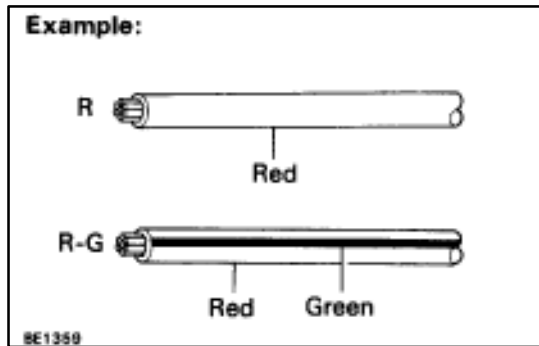


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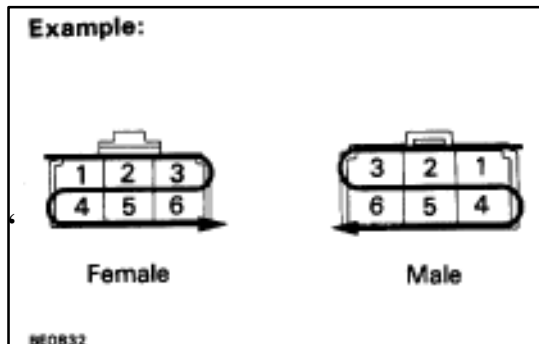
# BODY ELECTRICAL SYSTEM

**Example:****GENERAL INFORMATION****Wiring Color Code**

Wire colors are indicated by an alphabetical code.

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

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

**Example:****Connector****1. PIN NUMBERS OF FEMALE CONNECTOR**

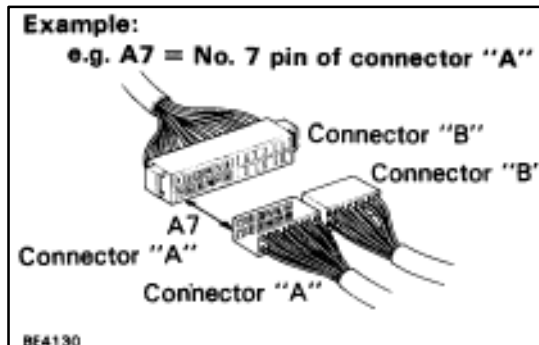
Numbered in order from upper left to lower right.

**2. PIN NUMBERS OF MALE CONNECTOR**

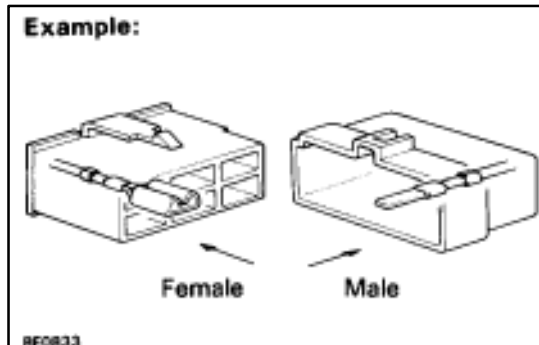
Numbered in order from upper right to lower left.

**Example:**

e.g. A7 = No. 7 pin of connector "A"



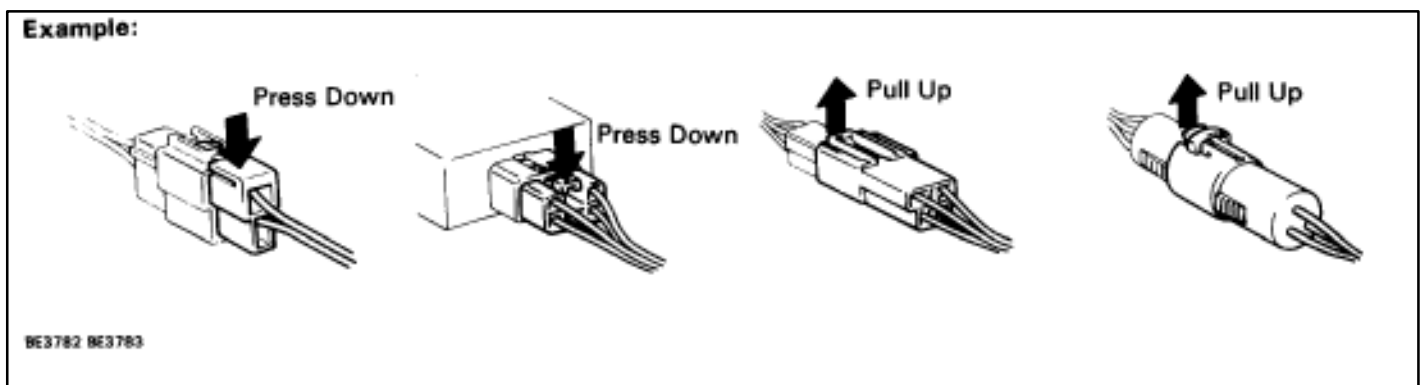
HINT: When connectors with different of the same number of terminals are used with the same parts, each connector name (letter of the alphabet) and pin number is specified.

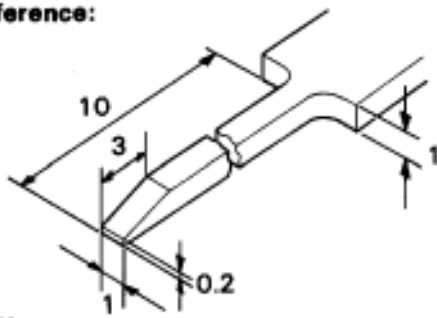
**Example:****3. DISTINCTION OF MALE AND FEMALE CONNECTORS**

Male and female connectors are distinguished by shape of their internal pins.

- All connectors are shown from the open end, and the lock is on top.
- To pull apart the connectors, pull on the connector itself, not the wires.

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

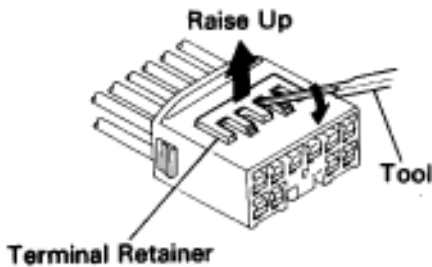
**Example:**

**Reference:**

BE2830

**How to Replace Terminal****(with Terminal Retainer Type)**

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



BE2831

**1. DISCONNECT CONNECTOR**

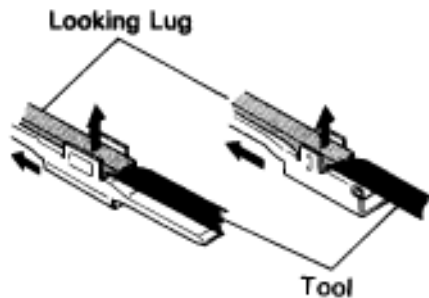
Disconnect the connector according to the instructions on [BE-2](#).

**2. DISCONNECT TERMINAL FROM CONNECTOR**

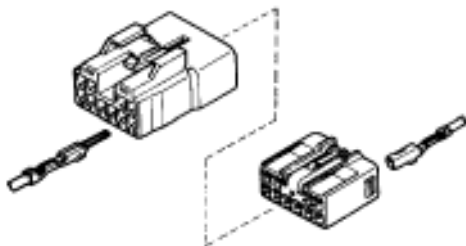
(a) Using the special tool, raise the retainer up to the temporary lock position.

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

(b) Using the special tool, release the locking lug and pull the terminal out from rear.



BE2832



BE2833

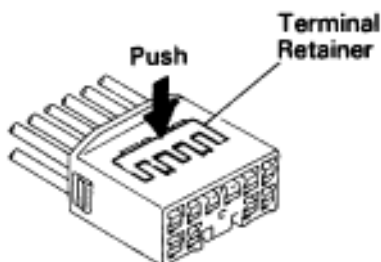
**3. INSTALL TERMINAL TO CONNECTOR**

(a) Insert the terminal.

HINT:

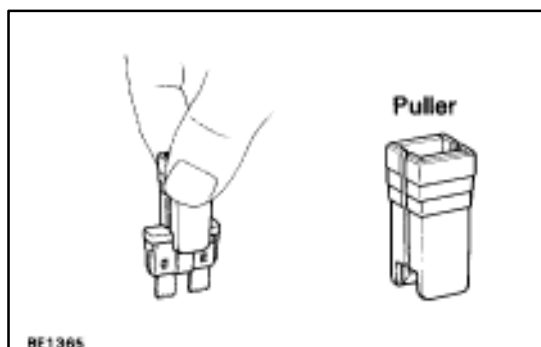
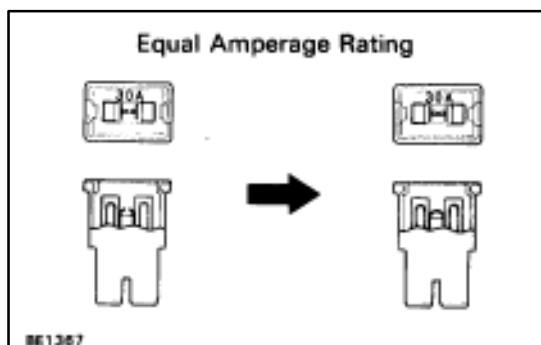
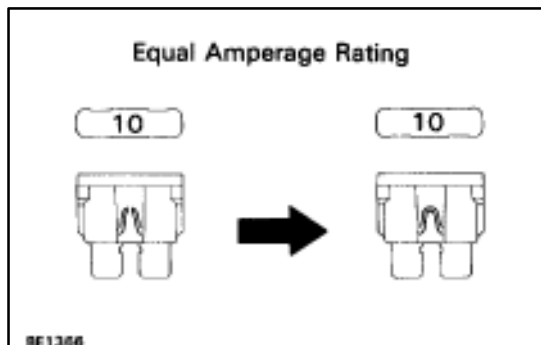
1. Make sure the terminal is positioned correctly.
2. Insert the terminal until the locking lug locks firmly.
3. Insert the terminal with retainer in the temporary lock position.

(b) Push the retainer in to the full lock position.



BE2834

**4. CONNECT CONNECTOR**



## Replacement of Fuse

**HINT:** If replacing the fuse, be sure to replace it with a fuse with an equal amperage rating.

### NOTICE:

1. Turn off all electrical components and the ignition switch before replacing a fuse. Do not exceed the fuse amperage rating.
2. Always use a fuse puller for removing and inserting a fuse. Remove and insert straight in and out without twisting. Twisting could force open the terminals too much, resulting in a bad connection.

If a fuse continues to blow, a short circuit is indicated. The system must be checked by a qualified technician.

**HINT:** The puller is located at Relay Block No. 2.

## How to Inspect for System Inspection

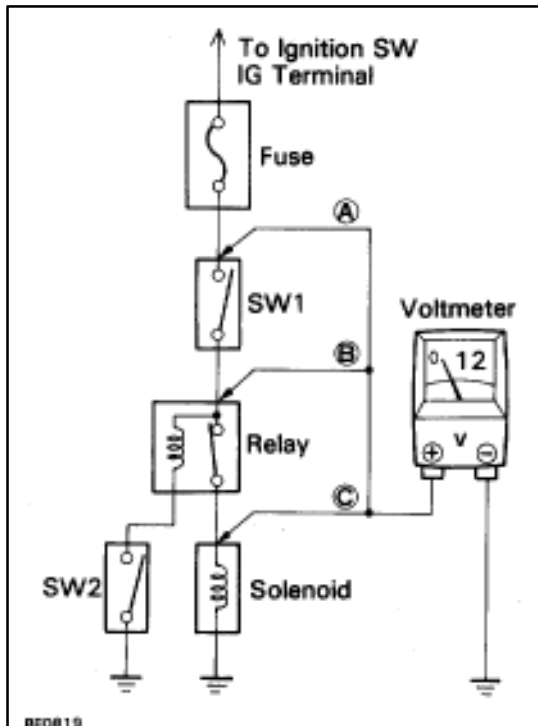
This inspection procedure is a simple troubleshooting which should be carried out on the vehicle during system operation and is based on the assumption of system component trouble (except for the wires and connectors, etc.).

Always inspect the trouble taking the following items into consideration.

- Ground point fault
- Open or short circuit of the wire harness
- Connector or terminal connection fault
- Fuse or fusible link fault

### NOTICE:

1. This is an on-vehicle inspection during system operation. Therefore, inspect the trouble with due regard for safety.
2. If connecting the battery directly, be careful not to short circuit, and select the applicable voltage.



## Check for Voltage

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

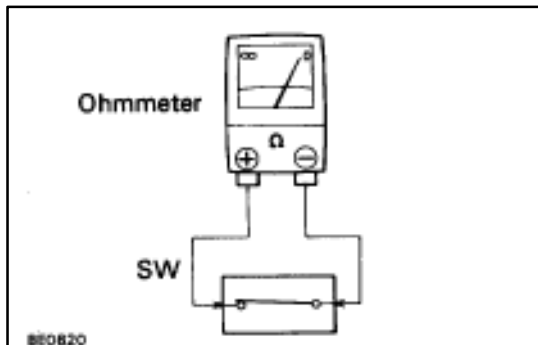
Example:

(A)– Ignition SW on

(B)– Ignition SW and SW 1 on

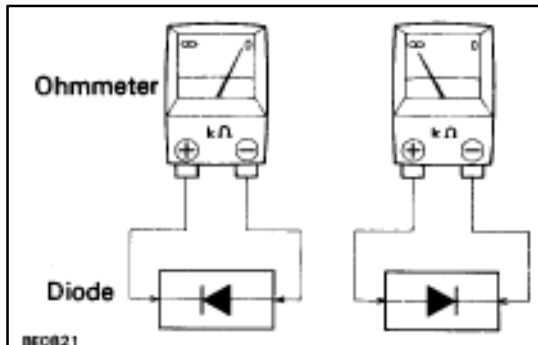
(C)– Ignition SW, SW 1 and Relay on (SW 2 off)

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



## Check for Continuity and Resistance

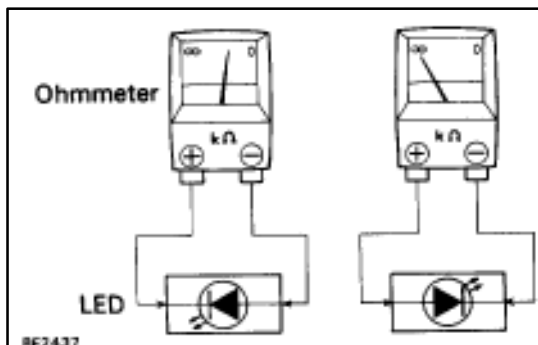
- (a) Disconnect the battery terminal or wire so there is no voltage between the check points.
- (b) Connect the two leads of an ohmmeter to each of the check points.



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.

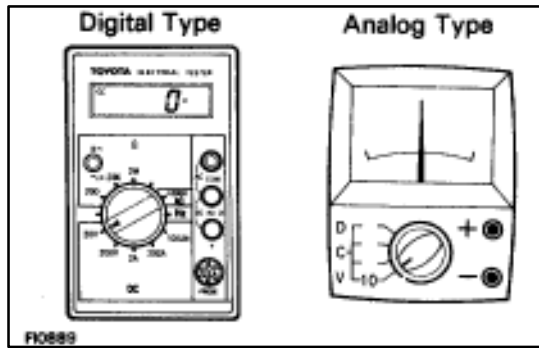
HINT: Specifications may vary depending on the type of tester, so refer to the tester's instruction manual before performing the inspection.



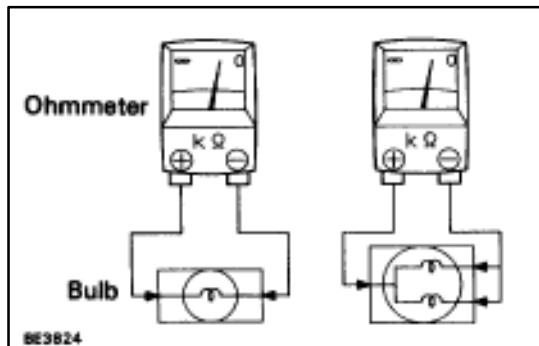
Check LED (Light Emitting Diode) in the same manner as that for diodes.

HINT:

- Use a tester with a power source of 3 V or greater to overcome the circuit resistance.
- If a suitable tester is not available, apply battery voltage and check that the LED lights up.

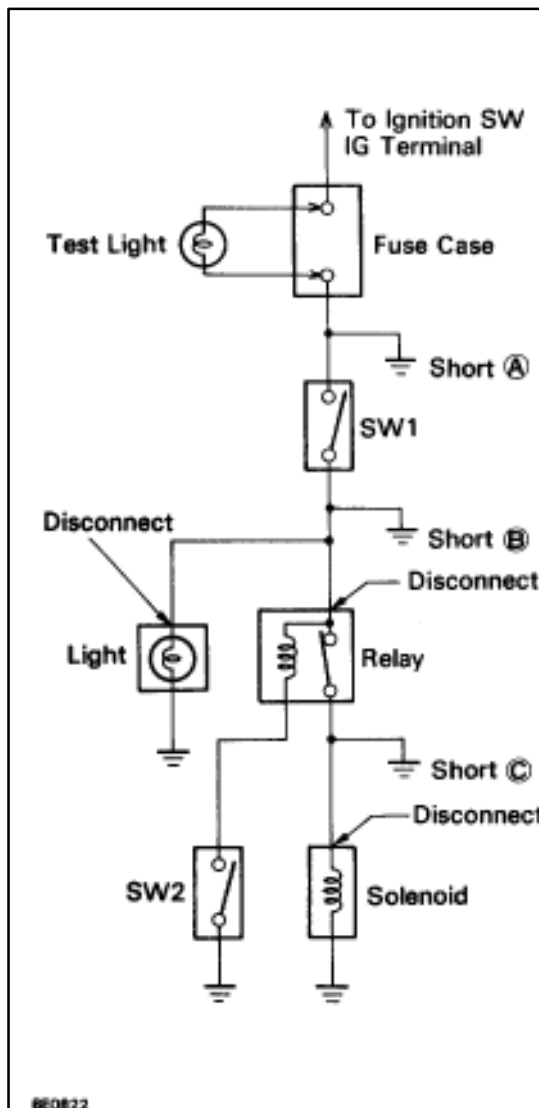


- (c) Use a volt/ohmmeter with high impedance (10 k/V minimum) for troubleshooting of the electrical circuit.



## Check the Bulb

- Remove the bulb.
- There should be continuity between the respective terminals of the bulb together with a certain amount of resistance.
- Apply the two leads of the ohmmeter to each of the terminals.
- Apply battery voltage and check that the bulb light up.



## Check for Short Circuit

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