



## CAST DISTRIBUTOR INSTALLATION INSTRUCTIONS

For Part Numbers:					
D104600	D134600	D134610	D134620	D134630	D144600
Recommended Flame-Thrower & HV Coils:					
Application	Primary resistance	Chrome	Black	Epoxy	
Ignitor Only	1.5 ohm	40001	40011	40111	
Ignitor Only	1.5 ohm	E-Core HV Coil		60115	
<b>NOTE: REMOVE OR BYPASS EXTERNAL BALLAST RESISTOR OR RESISTANCE WIRE WHEN INSTALLING THE RECOMMENDED FLAME-THROWER OR HV E-CORE COIL.</b>					

### LIMITED WARRANTY

PerTronix, LLC. warrants to the original Purchaser of its Flame-Thrower billet distributor that the product shall be free from defects in material and workmanship (normal wear and tear excluded) for a period of 12 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 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 FOREGOING LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

THE FURNISHING OF A REPAIR OR REPLACEMENT COMPONENT OR 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.

### GENERAL INFORMATION

1. **IMPORTANT:** Read all instructions before starting installation.
2. For 12-volt negative ground systems only.
3. Flame-Thrower Cast distributors come with hardened steel distributor gears which should not be used in applications with a billet camshaft. Consult camshaft manufacturer for distributor gear compatibility.
4. Engines that have been decked, had significant cylinder head milling or oil pump modification should be checked for oil pump bind and proper cam gear engagement prior to installation.
5. The Ignitor is compatible only with a "resisted style" coil. Eight cylinder engines require a minimum of 1.5 ohms of resistance.
6. If your Ignition coil has the proper primary resistance, remove or bypass all external resistors. Do not remove resistors if the coil primary resistance is lower than specified.
7. **Do not use solid core spark plug wires.**

### DISTRIBUTOR REMOVAL

1. Crank the engine until it is positioned at top dead center on a compression stroke. The timing indicator should point to 0.
2. Remove the distributor cap, and make sure that the rotor is pointing towards the first cylinder in the firing order.
3. Disconnect the battery negative (-) cable.
4. Disconnect all wires and hoses attached to the distributor.
5. Remove the distributor hold down.
6. Remove the distributor by lifting up on the distributor housing while slightly turning the rotor.
7. Check the distributor gear for signs of excess wear, or potential problems.

### DISTRIBUTOR INSTALLATION

1. Remove the Flame-Thrower Cast distributor cap.
2. Install the distributor gasket over the gear, and up to the distributor collar. Use a small amount of gasket adhesive to help hold the gasket in place.
3. Lubricate the distributor gear and distributor shaft with clean engine oil.
4. Turn the shaft so that when the distributor is placed into the engine, the rotor position matches that of the original distributor. As the distributor drops down, the rotor will turn slightly as it engages with the camshaft gear. Adjust for this rotation by turning the rotor a few degrees prior to the gear engagement. Several attempts may be necessary to achieve the proper rotor position. The distributor collar should sit completely flat on the intake manifold or block.
5. Place the distributor cap onto the housing.



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6. Turn the housing so that the terminal, that represents the first cylinder in the firing order, lines up with the rotor.
7. Install the distributor hold down and tighten the hold down bolt slightly. Insure that the distributor is grounded properly thru the hold down bracket.  
Once the ignition timing is adjusted the hold down bolt should be tightened completely.
8. Tighten the cap into place and install the spark plug wires in the proper firing order.
9. Locate the vacuum hose that was previously attached to the vacuum advance canister. This hose should originate at a ported vacuum source.

### WIRING INSTRUCTIONS

1. **NOTE: A BALLAST RESISTOR OR RESISTOR WIRE MAY OR MAY NOT BE INCLUDED IN THE ORIGINAL EQUIPMENT.**
2. Connect the Ignitor black wire to the negative (-) side of the ignition coil.
3. For installations that **do not use** a primary ballast resistor, connect the Ignitor red wire to the positive (+) side of the ignition coil. (See Figure 1)
4. For installations that use a primary ballast resistor, connect the Ignitor red wire to the ignition switch side of the resistor. (See Figure 2).
5. Reconnect battery and make sure all wires are connected.
6. The engine can now be started. Let the engine run for a few minutes and then set the timing in the conventional manner.

FIGURE 1

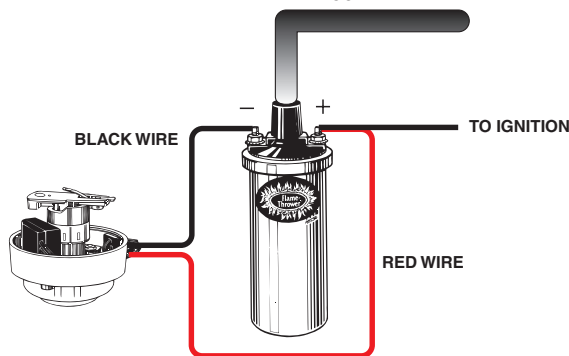
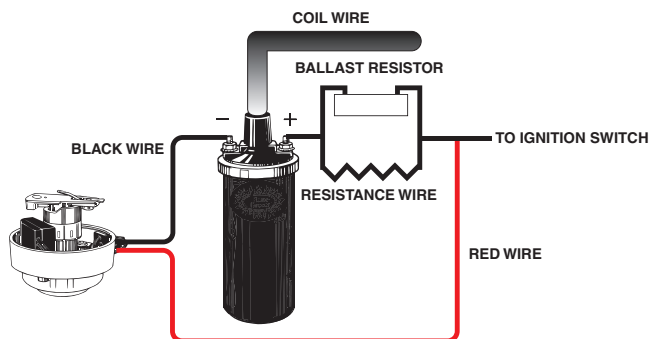


FIGURE 2  
With external resistors



### 10. For vacuum advance distributors:

Temporarily plug the end of this hose to allow proper timing. After setting initial timing the hose will be unplugged and attached to the vacuum advance on the distributor.

### 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.

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. How can I get additional help?

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