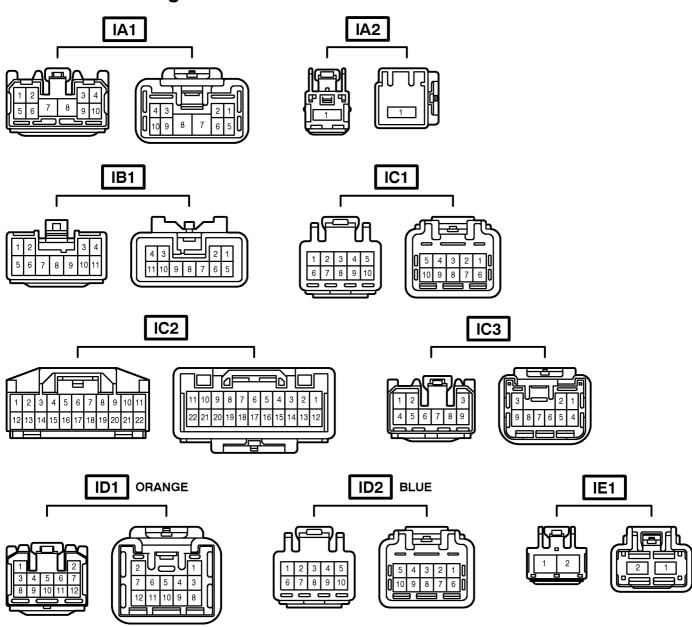


Code	Joining Wire Harness and Wire Harness (Connector Location)	
EA1	Engine No.4 Wire and Engine Wire (Near the Generator)	

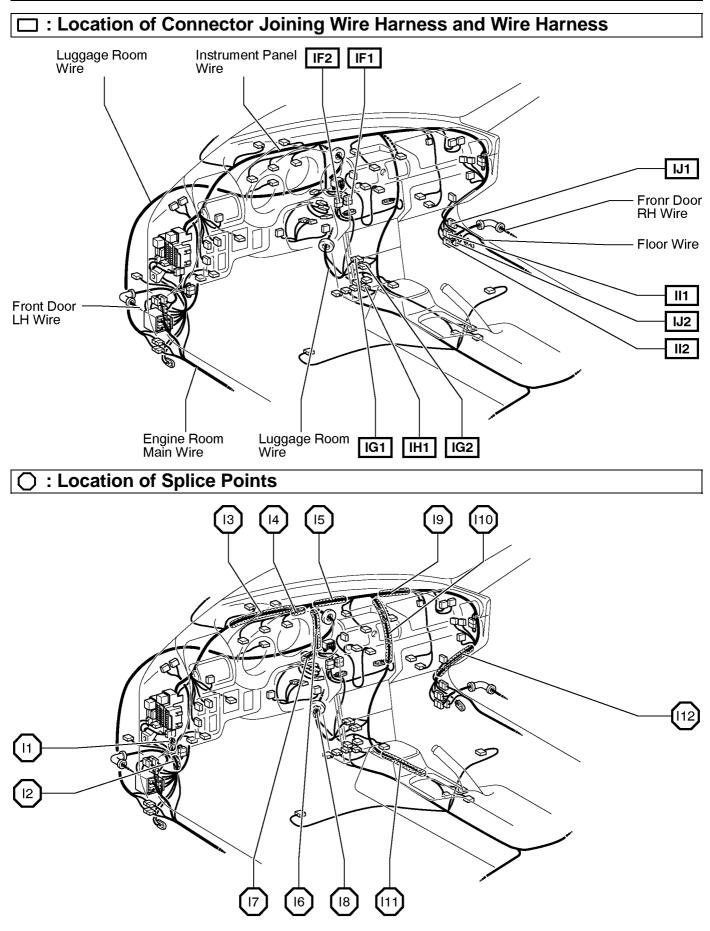
# : Location of Connector Joining Wire Harness and Wire Harness



# **Connector Joining Wire Harness and Wire Harness**

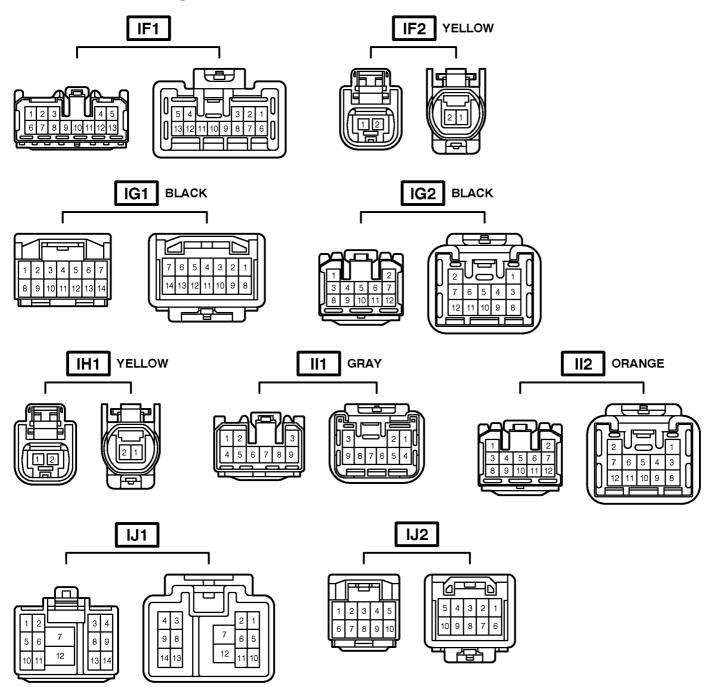


Joining Wire Harness and Wire Harness (Connector Location)			
Engine Deem Mein Wire and Luggage Deem Wire (Left Kiele Denel)			
Engine Room Main Wire and Luggage Room Wire (Left Kick Panel)			
Luggage Room Wire and Instrument Panel Wire (Left Kick Panel)			
Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)			
3			
Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)			
Engine Room Main Wire and Instrument Panel Wire (Left Side of Instrument Panel)			

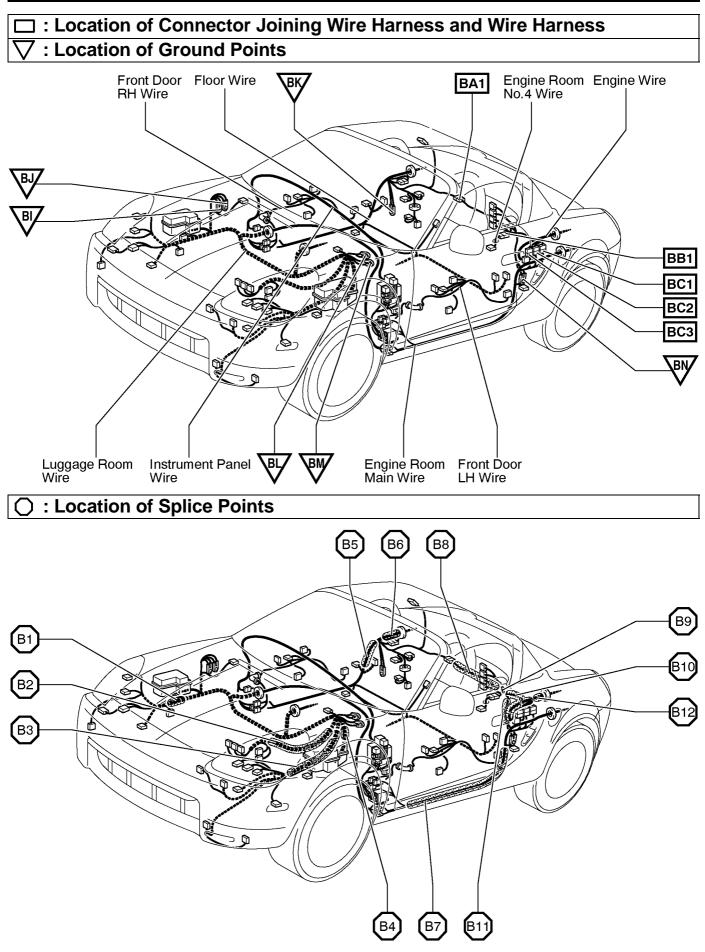


2000 MR2 (EWD408U)

# **Connector Joining Wire Harness and Wire Harness**

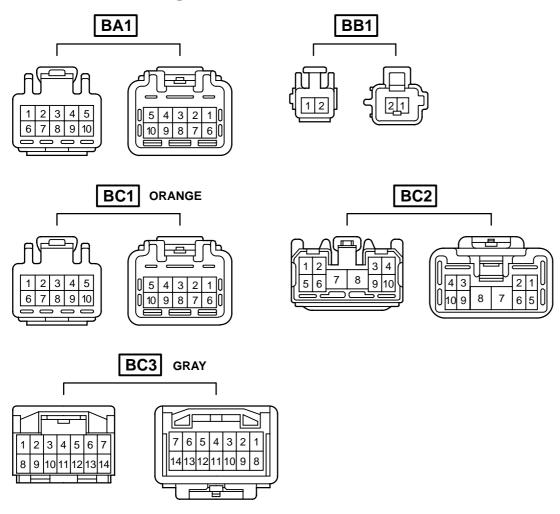


Code	Joining Wire Harness and Wire Harness (Connector Location)	
IF1	Lucreare Dears Miss and Jacks meant Dears Miss (Jacks meant Dears LU)	
IF2	Luggage Room Wire and Instrument Panel Wire (Instrument Panel Brace LH)	
IG1	Luggage Room Wire and Instrument Panel Wire (Under the Instrument Panel Center)	
IG2		
IH1	Instrument Panel Wire and Luggage Room Wire (Under the Instrument Panel Center)	
ll1	Front Door DU Wire and Josts mont Doord Wire (Disht Kirls Doord)	
112	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)	
IJ1	Floor Wire and Instrument Panel Wire (Right Kick Panel)	
IJ2		

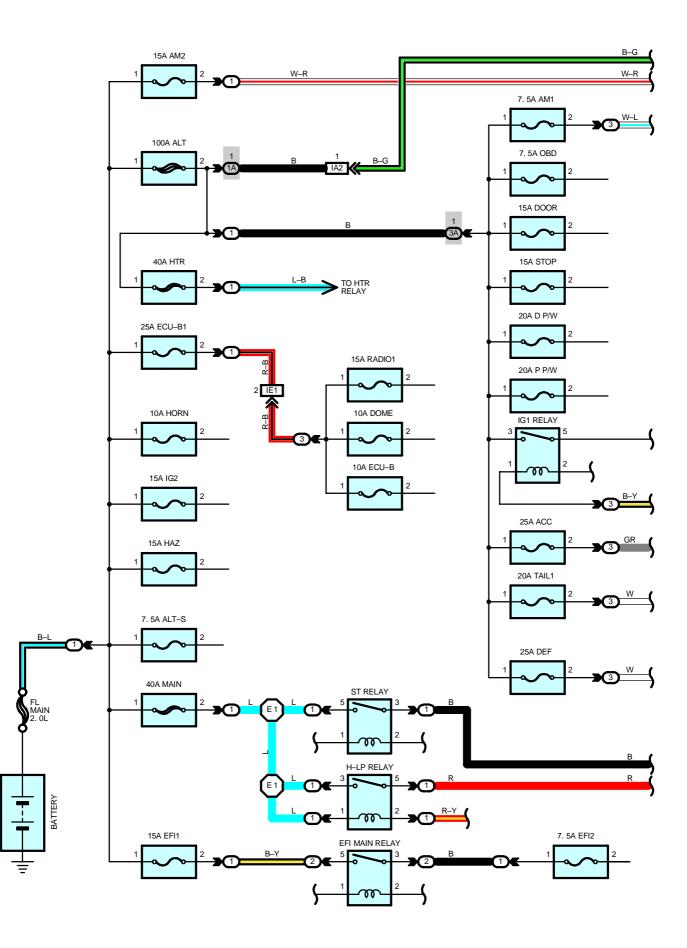


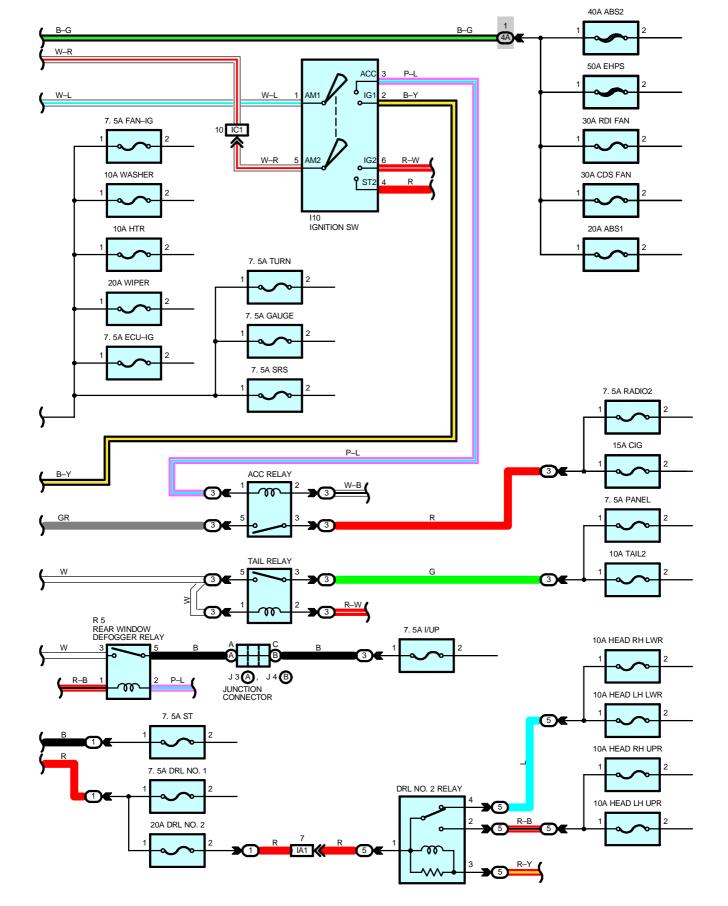
2000 MR2 (EWD408U)

# **Connector Joining Wire Harness and Wire Harness**



Code	Joining Wire Harness and Wire Harness (Connector Location)			
BA1	ngine Room Main Wire and Floor Wire (Right Side of Room Partition Panel)			
BB1	Engine Room No.4 Wire and Engine Room Main Wire (Left Side of Room Partition Panel)			
BC1				
BC2	Engine Wire and Engine Room Main Wire (Quarter Panel LH)			
BC3				





# **POWER SOURCE**

### SERVICE HINTS

### H-LP RELAY

5–3 : Closed with the light control SW at HEAD position or the dimmer SW at FLASH position Closed with the engine running and the parking brake lever is released (Parking brake SW off) [w/ daytime running light]

#### TAIL RELAY

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

#### **I10 IGNITION SW**

- $1{-}3$  : Closed with the ignition key at ACC or ON position
- 1–2 : Closed with the ignition key at **ON** or **ST** position
- 5–6 : Closed with the ignition key at **ON** or **ST** position
- 5–4 : Closed with the ignition key at  $\boldsymbol{ST}$  position

## O : PARTS LOCATION

Code		de	See Page	Со	de	See Page	Code	See Page
	l10		33	J4	В	33		
J3		А	33	R	5	33		

#### ) : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Fusible Link Block (Engine Compartment Left)
2	23	Engine Room R/B (Left Side of Room Partition Panel)
3	24	R/B No.3 (Left Side of Instrument Panel)
5	28	R/B No.5 (Front Compartment Right)

### : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

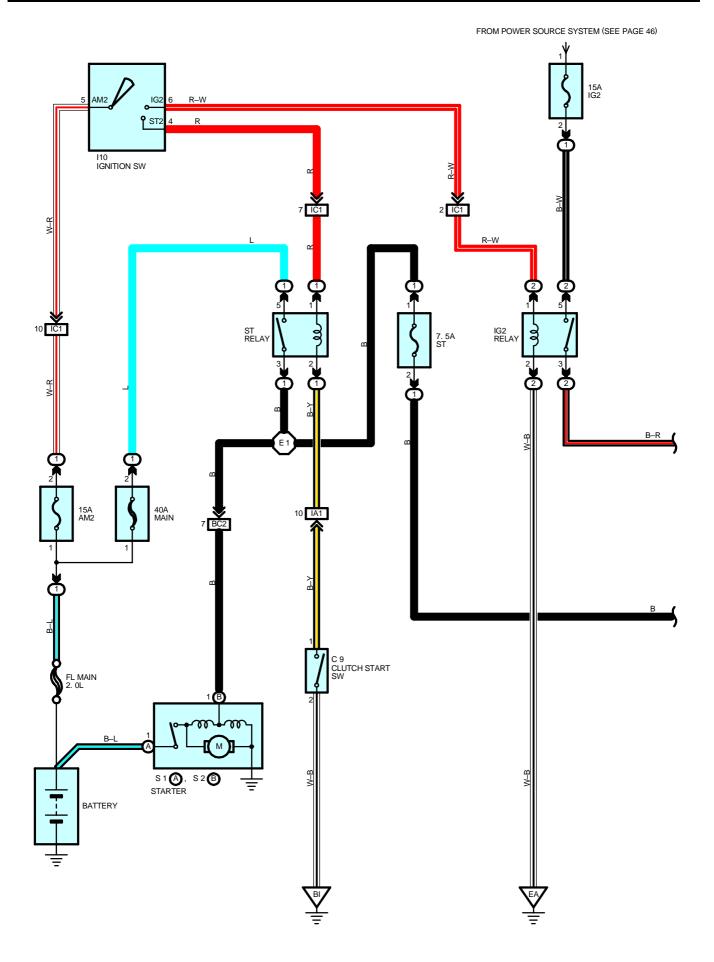
Code	See Page	ction Block and Wire Harness (Connector Location)	
1A	22	Engine Room Main Wire and J/B No.1 (Engine Compartment Left)	
ЗA	24	Engine Room Main Wire and J/B No.3 (Left Side of Instrument Panel)	
4A	25	Luggage Room Wire and J/B No.4 (Front Compartment Left)	

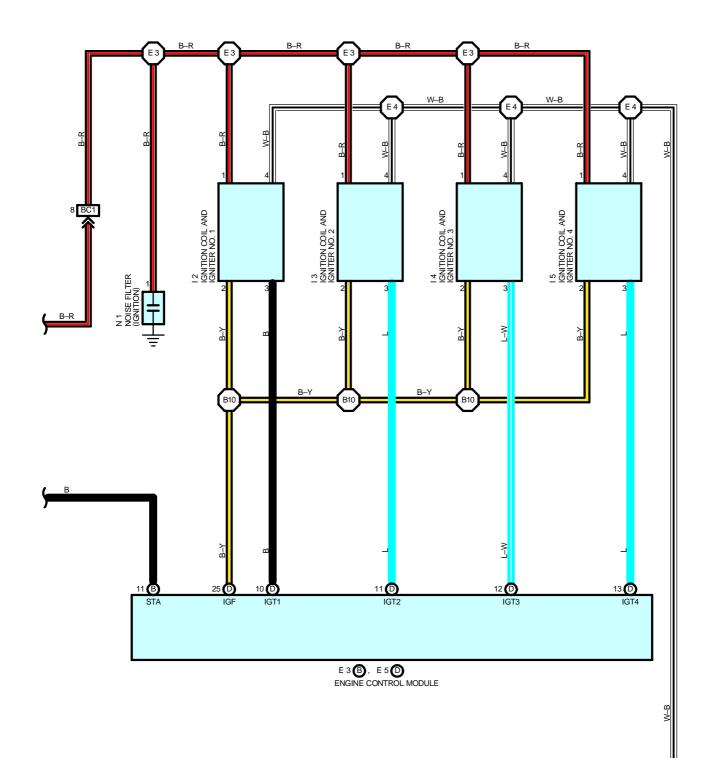
#### : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)		
IA1	20	Faring Deers Main Wire and Lucaness Deers Wire (Left Kiels Dens)		
IA2	38	Engine Room Main Wire and Luggage Room Wire (Left Kick Panel)		
IC1	38	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)		
IE1	38	Engine Room Main Wire and Instrument Panel Wire (Left Side of Instrument Panel)		

_						
	Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
	E1	36	Engine Room Main Wire			

# **STARTING AND IGNITION**





### - SERVICE HINTS

### **I10 IGNITION SW**

- 5–6 : Closed with the ignition SW at ON or ST position
- 5–4 : Closed with the ignition SW at  $\ensuremath{\text{ST}}$  position

#### **C9 CLUTCH START SW**

1-2 : Closed with the clutch pedal fully depressed

### ST RELAY

5–3 : Closed with the clutch start SW on and the ignition SW at  ${\boldsymbol{ST}}$  position

#### S1 (A), S2 (B) STARTER

Points closed with the clutch start SW on and the ignition SW at ST position

## O : PARTS LOCATION

Code		See Page	Code	See Page	Code		See Page
C9		32	13	30	N1		31
E3	В	34	14	30	S1	А	31
E5	D	34	15	30	S2	В	31
I	2	30	l10	33			

### : RELAY BLOCKS

Code	See Page	ay Blocks (Relay Block Location)	
1	22	Fusible Link Block (Engine Compartment Left)	
2	23	Engine Room R/B (Left Side of Room Partition Panel)	

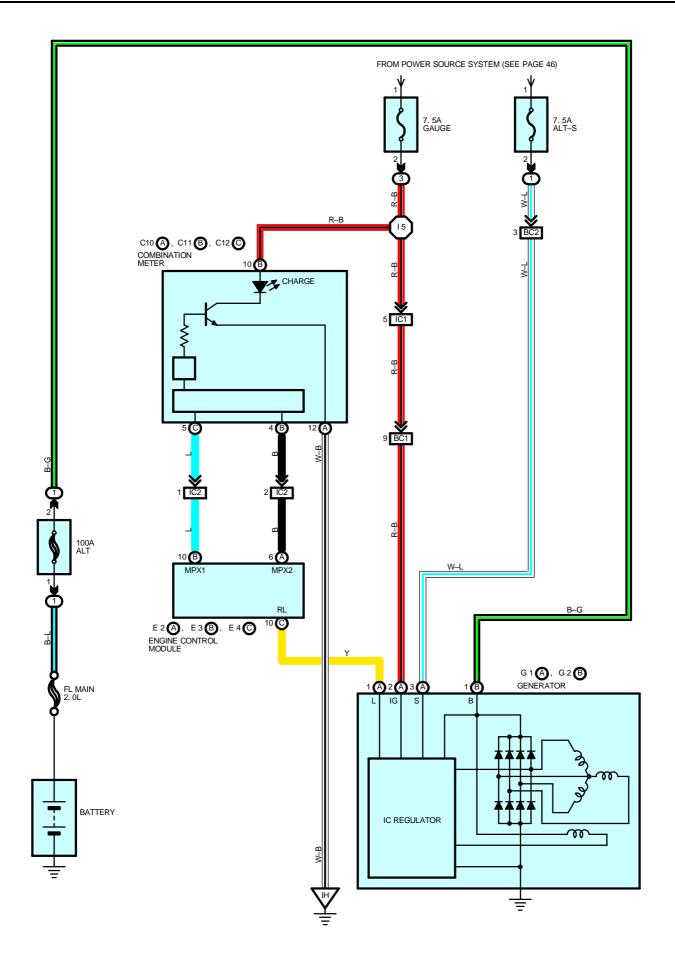
### : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	ning Wire Harness and Wire Harness (Connector Location)				
IA1	38	Engine Room Main Wire and Luggage Room Wire (Left Kick Panel)				
IC1	38	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)				
BC1	42	Engine Wire and Engine Room Main Wire (Quarter Panel LH)				
BC2	42					

### 7 : GROUND POINTS

Code	See Page	Ground Points Location
EA	36	Suspension Tower Rear LH
EC	36	Engine Block LH
BI	42	Suspension Tower Front RH

—					
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	36	Engine Room Main Wire	E4	36	Engine Wire
E3	36	Engine Wire	B10	42	



# - SERVICE HINTS

G1 (A) GENERATOR

(A) 3–GROUND : 13.2–14.0 volts with the engine running at 5000~rpm and  $115\,^\circ\text{C}$  (239 $^\circ\text{F})$ 

# O : PARTS LOCATION

Code		See Page	Code		See Page	Code		See Page
C10	А	32	E2	А	34	G1	А	30
C11	В	32	E3	В	34	G2	В	30
C12	С	32	E4	С	34			

## : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Fusible Link Block (Engine Compartment Left)
3	24	R/B No.3 (Left Side of Instrument Panel)

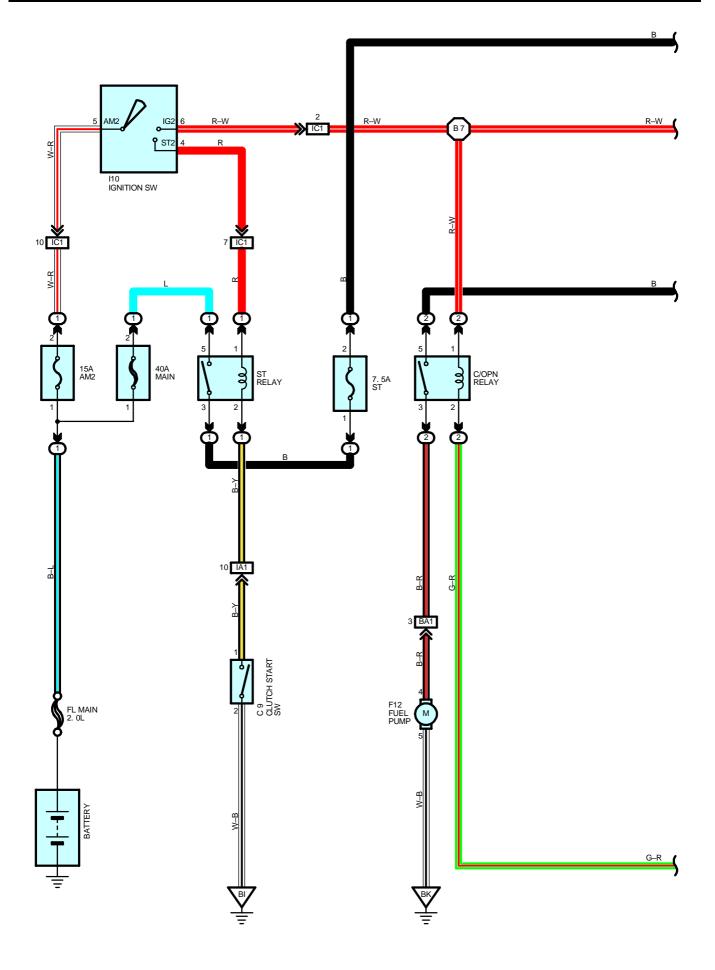
### : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

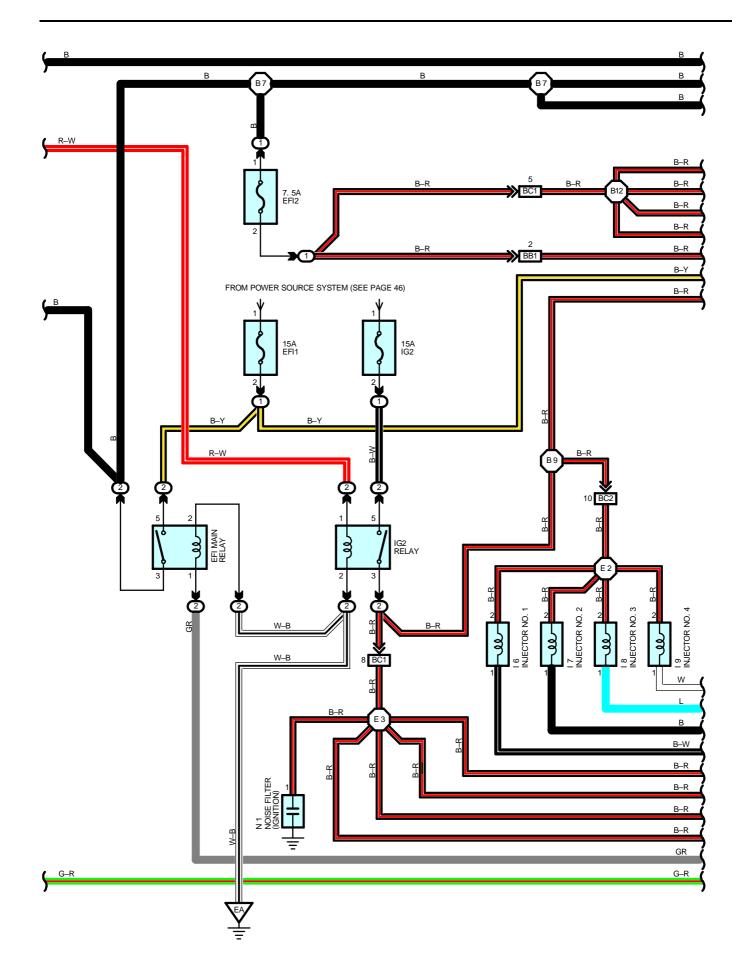
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	20	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
IC2	38	
BC1	40	Engine Wire and Engine Room Main Wire (Quarter Panel LH)
BC2	42	

## : GROUND POINTS

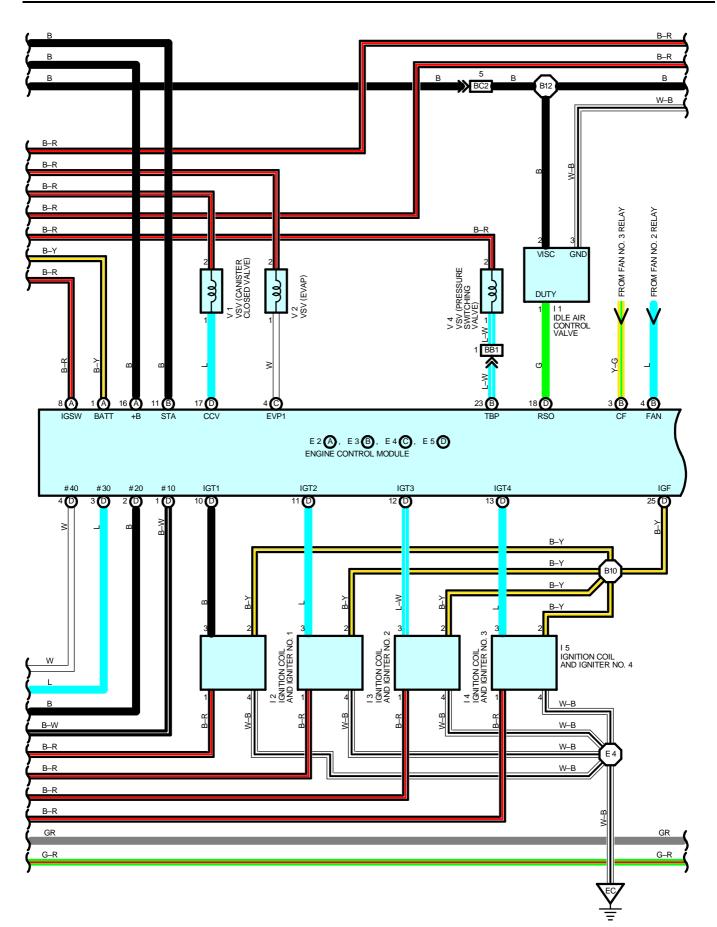
Code	See Page	Ground Points Location
IH	38	Right Kick Panel

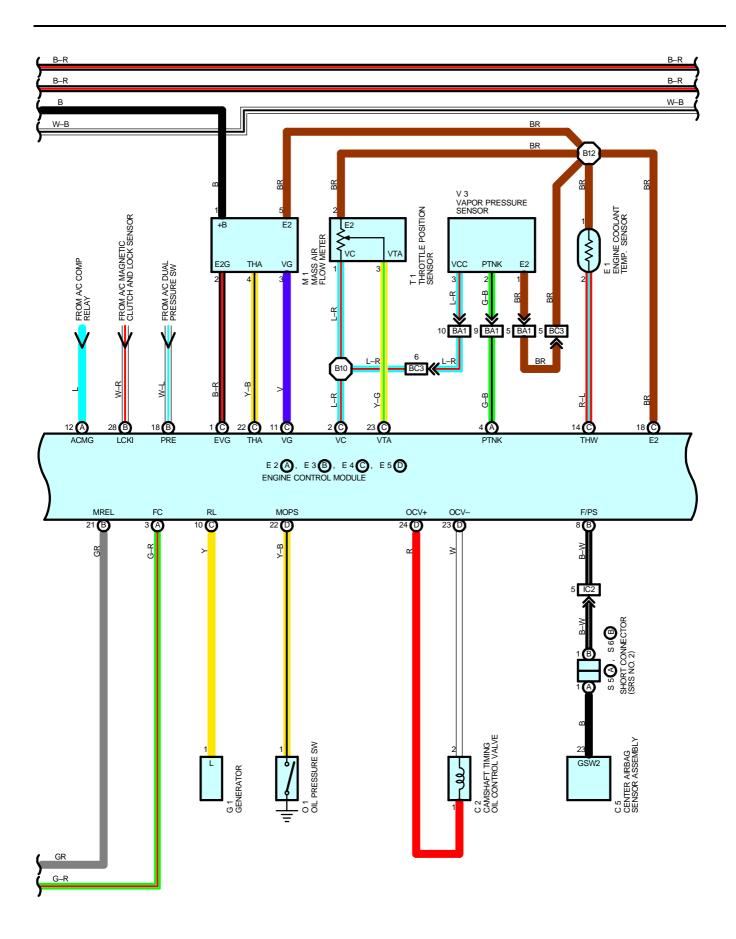
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
15	40	Instrument Panel Wire			



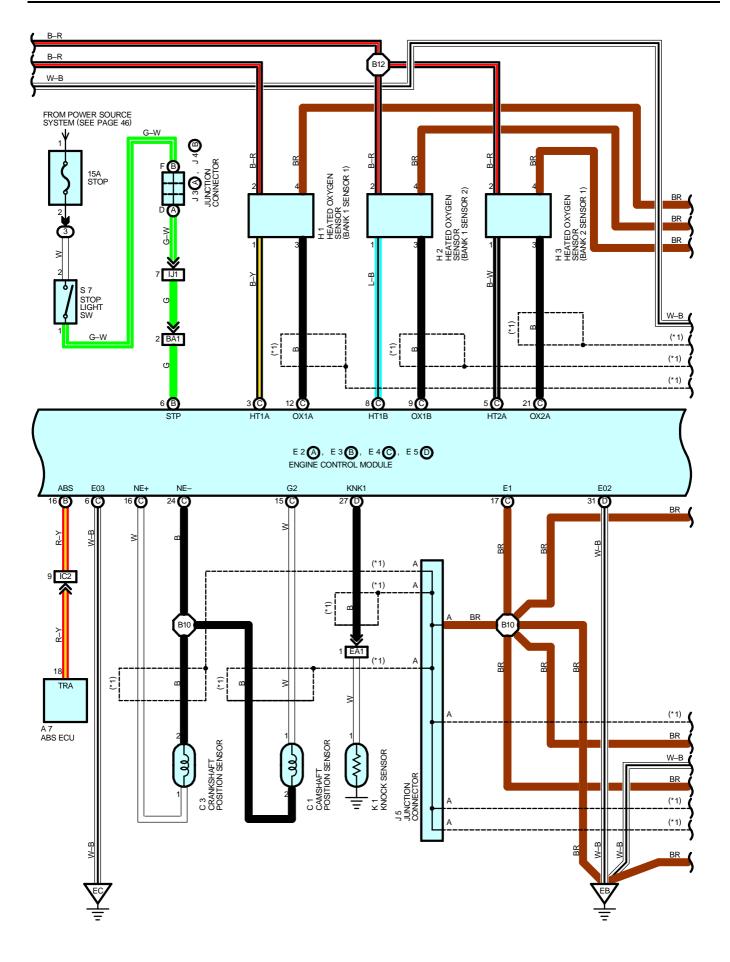


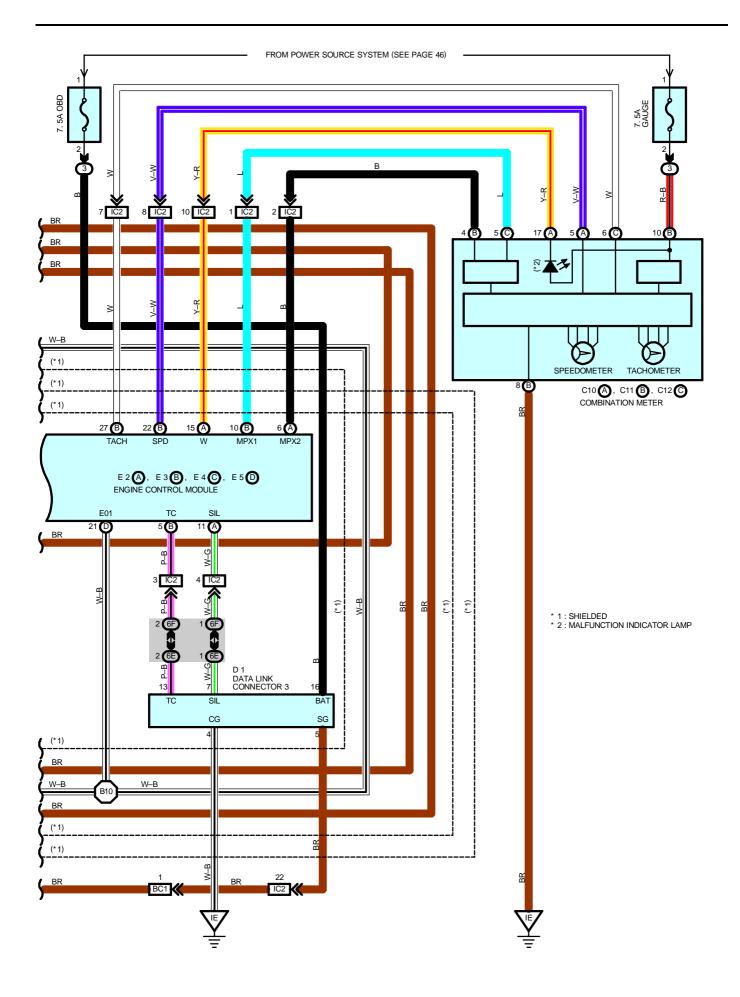
# **ENGINE CONTROL**





2000 MR2 (EWD408U)





#### SYSTEM OUTLINE

This system utilizes an engine control module and maintains overall control of the engine and so on. An outline of the engine control is explained here.

### 1. INPUT SIGNALS

(1) Engine coolant temp. signal circuit

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

(2) Intake air temp. signal circuit

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

(3) Oxygen sensor signal circuit

The oxygen density in the exhaust emission is detected and is input as a control signal from the heated oxygen sensors (Bank 1 sensor 1, bank 1 sensor 2, bank 2 sensor 1) to TERMINALS OX1A, OX1B, OX2A of the engine control module. To stabilize detection performance by the heated oxygen sensors, the heated oxygen sensors are warmed. This heater is also controlled by the engine control module (HT1A, HT1B, HT2A).

(4) RPM signal circuit

Camshaft position is detected by the camshaft position sensor and its signal is input to TERMINAL G2 of the engine control module as a control signal. Also, the engine RPM is detected by the crankshaft position sensor installed in the cylinder block and the signal is input into TERMINAL NE+ of the engine control module as a control signal.

(5) Throttle 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 control module.

(6) Vehicle speed circuit

The vehicle speed sensor, installed inside the transmission, detects the vehicle speed and inputs a control signal into TERMINAL SPD of the engine control module.

(7) A/C SW signal circuit

The operating voltage of the A/C magnetic clutch is detected and the signal is input into TERMINAL ACMG of the engine control module as a control signal.

(8) Battery signal circuit

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

(9) Intake air volume signal circuit

Intake air volume is detected by the mass air flow meter and the signal is input to TERMINAL VG of the engine control module as a control signal.

(10) Stop light SW signal circuit

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

(11) Starter signal circuit

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

#### (12) Engine knock signal circuit

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

### 2. CONTROL SYSTEM

#### \* SFI system

The SFI system monitors the engine condition through the signals input from each sensor (Input signals from (1) to (12) etc.) to the engine control module. The best fuel injection timing is decided based on this data and the program memorized by the engine control module, and the control signal is output to TERMINALS #10, #20, #30 and #40 of the engine control module to operate the injector (Inject the fuel). The sequential multiport fuel injection (Electronic fuel injection) system controls the fuel injection operation by the engine control module in response to the driving conditions.

\* ESA system

The ESA system monitors the engine condition through the signals input to the engine control module from each sensor (Input signals from (1), (2), (4) to (12) etc.). The best ignition timing is decided according to this data and the memorized data in the engine control module, and the control signal is output to TERMINALS IGT1, IGT2, IGT3 and IGT4. 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 heated oxygen sensors (Bank 1 sensor 1, bank 1 sensor 2, bank 2 sensor 1) to improve detection performance of the sensors.

The engine control module evaluates the signals from each sensor (Input signals from (1), (2), (4), (8) to (10) etc.), and outputs current to TERMINALS HT1A, HT1B, HT2A to control the heater.

#### 3. DIAGNOSIS SYSTEM

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

#### 4. FAIL-SAFE SYSTEM

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

# E2 (A), E3 (B), E4 (C), E5 (D) ENGINE CONTROL MODULE

BATT-E1 : Always **9.0–14.0** volts

- +B-E1 : 9.0-14.0 volts (Ignition SW at ON position)
- VC-E2 : 4.5-5.5 volts (Ignition SW at ON position)
- VTA-E2 : 0.3-0.8 volts (Ignition SW ON and throttle valve fully closed)
- 3.2–4.9 volts (Ignition SW ON and throttle valve open)
- THA-E2 : 0.5-3.4 volts (Ignition SW ON and intake air temp. 20°C, 68°F)
- THW-E2 : 0.2-1.0 volts (Ignition SW ON and coolant temp. 80°C, 176°F)
- STA-E1 : 6.0-14.0 volts (Engine cranking)

W-E1 : 9.0-14.0 volts (No trouble and engine running)

STP-E1 : 9.0-14.0 volts (Brake pedal depress)

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

IGT1, IGT2, IGT3, IGT4-E1 : 0.8-1.2 volts (Engine cranking or idling)

#10, #20, #30, #40-E01, E02 : 9.0-14.0 volts (Ignition SW at ON position)

### **RESISTANCE OF ECU WIRING CONNECTORS**

```
(Disconnect wiring connector)
```

VTA-E2 : **3.3–10.0** k $\Omega$  (Throttle valve fully open)

0.2-5.5 kΩ (Throttle valve fully closed)

VC–E2 : **2.0–7.0** kΩ

THA-E2 : 2.0-3.0 kΩ (Intake air temp. 20°C, 68°F)

THW-E2 : 0.2-0.4 kΩ (Coolant temp. 80°C, 176°F)

RSO–E1 : **19.3–22.3** Ω

#### **C/OPN RELAY**

5-3 : Closed with the starter cranking and engine running

#### **EFI MAIN RELAY**

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

#### E1 ENGINE COOLANT TEMP. SENSOR

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

## O : PARTS LOCATION

Co	ode	See Page	Code	See Page	Co	de	See Page
A	7	32	F12	34	J3	Α	33
C1		30	G1	30	J4	В	33
С	2	30	H1	30	J	5	35
C	3	30	H2	30	K	1	31
С	5	32	H3	30	N	1	31
С	;9	32	l1	30	N	1	31
C10	Α	32	12	30	C	1	31
C11	В	32	13	30	S5	Α	33
C12	С	32	14	30	S6	В	33
D	)1	32	15	30	S	7	33
E	1	30	16	30	Т	1	31
E2	Α	34	17	30	V	1	31
E3	В	34	18	30	V	2	31
E4	С	34	19	30	V	3	35
E5	D	34	l10	33	V	4	35

# : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Fusible Link Block (Engine Compartment Left)
2	23	Engine Room R/B (Left Side of Room Partition Panel)
3	24	R/B No.3 (Left Side of Instrument Panel)

# : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
6E	26	Instrument Denel Wire and I/D No 6 (Instrument Denel Brees I II)
6F	26	Instrument Panel Wire and J/B No.6 (Instrument Panel Brace LH)

# : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

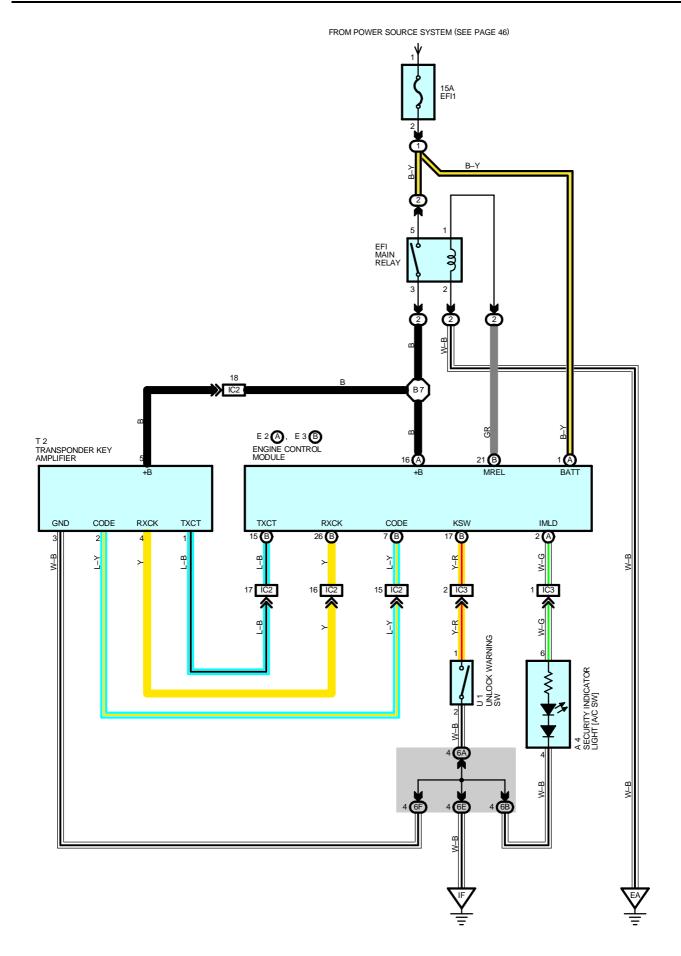
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)		
EA1	36	Engine No.4 Wire and Engine Wire (Near the Generator)		
IA1	38	Engine Room Main Wire and Luggage Room Wire (Left Kick Panel)		
IC1	- 38	Engine Dear Main Wire and Instrument Denal Wire (Laft Kiek Danal)		
IC2	- 30	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)		
IJ1	40	Floor Wire and Instrument Panel Wire (Right Kick Panel)		
BA1	42	Engine Room Main Wire and Floor Wire (Right Side of Room Partition Panel)		
BB1	42	Engine Room No.4 Wire and Engine Room Main Wire (Left Side of Room Partition Panel)		
BC1				
BC2	42	Engine Wire and Engine Room Main Wire (Quarter Panel LH)		
BC3				

# 

	0.5	
Code	See Page	Ground Points Location
EA	36	Suspension Tower Rear LH
EB	26	Engine Block III
EC	36	Engine Block LH
IE	38	Left Kick Panel
BI	42	Suspension Tower Front RH
BK	42	Under the Center Pillar RH

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E2			B9	42	Engine Room Main Wire
E3	36	Engine Wire	B10	40	
E4			B12	42	Engine Wire
B7	42	Engine Room Main Wire			

# **ENGINE IMMOBILISER SYSTEM**



## - SERVICE HINTS

## **T2 TRANSPONDER KEY AMPLIFIER**

3-GROUND : Always continuity

#### **U1 UNLOCK WARNING SW**

1–2 : Closed with the ignition key in cylinder

# O : PARTS LOCATION

Code		See Page	Code		See Page	Code	See Page
A	\4	32	E3	В	34	U1	33
E2	А	34	Т	2	33		

### : RELAY BLOCKS

Code	See Page	See Page Relay Blocks (Relay Block Location)	
1	1 22 Fusible Link Block (Engine Compartment Left)		
2	2 23 Engine Room R/B (Left Side of Room Partition Panel)		

# : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)			
6A	26				
6B		Instances ( Development //D No. 0.// astronomic Development / Diverse / Li)			
6E		Instrument Panel Wire and J/B No.6 (Instrument Panel Brace LH)			
6F					

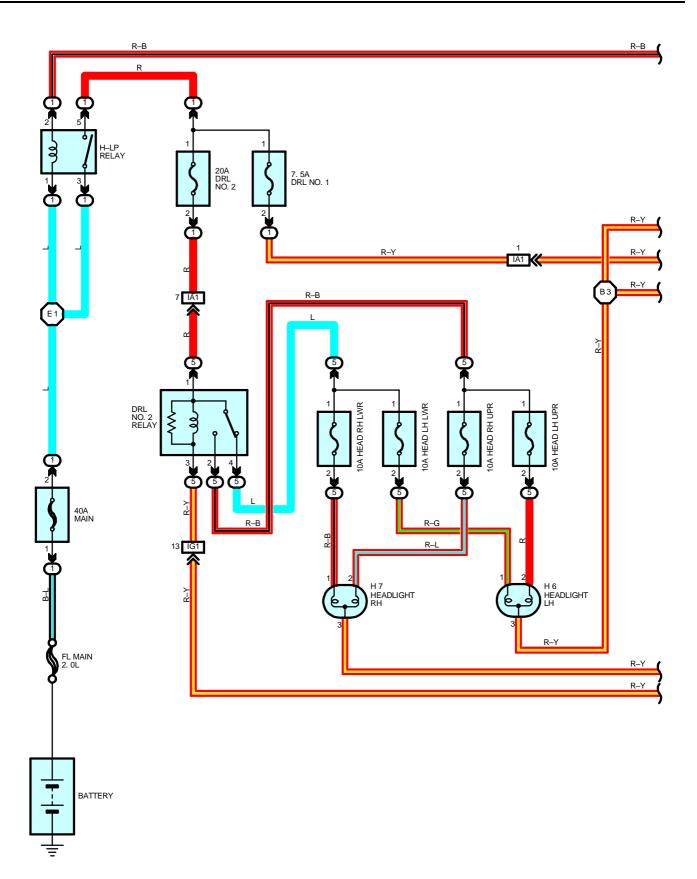
### : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

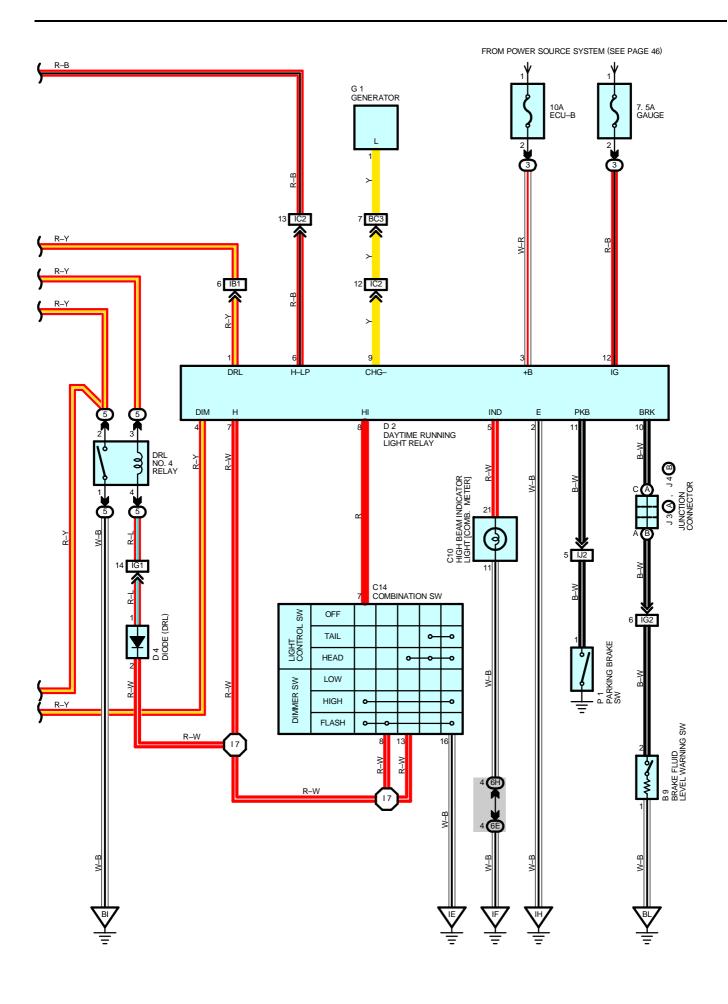
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)	
IC2	20	Facine Deem Main Mire and least waart Decal Mire (Left Kiel, Decal)	
IC3	38	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)	

## : GROUND POINTS

Code	See Page	Ground Points Location
EA	36	Suspension Tower Rear LH
IF	38	Instrument Panel Brace LH

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B7	42	Engine Room Main Wire			





# HEADLIGHT

### SYSTEM OUTLINE

When the following conditions are met while the ignition SW is ON, and if the light control SW is at OFF or TAIL position, the daytime running light is controlled.

\* Parking brake lever is released (Parking brake SW is OFF)

- $\ast\,$  Input signal from the generator
- If any of the following conditions are met, the daytime running light control is canceled.
- \* Ignition SW is turned OFF.
- \* Light control SW is at HEAD position.
- \* Dimmer SW is at FLASH position.

#### SERVICE HINTS

#### H-LP RELAY

5–3 : Closed with the light control SW at **HEAD** position or the dimmer SW at **FLASH** position Closed with the engine running and the parking brake lever released (Parking brake SW off)

#### C14 COMBINATION SW

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

#### P1 PARKING BRAKE SW

1-GROUND : Closed with the parking brake lever pulled up

#### D2 DAYTIME RUNNING LIGHT RELAY

- 3–GROUND : Always approx. 12 volts
- 12-GROUND : Approx. 12 volts with the ignition SW at ON position
- 2–GROUND : Always continuity

### O : PARTS LOCATION

Code	See Page	Code	See Page	Co	de	See Page
B9	34	D4	32	J3	А	33
C10	32	G1	30	J4	В	33
C14	32	H6	35	Р	1	33
D2	32	H7	35			

#### : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)	
1	22	Fusible Link Block (Engine Compartment Left)	
3	24	R/B No.3 (Left Side of Instrument Panel)	
5	28	R/B No.5 (Front Compartment Right)	

#### : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	unction Block and Wire Harness (Connector Location)	
6E	26	Instrument Denel Wire and J/D No 6 (Instrument Danel Brees J J I)	
6H	20	Instrument Panel Wire and J/B No.6 (Instrument Panel Brace LH)	

#### : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)	
IA1	38	Engine Room Main Wire and Luggage Room Wire (Left Kick Panel)	
IB1	38	Luggage Room Wire and Instrument Panel Wire (Left Kick Panel)	
IC2	38	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)	
IG1	10	Luggage Room Wire and Instrument Panel Wire (Under the Instrument Panel Center)	
IG2	40		
IJ2	40	Floor Wire and Instrument Panel Wire (Right Kick Panel)	
BC3	42	Engine Wire and Engine Room Main Wire (Quarter Panel LH)	

#### 

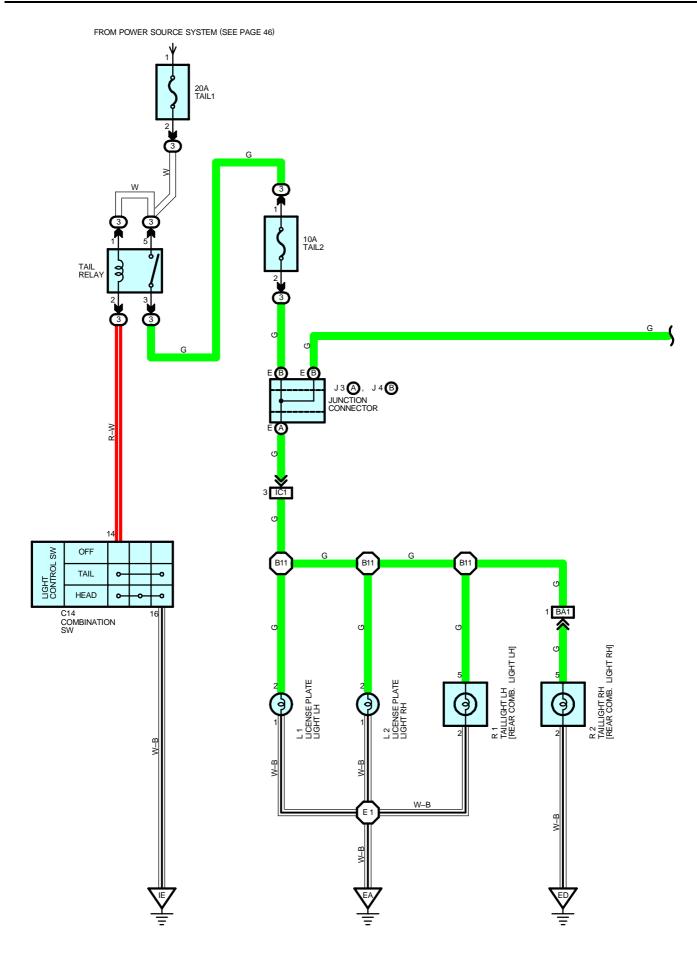
Code	See Page	Ground Points Location
IE	38	Left Kick Panel
IF	38	Instrument Panel Brace LH
IH	38	Right Kick Panel
BI	42	Suspension Tower Front RH
BL	42	Suspension Tower Front LH

## : SPLICE POINTS

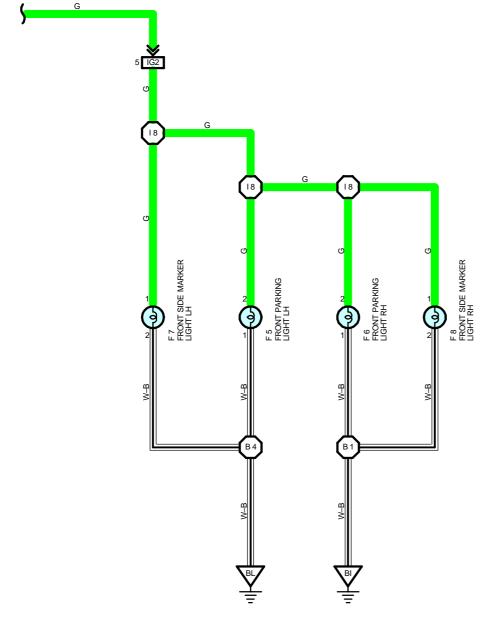
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Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	36	Engine Room Main Wire	B3	42	Luggage Room Wire
17	40	Instrument Panel Wire			

## TAILLIGHT



2000 MR2 (EWD408U)



## TAILLIGHT

## - SERVICE HINTS -

TAIL RELAY

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П

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

## **C14 COMBINATION SW**

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

## O : PARTS LOCATION

Code	See Page	Co	de	See Page	Code	See Page
C14	32	F	8	34	L2	31
F5	34	J3	А	33	R1	31
F6	34	J4	В	33	R2	31
F7	34	L	1	31		

## : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
3	24	R/B No.3 (Left Side of Instrument Panel)

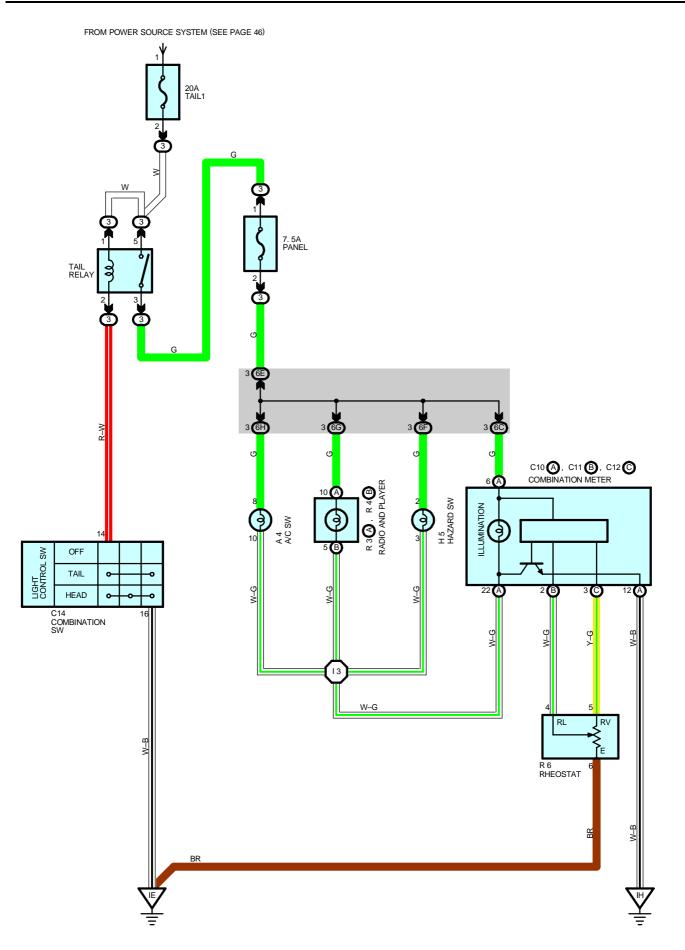
## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	38	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
IG2	40	Luggage Room Wire and Instrument Panel Wire (Under the Instrument Panel Center)
BA1	42	Engine Room Main Wire and Floor Wire (Right Side of Room Partition Panel)

## 7 : GROUND POINTS

Code	See Page	Ground Points Location
EA	36	Suspension Tower Rear LH
ED	36	Suspension Tower Rear RH
IE	38	Left Kick Panel
BI	42	Suspension Tower Front RH
BL	42	Suspension Tower Front LH

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	36	Engine Room Main Wire	B4	42	Luggage Room Wire
18	40		B11	42	Engine Room Main Wire
B1	42	Luggage Room Wire			



## TAIL RELAY

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

### **C14 COMBINATION SW**

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

## O : PARTS LOCATION

Co	de	See Page	Code	See Page	Co	de	See Page
A	4	32	C12 C	32	R3	А	33
C10	А	32	C14	32	R4	В	33
C11	В	32	H5	33	R	6	33

## : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
3	24	R/B No.3 (Left Side of Instrument Panel)

## : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

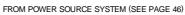
Code	See Page	Junction Block and Wire Harness (Connector Location)
6C		
6E		
6F	26	Instrument Panel Wire and J/B No.6 (Instrument Panel Brace LH)
6G		
6H		

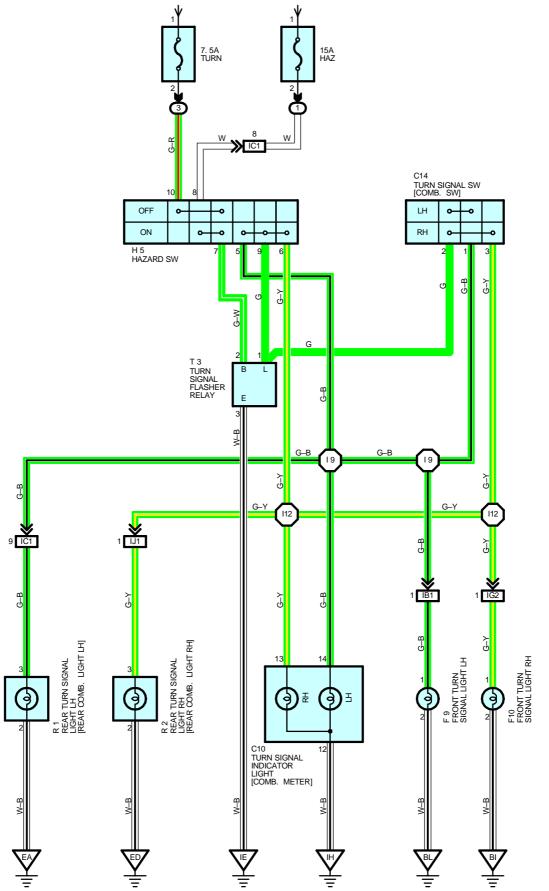
## 7 : GROUND POINTS

Code	See Page	Ground Points Location
IE	38	Left Kick Panel
IH	38	Right Kick Panel

Code	Code See Page Wire Harness with Splice Points		Code	See Page	Wire Harness with Splice Points
13	40 Instrument Panel Wire				

## TURN SIGNAL AND HAZARD WARNING LIGHT





2000 MR2 (EWD408U)

## T3 TURN SIGNAL FLASHER RELAY

2–GROUND : Approx. 12 volts with the ignition SW on or the hazard SW on

1–GROUND : Changes from approx. **12** to **0** volts with the ignition SW on and the turn signal SW **LH** or **RH** position, and with the hazard SW on

3-GROUND : Always continuity

## O : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C10	32	F10	34	R2	31
C14	32	H5	33	Т3	33
F9	34	R1	31		

### : RELAY BLOCKS

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Code	See Page	Relay Blocks (Relay Block Location)
1	22	Fusible Link Block (Engine Compartment Left)
3	24	R/B No.3 (Left Side of Instrument Panel)

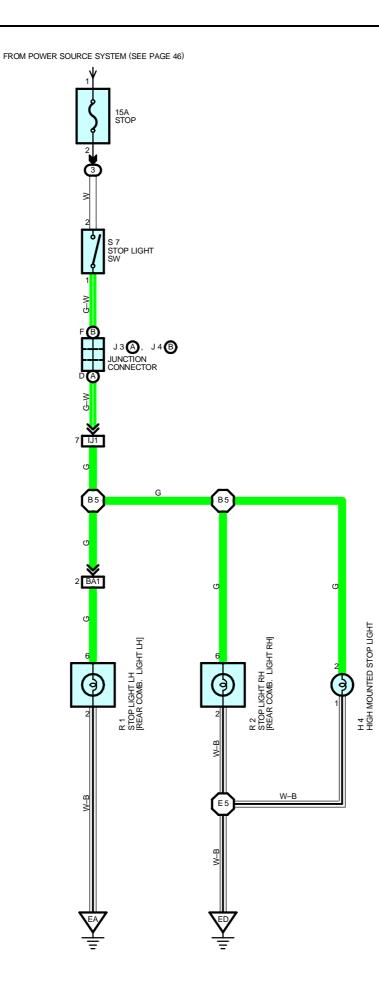
### : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	38	Luggage Room Wire and Instrument Panel Wire (Left Kick Panel)
IC1	38	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
IG2	40	Luggage Room Wire and Instrument Panel Wire (Under the Instrument Panel Center)
IJ1	40	Floor Wire and Instrument Panel Wire (Right Kick Panel)

## 7 : GROUND POINTS

Code	See Page	Ground Points Location
EA	36	Suspension Tower Rear LH
ED	36	Suspension Tower Rear RH
IE	38	Left Kick Panel
IH	38	Right Kick Panel
BI	42	Suspension Tower Front RH
BL	42	Suspension Tower Front LH

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
19	40	Instrument Panel Wire	l12	40	Instrument Panel Wire



### S7 STOP LIGHT SW

2-1 : Closed with the brake pedal depressed

## O : PARTS LOCATION

С	ode	See Page	Code		See Page	Code	See Page
ł	-14	30	J4	В	33	R2	31
J3	А	33	R	1	31	S7	33

## : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
3	24	R/B No.3 (Left Side of Instrument Panel)

## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

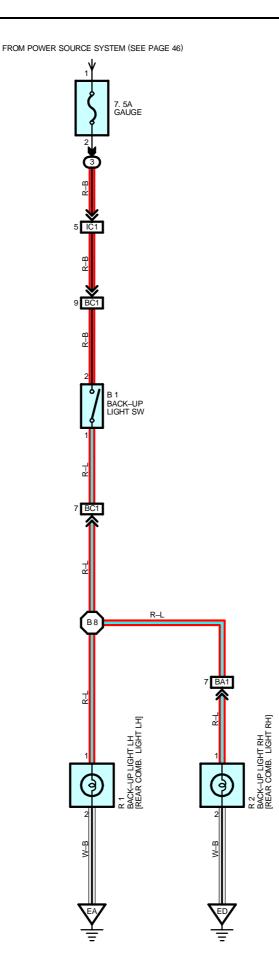
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IJ1	40	Floor Wire and Instrument Panel Wire (Right Kick Panel)
BA1	42	Engine Room Main Wire and Floor Wire (Right Side of Room Partition Panel)

## 7 : GROUND POINTS

Code	See Page	Ground Points Location
EA	36	Suspension Tower Rear LH
ED	36	Suspension Tower Rear RH

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E5	36	Floor Wire	B5	42	Floor Wire





### B1 BACK-UP LIGHT SW

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

## O : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
B1	30	R1	31	R2	31

## : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
3	24	R/B No.3 (Left Side of Instrument Panel)

## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

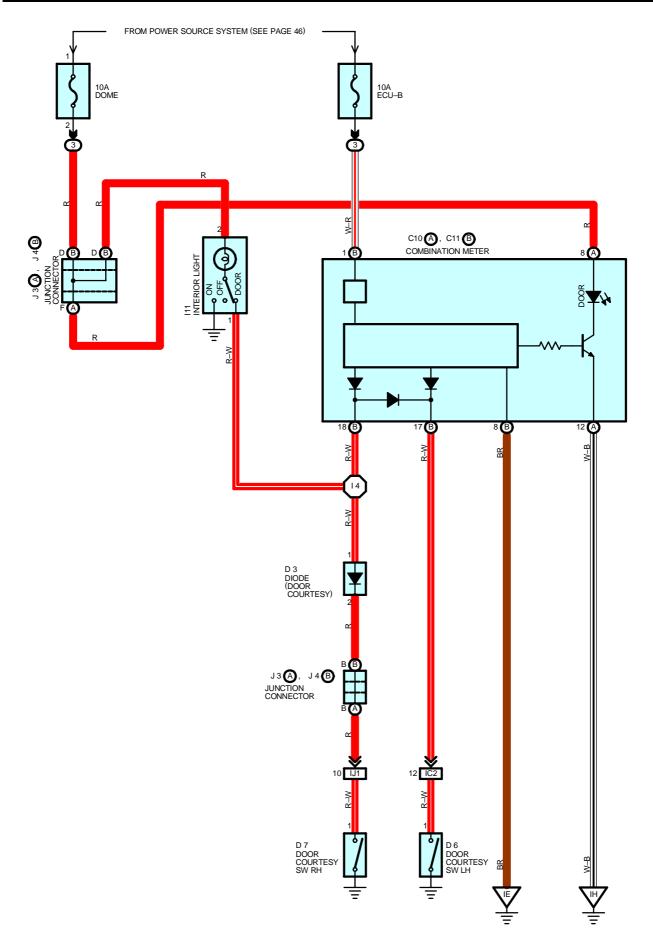
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	38	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
BA1	42	Engine Room Main Wire and Floor Wire (Right Side of Room Partition Panel)
BC1	42	Engine Wire and Engine Room Main Wire (Quarter Panel LH)

#### 

Code	See Page	round Points Location	
EA	36	Suspension Tower Rear LH	
ED	36	Suspension Tower Rear RH	

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B8	42	Engine Room Main Wire			

# **INTERIOR LIGHT**



## – SERVICE HINTS

## **I11 INTERIOR LIGHT**

2-GROUND : Always approx. 12 volts

### D6 DOOR COURTESY SW LH

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

### D7 DOOR COURTESY SW RH

1-GROUND : Closed with the passenger's door open

## O : PARTS LOCATION

Co	de	See Page	Code	See Page	Co	de	See Page
C10	А	32	D6	34	J3	Α	33
C11	В	32	D7	34	J4	В	33
D	3	32	I11	35			

## : RELAY BLOCKS

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Code	See Page	Relay Blocks (Relay Block Location)
3	24	R/B No.3 (Left Side of Instrument Panel)

## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

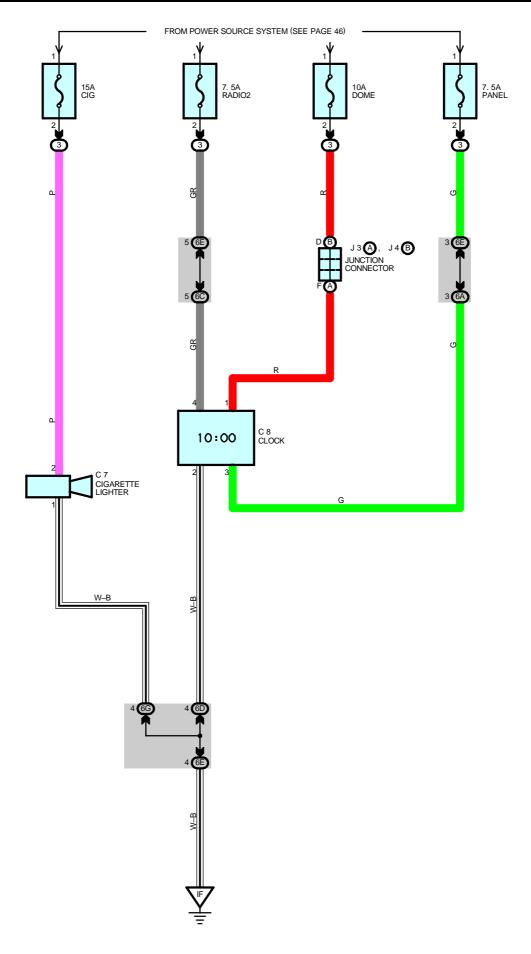
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC2	38	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
IJ1	40	Floor Wire and Instrument Panel Wire (Right Kick Panel)

### 7 : GROUND POINTS

Code	See Page	Ground Points Location
IE	38	Left Kick Panel
IH	38	Right Kick Panel

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
14	40	Instrument Panel Wire			

# **CIGARETTE LIGHTER AND CLOCK**



## C7 CIGARETTE LIGHTER

2–GROUND : Approx. 12 volts with the ignition SW at ACC or ON position

1-GROUND : Always continuity

## C8 CLOCK

()

1-GROUND : Always approx. 12 volts

4-GROUND : Approx. 12 volts with the ignition SW at ACC or ON position

3-GROUND : Approx. 12 volts with the light control SW at TAIL or HEAD position

2-GROUND : Always continuity

## O : PARTS LOCATION

Code	See Page	Co	de	See Page	Code	See Page
C7	32	J3	А	33		
C8	32	J4	В	33		

### : RELAY BLOCKS

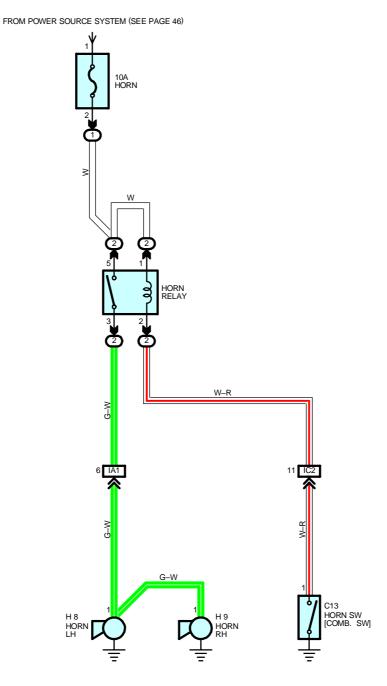
Code	See Page	elay Blocks (Relay Block Location)	
3	24	R/B No.3 (Left Side of Instrument Panel)	

## : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
6A		
6C		
6D	26	Instrument Panel Wire and J/B No.6 (Instrument Panel Brace LH)
6E		
6G	]	

## : GROUND POINTS

Code	See Page	Ground Points Location
IF 38	3	Instrument Panel Brace LH



## – SERVICE HINTS –

### HORN RELAY

5–3 : Closed with the horn SW on

## O : PARTS LOCATION

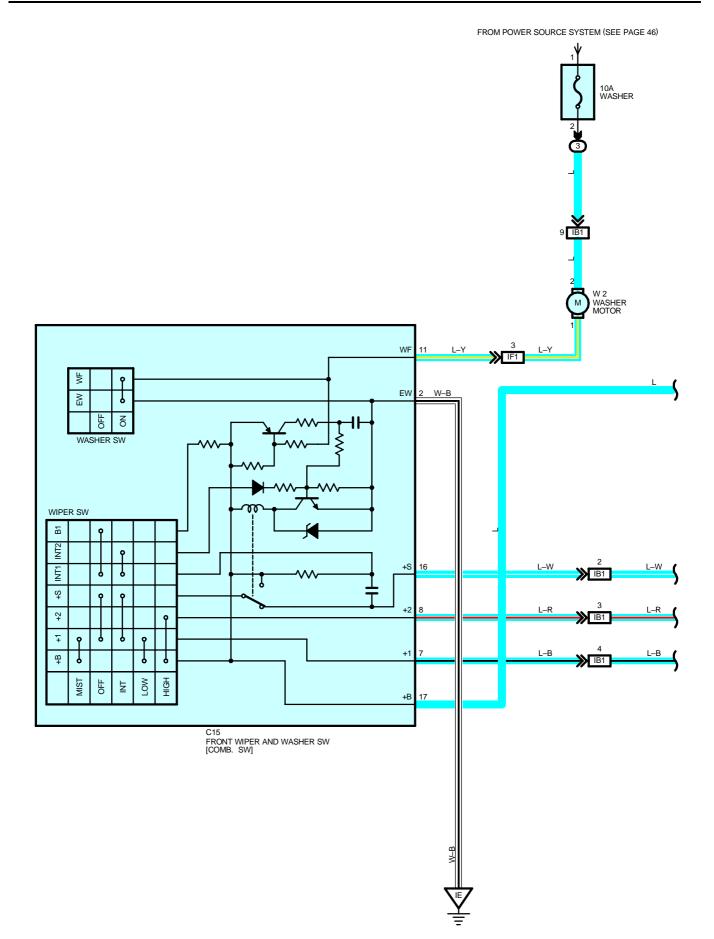
Code	See Page	Code	See Page	Code	See Page
C13	32	H8	35	H9	35

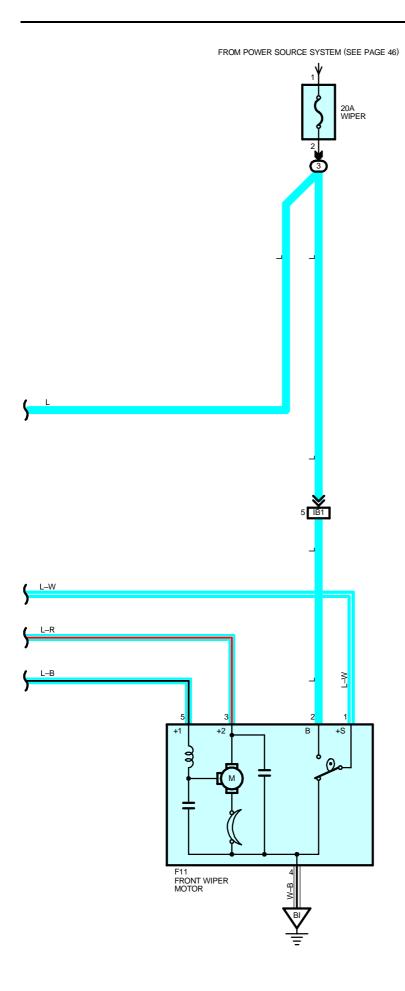
## : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)	
1	22	sible Link Block (Engine Compartment Left)	
2	23	Engine Room R/B (Left Side of Room Partition Panel)	

## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)	
IA1	38	Engine Room Main Wire and Luggage Room Wire (Left Kick Panel)	
IC2	38	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)	





### SYSTEM OUTLINE

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

### 1. LOW SPEED POSITION

With the wiper SW turned to LOW position, current flows from TERMINAL 17 of the front wiper and washer SW to TERMINAL 7 to TERMINAL 5 of the front wiper motor to TERMINAL 4 to GROUND, causing the front wiper motor to run at low speed.

### 2. HIGH SPEED POSITION

With the wiper SW turned to HIGH position, current flows from TERMINAL 17 of the front wiper and washer SW to TERMINAL 8 to TERMINAL 3 of the front wiper motor to TERMINAL 4 to GROUND, causing the front wiper motor to run at high speed.

### 3. INT POSITION

With the wiper SW turned to INT position, the relay operates and the current which is connected by relay function flows from TERMINAL 17 of the front wiper and washer SW to TERMINAL 2 to GROUND. This operates the intermittent circuit and current flows from TERMINAL 17 of the front wiper and washer SW to TERMINAL 7 to TERMINAL 5 of the front wiper motor to TERMINAL 4 to GROUND, and operating the wiper.

The intermittent operation is controlled by a condenser's charged and discharged function installed in the relay, and the intermittent time is controlled by a time control SW to change the charging time of the condenser.

### 4. MIST POSITION

With the wiper SW turned to MIST position, current flows from TERMINAL 17 of the front wiper and washer SW to front wiper mist SW to TERMINAL 2 to GROUND, and current flows from TERMINAL 17 of the front wiper and washer SW to TERMINAL 7 to TERMINAL 5 of the front wiper motor to TERMINAL 4 to GROUND, causing the front wiper motor to run at low speed.

### 5. WASHER CONTINUOUS OPERATION

With the washer SW pushed to on, 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, causing the washer motor to run, and the window washer emits a water spray. This causes current to flow to washer continuity operation circuit in TERMINAL 17 of the front wiper and washer SW to TERMINAL 5 of the front wiper motor to TERMINAL 4 to GROUND, operating the wiper.

### SERVICE HINTS

### C15 FRONT WIPER AND WASHER SW [COMB. SW]

### 2-GROUND : Always continuity

17–GROUND : Approx. **12** volts with the ignition SW at **ON** position

- 7-GROUND : Approx. 12 volts with the wiper and washer SW at LOW or MIST position
  - Approx. 12 volts 1.6 to 10.7 seconds intermittently with the wiper and washer SW at INT position
- 15–GROUND : Approx. **12** volts with the ignition SW on unless the wiper motor at **STOP** position

8-GROUND : Approx. 12 volts with the wiper and washer SW at HIGH position

### F11 FRONT WIPER MOTOR

1-2 : Closed unless the wiper motor at STOP position

### O : PARTS LOCATION

ſ	Code	See Page	Code	See Page	Code	See Page
ſ	C15	32	F11	34	W2	35

### : RELAY BLOCKS

Γ	Code	See Page	Relay Blocks (Relay Block Location)
Γ	3 24 R/B No.3 (Left Side of Instrument Panel)		R/B No.3 (Left Side of Instrument Panel)

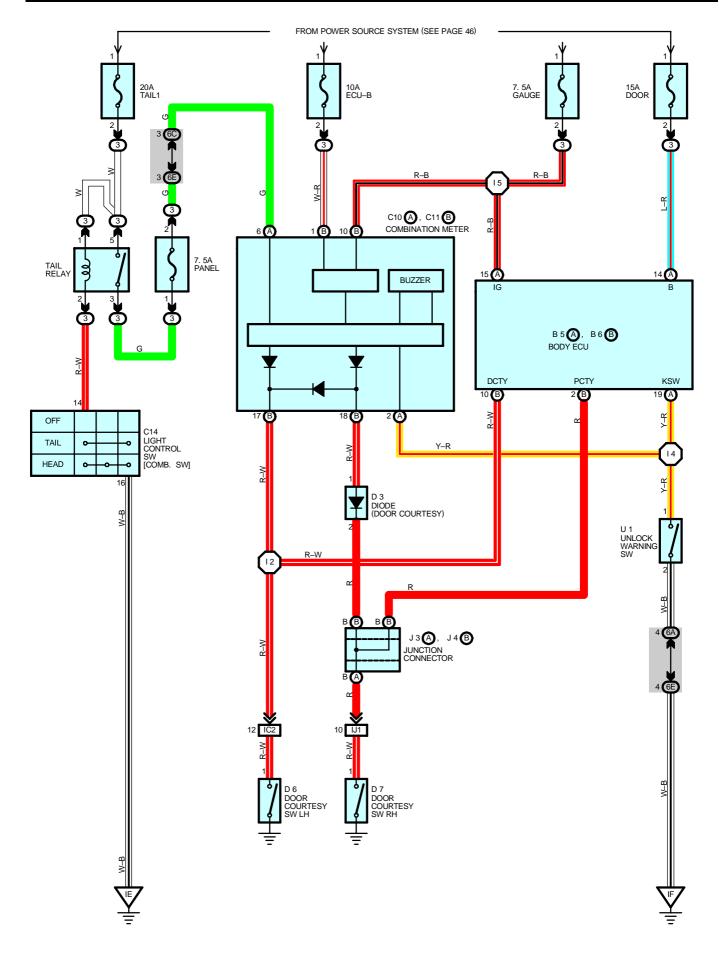
### : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	de See Page Joining Wire Harness and Wire Harness (Connector Location)	
IB1	38 Luggage Room Wire and Instrument Panel Wire (Left Kick Panel)	
IF1	IF1 40 Luggage Room Wire and Instrument Panel Wire (Instrument Panel Brace LH)	

#### 

Code	See Page	Ground Points Location
IE	38	Left Kick Panel
BI	42	Suspension Tower Front RH

# LIGHT REMINDER AND KEY REMINDER BUZZER



## SYSTEM OUTLINE

## 1. LIGHT REMINDER SYSTEM

When the ignition SW is OFF and the driver's side door or passenger's side door is opened (Door courtesy SW ON) and the light control SW is at TAIL or HEAD position, the light reminder buzzer comes ON.

## 2. KEY REMINDER BUZZER SYSTEM

If the driver door is opened with the ignition SW set at the ACC or OFF position and the ignition key remained inserted into the key cylinder (The unlock warning SW is on), the signal from the unlock warning SW is input to TERMINAL KSW of the body ECU and the signal from the door courtesy SW LH is input to TERMINAL DCTY of body ECU. As a result, through communication control of the body ECU etc. the buzzer in the combination meter goes on to warn the driver that the ignition key is still inserted.

## SERVICE HINTS -

## D6 DOOR COURTESY SW LH

1-GROUND : Closed with driver's door open

## D7 DOOR COURTESY SW RH

1-GROUND : Closed with the passenger's door open

## **U1 UNLOCK WARNING SW**

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

## O : PARTS LOCATION

Co	de	See Page	Code	See Page	Co	de	See Page
B5	А	32	C14	32	J3	А	33
B6	В	32	D3	32	J4	В	33
C10	А	32	D6	34	U	1	33
C11	В	32	D7	34			

### : RELAY BLOCKS

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Code	See Page	Relay Blocks (Relay Block Location)	
3	24	R/B No.3 (Left Side of Instrument Panel)	

### : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
6A		
6C	26	Instrument Panel Wire and J/B No.6 (Instrument Panel Brace LH)
6E		

### : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

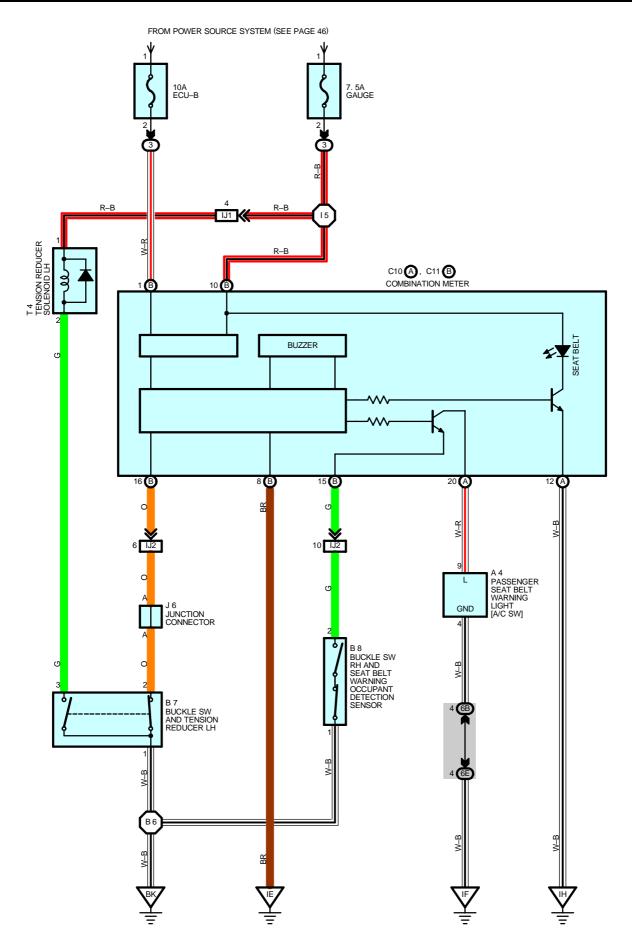
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)	
IC2	38	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)	
IJ1	40	Floor Wire and Instrument Panel Wire (Right Kick Panel)	

## 7 : GROUND POINTS

Code	See Page	Ground Points Location
IE	38	Left Kick Panel
IF	38	Instrument Panel Brace LH

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
12	10	Instrument Denal Wine	15	40	Instrument Panel Wire
14	40	Instrument Panel Wire			

# SEAT BELT WARNING AND ELECTRIC TENSION REDUCER



2000 MR2 (EWD408U)

### SYSTEM OUTLINE

Current is always applied from the ECU–B fuse to comb. meter TERMINAL (B) 1.

### SEAT BELT WARNING SYSTEM

When the ignition SW is turned on, the current flows from the GAUGE Fuse to comb. meter TERMINAL (B) 10. At this time, to determine whether the driver is wearing the seat belt or not, a signal is input from the buckle SW (Driver side) to comb. meter TERMINAL (A) 12. If the driver is not wearing the seat belt, the seat belt warning light in the comb. meter flashes and buzzer to inform the driver. Also, a sensor installed in the front passenger seat determines whether there is a passenger seated, and whether the seat belt is worn or not. If the seat belt is not worn, the signal from the buckle SW (Passenger side) and the sensor is input to the comb. meter TERMINAL (B) 15, and the current flows from comb. meter TERMINAL (A) 20 to passenger seat belt warning light TERMINAL 9 to TERMINAL 4 to GROUND, and the light flashes to inform.

### SERVICE HINTS

### **B7 BUCKLE SW AND TENSION REDUCER LH**

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

### **B8 BUCKLE SW RH AND SEAT BELT WARNING OCCUPANT DETECTION SENSOR**

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

#### C10 (A), C11 (B) COMBINATION METER

(A)12, (B) 8–GROUND : Always continuity

- (B)15-GROUND : Continuity with the passenger's door open
- (B) 1-GROUND : Always approx. 12 volts
- (B)10-GROUND : Approx. 12 volts with the ignition SW at ON position

### **T4 TENSION REDUCER SOLENOID LH**

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

### • : PARTS LOCATION

Code	See Page	Co	de	See Page	Code	See Page
A4	32	C10	А	32	T4	35
B7	32	C11	В	32		
B8	32	J	6	35		

### ) : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
3	24	R/B No.3 (Left Side of Instrument Panel)

### : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
6B	20	Instrument Devel Wire and I/D No. C (Instrument Devel Dress III)
6E	20	Instrument Panel Wire and J/B No.6 (Instrument Panel Brace LH)

### : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

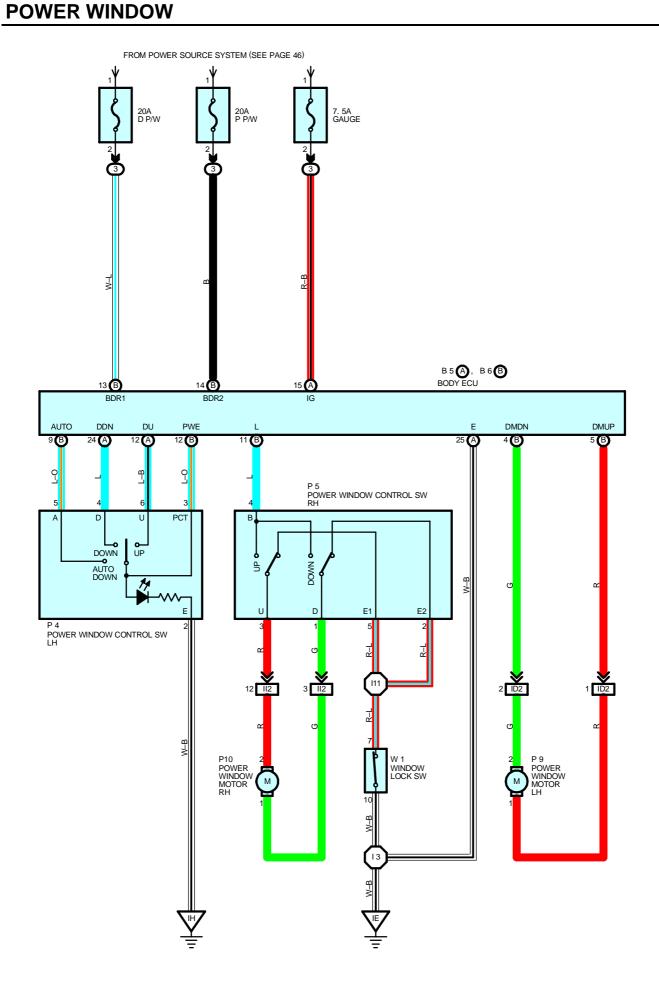
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IJ1	40	Floer Wire and Jastryment Danal Wire (Bight Kiel, Danal)
IJ2	40	Floor Wire and Instrument Panel Wire (Right Kick Panel)

### : GROUND POINTS

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Code	See Page	Ground Points Location
IE	38	Left Kick Panel
IF	38	Instrument Panel Brace LH
IH	38	Right Kick Panel
BK	42	Under the Center Pillar RH

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
15	40	Instrument Panel Wire	B6	42	Floor Wire



### SYSTEM OUTLINE

### 1. MANUAL DOWN OR UP OPERATION

When the power window control SW (Driver's side) is pushed one step, the motor rotates, and the driver's side power window is opened while the switch is being pushed.

When the power window control SW (Driver's side) is pulled up one step, the motor rotates to the opposite direction from open operation, and the driver's side power window is closed while the switch is being pulled up.

The passenger side window opens/closes similarly by operating the power window control switch (Passenger side).

### 2. AUTO DOWN OPERATION

When the power window control SW (Driver side) is pushed two steps, the motor rotates and the driver's side window will open automatically.

### SERVICE HINTS

### P4 POWER WINDOW CONTROL SW LH

2-GROUND : Always continuity

- 5-2 : Closed with the power window control SW at AUTO DOWN position
- 4–2 : Closed with the power window control SW at **DOWN** position
- 6-2 : Closed with the power window control SW at **UP** position

#### **P5 POWER WINDOW CONTROL SW RH**

- 4-1 : Closed with the power window control SW at **DOWN** position
- 4–3 : Closed with the power window control SW at UP position

### W1 WINDOW LOCK SW

7-10 : Open with the window lock SW at LOCK position

## O : PARTS LOCATION

Co	ode	See Page	Code	See Page	Code	See Page
B5	А	32	P5	33	W1	33
B6	В	32	P9	35		
F	P4	33	P10	35		

### : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
3	24	R/B No.3 (Left Side of Instrument Panel)

# CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

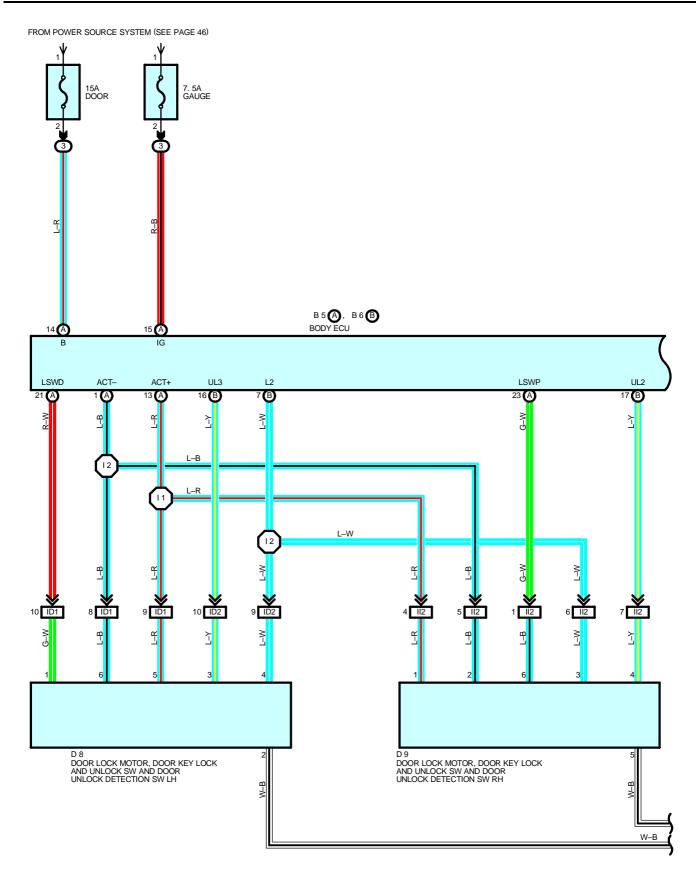
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID2	38	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
ll2	40	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)

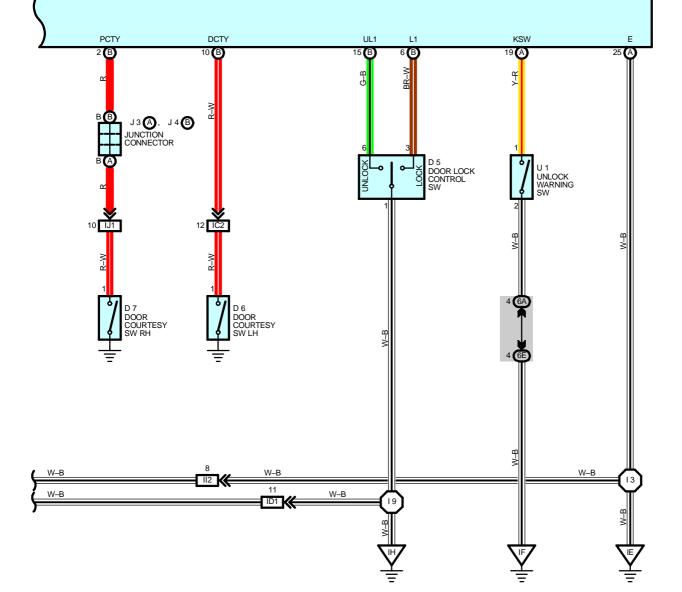
### : GROUND POINTS

Code	See Page	Ground Points Location
IE	38	Left Kick Panel
IH	38	Right Kick Panel

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
13	40	Instrument Panel Wire	I11	40	Instrument Panel Wire

## DOOR LOCK CONTROL





B 5 (A), B 6 (B) BODY ECU



## - SYSTEM OUTLINE

## 1. MANUAL UNLOCK OPERATION

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

### 2. MANUAL LOCK OPERATION

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

### 3. DOOR KEY UNLOCK OPERATION

Unlock operation from driver's side door

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

Unlock operation from front passenger's side door

When the passenger's side door is unlocked using the ignition key, all the other doors are unlocked, too.

### 4. DOOR KEY LOCK OPERATION

Lock operation from driver's side door

When the driver's side door is locked using the ignition key, all the other doors are locked.

Lock operation from front passenger's side door

When the passenger's side door is locked using the ignition key, all the other doors are locked, too.

### 5. IGNITION KEY REMINDER OPERATION

When the door lock operation is made using the door knob with the ignition key remained inserted in the key cylinder and the door open, unlock operation is automatically made. Additionally, if lock operation is made with the door lock control SW or door key lock and unlock SW, unlock operation is automatically made after the lock operation has been completed.

### SERVICE HINTS

### D6, D7 DOOR COURTESY SW LH, RH

1-GROUND : Closed with door open

### **D5 DOOR LOCK CONTROL SW**

- 3–1 : Closed with **LOCK** position
- 6-1 : Closed with UNLOCK position

### D8 DOOR LOCK MOTOR, DOOR KEY LOCK AND UNLOCK SW AND DOOR UNLOCK DETECTION SW 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

### D9 DOOR LOCK MOTOR, DOOR KEY LOCK AND UNLOCK SW AND DOOR UNLOCK DETECTION SW 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

- 3-5 : Closed with door lock cylinder locked with key
- 4-5 : Closed with door lock cylinder unlocked with key

### C : PARTS LOCATION

C	ode	See Page	Code		See Page	Code		See Page
B5	А	32	D	7	34	J4	В	33
B6	В	32	D	8	34	U	1	33
[	05	32	D9		34			
[	06	34	J3	А	33			

### : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
3	24	R/B No.3 (Left Side of Instrument Panel)

### : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)	
6A	26	Lestrument Devel Wire and U/D No. C (lestrument Devel Dress LLI)	
6E	20	Instrument Panel Wire and J/B No.6 (Instrument Panel Brace LH)	

## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

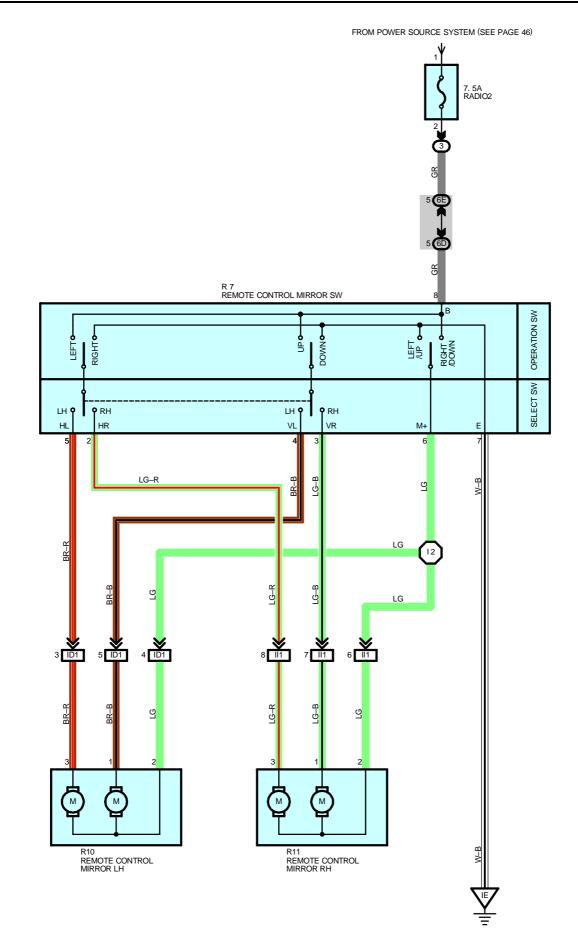
: 🗆	: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS								
Code	See Page Joining Wire Harness and Wire Harness (Connector Location)								
IC2	38	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)							
ID1	20	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)							
ID2	- 38	Front Door Let whe and instrument Parel whe (Leit Kick Parel)							
112	40	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)							
IJ1	40	Floor Wire and Instrument Panel Wire (Right Kick Panel)							

## $\bigcirc$ : GROUND POINTS

Code	See Page	Ground Points Location
IE	38	Left Kick Panel
IF	38	Instrument Panel Brace LH
IH	38	Right Kick Panel

#### $\bigcirc$ : SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
1	- 40	Instrument Panel Wire	13	40 Instr	Instrument Panel Wire
12			19		



## SERVICE HINTS

### R7 REMOTE CONTROL MIRROR SW

- 8-GROUND : Approx. 12 volts with the ignition SW at ACC or ON position
  - 6--7 : Continuity with the operation SW at UP or LEFT position
  - 5-7 : Continuity with the operation SW at RIGHT position and the select SW at LH position
  - 4-7 : Continuity with the operation SW at DOWN position and the select SW at LH position
  - 2–7 : Continuity with the operation SW at RIGHT position and the select SW at RH position

3-7 : Continuity with the operation SW at DOWN position and the select SW at RH position

## O : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
R7	33	R10	35	R11	35

### : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
3	24	R/B No.3 (Left Side of Instrument Panel)

## : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

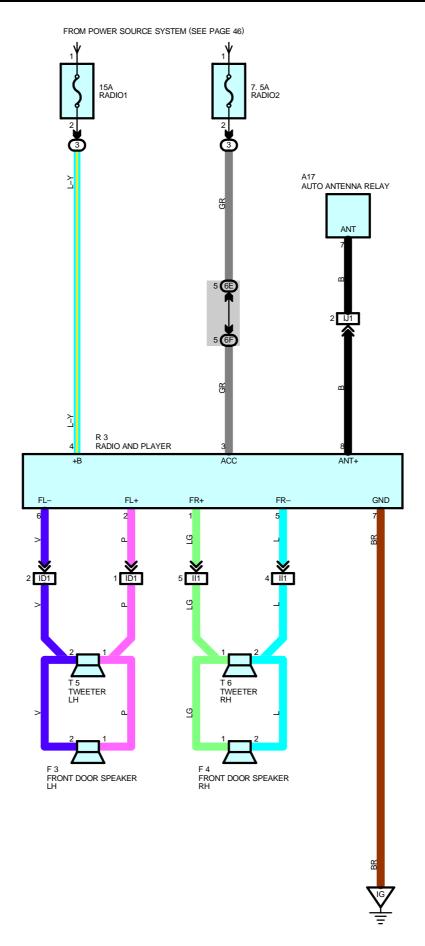
Code	See Page	Junction Block and Wire Harness (Connector Location)				
6D	00	Instrument Denel Wire and J/D No 6 (Instrument Denel Brees      )				
6E	20	Instrument Panel Wire and J/B No.6 (Instrument Panel Brace LH)				

CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS								
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)						
ID1	38	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)						
ll1	40	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)						

### : GROUND POINTS

•		
Code	See Page	Ground Points Location
IE	38	Left Kick Panel

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
12	40	Instrument Panel Wire			



## - SERVICE HINTS

## R3 RADIO AND PLAYER

4–GROUND : Always approx. 12 volts

3-GROUND : Approx. 12 volts with the ignition SW at ACC or ON position

7–GROUND : Always continuity

## O : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A17	34	F4	34	T5	35
F3	34	R3	33	Т6	35

## : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
3	24	R/B No.3 (Left Side of Instrument Panel)

## : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

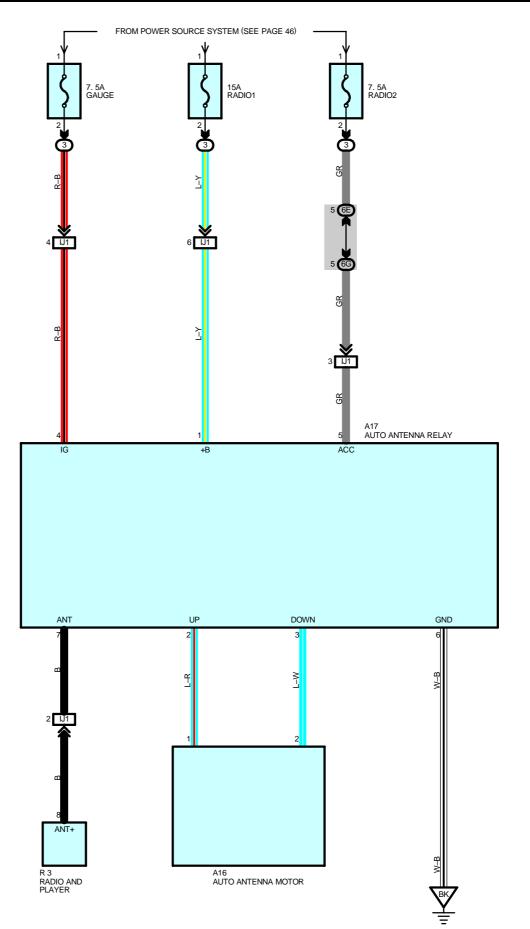
Code	See Page	Junction Block and Wire Harness (Connector Location)
6E	26	Instrument Denel Wire and UR No 6 (Instrument Denel Brees IIII)
6F	20	Instrument Panel Wire and J/B No.6 (Instrument Panel Brace LH)

### : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)	
ID1	38	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)	
1	40	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)	
IJ1	40	Floor Wire and Instrument Panel Wire (Right Kick Panel)	

## : GROUND POINTS

Code	See Page	Ground Points Location
IG	38	Instrument Panel Brace RH



<b>A17</b> A 4–GF 1–GF 5–GF	ROUND : Always	. 12 volts with the approx. 12 volts . 12 volts with the	C	at <b>ON</b> position at <b>ACC</b> or <b>ON</b> position				
0:	PARTS LOCAT							
Code		e Page	Code	See Page	Code	See Page		
A16	34		A17	34	R3	33		
Code 3 C :	See Page 24 JUNCTION BLO	Relay Blocks (Re R/B No.3 (Left Sid	de of Instrume	nt Panel)				
Code	See Page	Junction Block ar	nd Wire Harnes	ss (Connector Location)				
6E 6G	- 26	26 Instrument Panel Wire and J/B No.6 (Instrument Panel Brace LH)						
: []	CONNECTOR J	IOINING WIRE H	ARNESS AN	ND WIRE HARNESS				
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)						
IJ1	40         Floor Wire and Instrument Panel Wire (Right Kick Panel)							
V			action					
Code	See Page	Ground Points Location						

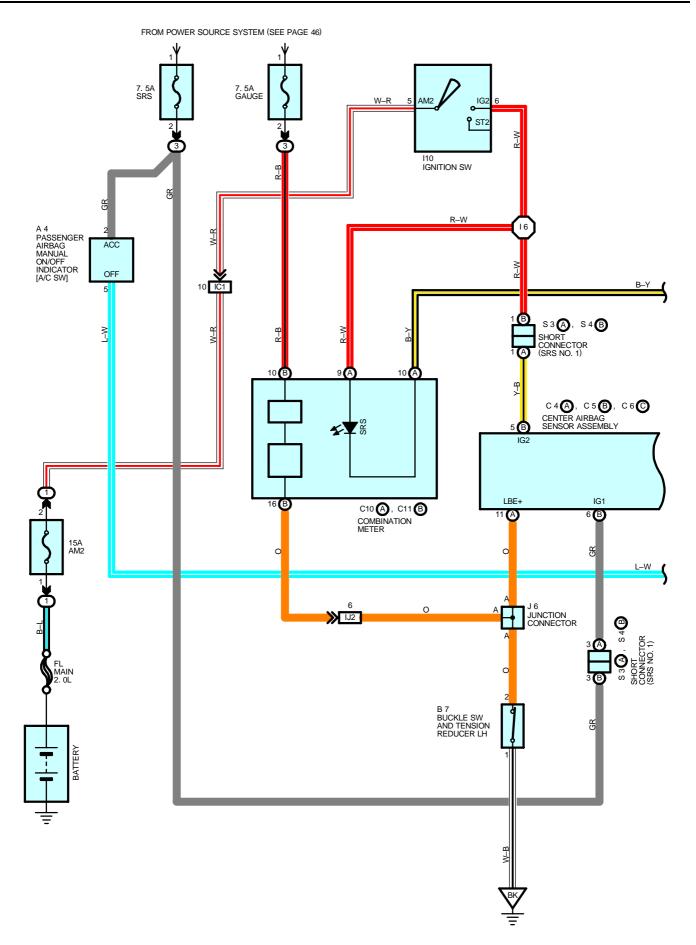
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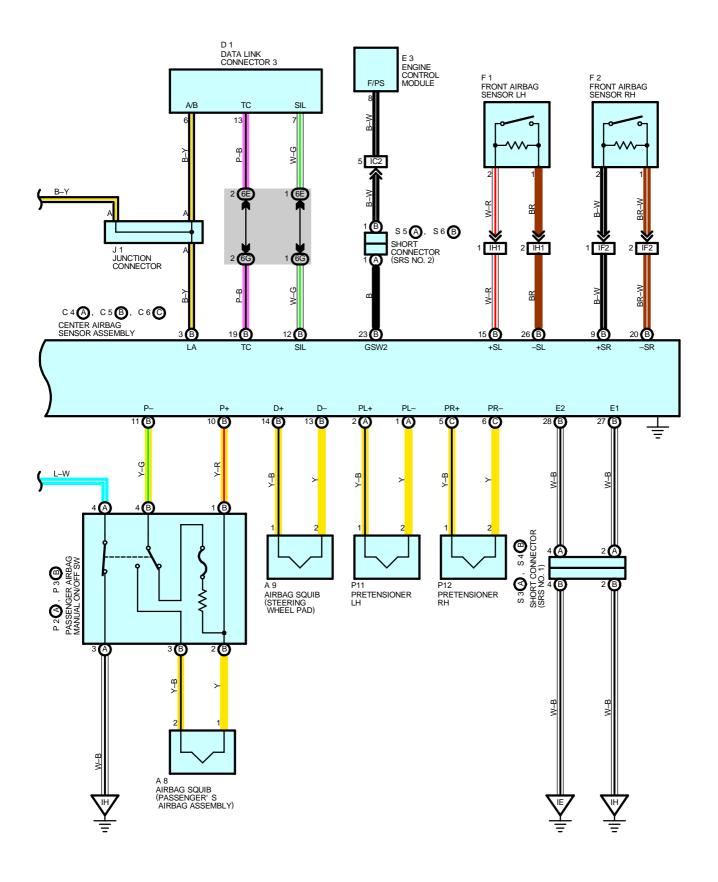
42

Under the Center Pillar RH

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, passenger airbag assembly, seat belt pretensioner, center airbag sensor assembly, front 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, passenger airbag assembly, seat belt pretensioner, center airbag sensor assembly, front 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, passenger airbag assembly, seat belt pretensioner, center airbag sensor assembly, front airbag sensor assembly in order to reuse it.
- If the steering wheel pad, passenger airbag assembly, seat belt pretensioner, center airbag sensor assembly, front 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.
- If the vehicle is equipped with a mobile communication system, refer to the precaution in the IN section of the Repair Manual.





## 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 fuse flows to the center airbag sensor assembly TERMINAL (B) 6. Only when the ignition SW is ON does the current from the IGN fuse flow to center airbag sensor assembly TERMINAL (B) 5.

In case an accident occurs while driving, when the frontal impact exceeds a predetermined level, the current from the center airbag sensor assembly TERMINAL (B) 14 to airbag squibs TERMINAL 1 to TERMINAL 2 to center airbag sensor assembly TERMINAL (B) 13 to TERMINAL (B) 27, (B) 28 to GROUND or BODY GROUND. The current flows to the airbag squibs, and the airbag stored in the steering wheel is expanded instantaneously to reduce the impact to the driver.

As for the passenger side seat, if the passenger airbag manual ON/OFF SW is on, the current flows from the center airbag sensor assembly TERMINAL (B) 10 to passenger airbag manual SW ON/OFF SW TERMINAL (B) 1 to TERMINAL (B) 2 to airbag squibs TERMINAL 2 to TERMINAL 1 to passenger airbag manual SW ON/OFF SW TERMINAL (B) 3 to TERMINAL (B) 4 to center airbag sensor assembly TERMINAL (B) 11 to TERMINAL (B) 27, (B) 28 to GROUND or BODY GROUND. The airbag stored in the front passenger's instrument panel is expanded instantaneously to reduce the impact to the front passenger.

## C : PARTS LOCATION

Co	de	See Page	Code	See Page	Co	de	See Page
A	4	32	C11 B	32	P2	А	33
A	.8	32	D1	32	P3	В	33
A	.9	32	E3	34	P	11	35
В	57	32	F1	34	P1	2	35
C4	Α	32	F2	34	S3	А	33
C5	В	32	l10	33	S4	В	33
C6	С	32	J1	33	S5	А	33
C10	Α	32	J6	35	S6	В	33

## ) : RELAY BLOCKS

 $\bigcirc$ 

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Fusible Link Block (Engine Compartment Left)
3	24	R/B No.3 (Left Side of Instrument Panel)

## : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)			
6E	26	Instrument Denel Wire and I/P No 6 (Instrument Denel Brace I H)			
6G	20	Instrument Panel Wire and J/B No.6 (Instrument Panel Brace LH)			

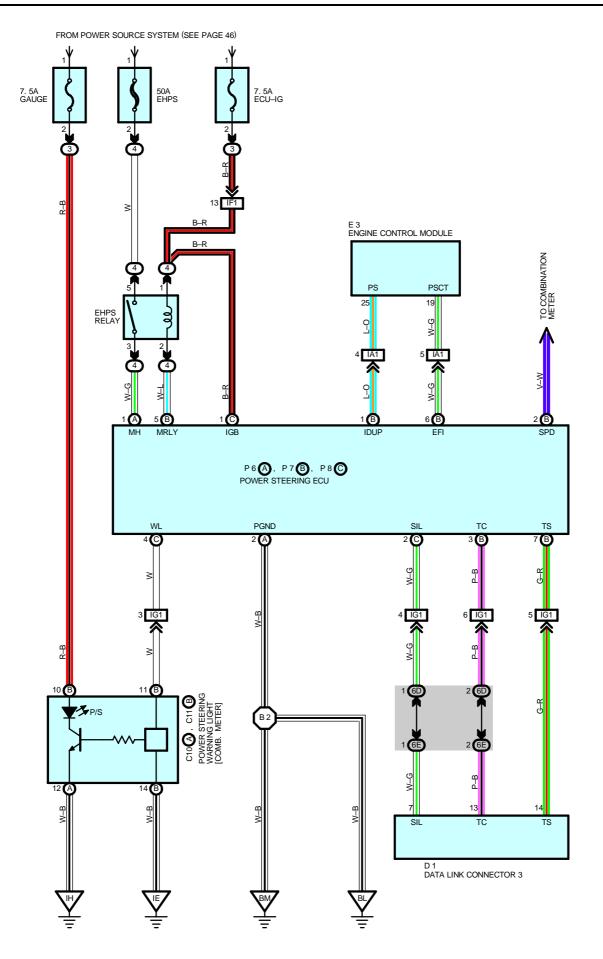
## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)			
IC1	20	Engine Deem Main Wire and Instrument Denal Wire (Left Kiels Denal)			
IC2	- 38	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)			
IF2	40	Luggage Room Wire and Instrument Panel Wire (Instrument Panel Brace LH)			
IH1	40	Instrument Panel Wire and Luggage Room Wire (Under the Instrument Panel Center)			
IJ2	40	Floor Wire and Instrument Panel Wire (Right Kick Panel)			

## : GROUND POINTS

Code	See Page	Ground Points Location
IE	38	Left Kick Panel
IH	38	Right Kick Panel
BK	42	Under the Center Pillar RH

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
16	40	Instrument Panel Wire			



#### SYSTEM OUTLINE

EHPS (Electro hydraulic power steering) controls the pump motor at the appropriately, according to the power steering load condition, by monitoring the speed signal from the combination meter and the signals from the engine control module. When the power steering load is high, idle up signal is output to the engine control module.

## – SERVICE HINTS –

#### P6 (A), P7 (B), P8 (C) POWER STEERING ECU

(C) 1-GROUND : Approx. 12 volts with the ignition SW at ON position

(A) 2–GROUND : Always continuity

## O : PARTS LOCATION

Code		See Page	Code		See Page	Code		See Page
C10	А	32	E	3	34	P8	С	35
C11	В	32	P6	А	35			
D	1	32	P7	В	35			

## : RELAY BLOCKS

 $\square$ 

Code	See Page	Relay Blocks (Relay Block Location)
3	24	R/B No.3 (Left Side of Instrument Panel)
4	25	R/B No.4 (Front Compartment Left)

## : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
6D	26	Instrument Dens Wire and I/D No 6 (Instrument Dens) Brees (11)
6E	20	Instrument Panel Wire and J/B No.6 (Instrument Panel Brace LH)

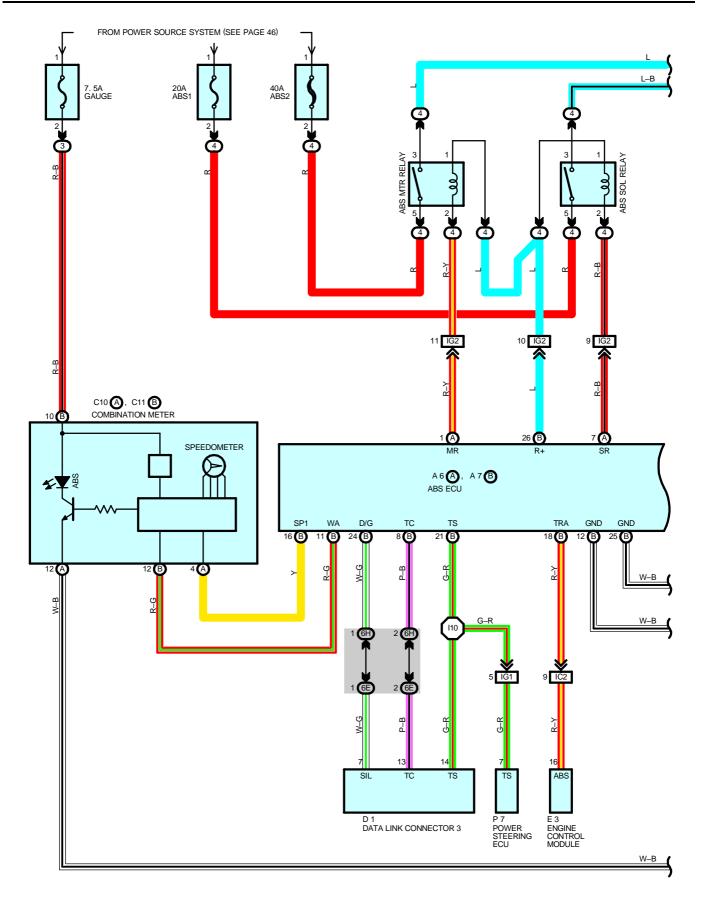
#### : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

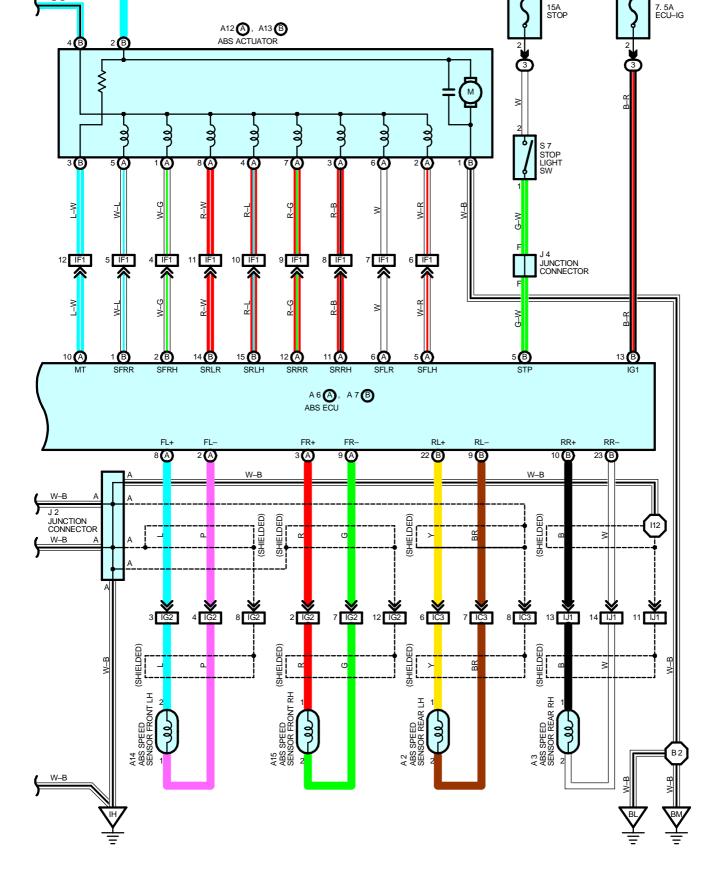
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	38	Engine Room Main Wire and Luggage Room Wire (Left Kick Panel)
IF1	40	Luggage Room Wire and Instrument Panel Wire (Instrument Panel Brace LH)
IG1	40	Luggage Room Wire and Instrument Panel Wire (Under the Instrument Panel Center)

## 7 : GROUND POINTS

Code	See Page	Ground Points Location
IE	38	Left Kick Panel
IH	38	Right Kick Panel
BL	40	Supportion Towar Front III
BM	42	Suspension Tower Front LH

Code	See Page	See Page Wire Harness with Splice Points		See Page	Wire Harness with Splice Points
B2	42	Luggage Room Wire			





L–B

FROM POWER SOURCE SYSTEM (SEE PAGE 46)

## SYSTEM OUTLINE

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

## 1. INPUT SIGNALS

- (1) Speed sensor signal
  - The speed of the wheels is detected and input to TERMINALS FL+, FR+, RL+ and RR+ of the ABS ECU.
- (2) Stop light SW signal A signal is input to TERMINAL STP of the ABS ECU when the brake pedal depressed.

## 2. SYSTEM OPERATION

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

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

## SERVICE HINTS

## A6 (A), A7 (B) ABS ECU

(B)13–GROUND : Approx. **12** volts with the ignition SW at **ON** position (B) 5–GROUND : Approx. **12** volts with the brake pedal depressed (B)12, (B) 25–GROUND : Always continuity

## O : PARTS LOCATION

Co	de	See Page	Code		See Page	Code	See Page
A	2	30	A14		34	J2	33
A	.3	30	A15		34	J4	33
A6	А	32	C10	А	32	P7	35
A7	В	32	C11	В	32	S7	33
A12	А	34	D	1	32		
A13	В	34	E	3	34		

## : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
3	24	R/B No.3 (Left Side of Instrument Panel)
4	25	R/B No.4 (Front Compartment Left)

## : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
6E	26	Instrument Denel Wire and I/P No 6 (Instrument Denel Press I H)
6H	20	Instrument Panel Wire and J/B No.6 (Instrument Panel Brace LH)

## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

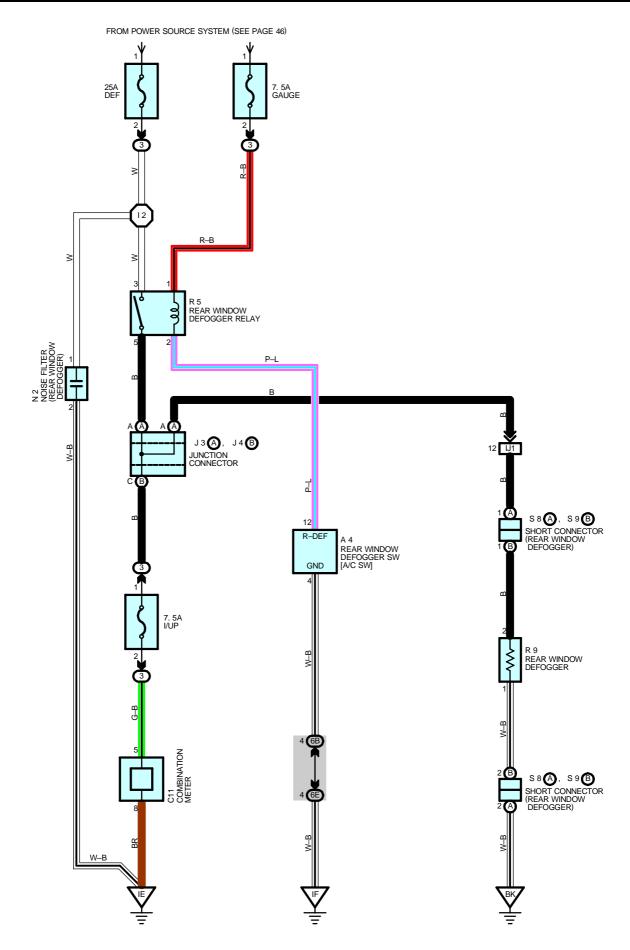
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)					
IC2	20	Engine Deem Main Wire and Instrument Denal Wire (Left Kiele Denal)					
IC3	38	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)					
IF1	40	Luggage Room Wire and Instrument Panel Wire (Instrument Panel Brace LH)					
IG1	40	Luggage Deem Wire and lastrument Denal Wire (Linder the lastrument Denal Center)					
IG2	40	Luggage Room Wire and Instrument Panel Wire (Under the Instrument Panel Center)					
IJ1	40	Floor Wire and Instrument Panel Wire (Right Kick Panel)					

## : GROUND POINTS

•		
Code	See Page	Ground Points Location
IH	38	Right Kick Panel
BL	40	Oursessing Towns Frank III
BM	42	Suspension Tower Front LH

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
l10	110	In structure and Densel Mine	B2	42	Luggage Room Wire
l12	40	Instrument Panel Wire			

## **REAR WINDOW DEFOGGER**



## - SERVICE HINTS

## **R5 REAR WINDOW DEFOGGER RELAY**

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

A4 A/C SW

4-GROUND : Always continuity

#### 0 : PARTS LOCATION

Code		See Page	Code		See Page	Code		See Page
A4		32	J4	В	33	R9		35
С	11	32	N	2	33	S8	А	35
J3	А	33	R	5	33	S9	В	35

#### : RELAY BLOCKS $\bigcirc$

Code	See Page	Relay Blocks (Relay Block Location)
3	24	R/B No.3 (Left Side of Instrument Panel)

#### : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR $\bigcirc$

Γ	Code	See Page	Junction Block and Wire Harness (Connector Location)	
Γ	6B	26	Instrument Denel Wire and I/D No 6 (Instrument Denel Brees III)	
	6E 26		Instrument Panel Wire and J/B No.6 (Instrument Panel Brace LH)	

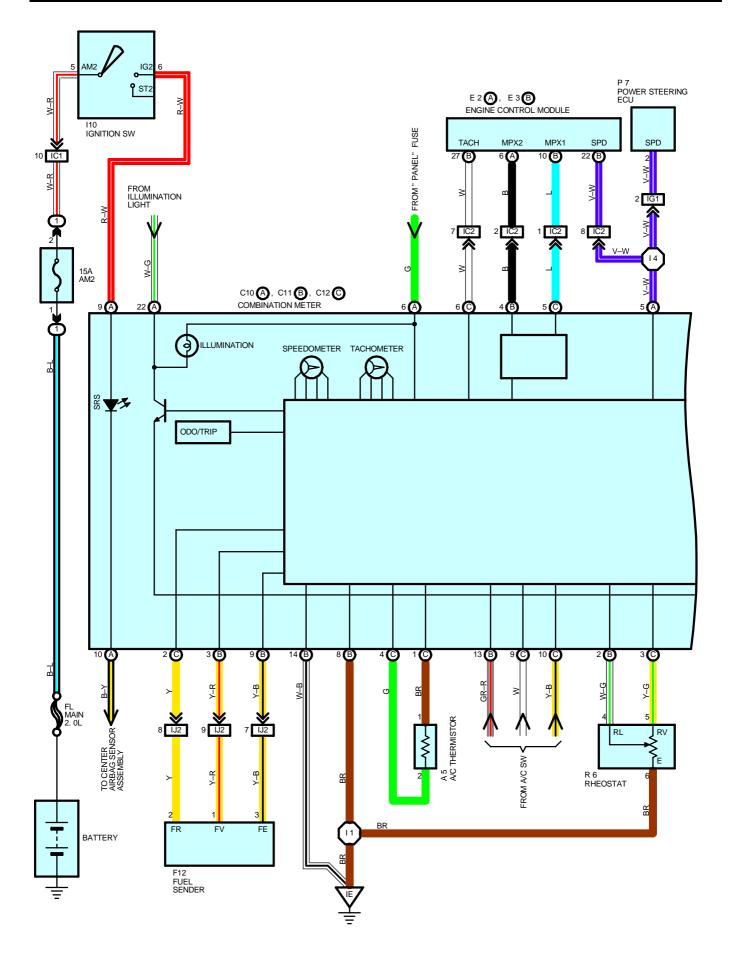
: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS Code See Page Joining Wire Harness and Wire Harness (Connector Location) 40 Floor Wire and Instrument Panel Wire (Right Kick Panel)

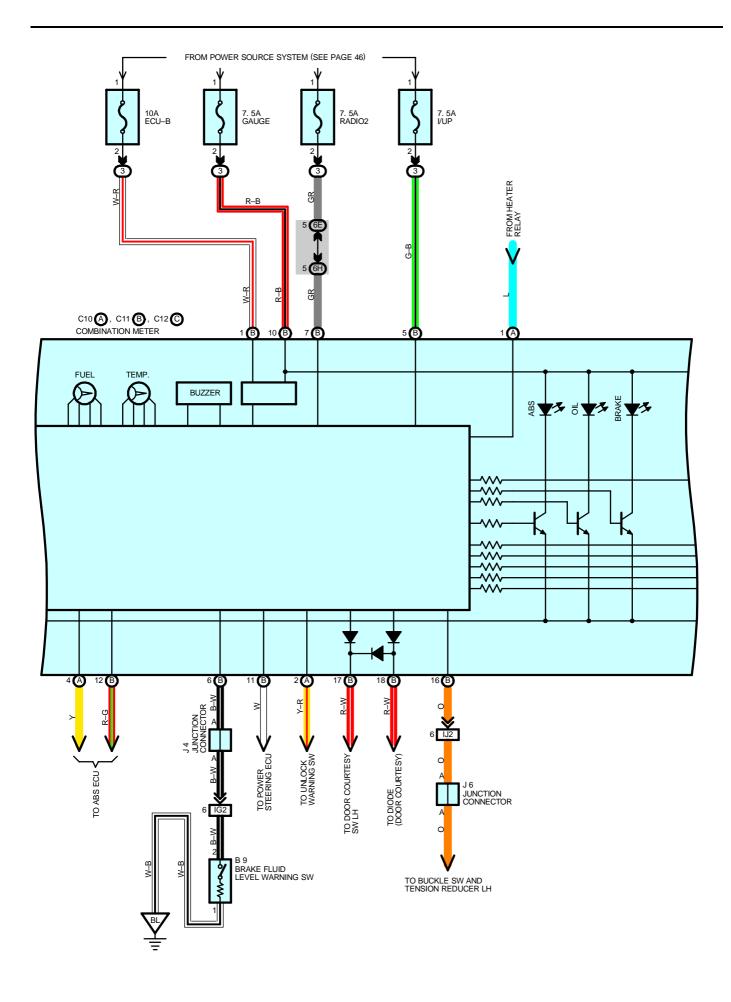
## : GROUND POINTS

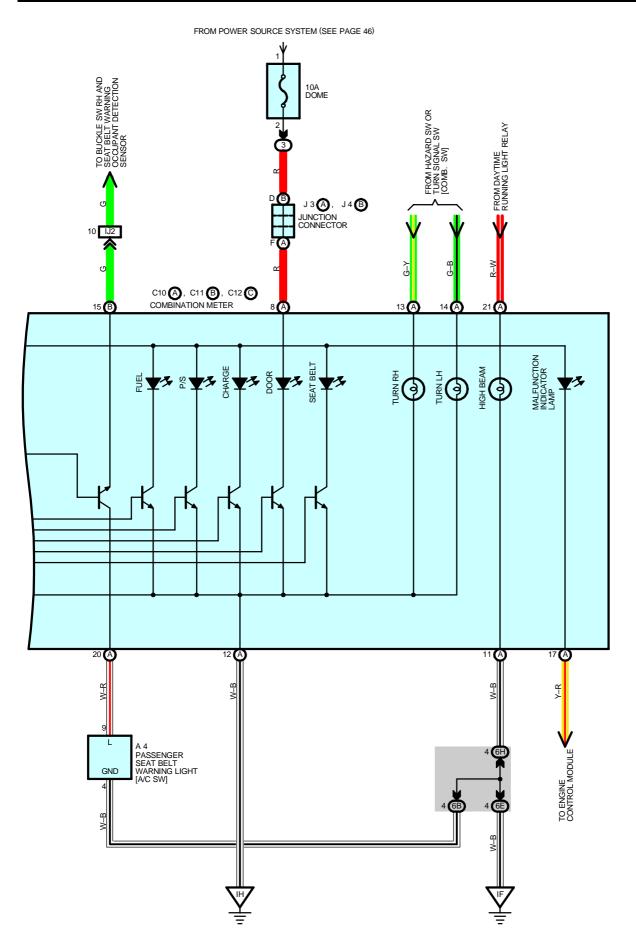
IJ1

Code	See Page	Ground Points Location
IE	38	Left Kick Panel
IF	38	Instrument Panel Brace LH
BK	42	Under the Center Pillar RH

ſ	Code See Page Wire Harness with		Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
Ī	I2 40 Instrument Panel Wire					







## SERVICE HINTS -

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

(B) 5–GROUND : Approx. 12 volts with the ON position and the defogger SW [A/C SW ] on

(A) 8, (A) 9, (B) 1–GROUND : Always approx. **12** volts

(B)10–GROUND : Approx. **12** volts with the ignition SW at **ON** position

(B) 7–GROUND : Approx. 12 volts with the ignition SW at ACC position

(B) 8, (B) 14, (A) 12, (A) 11–GROUND : Always continuity

## O : PARTS LOCATION

Co	ode	See Page	Code		See Page	Code		See Page
A	4	32	E2	Α	34	J4 B		33
A	.5	32	E3	В	34	J6		35
В	9	34	F12		34	P7		35
C10	Α	32	I1	0	33	R	6	33
C11	В	32	J3	А	33			
C12	С	32	J	4	33			

## : RELAY BLOCKS

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Code	See Page	Relay Blocks (Relay Block Location)
1	22	Fusible Link Block (Engine Compartment Left)
3	24	R/B No.3 (Left Side of Instrument Panel)

## : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
6B		
6E	26	Instrument Panel Wire and J/B No.6 (Instrument Panel Brace LH)
6H		

## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

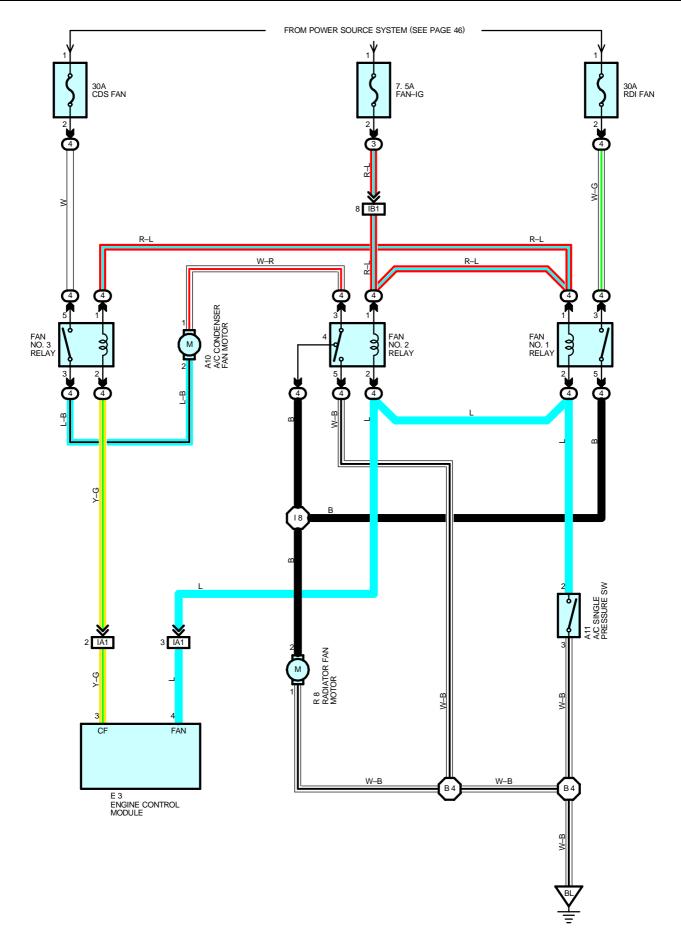
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)	
IC1	20	Ensine Deem Mein Wire and Instrument Denal Wire (Left Kiels Denal)	
IC2	- 38	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)	
IG1	40	Luggage Deem Wire and Instrument Denel Wire (Linder the Instrument Denel Center)	
IG2	40	Luggage Room Wire and Instrument Panel Wire (Under the Instrument Panel Center)	
IJ2	40	Floor Wire and Instrument Panel Wire (Right Kick Panel)	

## **7**: GROUND POINTS

Code	See Page	Ground Points Location
IE	38	Left Kick Panel
IF	38	Instrument Panel Brace LH
IH	38	Right Kick Panel
BL	42	Suspension Tower Front LH

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
11	40	Instrument Panel Wire	14	40	Instrument Panel Wire

## **RADIATOR FAN AND CONDENSER FAN**



## SYSTEM OUTLINE

The radiator fan motor and A/C condenser fan motor is rotated according to the condition of the engine temperature, and the A/C system. The FAN NO.1 relay, FAN NO.2 relay and FAN NO.3 relay are turned ON or OFF to rotate the two fan motors at low speed (Serial) or at high speed (Parallel).

## - SERVICE HINTS -

#### A11 A/C SINGLE PRESSURE SW

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

## O : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A10	34	E3	34		
A11	34	R8	35		

#### : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)				
3	24	/B No.3 (Left Side of Instrument Panel)				
4	25	R/B No.4 (Front Compartment Left)				

#### : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

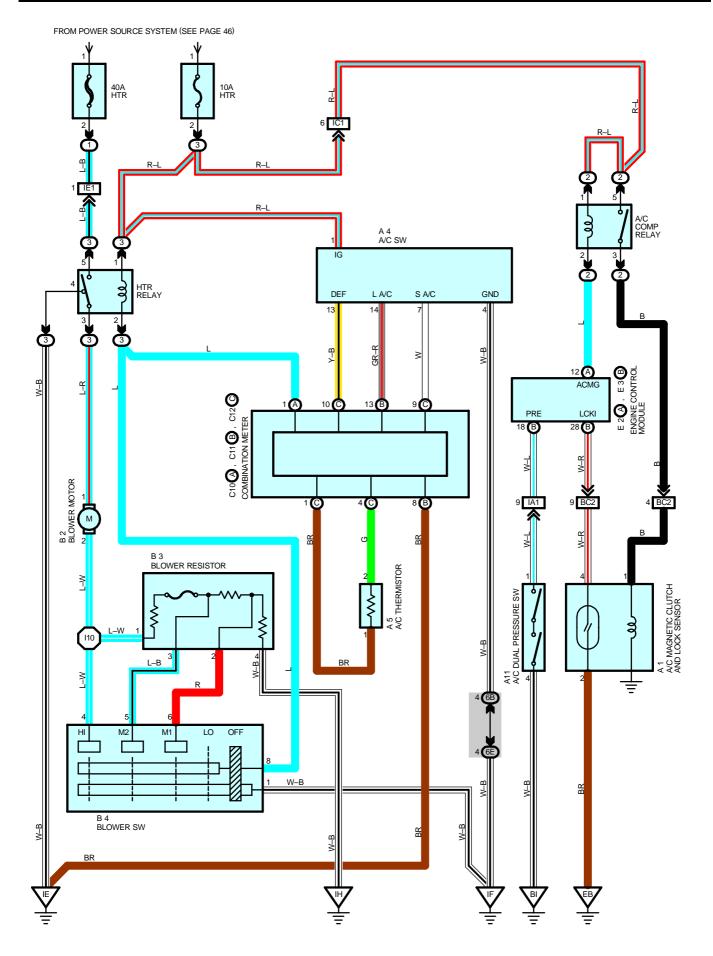
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	38	Engine Room Main Wire and Luggage Room Wire (Left Kick Panel)
IB1	38	Luggage Room Wire and Instrument Panel Wire (Left Kick Panel)

## 7 : GROUND POINTS

Code	See Page	Ground Points Location	
BM	42	Suspension Tower Front LH	

Code	See Page	See Page Wire Harness with Splice Points		See Page	Wire Harness with Splice Points
18	40 Luggage Room Wire		B4	42	Luggage Room Wire

## **AIR CONDITIONING**



## SYSTEM OUTLINE

#### 1. HEATER BLOWER MOTOR OPERATION

Current is applied at all times through the HTR fuse to TERMINAL 5 of the HTR relay.

When the ignition SW is turned on, the current flows through HTR fuse to TERMINAL 1 of the HTR relay to TERMINAL 2 to TERMINAL 8 of the blower SW.

\* Low speed operation

When the blower SW is moved to LO position, the current flows the to TERMINAL 8 of the blower SW to TERMINAL 1 to GROUND, causing the HTR relay to turn on. This causes the current to flow from the HTR fuse to TERMINAL 5 of the HTR relay to TERMINAL 3 to TERMINAL 1 of the blower motor to TERMINAL 2 to TERMINAL 1 of the blower resistor to TERMINAL 4 to GROUND, rotating the blower motor at low speed.

\* Medium speed operation (Operation at M1, M2)

When the blower SW is moved to M1 position, the current flows to TERMINAL 8 of the blower SW to TERMINAL 1 to GROUND, causing the HTR relay to turn on. This causes the current flows from the HTR fuse to TERMINAL 5 of the HTR relay to TERMINAL 3 to TERMINAL 1 of the blower motor to TERMINAL 2 to TERMINAL 1 of the blower resistor to TERMINAL 2 to TERMINAL 6 of the blower SW to TERMINAL 1 to GROUND. At this time, the blower resistance of the blower resistor is smaller than at low speed, so the blower motor rotates at medium low speed.

When the blower SW is moved to M2 position, the current through the motor flows from TERMINAL 1 of the blower resistor to TERMINAL 3 to TERMINAL 5 of the blower SW to TERMINAL 1 to GROUND. At this time, resistance of the blower resistor is smaller than at M1 position, so the blower motor rotates at medium high speed.

#### \* High speed operation

When the blower SW is moved to HI position, the current flows to TERMINAL 8 of the blower SW to TERMINAL 1 to GROUND, causing the HTR relay to turn on.

This causes the current to flow from the HTR fuse to TERMINAL 5 of the heater relay to TERMINAL 3 to TERMINAL 1 of the blower motor to TERMINAL 2 to TERMINAL 3 of the blower SW to TERMINAL 1 to GROUND, rotating the blower motor at high speed.

## SERVICE HINTS

#### HTR RELAY

3-5 : Closed with the ignition SW at **ON** position and the blower SW on

#### A11 A/C DUAL PRESSURE SW

1–4 : Open with the refrigerant pressure at less than approx. **196** Kpa (**2.0** kgf/cm<sup>2</sup>, **28.4** psi) or more than approx. **3140** Kpa (**32** kgf/cm<sup>2</sup>, **455** psi)

## : PARTS LOCATION

Code	See Page	Code	See Page	Code		See Page
A1	30	B2	32	C11	В	32
A4	32	B3	32	C12	С	32
A5	32	B4	32	E2	А	34
A11	34	C10 A	32	E3	В	34

## ) : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Fusible Link Block (Engine Compartment Left)
2	23	Engine Room R/B (Left Side of Room Partition Panel)
3	24	R/B No.3 (Left Side of Instrument Panel)

## : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
6B	6B	notwine and Nors and NO No C (Instrument Devel Dress 111)
6E	20	Instrument Panel Wire and J/B No.6 (Instrument Panel Brace LH)

## **AIR CONDITIONING**

	CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS							
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)						
IA1	38	Engine Room Main Wire and Luggage Room Wire (Left Kick Panel)						
IC1	38	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)						
IE1	38	Engine Room Main Wire and Instrument Panel Wire (Left Side of Instrument Panel)						
BC2	42	Engine Wire and Engine Room Main Wire (Quarter Panel LH)						

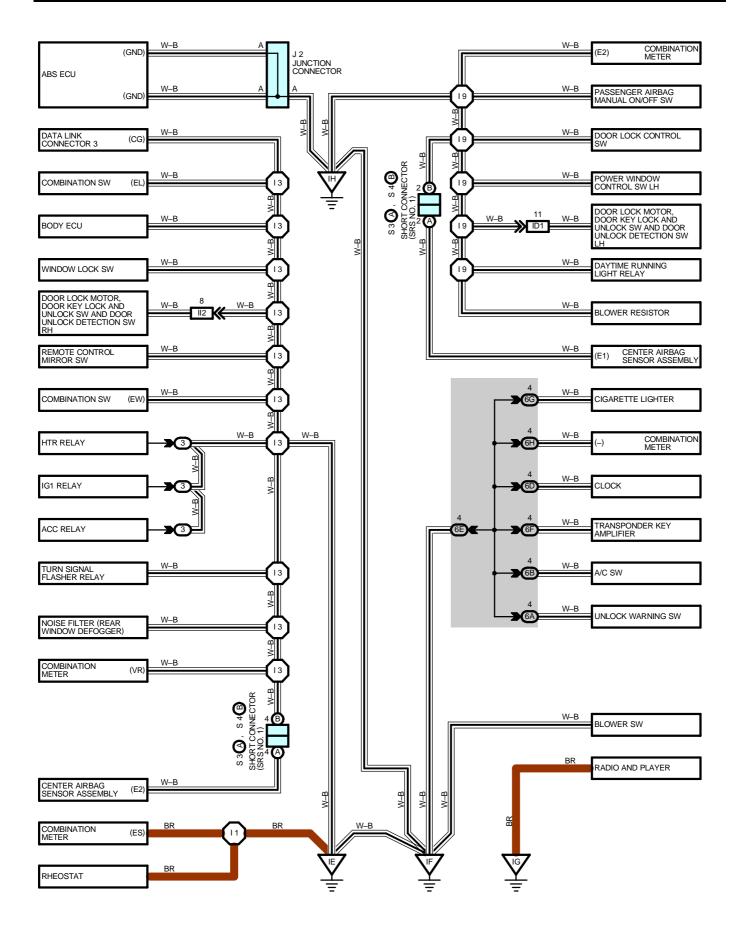
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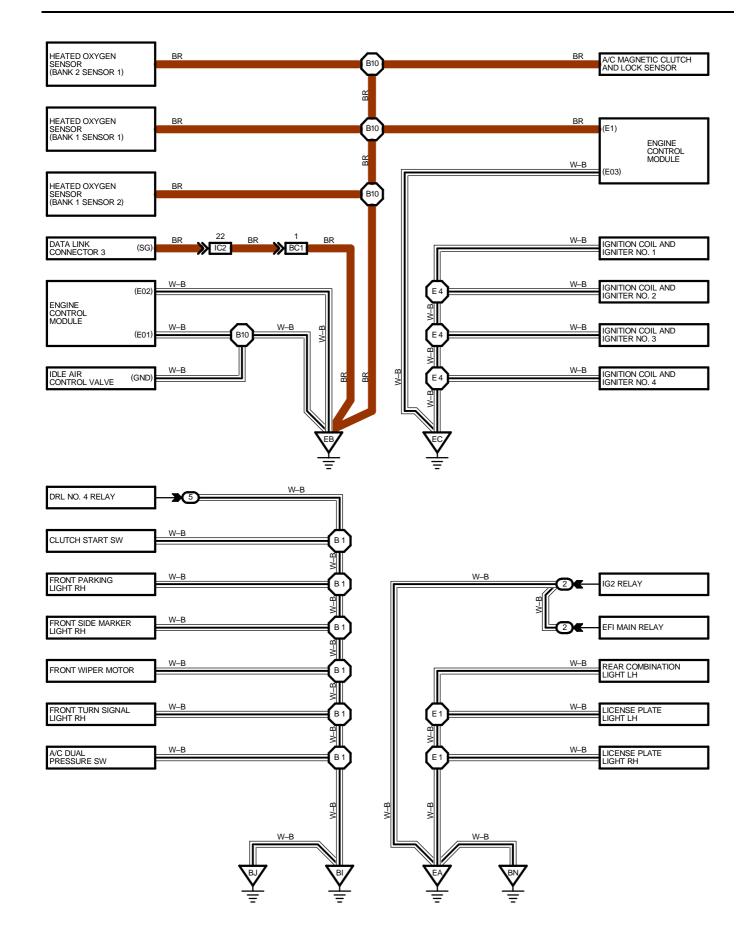
Code	See Page	Ground Points Location
EB	36	Engine Block LH
IE	38	Left Kick Panel
IF	38	Instrument Panel Brace LH
IH	38	Right Kick Panel
BI	42	Suspension Tower Front RH

## 

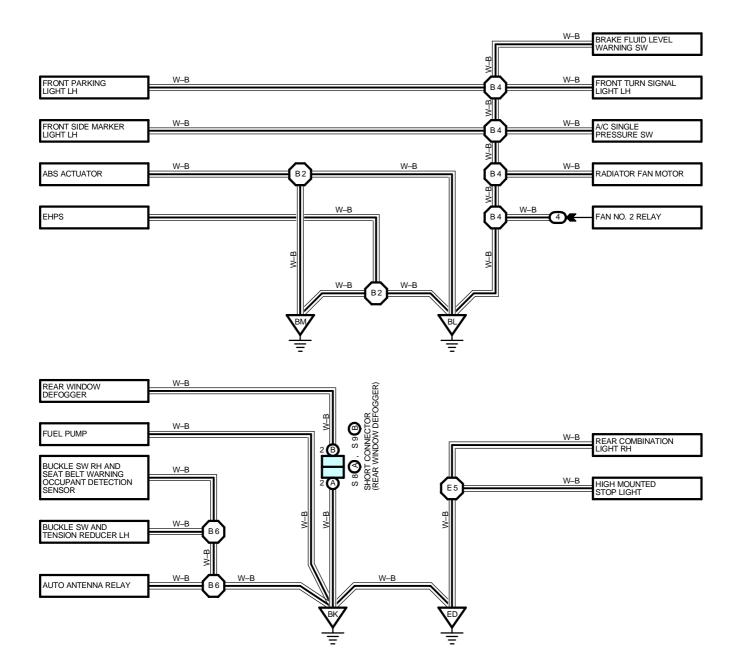
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
l10	40	Instrument Panel Wire			

# I GROUND POINT





## I GROUND POINT



## O : PARTS LOCATION

Code		de	See Page	Code		See Page	Code		See Page
	J	2	33	S4	В	33	S9	В	35
S3	3	А	33	S8	А	35			

## : RELAY BLOCKS

 $\bigcirc$ 

Code	See Page	Relay Blocks (Relay Block Location)			
2	23	jine Room R/B (Left Side of Room Partition Panel)			
3	24	R/B No.3 (Left Side of Instrument Panel)			
4	25	R/B No.4 (Front Compartment Left)			
5	28	B No.5 (Front Compartment Right)			

## : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
6A		
6B		
6D		
6E	26	Instrument Panel Wire and J/B No.6 (Instrument Panel Brace LH)
6F		
6G		
6H		

## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

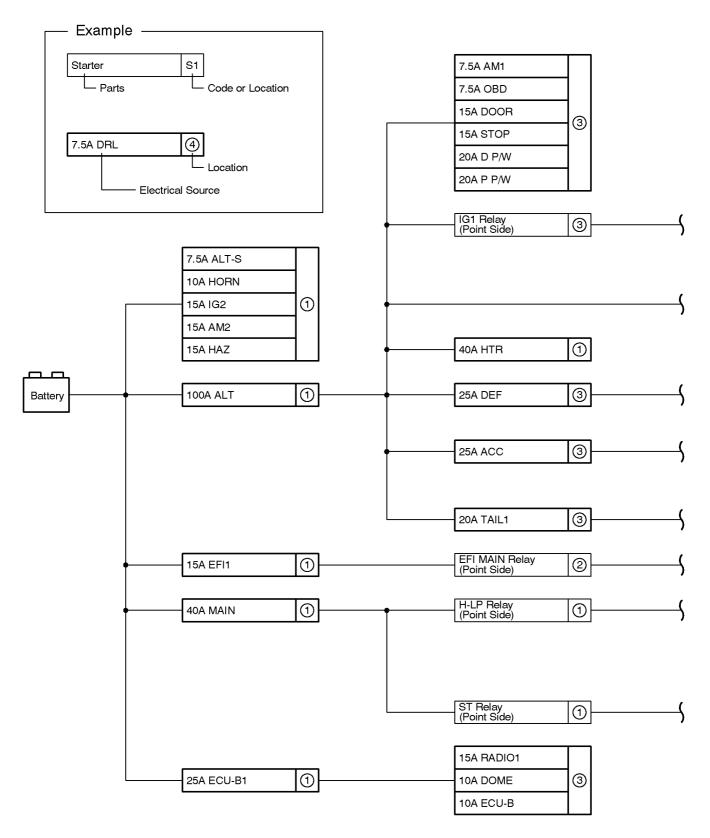
Code	See Page	Page Joining Wire Harness and Wire Harness (Connector Location)	
IC2 38 Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)			
ID1	ID1 38 Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)		
ll2	II2 40 Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)		
BC1	42	Engine Wire and Engine Room Main Wire (Quarter Panel LH)	

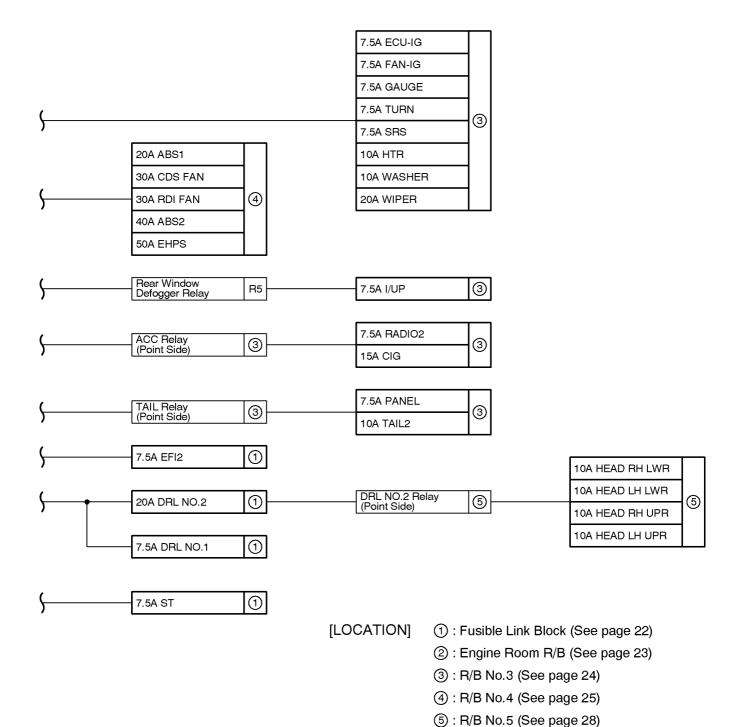
## : GROUND POINTS

Code	See Page	Ground Points Location
EA	36	Suspension Tower Rear LH
	30	
EB	- 36	Engine Block LH
EC	30	
ED	36	Suspension Tower Rear RH
IE	38	Left Kick Panel
IF	38	Instrument Panel Brace LH
IG	38	Instrument Panel Brace RH
IH	38	Right Kick Panel
BI	40	Supremain Towar Front DU
BJ	42	Suspension Tower Front RH
BK	42	Under the Center Pillar RH
BL	40	Supremain Towar Front I II
BM	42	Suspension Tower Front LH
BN	42	Under the Center Pillar LH

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	36	Engine Room Main Wire	B1		
E4	36	Engine Wire	B2	42	Luggage Room Wire
E5	36	Floor Wire	B4		
11			B6	42	Floor Wire
13	40	Instrument Panel Wire	B10	42	Engine Wire
19					

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.





## Fusible Link Block (See Page 22)

	Fuse	System	Page
7.5A	ALT–S	Charging	54
7.5A	DRL NO.1	Headlight	68
7.5A	EFI2	Engine Control	56
7.5A	ST	Engine Control	56
7.5A	51	Starting and Ignition	50
10A	HORN	Horn	88
		Combination Meter	124
15A	AM2	Engine Control	56
IJA	AIVIZ	SRS	111
		Starting and Ignition	50
15A	EFI1	Engine Control	56
IJA		Engine Immobiliser System	66
15A	HAZ	Turn Signal and Hazard Warning Light	78
15A	IG2	Engine Control	56
IJА	102	Starting and Ignition	50
20A	DRL NO.2	Headlight	68
40A	HTR	Air Conditioning	130
		Engine Control	56
40A	MAIN	Headlight	68
		Starting and Ignition	50
100A	ALT	Charging	54

## R/B No.3 (See Page 24)

	Fuse	System	Page
7.5A	ECU–IG	ABS	118
7.5A	ECO-IG	EHPS	116
7.5A	FAN–IG	Radiator Fan and Condenser Fan	128
		ABS	118
		Auto Antenna	108
		Back–Up Light	82
	GAUGE	Charging	54
		Combination Meter	124
		Door Lock Control	100
7.5A		EHPS	116
7.5A		Engine Control	56
		Headlight	68
		Light Reminder and Key Reminder Buzzer	94
		Power Window	98
		Rear Window Defogger	122
		Seat Belt Warning and Electric Tension Reducer	96
		SRS	111
7.5A	I/UP	Combination Meter	124

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

	Fuse	System	Page
7.5A	OBD	Engine Control	56
7.5A	PANEL	Cigarette Lighter and Clock	86
1.54	PANEL	Illumination	76
		Auto Antenna	108
		Cigarette Lighter and Clock	86
7.5A	RADIO2	Combination Meter	124
		Radio and Player	106
		Remote Control Mirror	104
7.5A	SRS	SRS	111
7.5A	TURN	Turn Signal and Hazard Warning Light	78
		Cigarette Lighter and Clock	86
10A	DOME	Combination Meter	124
		Interior Light	84
		Combination Meter	124
	ECU–B	Headlight	68
10A		Interior Light	84
		Light Reminder and Key Reminder Buzzer	94
		Seat Belt Warning and Electric Tension Reducer	96
10A	HTR	Air Conditioning	130
10A	TAIL2	Taillight	72
10A	WASHER	Wiper and Washer	90
15A	CIG	Cigarette Lighter and Clock	86
4 = 4	<b>DOOD</b>	Door Lock Control	100
15A	DOOR	Light Reminder and Key Reminder Buzzer	94
454		Auto Antenna	108
15A	RADIO1	Radio and Player	106
		ABS	118
15A	STOP	Engine Control	56
		Stop Light	80
20A	D P/W	Power Window	98
20A	P P/W	Power Window	98
		Illumination	76
20A	TAIL1	Light Reminder and Key Reminder Buzzer	94
		Taillight	72
20A	WIPER	Wiper and Washer	90
25A	DEF	Rear Window Defogger	122

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

J

## R/B No.4 (See Page 25)

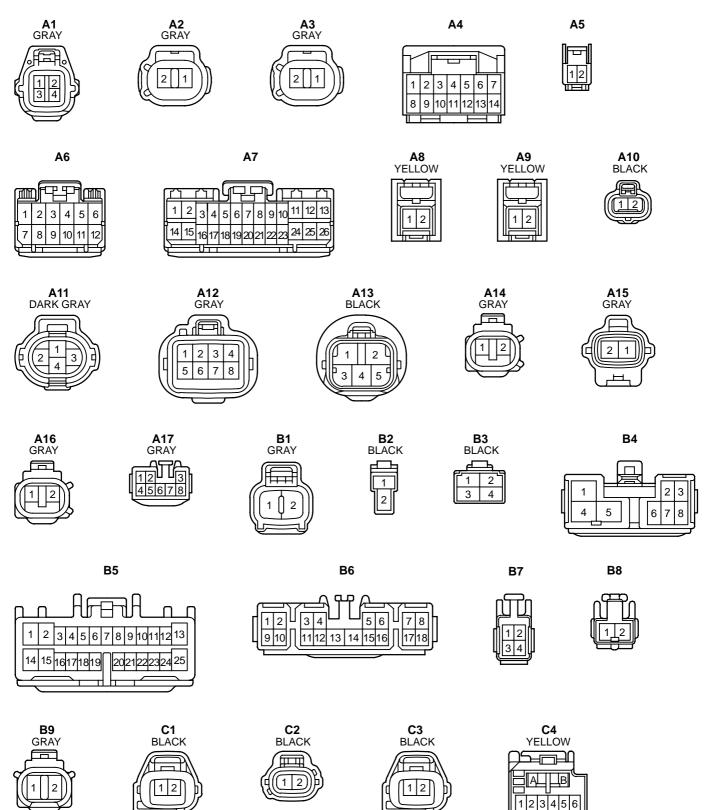
	Fuse	System	Page
20A	ABS1	ABS	118
30A	CDS FAN	Radiator Fan and Condenser Fan	128
30A	RDI FAN	Radiator Fan and Condenser Fan	128
40A	ABS2	ABS	118
50A	EHPS	EHPS	116

# R/B No.5 (See Page 28)

	Fuse	System	Page
10A	HEAD LH LWR	Headlight	68
10A	HEAD LH UPR	Headlight	68
10A	HEAD RH LWR	Headlight	68
10A	HEAD RH UPR	Headlight	68

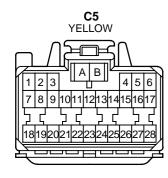
\* These are the page numbers of the first page on which the related system is shown.

# **K CONNECTOR LIST**

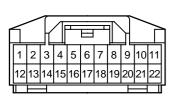


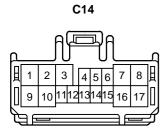
1

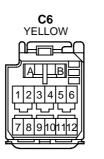
7 8 9 10 11





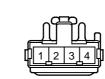








**C**7

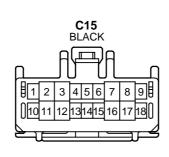


**C**8

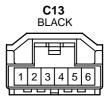


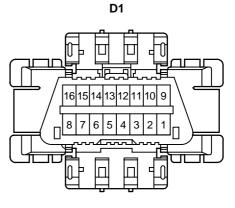
C9

C11 BLUE









D2 3 4 5 6 7 8 9 10 11 1 2 14 15 16 17 18 19 20 12 13 

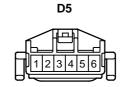








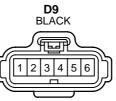






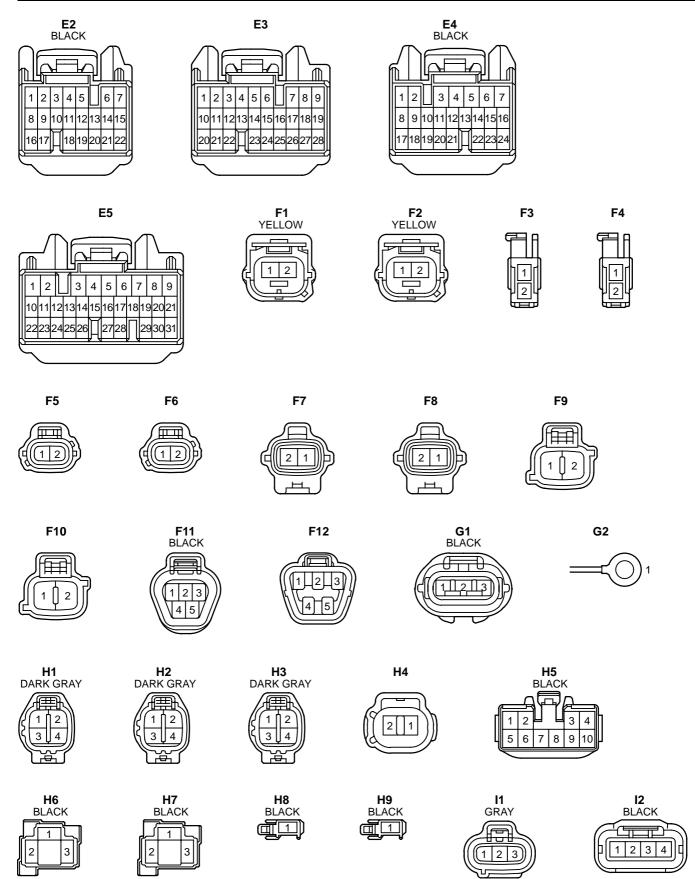
D6

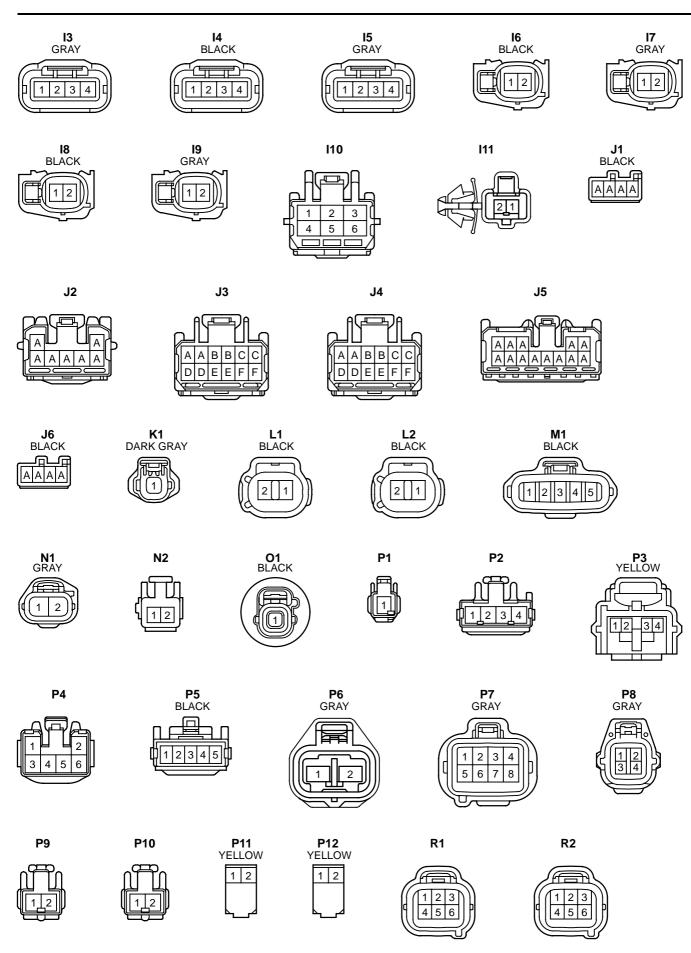




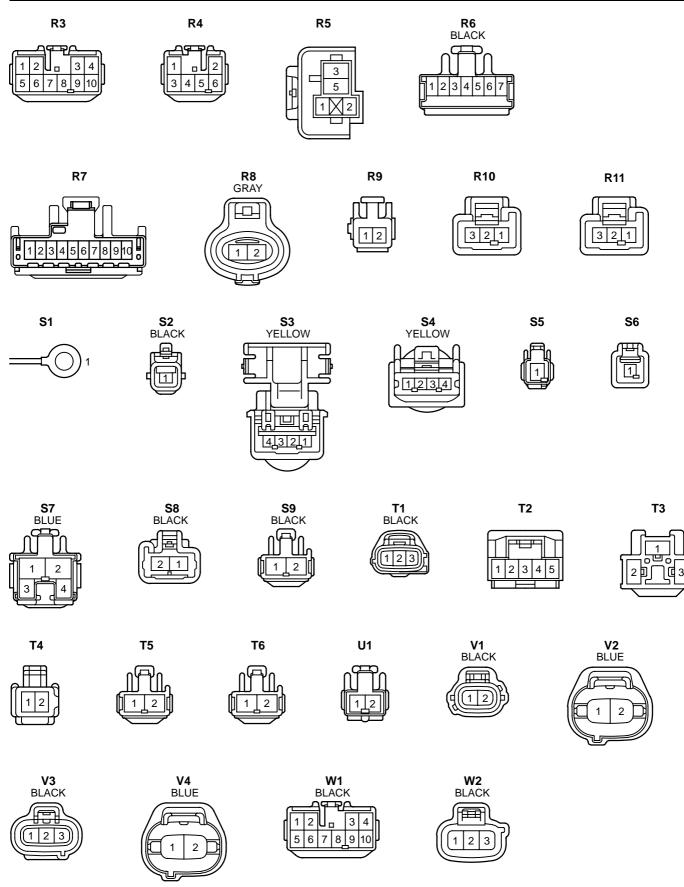
E1 DARK GRAY

# **K CONNECTOR LIST**





# **K CONNECTOR LIST**



# L PART NUMBER OF CONNECTORS

Code	Part Name	Part Number	Code	Part Name	Part Number
A 1	A/C Magnetic Clutch and Lock Sensor	90980–10942	D 3	Diode (Door Courtesy)	
A 2	ABS Speed Sensor Rear LH		D 4	Diode (DRL)	90980–10962
A 3	ABS Speed Sensor Rear RH	90980-11002	D 5	Door Lock Control SW	90980–10964
A 4	A/C SW	90980-11911	D 6	Door Courtesy SW LH	
A 5	A/C Thermistor	90980-11918	D 7	Door Courtesy SW RH	90980–10871
A 6	ABS ECU	90980–11424		Door Lock Motor, Door Key Lock and	
Α7	ABS ECU	90980-11390	D 8	Unlock SW and Door Unlock Detection SW	
A 8	Airbag Squib (Passenger's Airbag Assembly)	90980–11886	D 9	Door Lock Motor, Door Key Lock and Unlock SW and Door Unlock Detection SW	90980–11858
A 9	Airbag Squib (Steering Wheel Pad)			RH	
A10	A/C Condenser Fan Motor	90980–11410	E 1	Engine Coolant Temp. Sensor	90980-10737
A11	A/C Triple Pressure SW (A/C Dual and Single Pressure SW)	90980-10943	E 2	Engine Control Module	90980–11638
A40		00000 40004	E 3	Engine Control Module	90980–11637
A12	ABS Actuator	90980-10891	E 4	Engine Control Module	90980–11476
A13	ABS Actuator	90980-11413	E 5	Engine Control Module	90980–11421
A14	ABS Speed Sensor Front LH	90980-11003	F 1	Front Airbag Sensor LH	90980–11856
A15	ABS Speed Sensor Front RH	90980-11074	F 2	Front Airbag Sensor RH	
A16	Auto Antenna Motor	90980–11003	F 3	Front Door Speaker LH	90980-10935
A17	Auto Antenna Relay	90980–10779	F 4	Front Door Speaker RH	30300 10333
B 1	Back–Up Light SW	90980-11051	F 5	Front Parking Light LH	90980–11162
B 2	Blower Motor	90980-10214	F 6	Front Parking Light RH	90900-11102
B 3	Blower Resistor	90980-10171	F 7	Front Side Marker Light LH	00000 44074
B 4	Blower SW	90980–10877	F 8	Front Side Marker Light RH	90980–11074
B 5	Body ECU	90980-11877	F 9	Front Turn Signal Light LH	
B 6	Body ECU	90980-10819	F10	Front Turn Signal Light RH	90980–11019
Β7	Buckle SW and Tension Reducer LH	90980-10795	F11	Front Wiper Motor	90980–11599
B 8	Buckle SW RH and Seat Belt Warning Occupant Detection Sensor	90980–10860	F12 G 1	Fuel Pump and Fuel Sender Generator	90980–11077 90980–11349
B 9	Brake Fluid Level Warning SW	90980-11207	_		
C 1	Camshaft Position Sensor	90980-10947	G 2	Generator	90980-09200
C 2	Camshaft Timing Oil Control Valve	90980-11162	H1	Heated Oxygen Sensor (Bank 1 Sensor 1)	
C 3	Crankshaft Position Sensor	90980–10947	H 2	Heated Oxygen Sensor (Bank 1 Sensor 2)	90980–11028
C 4	Center Airbag Sensor Assembly	90980-11869	H 3	Heated Oxygen Sensor (Bank 2 Sensor 1)	
C 5	Center Airbag Sensor Assembly	90980-11872	H 4	High Mounted Stop Light	90980–11002
C 6	Center Airbag Sensor Assembly	90980-11867	H 5	Hazard SW	90980-10801
C 7	Cigarette Light	90980-10760	H 6	Headlight LH	90980–11314
C 8	Clock	90980-11013	Η7	Headlight RH	
C 9	Clutch Start SW	90980–10825	H 8	Horn LH	90980-10619
C10	Combination Meter	90980-11915	H 9	Horn RH	
C11	Combination Meter	90980-11913	11	Idle Air Control Valve	90980–11145
C12	Combination Meter	90980-11923	12	Ignition Coil and Igniter No.1	
C12	Combination SW	90980-11923	13	Ignition Coil and Igniter No.2	90980–11885
C13	Combination SW	90980-11988	14	Ignition Coil and Igniter No.3	00000-11000
			15	Ignition Coil and Igniter No.4	
C15	Combination SW	90980-11594			
D1	Data Link Connector 3	90980-11665			
D 2	Daytime Running Light Relay	90980-12034			

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

Code	Part Name	Part Number	Code	Part Name	Part Number
16	Injector No.1		R 3	Radio and Player	90980-10997
17	Injector No.2	00000 44075	R 4	Radio and Player	90980-10996
18	Injector No.3	90980-11875	R 5	Rear Window Defogger Relay	82660-20340
19	Injector No.4		R 6	Rheostat	90980–11165
l10	Ignition SW	90980-11778	R 7	Remote Control Mirror SW	90980–11657
111	Interior Light	90980-11724	R 8	Radiator Fan Motor	90980-10928
J 1	Junction Connector	90980-11398	90980–11398 R 9 Rear Window Defogger		90980-10825
J 2	Junction Connector	90980-11529	R10	Remote Control Mirror LH	00000 40007
J 3	Junction Connector	00000 44.004	R11	Remote Control MIrror RH	- 90980-10907
J 4	Junction Connector	90980-11661	S 1	Starter	90980-09506
J 5	Junction Connector	90980-11542	S 2	Starter	90980-11400
J 6	Junction Connector	90980-11398	S 3	Short Connector (SRS No.1)	90980-11023
K 1	Knock Sensor	90980–11166	S 4	Short Connector (SRS No.1)	90980–11904
L 1	License Plate Light LH	00000 (1000	S 5	Short Connector (SRS No.2)	90980-10871
L 2	License Plate Light RH	90980-11002	S 6	Short Connector (SRS No.2)	90980-10870
M 1	Mass Air Flow Meter	90980-11317	S 7	Stop Light SW	90980–11118
N 1	Noise Filter (Ignition)	90980-10843	S 8	Short Connector (Rear Window Defogger)	90980-10915
N 2	Noise Filter (Rear Window Defogger)	90980-10825	S 9	Short Connector (Rear Window Defogger)	90980-10916
01	Oil Pressure SW	90980-11363	T 1	Throttle Position Sensor	90980-11261
P 1	Parking Brake SW	90980-10871	T 2	Transponder Key Amplifier	90980–11909
P 2	Passenger Airbag Manual ON/OFF SW	90980-11013	Т3	Turn Signal Flasher Relay	90980-10704
P 3	Passenger Airbag Manual ON/OFF SW	90980-12017	T 4	Tension Reducer Solenoid LH	90980–11369
P 4	Power Window Control SW LH	90980-10797	T 5	Tweeter LH	00000 40040
P 5	Power Window Control SW RH	90980-10789	Τ6	Tweeter RH	- 90980-10916
P 6	Power Steering ECU	90980-12068	U 1	Unlock Warning SW	90980-10860
Ρ7	Power Steering ECU	90980-10897	V 1	VSV (Canister Closed Valve)	90980–11162
P 8	Power Steering ECU	90980-10942	V 2	VSV (EVAP)	90980–11156
P 9	Power Window Motor LH	00000 40000	V 3	Vapor Pressure Sensor	90980–11143
P10	Power Window Motor RH	90980-10860	V 4	VSV(Pressure Switching Valve)	90980–11156
P11	Pretensioner LH	00000 41000	W 1	Window Lock SW	90980-10997
P12	Pretensioner RH	90980-11862	W 2	Washer Motor	90980-10981
R 1	Rear Combination Light LH		L	1	1
R 2	Rear Combination Light RH	90980-10988			

L