

Thank you for purchasing our PIVOT VOLT STABILIZER RAIZIN.  
Please read these instructions carefully before installing or using the device.

**RAIZIN INSTALLATION**

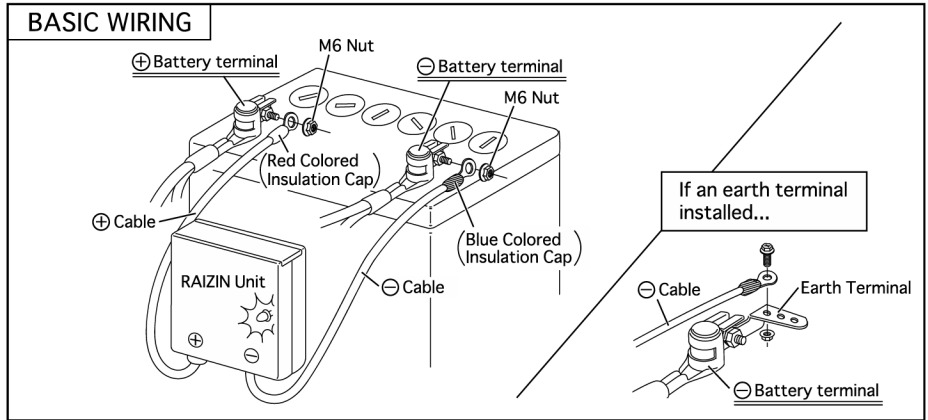
**⚠ WARNING**

Please install safely and surely by following these instructions.  
In particular, please be very careful about connecting the ⊕ and ⊖ cables. Mixing these up will cause damage to the product.

■ Things to prepare

- Wrenches ( • Socket Wrench  
• Combination Wrench )
- Vinyl Electrical Tape
- Cloth • Absorbing Agent

**BASIC WIRING**



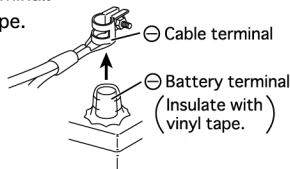
**INSTALLATION PROCEDURE**

**1 Installation Preparation**

- ① Remove the ⊖ cable from the ⊖ battery terminal.
- ② Insulate the ⊖ battery terminal with vinyl tape.

**⚠ CAUTION**

To prevent making any mistakes with the ⊕ and ⊖ and causing a short during installation, please make sure to insulate.

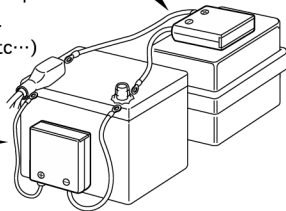


**2 Installing the RAIZIN unit.**

- ① Decide installation place.
  - Without forcing, make sure you can connect the two cables to the correct terminals.
  - Make sure the installation place is a flat surface where the unit can be fixed with double-sided tape.

⚠ If you're installing on the top surface, make sure the car hood will not to hit the unit when closed.

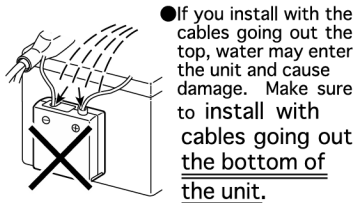
Ex) The top or side of the battery or any other flat surface near the battery. (fuse box, etc...)



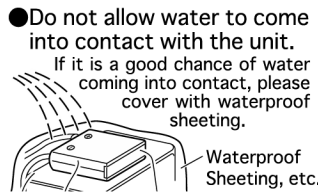
⚠ If you're installing on the side surface, install so that the cables go out the bottom.\*

※Do not to install in areas subject to water.

Circuitry has waterproof coating. But do not to install in areas subject to water or spray with water.

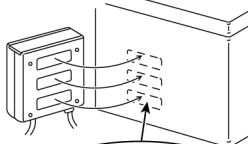


● If you install with the cables going out the top, water may enter the unit and cause damage. Make sure to install with cables going out the bottom of the unit.



● Do not allow water to come into contact with the unit. If it is a good chance of water coming into contact, please cover with waterproof sheeting.

- ② Clean off all oil and dirt from the bottom of the main unit and affix the double-sided tape included in the kit.
- ③ Clean off all oil and dirt from the installation place and fasten the main unit.



CLEAN TO REMOVE OIL & DUST

**⚠ CAUTION**

1. If you're installing on the side surface, the double-sided tape will take about two hours to become secure. During that time do not allow any vibration to the unit.
2. Reinstalling will cause the tape's adhesive strength to weaken, so please do not to it.

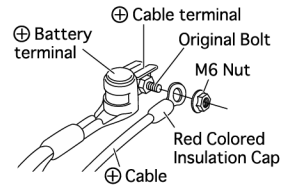
**3 Connect the ⊕ Cable**

- ① Remove the cover from the ⊕ terminal of the battery. Connect the unit's ⊕ cable (one with red colored insulation cap) to the terminal of the ⊕ battery cable.

- Fasten with an M6 nut to the original bolt.
- Fasten between the original nut and the terminal.

- ② Replace the cover after completing the connection.

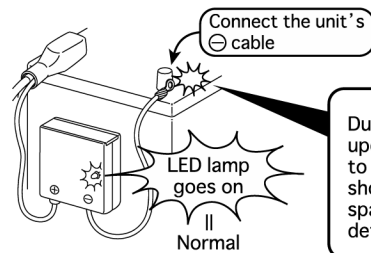
※If the cover does not insulate properly, please use vinyl tape to ensure proper insulation.



**4 Check Wiring**

- ① Remove the vinyl tape from the ⊖ terminal of the battery.
- ② Connect the unit's ⊖ cable (one with blue colored insulation cap) to the bolt of the ⊖ battery and check to see if the unit's blue LED lamp goes on or not.
  - LED lamp goes on = Normal
  - LED lamp does not go on = Check all connections including whether ⊕ and ⊖ are properly connected.

**⚠ WARNING** Please make sure to check about connecting the ⊕ and ⊖ cables. Mixing these up will cause damage to the product.



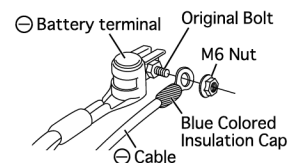
**⚠ Sparking upon Contact**

Due to characteristics of the product, upon contact of the RAIZIN'S ⊕ ⊖ to the battery's ⊕ ⊖ or upon the shorting of the flow of ⊕ ⊖ current sparks may be emitted. This is not a defect.

**5 Connect the ⊖ Cable**

- ① Properly connect the ⊖ cable terminal to the ⊖ battery terminal.
- ② Connect the unit's ⊖ cable (one with blue colored insulation cap) to the terminal of the ⊖ battery cable.

- Fasten with an M6 nut to the original bolt.
- Fasten between the original nut and the terminal.



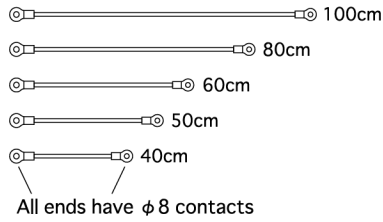
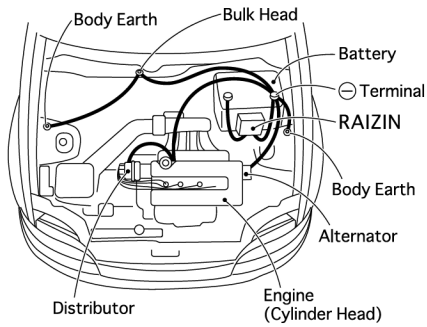
⚠ If an earth terminal is installed, connect the cable to the terminal. (See [BASIC WIRING])

**6 Arranging the Cables**

Arrange the cables with the lock ties included in the kit.

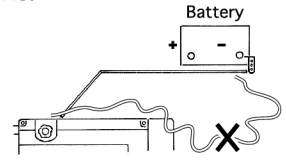
# EARTH CABLE INSTALLATION (VS-E ONLY)

From the 5 lengths of cable in kit, choose the most suitable length cable and lay it.



## CAUTION

1. Choose the most direct path and the shortest cable possible.
2. Don't lay cables that are too short.
3. Both ends of the cable have a φ 8 crimp contact, connect using bolts that are less than M8.

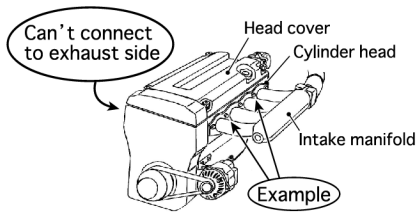


## EXAMPLE OF WIRING FOR SUPPLEMENTARY EARTH

Connect the additional earth cables from the ⊖ battery terminal to the following places.

### (A) Near Cylinder Head

Connect to about 2 places on the intake side.

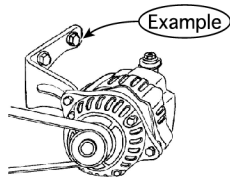


### Effects of Various Wiring

(A) Near Cylinder Head	Increased plug firing.	● Increased torque at low and middle speed.
(B) Near Alternator	Increased and stabilized electricity.	● Improved starting.
(C) Near Distributor	Increased and stabilized plug firing.	● Increased response.
(D) Body Earth	Stabilized parts.	● Increased light brightness.
(E) Bulk Head	Stabilized car audio and decreased noise.	● Stabilized electronic parts.
	Stabilized ECU and decreased noise.	● Improved bass sound and decreased noise.

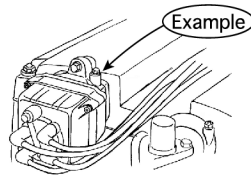
### (B) Near Alternator

Connect to the earth screw.



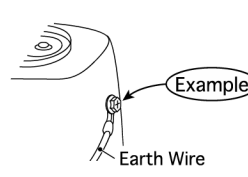
### (C) Near Distributor

Connect to the earth screw.



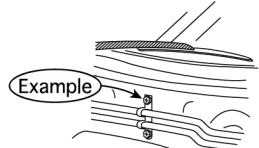
### (D) Body Earth

Connect to the screw of the earth wire.



### (E) Bulk Head

Connect to the screw on the wall surface between the engine room and the interior of the car.



## How to Connect the Cables to Various Places.

Loosen and take off the screw from the connection place and install a cable terminal.

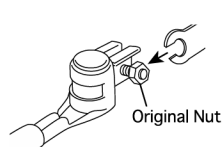
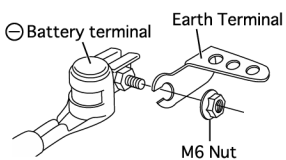
(If you can loosen the screw but cannot remove it, cut the end of the terminal with pliers or other tool and squeeze the terminal into the space and tighten it on as you tighten the screw.)



## TERMINAL INSTALLATION

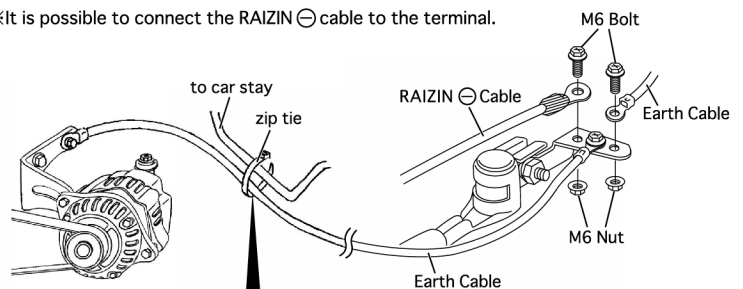
① Fasten the earth terminal to the ⊖ Battery terminal with the included M6 Nut.

※If it is impossible to use an M6 nut, loosen the nut that holds the ⊖ cable terminal, attach and fasten.



② Fasten the earth cables at Earth Terminal and Earth Position.

※It is possible to connect the RAIZIN ⊖ cable to the terminal.

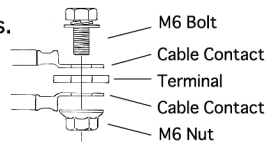


The earth terminal has no set angle, connect it so that when connecting cables they do not come in contact with other places or with the back of hood etc.

When laying cables near the heat exhaust side, the alternator or the fan, fasten the cables with the zip tie so as not to allow contact.

## Cautions about connecting the cables.

1. If you are connecting 2 cable terminals to 1 terminal hole, please connect 1 on top and 1 on bottom as shown in the figure to the right.



2. If you are connecting the cable terminals in a line, make sure that the terminals on top of one another do not render the screw useless (See arrows in right figure). Lightly tighten the screw and adjust the terminals as necessary to make sure the connection tightens properly.

