

## FREQUENTLY ASKED QUESTIONS

**Q. How can I determine if I have an HEI type ignition?**

A. HEI ignitions are more common in later model vehicles ('74-'84). As a rule of thumb, if the vehicle has electronic ignition from the factory, then it is most likely an HEI ignition. HEI systems are defined as; Systems which limit dwell current by raising voltage at coil negative.

**Q. Will my tachometer work with the Second Strike?**

A. The Second Strike is compatible with most tachometers. If the tachometer seems to malfunction while wired in the original manner, relocate the tachometer trigger wire to the white wire from the Second Strike box.

**Q. The rev limit does not match my tachometer.**

A. Due to the accuracy of our digital rev limiter, non-calibrated tachometers may not exactly match the rev limit. If the tachometer is grossly inaccurate, relocate the tachometer trigger wire to the white wire from the Second Strike box.

**Q. How do I check the ignition timing after I have installed the Second Strike?**

A. To accurately check and adjust the engine timing, the Second Strike should be turned off. To do this, turn the C.A.O. switch to 0. Timing can then be checked and adjusted normally.

**Q. Where should I set the C.A.O.?**

A. A typical C.A.O. setting for vehicles operating under normal driving conditions is 4 or 6 degrees (switch setting of 2 or 3).

**Q. How can I test the Second Strike.**

A. The Second Strike is an ignition supplement. This means that the primary ignition is solely responsible for providing the ignition, the Second Strike simply follows it. If no primary spark occurs then the Second Strike has nothing to follow. By setting the cylinder selection switch to 0, the Second Strike box is completely bypassed. Check to make sure the switches are in the correct position. Rotate the switches back and forth then back to the proper setting.

For further trouble shooting tips, visit our Manufacturers website at [www.pertronix.com](http://www.pertronix.com).



## INSTALLERS INFORMATION SHEET

### SOME IMPORTANT INFORMATION YOU SHOULD KNOW BEFORE INSTALLING THE PERTRONIX SECOND STRIKE IGNITION SYSTEM

#### GENERAL INFORMATION

- Read all instructions before beginning installation.
- For use on 4, 6 and 8 cylinder engines.
- Compatible systems include 12-volt negative ground, inductive type, single coil applications.
- Do not use with solid core spark plug wires.
- Disconnect the battery before installation.

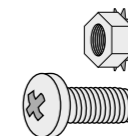
#### MOUNTING INSTRUCTIONS

1. Choose a place to mount the Second Strike box that is reasonably flat. Keep it away from direct heat, excessive vibration and areas susceptible to wet conditions.
2. Position the Second Strike in the desired mounting position. Use the box as a template and mark the four mounting points.
3. Choose the mounting hardware type that best suits your application.

**NOTE:** Sheet metal screws can be used when the back side of the mounting surface is not accessible. Machine screws should be used when both sides of the mounting surface are accessible.



#8 x 3/4 Sheet Metal Screw  
Use a #31 drill bit (.120") for screw hole.



8-32 x 5/8 Machine Screw  
Use a #29 drill bit (.136") for screw hole.

#### WIRING THE SECOND STRIKE

There are two types of systems which the Second Strike can be configured for. These are categorized as HEI and Non-HEI systems. Determine which system you have and follow the corresponding wiring instructions below. Wires can be shortened or lengthened to the desired length. Use the proper gauge wire when lengthening and make sure all connections are crimped tight or soldered, and insulated. Wires not used should also be insulated. Remember to reconnect the battery after the installation is completed.

#### NON-HEI TYPE SYSTEMS (FIGURE 1)

1. Attach the **BLACK** wire to a good engine ground or battery negative terminal. Make sure the connection is free of dirt, grease and paint.
2. Attach the **RED** wire to the positive battery terminal or positive terminal of the starter solenoid.
3. Attach the **GREEN** wire to a 12 volt power source controlled by the ignition switch. The coil positive terminal can be used as a power source as long as it provides a non-resisted 12 volts.
4. Attach the **YELLOW** wire to the coil's negative terminal.
5. The **ORANGE** wire is not used for Non-HEI type systems. Caution...**The orange wire is a high voltage lead.** Isolate the exposed end by crimping on the provided end splice. Be careful when handling this wire while vehicle is running.
6. The **WHITE** wire is a tachometer output, compatible with most modern tachometers. If the white wire is not used, make sure it is properly isolated.

#### HEI TYPE SYSTEMS (FIGURE 2)

1. Attach the **BLACK** wire to a good engine ground or battery negative terminal. Make sure the connection is free of dirt, grease and paint.
2. Attach the **RED** wire to positive battery terminal or positive terminal of the starter solenoid.
3. Attach the **GREEN** wire to a 12 volt power source controlled by the ignition switch. For GM HEI applications remove the original ignition switch wire from the terminal marked "BAT" on the coil cover. Plug the provided adapter harness onto this terminal and then reconnect the original ignition switch wire. Attach the **GREEN** wire to the open terminal on the adapter harness.
4. Crimp the provided slip-on connector to the **ORANGE** wire. Attach this wire to the coil's negative terminal. On GM HEI applications, plug the **ORANGE** wire onto the terminal marked "TACH" on the coil cover. If the terminal is currently used, remove the wire, plug the provided adapter harness onto the terminal and then reconnect the wire. Attach the **ORANGE** wire to the open terminal on the adapter harness.
5. The **YELLOW** wire is not used for HEI type systems. Caution...**The yellow wire is a high voltage lead.** Isolate the exposed end by crimping on the provided end splice. Be careful when handling this wire while the vehicle is running.
6. The **WHITE** wire is a tachometer output, compatible with most modern tachometers. If the white wire is not used, make sure it is properly isolated.

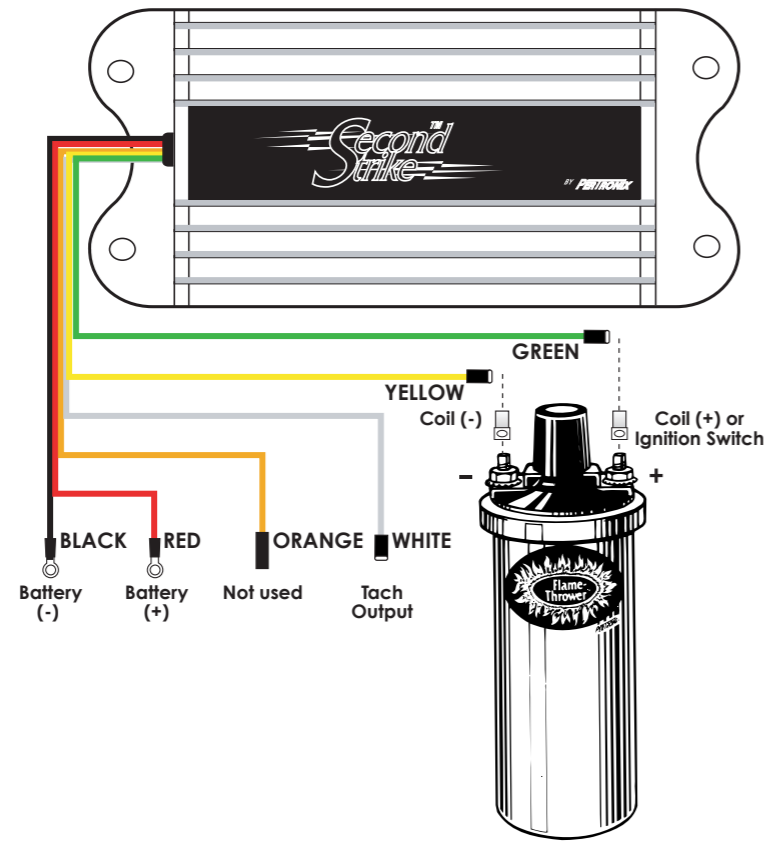
#### OUR RETURNS POLICY

The returns policy of Pertronix Australia is as follows: In brief, all returns must be authorised prior to forwarding via prepaid freight, with your proof of purchase. The information you give us when requesting a Return Authorisation will aid us in our analysis of the returned item, and in identifying any possible faults during the testing process. Second Strikes will not be credited or exchanged until testing is complete. The Limited Warranty allows for the repair or replacement of faulty components only (purchased from Pertronix Australia or an authorised re-seller), and does not offer "money back".



[www.pertronix.com.au](http://www.pertronix.com.au)

**NON-HEI SYSTEMS  
(FIGURE 1)**



**SETTING UP THE SECOND STRIKE IGNITION**

- All settings can be done externally through the rotary switches on the front of the Second Strike box.
- A white dot on the rotary portion of the switch indicates the switch position.
- Use a small flat blade screw driver to make adjustments.
- Setting the switches between indents will cause the Second Strike not to function.

**Selecting the number of cylinders**

Rotate the cylinder selection switch to the proper cylinder number for your application. The white dot on the face of the switch should point to the appropriate cylinder number. A slight indentation should be felt as the switch is turned. This signifies proper switch alignment.

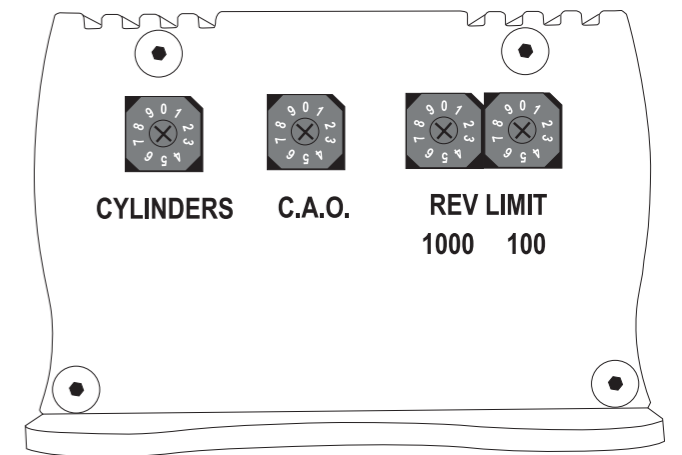
**Note:** Settings should be made while the engine is off. The Second Strike will only operate in 4, 6 and 8 cylinder modes.

**Setting the Rev Limit**

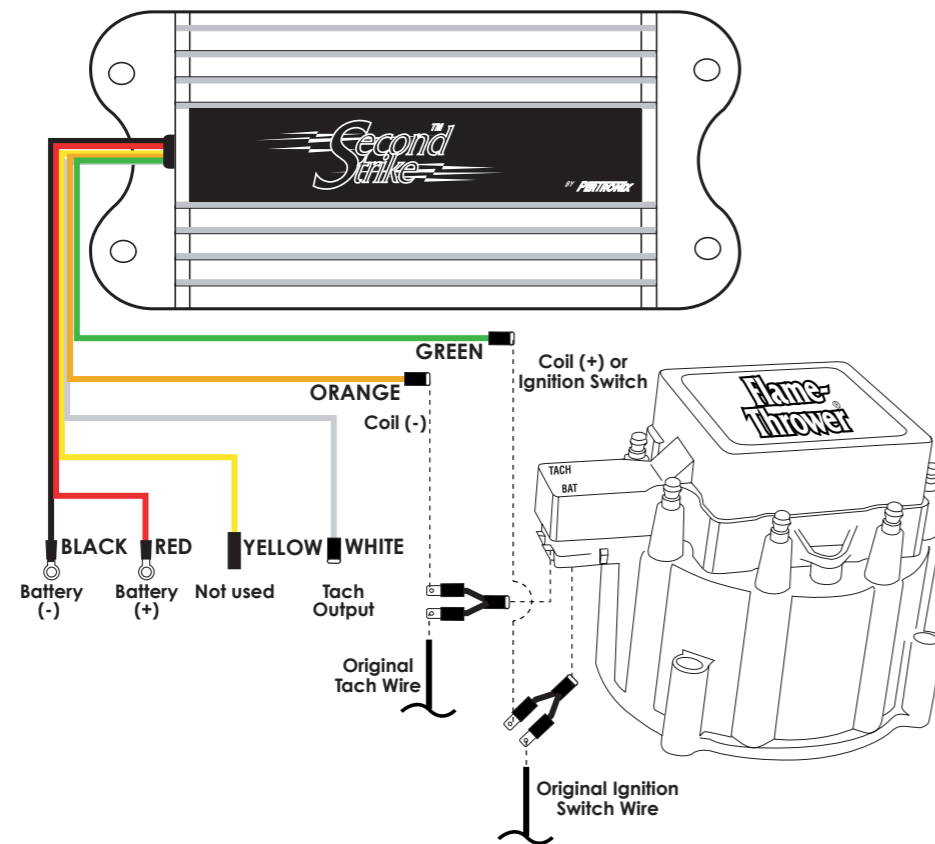
To set the rev limiter portion of the Second Strike, choose the desired rev limit. The rev limiter has a 100 RPM resolution. This means that the rev limit can be set between 1000 and 9900 in increments of 100 RPM.

A typical limit would be 5500 RPM (1000 switch set to 5, and the 100 switch set to 5). Turning both switches to 0 turns the rev limiter off.

The rev limiter is not designed to be used as a governor. If the limit is set too low, and the engine RPM is allowed to continually push up against the rev limit, failure to the Second Strike ignition or engine may result.



**HEI SYSTEMS  
(FIGURE 2)**



**Adjusting the C.A.O.**

The C.A.O. (crank angle offset) switch adjusts the time or crank angle (0 to 18 degrees) at which the second spark occurs. Each setting represents 2 degrees of crank angle.

By setting the C.A.O. switch to 2, the Second Strike ignition releases a capacitive discharge spark 4 degrees after the inductive spark. Due to the many differences in vehicles, each application will respond differently to this setting.

For best results start with the C.A.O. switch set to the 2 position and test its function before proceeding to higher or lower settings. This method allows you to achieve the optimum setting for your vehicle.

Adjustment of the C.A.O. switch can be done while the engine is running. Turning the C.A.O. switch to 0 turns the Second Strike spark off.