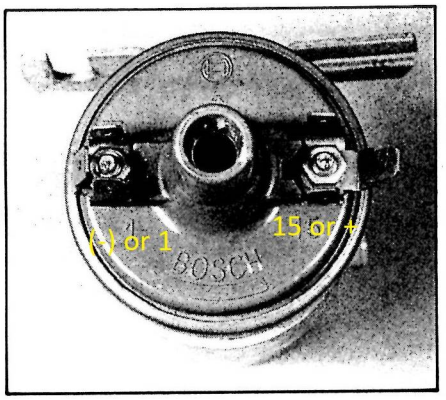
Coils and Pertronics Ignition Modules

Quick reference Coil Connection Picture DIN 1 is the same as (-) and DIN 15 is the same as (+)



A few of our competitors have burned up up quite a few Pertronix ignitors. This would not happen if they knew a bit more about the incredibly reliable and durable canister bolted to their firewall. All German influenced coils are marked with DIN codes 1 and 15. Code I is a wire (usually green) that went to the distributor on a points system. The code 15 wire was the hot lead from the fusebox on a points system . If your coil uses US markings then 1=(-) usually green wire and 15=(+) usually red wire. This made hooking up your ignition a snap. Then along comes Pertronics and, I'm sure for good reasons, makes the wires on the Pertronics I red and black. Not much mental gymnastics are needed to conclude red to red and black replaces green. Still the number one reason for blowing out a Pertronics I is reversing the wires. So watch out and get your polarity right. Get the Pertronics II if you want insurance because it does not blowout when the wires are crossed but of course its more money.

Pertronics also wants you to run a coil with an internal ballast resister. Better yet buy their coils which is fine because their coils are pretty good ones. Before we talk about this concept further let look at history. The reason for putting a resister in the coil was in the old days to prevent burning the points. If your coil did not have an internal resister you could just buy an external one an insert it into your wiring and all was well. You can determine if your coil has a resistor by measuring the ohms across the coil (terminal 15 vs. terminal 1). A resister will be certain ohm value greater than zero. A zero resistor coil would give zero ohms.

A new Pertronics Igniter-based Scat distributor on my bench sports a label "only for use with a resister based coil". They don't tell me what resistance I should be looking for but don't fall for the 1950's concept that a hot coil with more windings and lower resistance should result in a spark with more energy thus higher HP. Just use the number Pertronics wants. In our experience resistance coils of various values has given good results.

Regardless whether you are running stock points or the Pertronics, you need a coil with the ballast resistor inside so your points and the Pertronics module will live longer.

Last question is which Pertronics coil to buy. Last time I bought one is was the 45011 which had a .6 ohm resister. I might go for the 3 ohm version next time or I might even read the spec sheet BELOW:

Flame-Thrower Canister Ignition Coil Application Chart

Ignition Type	System Voltage	Resistance	Application	28,000 Volts	40,000 Volts	45,000 Volts
IGNITOR or points	12V	3 Ω	4 & 6 cylinder engines	28010	40501, 40511 40611	
	12V	1.5 Ω	8 cylinder engine		40001, 40011 40111	
	6V	1.5 Ω	4 & 6 cylinder engines		40001, 40011 40111	
	6V	0.6 Ω	8 cylinder engines			45001, 45011 45111
Ignitor II	12V	0.6 Ω	4, 6 and 8 cylinder engines			45001, 45011 45111
Ignitor III	12V	0.32 Ω	8 cylinder engines			44001, 44011

Note: Shaded area of application chart applies to positive ground as well as negative ground applications.

This was from Pertronics ----Never Tried it. But FYI

What type of coil can I use with the Ignitor™? How do I check my coils resistance? (12V negative ground only)

To determine if your systems coil is compatible with the Ignitor, some measurements should be taken prior to installation of the Ignitor. Caution… While performing this test, never leave the ignition switch on for more than 30 seconds at a time.

Set your voltmeter to a 15 or 20-volt scale. Attach an 18 or 20 AWG jumper wire from the negative coil terminal to an engine ground. Attach positive (red) lead of your voltmeter to the positive side of the coil, and the negative (black) lead to an engine ground. Turn the ignition switch to the run position. Now read the voltage at the positive coil terminal. Turn the ignition switch off. If the voltage measured is approximately 12 volts, no resistance wire is present. A typical resistance wire will provide 9 - 6 volts.

The next step is to determine the resistance in the primary ignition. Label the wires attached to the coil terminals and note their appropriate location. Make sure that the ignition switch is off and disconnect all wires from the coil. Adjust your meter to the lowest ohm

scale. If you are using an analog style meter make sure to zero the needle.

Measure from the negative terminal to the positive terminal. Write your measurement down.

Now the maximum system amperage can be determined, divide your voltage measurement by your coil resistance measurement. This will give you the system current or amperage.

Four and six cylinder engines should not exceed 4 amps. Eight cylinder engines should not exceed 8 amps. If the total amperage in your system is higher than the amount recommended for your application, you should install a ballast resistor.

Example

Voltage 12
Resistance 1.5
12 / 1.5 = 8
Total amperage 8