

FLAME-THROWER COIL APPLICATIONS						
Use with:	System Voltage	Cylinders	Primary Resistance	Recommended Flamethrower Coils		
				Black	Chrome	Epoxy
Ignitor	12V	1,2,3,4 & 6	3.0 ohms	40511	40501	40611
Agricultural & Industrial						
Ignitor	12V	1,2,3,4, & 6	2.8 ohms	28010 or 40511, 40501, 40611		
NOTE: REMOVE OR BYPASS EXTERNAL BALLAST RESISTOR/RESISTANCE WIRE WHEN INSTALLING THE RECOMENDED FLAME-THROWER COIL.						

LIMITED WARRANTY

Pertronix, Inc. Warrants to the original Purchaser of its solid-state ignition system (product) that the Ignitor, magnet assembly and wiring (components) shall be free from defects in material and workmanship for a period of (30) months from the date of purchase.

If within the period of the foregoing warranty Pertronix finds, after inspection, that the product or any component thereof is defective, Pertronix will, at its option, repair such products or component or replace them with identical or similar parts PROVIDED that within such period Purchaser:

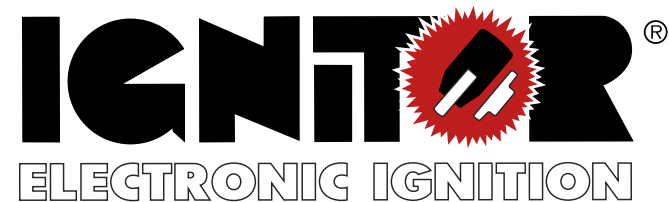
1. Promptly Notifies Pertronix, in writing, of such defects.
2. Delivers the defective products product or component to Pertronix (ATTN: Warranty) with proof of purchase date; and
3. Has installed and used the product in a normal and Proper manner, consistent with Pertronix printed instructions.

THE FORGOING LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED, INCLUDING AND IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PURPOSE.

THE FURNISHING OF A REPAIR OR REPLACEMENT COMPONENTS SHALL CONSTITUTE THE SOLE REMEDY OF PURCHASER AND THE SOLE LIABILITY OF PerTronix WHETHER ON WARRANTY, CONTRACT OR FOR NEGLIGENCE, AND IN NO EVENT WILL PerTronix BE LIABLE FOR MONEY DAMAGES WHETHER DIRECT OR CONSEQUENTIAL.



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12-Volt Negative Ground Instructions

For Part Number: MR-163

CAUTION!!! Please read the following important information....

1. **DO NOT USE SOLID CORE SPARK PLUG WIRE.** Use suppression or carbon type spark plug wires.
2. **Warning!!!** Leaving the ignition switch "ON" with the engine "OFF" for an extended period could result in permanent damage to the Ignitor.
3. Four & Six cylinder engines require a minimum of 3.0 ohms of primary resistance.
NOTE: If your Ignition coil has the recommended primary resistance, remove or bypass all external resistors. Do not remove resistors if the coil primary resistance is **lower than** 3.0 ohms.
4. **Note:** Most GM & Ford applications from 1957 to 1974 use a Resistance Wire. Go to www.pertronix.com for additional information or call Pertronix Technical Support @ 909-547-9058 for additional assistance.
5. **See back page for coil recommendations** and specifications for other applications.
6. The Ignitor is compatible as a trigger for most electronic boxes.

DISTRIBUTOR DISASSEMBLY

1. **PRIOR TO INSTALLATION TURN IGNITION SWITCH OFF OR DISCONNECT THE BATTERY**
2. Remove distributor cap and rotor from distributor. Do not disconnect spark plug wires from cap. Examine cap and rotor for wear or damage. Replace as needed.
3. Remove the point wire from the negative (-) terminal of the Ignition coil.
4. Remove screws that retain the original breaker plate and lift out the entire breaker plate assembly from the distributor. Installing the Ignitor does not alter the internal configuration of your distributor. Therefore, the points, condenser and hardware can be used as backup.
5. Clean all dirt and excess oil from the point cam.

IGNITOR INSTALLATION

6. Place the Ignitor module into the distributor housing and align the "X" mark on the plate to the wire exit hole on the distributor housing. Fasten the plate into place using the original screws.
7. Install magnet sleeve over the distributor shaft, onto point cam. Rotate the sleeve until a slight locating position is felt before applying pressure. Press down firmly insuring sleeve is fully seated.
8. Insert wires through the wire exit hole in distributor housing. Pull the rubber grommet into place. Make sure wires do not interfere with any moving parts.
9. Install rotor and distributor cap. Make sure all spark plug wires are securely attached.
10. See Wiring Instructions.

WIRING INSTRUCTIONS

A BALLAST RESISTOR OR RESISTANCE WIRE MAY OR MAY NOT BE INCLUDED IN THE ORIGINAL EQUIPMENT.

1. Connect the Ignitor black wire to the negative (-) terminal of the ignition coil.
 2. For installations that do not use a primary ballast resistor or resistance wire, connect the Ignitor red wire to the positive (+) terminal of the ignition coil. (See Figure A)
 3. For installations that use a primary ballast resistor or resistance wire, connect the Ignitor red wire to the ignition switch side of the ballast resistor or resistance wire. (See Figure B).
 4. Reconnect battery and make sure all wires are connected.
 5. The engine can now be started. Let the engine run for a few minutes and then set the timing in the conventional manner.
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FIGURE "A"

USE FIGURE "A" ONLY WHEN INSTALLING THE RECOMMENDED COIL.

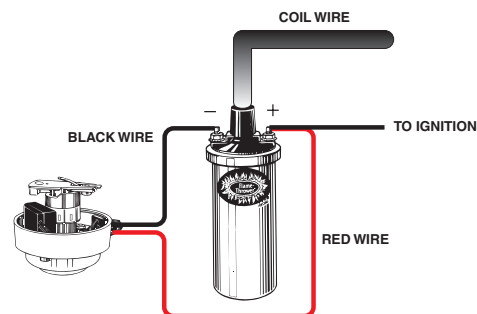
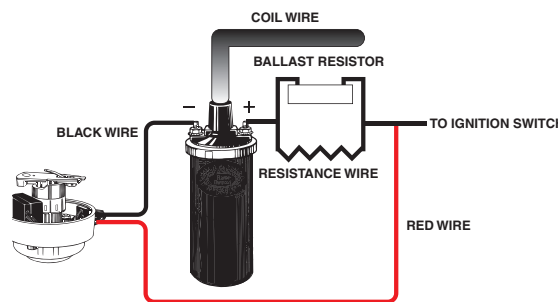


FIGURE "B"

USE FIGURE "B" WHEN USING THE STOCK COIL WITH THE BALLAST RESISTOR OR RESISTANCE WIRE.



Ignitor COMMON QUESTIONS AND ANSWERS

Q. What is the first thing I should check if the engine would not start?

A. Make certain all wires are connected securely to the proper terminals.

Q. The engine will not start or runs rough. Are there any tests I can do?

A. Yes, remove the red ignitor wire from the coil. Connect jumper wire from the positive side of the battery to the red ignitor wire just removed from the coil. If the engine starts, then you have a low voltage problem. Remember this is just a test. Not intended for permanent installation.

Q. How can I fix a low voltage problem?

A. First, if you have an external ballast resistor or resistance wire, connect the red ignitor wire to the ignition wire prior to the ballast resistor or resistance wire. Second, if you do not have an external resistor you must connect the ignitor red wire to a 12-volt source that is controlled by the ignition switch.

Q. Should I remove the starter bypass wire?

A. No, the starter bypass wire is needed to provide voltage while starting (cranking).

Q. What type of coil do I need?

A. The ignitor is compatible only with a "points type" coil. Eight cylinder engines require a minimum of 1.5 Ohms of resistance in the primary circuit. Four & six cylinder engines require a minimum of 3.0 Ohms of resistance (primary).

Q. How do I check my coil for resistance?

A. First you need an ohmmeter. Remove all the wires from the coil. Attach the ohmmeter to both the positive and negative terminals. The reading should be 1.5 Ohms or greater for eight cylinder engines and 3.0 Ohms or greater for six cylinder engines. (Your local auto parts store can do this for you if you don't have an ohmmeter)

Q. What do I do if my coil does not have enough resistance?

A. You may purchase and install a ballast resistor from your local auto parts store. You may also choose to purchase a Flamethrower 40,000-volt coil, which provides resistance internally. Note: Many vehicles come with ballast resistor or resistance wire. These applications do not need an additional resistor.

Q. What happens if you leave the ignition switch on when the engine is not running?

A. This can cause your coil to overheat, which may cause permanent damage to the coil and the ignitor.

Q. May I modify the length of the wires?

A. Yes, you can cut the wires to any length your application may require. You may also add length of wire if needed (20-gauge wire). Please make sure all wire splice are clean and connections are secure.

Q. Will the shift interrupter on an OMC stern drive boat work with the ignitor?

A. The ignitor is compatible with all OMC stern drive applications, when equipped with a "diode fix". If you purchased a kit that does not include the "diode fix" diagram, call our tech line.

Q. How can I get additional help?

A. Call our tech line (909-547-9058) for any further instructions or questions.
