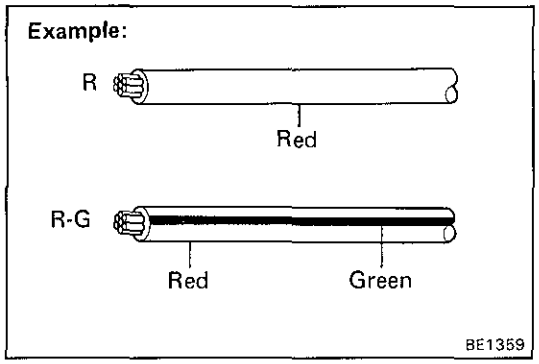


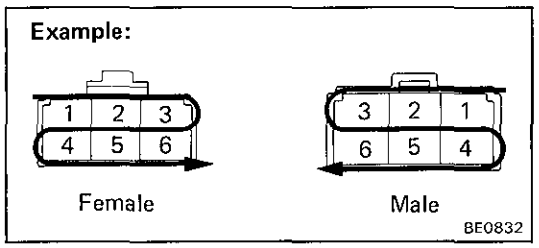
GENERAL INFORMATION

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.



Connector

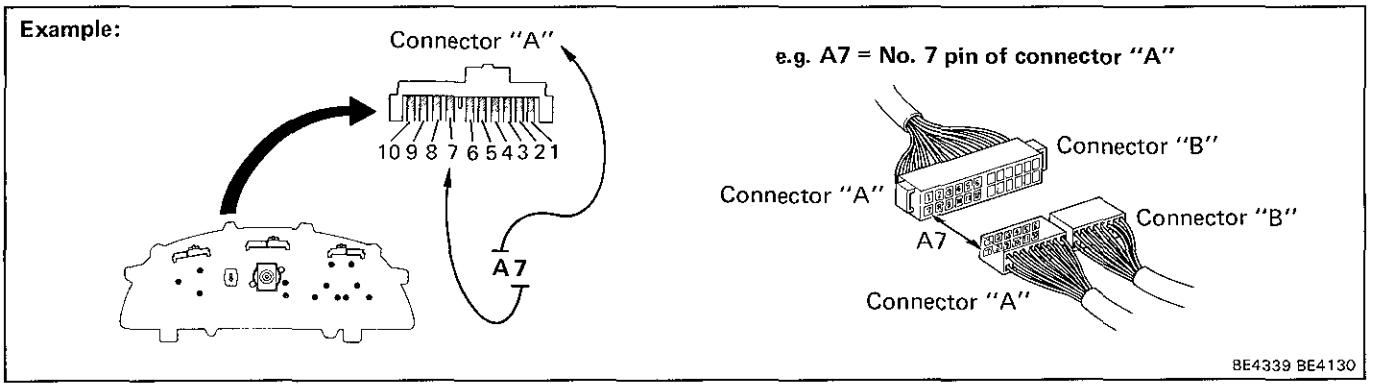
1. **PIN NUMBER OF FEMALE CONNECTOR**

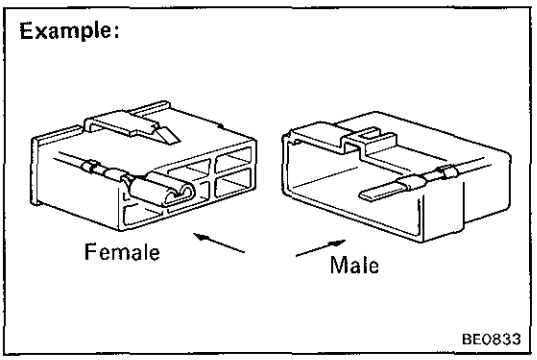
Numbered in order from upper left to lower right.

2. **PIN NUMBER OF MALE CONNECTOR**

Numbered in order from upper right to lower left.

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





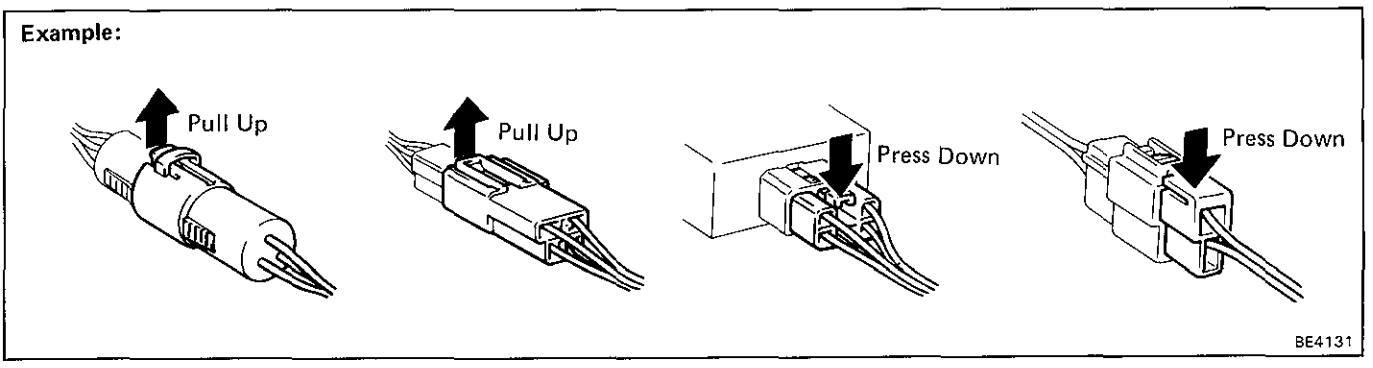
3. **DISTINCTION OF MALE AND FEMALE CONNECTORS**

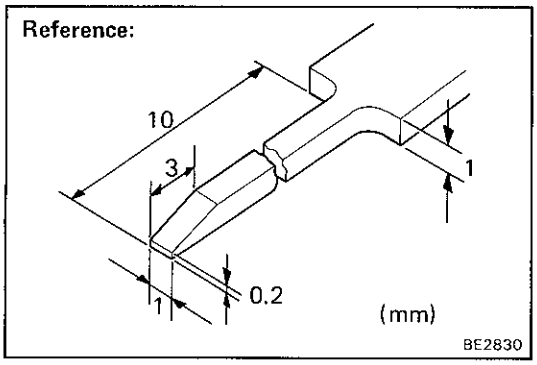
Male and female connectors are distinguished by shape of their internal pins.

(a) All connectors are shown from the open end, and the *lock is on top.*

(b) 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.

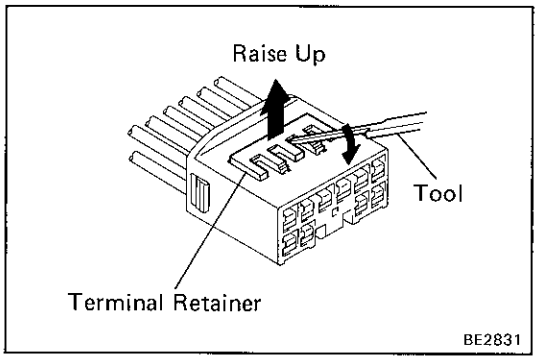




How to Replace Terminal

(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.



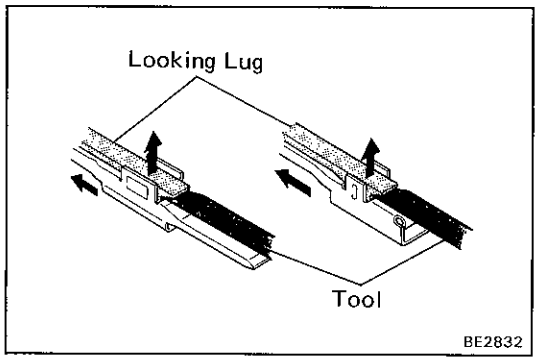
1. DISCONNECT CONNECTOR

Disconnect the connector according to the instructions on BE-2.

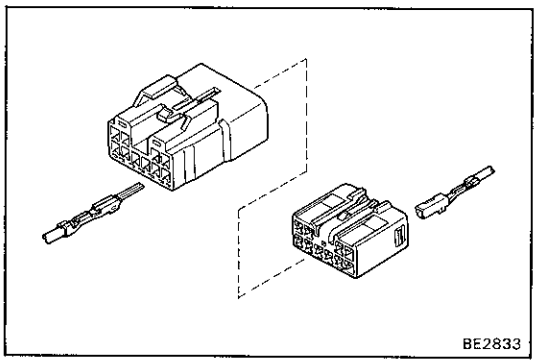
2. DISCONNECT TERMINAL FROM CONNECTOR

(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.

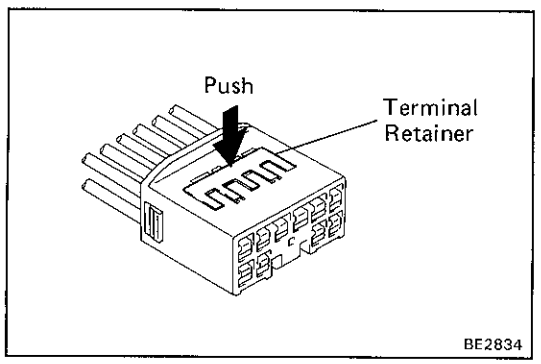


3. INSTALL TERMINAL TO CONNECTOR

(a) Insert the terminal.

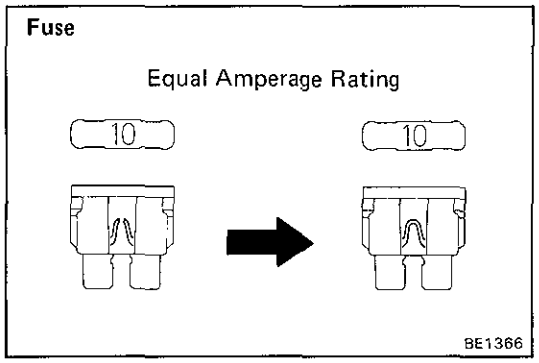
HINT:

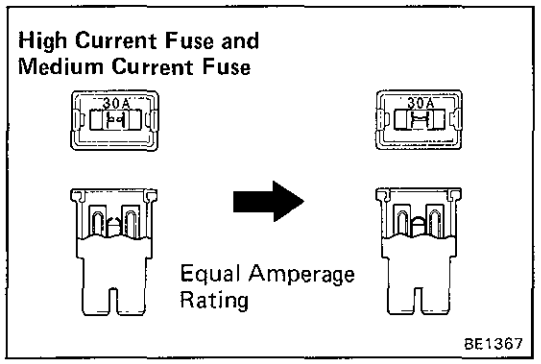
- Make sure the terminal is positioned correctly.
- Insert the terminal until the locking lug locks firmly.
- Insert the terminal with retainer in the temporary lock position.

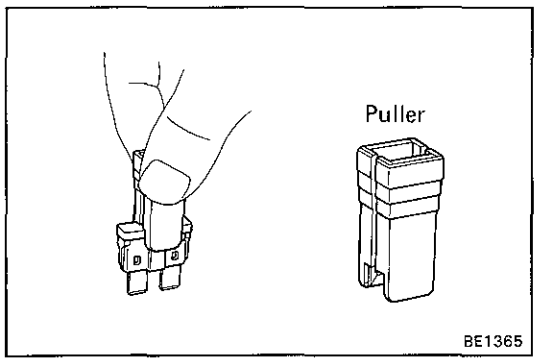


(b) Push the retainer in as far as the full lock position.

4. CONNECT CONNECTOR







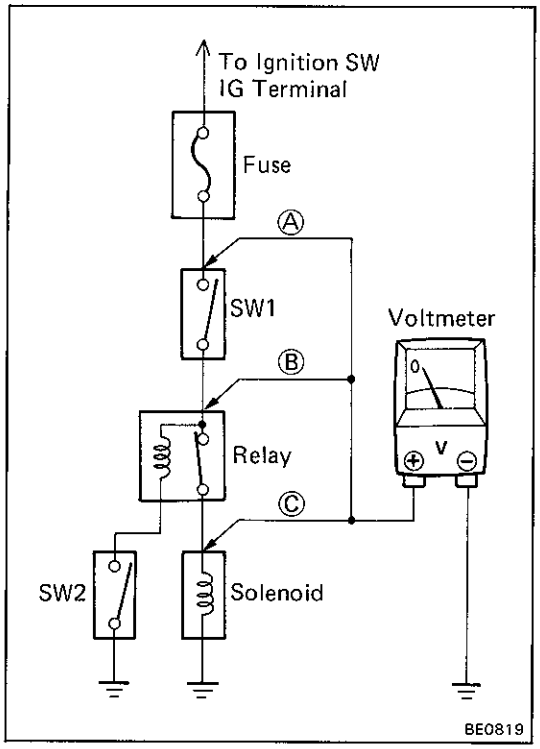
Replacement of Fuse

HINT: If replacing the fuse, be sure to replace it with a fuse with and 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.



Check for Voltage

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

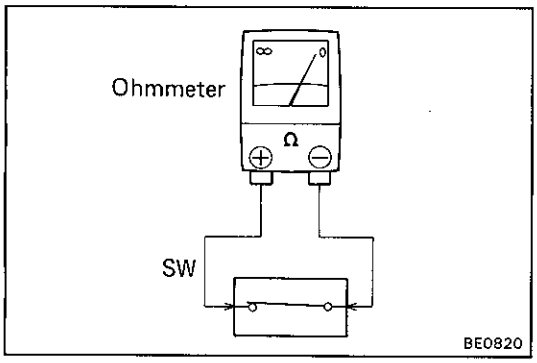
Example:

Ⓐ — Ignition switch on.

Ⓑ — Ignition switch and switch 1 (SW1) on.

Ⓒ — Ignition switch, switch 1 (SW1) and relay on (switch 2 (SW2) off).

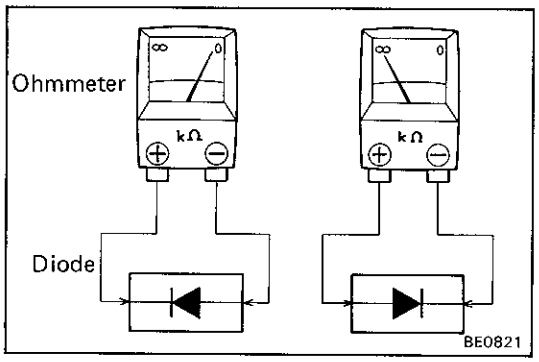
(b) Using a voltmeter, connect the negative (—) lead to a good ground point or negative (—) battery terminal and the positive (+) lead to the connector or component terminal. This check can be done with a test bulb instead of a voltmeter.



Check for Continuity and Resistance

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

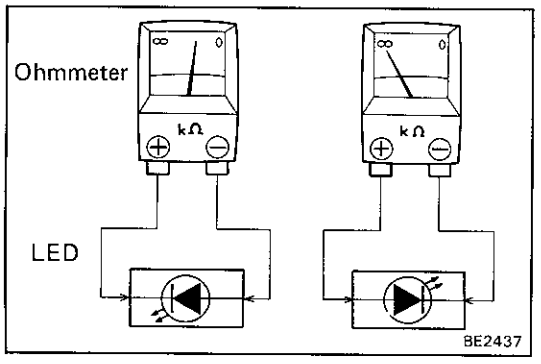
(b) Contact the two leads of an ohmmeter to each of the check points.



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

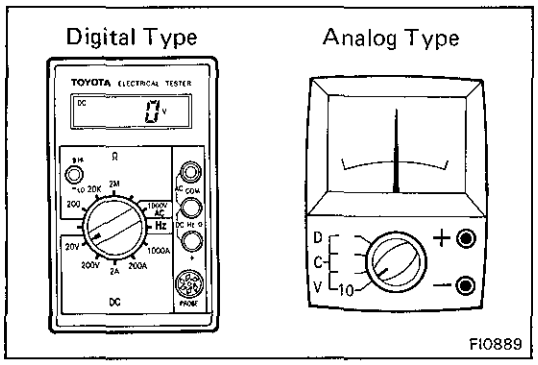
When contacting the negative (—) lead to the diode positive (+) side and the positive (+) lead to the negative (—) side, there should be continuity. When contacting the two leads in reverse, there should be no continuity.

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

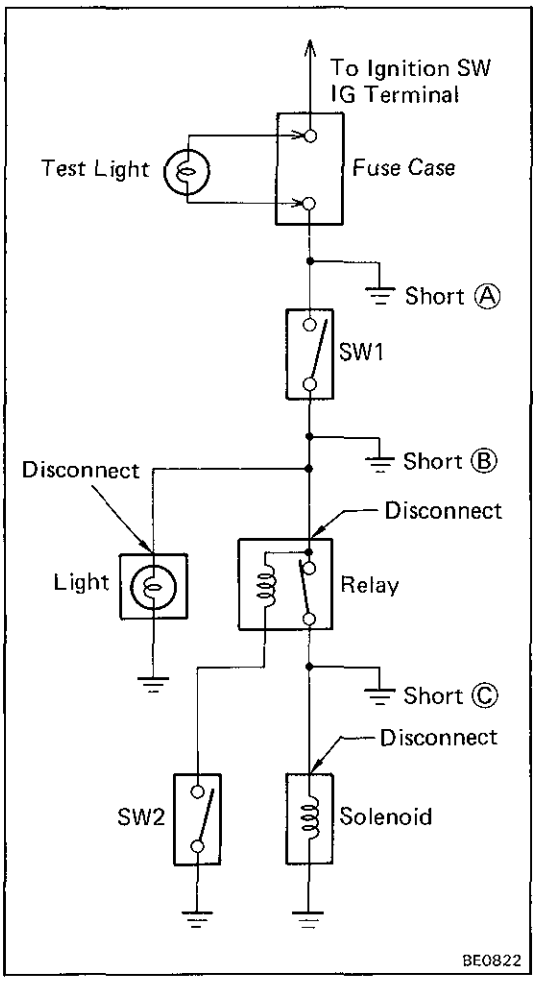


Check LED (Light Emitting Diode) in the same manner as that for diodes.

- 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 that the LED lights up.



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



Check for Short Circuit

(a) Remove the blown fuse and eliminate all loads from the fuse.

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

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

Example:

Ⓐ – Ignition switch on.

Ⓑ – Ignition switch and switch 1 (SW1) on.

Ⓒ – Ignition switch, switch 1 (SW1) and relay on (connect the relay) and switch 2 (SW2) off (or disconnect switch 2 (SW2)).

(d) 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.

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