

USER'S GUIDE (As of September, 2005)







Pivot

IGNITION VOLT STABILIZER RAIZIN Spark

RAIZIN Spark Type S VS-S

Thank you for purchasing our PIVOT product. Please read these instructions carefully before installing or using this device.

- When installing this product, we recommend that if technical knowledge becomes necessary please consult a qualified mechanic.
- Please do not lose this user's guide, as you will held liable for the cost of reissuing it.

CONTENTS					
					
RAIZIN Unit	Fuse Power Cord (RED)	Extension Cord (YELLOW)	Wire Connector (Large)	Double-sided Tapes X 3	User's Guide - List of Wiring Method by Car Model

For the car models below a fuse power cable must be purchased separately.

- SUBARU Impreza GC/GF8 (A ~ D model) = 15A Regular Type
- All DAIHATSU Car = 10A Mini Type

WARNING

1. Please install safely and surely by following these instructions.
2. Please be sure to remove the ⊖ battery cable from the terminal before wiring.
3. A mistake in wiring may cause a short circuit and subsequent malfunction to the product or your car.
4. Because this product is not waterproof, please be sure to install it on the inside of the car. (Do not install it on the engine room.)

CAUTION

1. There are some model cars for which this product cannot be connected, has not been checked for wiring compatibility or for which due to the car's wiring there was a lack of results.
2. Please do not attempt to connect a similar product in the same way as our product, or install this product to a car for which the product is not compatible. Doing so may cause damage to your car's parts.

EFFECTS

Specialized design means a clear rise in performance !

- Torque and Response and Power
- Improved Fuel Efficiency and Engine Kick Over
- Stabilized Idling
- The hushed sound of an engine

FEATURES

Stabilization at the Power Source; the Ideal Ignition for Power Enhancement !

Until now, due to various types of load resistance and interference at the contact terminals, fuses, contact points and cords in the electric circuitry on the way to the ignition coil, major loss occurred and optimum combustion did not take place. To help solve this the RAIZIN Spark utilizes a new approach in voltage stabilizer devices for ignition coils that brings out 100% of your ignition's performance by providing point blank power to the ignition coil via connection to our specially designed circuitry. This in turn gives you dramatic improvement in engine performance from optimum ignition to ideal combustion.

Easy-wiring for Changing Fuses etc...

Simply replacing the standard ignition fuse makes installation is a snap. (For some car models where the fuse connection does not result in any improvements, it may be necessary to connect to the key switch +IG12V.)

Newly Designed Honeycomb Condenser

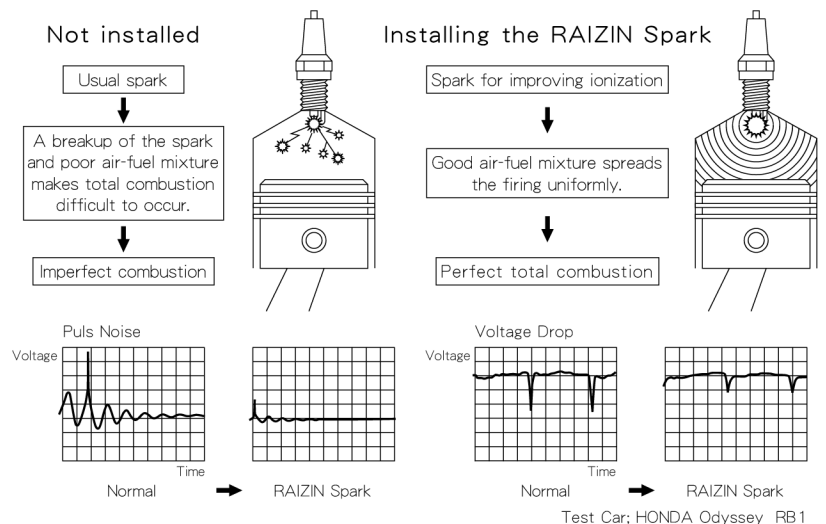
Optimum performance comes from our honeycomb condenser and the high frequency wave responsivity circuitry.

Power Burst Prevention Circuitry

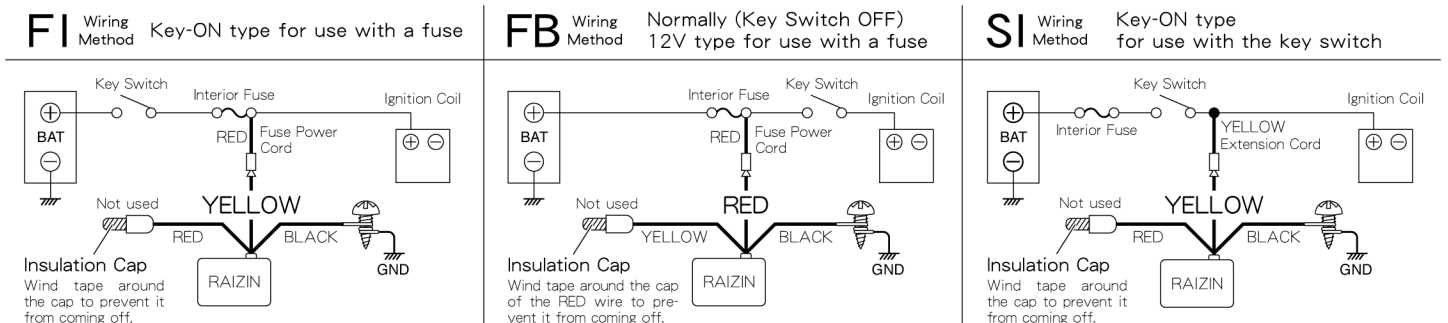
Moreover, peace of mind comes in knowing that the unit is equipped with a delay circuit to avoid trouble caused by power bursts during battery recharging when using IG+ ON.

The Excited Ionization is Improved to Bring You the Ideal Combustion.

In order to enable ideal combustion for high power it is not only necessary that the spark be strong for the initial firing, the ignition and for the combustion stroke but also it is necessary to improve the excited ionization in order that the spark is uniformly ignited within the air-fuel mixture and does not disintegrate like a sparkler. RAIZIN Spark by connecting closer to the ignition coil power supply (preliminary side) with its specialized high frequency wave responsivity circuitry, controls the loss of voltage and the occurrence of pulse noise from the breaking of electrical current. As a result, the break in electrical current is faster, at firing (secondary side) the speed of the spark current rises, the high frequency electromagnetic waves are strengthened, and the excited ionization is improved to bring you the ideal combustion.



BASIC WIRING and PRINCIPLE



CONNECTING THE WIRES (Power) Connect RED and YELLOW Wire

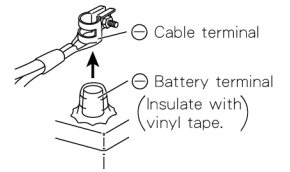
Because wiring depends on your car model, please follow the List of Wiring Method.

WARNING For safety purposes, when working on your car always disconnect the ⊖ battery terminal.

CAUTION To prevent short circuits, after wiring, please insulate any extra wire and couplers with insulation tape.

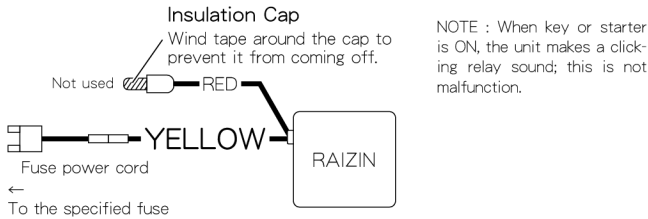
Installation Preparation

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



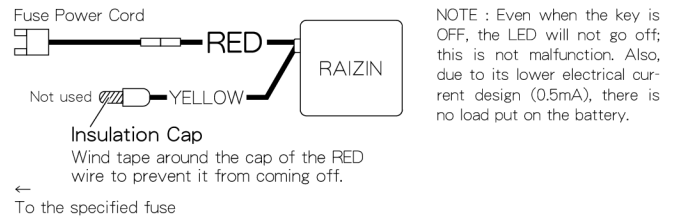
FI Wiring Method Key-ON type for use with a fuse (When using Fuse Power for key switch ON 12V)

Pull out the specified fuse from interior fuse box, then insert the fuse of the fuse power cord, and connect the other end it to the YELLOW wire from the unit.

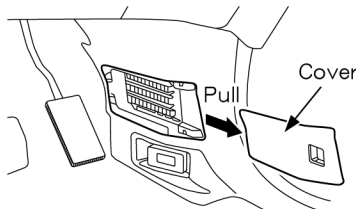


FB Wiring Method Normally 12V type for use with a fuse (When using Fuse Power for Normally 12V)

Pull out the specified fuse from interior fuse box, then insert the fuse of the fuse power cord, and connect the other end it to the RED wire from the unit.



- ※Please do not wire it to the fuse box in the engine room.
- ※Fuse names are written near the fuse box (on the back of the cover).



Explanation of fuse (Mentioned on the back of the fuse box cover or in the car manual.)

Fuse names

Fuse capacity

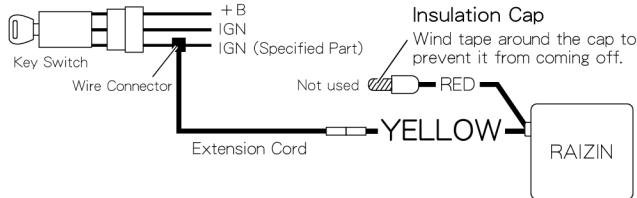
23	24	25	26	27	28	29	30	31	32	33
7.5A	20A	20A	20A	20A	(20A)	(7.5A)	7.5A	(7.5A)	7.5A	(7.5A)
FR 1	FR 2	FR 1	AS	DI	DI	DI	DI	DI	DI	DI
12	13	14	15	16	17	18	19	20	21	22
(15A)	(20A)	(20A)	(20A)	(20A)	(30A)	15A	15A	7.5A	7.5A	10A
FR 1	FR 1	FR 1	FR 1	FR 1	FR 1	FR 1	FR 1	FR 1	FR 1	FR 1
1	2	3	4	5	6	7	8	9	10	11
(15A)	15A	15A	15A	10A	10A	20A	20A	7.5A	30A	

※ This illustration is for an Odyssey RB1. It may differ from your car model.

SI Wiring Method Key-ON type for use with the key switch (Turning the key switch ON to 12V with a key switch harness.)

When connecting directly to the wire from the key switch

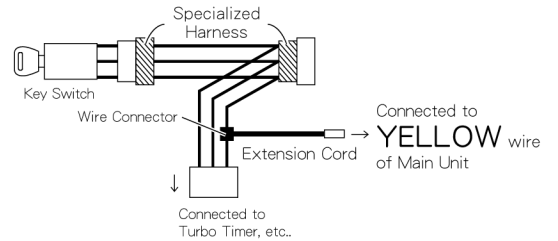
Connect the extension cord to the wire connecting to 12V from the key switch, and then connect it to the YELLOW wire from the unit.



It will be easier to wire by using in combination with a specialized harness of Engine Starter or Turbo Timer.

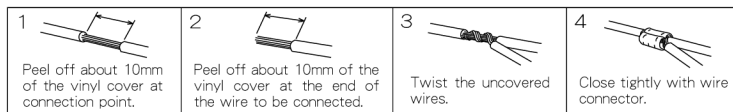
Wiring Method used with Special Harness

Using in combination with a specialized harness of Engine Starter or Turbo Timer.



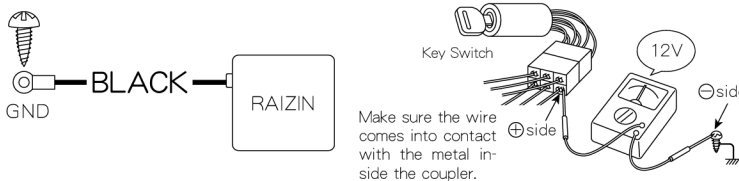
HOW TO USE THE WIRE CONNECTORS

※If soldering is possible, please do so.



- ※ Use a crushing tool to press the wire connector. If you do not have such a tool, use pliers or such to fold and crush the connector together for a secure contact.
- ※ After covering, make sure to insulate properly with vinyl tape.

Connect BLACK Wire Connect the BLACK wire from the unit to a screw that can carry earth near the place of installation.



※ A screw that is fastened to plastic etc cannot conduct earth and hence cannot carry electricity, therefore please be sure to connect the BLACK wire to a screw that is connected to an iron plate, etc...

INSTALLATION

WARNING Please install the unit to a place where it would not obstruct your driving, even if it were to become detached.

CAUTION

- 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.
- Reinstalling will cause the tape's adhesive strength to weaken, so please do not to it.

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

