Performance Distributors
HIGH PERFORMANCE & RACING IGNITION SYSTEMS
www.performancedistributors.com
901-396-5782

GM STREET/STRIP D.U.I. INSTRUCTIONS

1) Familiarize yourself with our new distributor. Notice that on top of the coil cover the connecting terminals are marked "TACH" on the left "BATT" on the right (see illustration). The "BATT" terminal is for 12 volt hook-up and the "TACH" terminal is for connecting a tachometer. CAUTION should be used to never accidentally reverse these connections as electronic damage could be extensive.

2) For those of you who are converting from a breaker point distributor to our electronic H.E.I. distributor, a full alternator voltage is required. This means eliminating any ballast resistor or original equipment resistance wire(on some model cars and trucks) and requires wiring straight from your ignition switch with 12 gage wire to the "BATT" terminal cap. 18 gage wires are sufficient for the tachometer hook-up. If you do not use a tachometer as a permanent hook-up, this terminal is also to be used to connect diagnostic equipment for tune-ups. ***NOTE: These distributors require alternator voltage of approximately 14.5 volts for maximum RPM operation. **NOTE: Cars already wired for the H.E.I. distributors will have a large pink (or red) wire coming from the distributor cap (this is the 12 volt wire) and if equipped with a tachometer, will have a smaller, usually neutral colored wire coming from the distributor cap (this is the 12 volt wire) and if equipped with a tachometer, will have a smaller, usually neutral colored wire coming from the cap.

3) Now disconnect the terminal (see illustration) plugged into the H.E.I. distributor cap (with 3 wires from the distributor base) by carefully prying out and then down on the restraining ears. After removing, not that the wide gap in the plastic insulator is to the right towards the "BATT" terminal. It can only be replaced in this position.

4) Now remove the cap by turning the 4 retainer about one quarter turn count-clock-wise and life off the cap. It contains the H.E.I. coil.

5) This is a good time to examine the centrifugal advance system by removing the 2 nylon rotor hold-down screws and flat washers and lifting off the rotor. NOTE: When reinstalling these rotor screws, use caution and do not over tighten!

6) Notice that one of the weights, springs and posts they are attached to, along with the corresponding end of the "cam" are marked with red. These markings are initially placed to assist us in calibrating your distributor by keeping the parts matched as we work with them. Also, if you ever find it necessary to disassemble the weight assembly,

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7) Re-install the rotor placing the cut out notch on the proper side and carefully re-tightening the nylon screws.

8) Removal of the distributor:

A) Remove the distributor cap.

B) Remove the vacuum advance hose or line.

C) Remove the distributor hold-down clamp and bolt.

D) Note position of rotor. Suggest cranking until rotor faces fire wall and mark where rotor point with chalk.

E) Pull distributor up and out of the engine noting the position of the rotor as the distributor gear clears the cam gear.

9) Reinstalling the distributor:

A) Position the rotor where it was when the distributor was just removed from the engine.

B) Slide the distributor down into the engine. Be sure rotor turns back to original position.

C) If the oil pump drive does not engage, check that rotor is pointing in correct direction.

1) If it is not, pull the distributor out and repeat B

2) It may be necessary to reach down into the engine with a long screwdriver and turn the oil pump slot to align with the distributor shaft position.

CAUTION: Be sure that your distributor does not "Bottom" when you install it. Be especially Careful of this condition your heads, block, intake manifold, etc., have been milled. The best way to do this is first install the distributor in the engine with No gasket and check the shaft for up and down movement while holding the housing down firmly again the intake manifold. **DO NOT** check this movement by the reluctor (the part the rotor is attached to). Check for the up and down movement by moving the plate that is attached directly to the shaft. This is the plate that the weights ride on and also has the weight pivot pins attached. If **any** up and down movement with no gasket, add you gasket and you are ready to install hold-down clamp and bolt, if you **DO NOT** have any up and down movement with no gasket, use distributor shims of correct thickness (available from Moroso) to accommodate this space. Then add the distributor gasket for ample clearance. Always use the gasket in addition to shims.

D) Reinstall the hold-down clamp and bolt finger tight.

E) Put the distributor cap on. Bottoming a distributor can severely damage the oil pump, cam, and distributor gears!!

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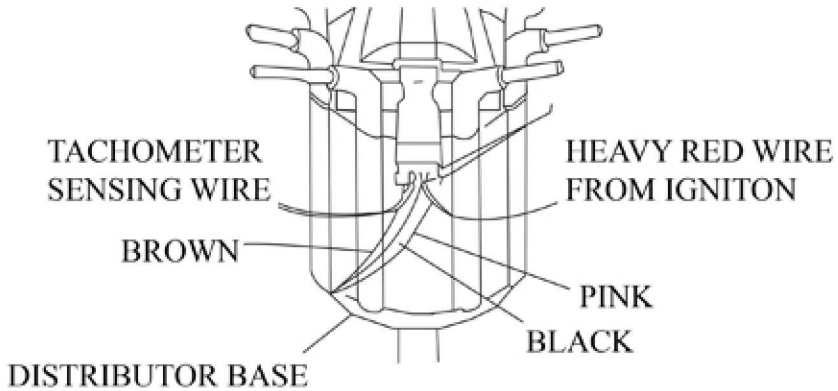
10) Install the cap and transfer the plug wires (now is a good time to replace the plug wires with a good set of 8MM metallic core wires).

11) If you have converted your ignition from a beaker point distributor to our H.E.I. distributor, this would be a good time to open those spark plug gaps now that you have enough firepower available. We recommend setting you spark plugs at .050"-.055". This setting is also recommended to those of you that had a sock electronic distributor.

12) Note that your distributor calibrations are stenciled under the base of your distributor (see illustration).

13) To meet emission standards, set your initial timing at the O.E.M. recommendation which can be found on your hood label or any tune-up manual. For Racing and Off-Road applications, we recommend setting your initial timing at 12 degrees(while idleing very slow, preferably under 600 RPM and with the vacuum advance disconnected with the vacuum advance disconnected with the vacuum advance hose plugged). After tightening the distributor hold-down bolt, re-check the timing mark to make sure it remained at 12 degrees. Re-connect the vacuum advance hose and idle engine speed where desired. For racing and off-road applications, we also suggest power timing your engine. To do this, let the engine warm up to proper operating temperature. Now, road test and if under heavy load pinging is observed, retard by simply turning the distributor in a clockwise direction (very slightly) and then test again under load. Repeat this until the ping is no longer objectionable. You might also want to run more than 12 degrees initial timing if you have no ping on your first road test. If this is the case, simply rotate (advance) the distributor in a counter-clockwise direction until you detect pinging and then back up till it stops. Also make sure you do not advance so far the engine "kicks" back and is hard to start. *NOTE: The above directions of rotation to advance and retard apply to Chevy. Small & Big Block and any other distributors with clockwise rotation. If your distributor is counter-clockwise, reverse direction of movement in above instructions. Refer to shop manual to determine direction of rotation for your application.



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WARRANTY INFORMATION

Street/Strip H.E.I. Distributors, by Performance Distributors, Inc., upon inspection which indicates either materials or workmanship defects, will repair or replace part in question for a period of one year. This warranty does not cover damage to engine or other parts, personal injury, labor, or any other damage or injury. Proof of the date of sale to the original consumer is required. If you are having tuning problems, we will be glad to check out and test any of our products to help you eliminate the problem. If our products check O.K., there will be a $25.00 service charge plus shipping. If our product to be defective, and is still in warranty, the defective product will be replaced/repaired at no cost to the customer. Customer must pay shipping to us and we pay return shipping to customer regular ground UPS. All products must be returned in their entirety-i.e. complete distributors, complete coil kits, etc. We do not repair, rebuild, or test any products beyond warranty date!!

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DUI DISTRIBUTOR TROUBLESHOOTING

If you are experiencing a no spark problem with your new DUI Distributor, following information will help you check and test the installation, connections and components of unit so that you can get your engine running and start Driving Under the Influence of more power!

1) First and foremost, check the 12 volt wire that you are using for power to the distributor. This wire should be a minimum of 12 gage and have no resistors in line. Make sure your 12 volt wire if fully connected to the "BAT' terminal, which is the terminal located on the front right of the cap. Also, make sure the three wire harness is fully connected to the three terminals behind the BAT and TACH connections. WARNING: if the hot wire is connected to the "TACH" terminal, damage to the module and/or coil can occur.

2) If all of your connection check out good, then check your battery voltage as you are cranking the engine. Since the DUI is a high performance ignition system it requires more voltage than a standard ignition system. If your batter voltage drops below 10.5 volts, this is not enough power to get the distributor to fire. This condition can be due to a weak or old battery or you are using a hot wire that has a resistor in line. Use a volt meter to test the hot wire while someone cranks the engine over. If the voltage drops below 10.5, check your battery. To make sure it is not the hot wire, run a temporary jumper wire directly from the positive side of the battery to the distributor. If the distributor fires using the jumper wire, run a new hot wire from your switched 12 volt source to the distributor.

3) A bad ground can keep the distributor from firing as well. The distributor ground itself to the engine when installed. Make sure your ground to the engine block is secure. If the intake and/or the hold down clamp has been painted, remove any paint from the surface where contact with the distributor is made. To ensure a good ground a secondary ground wire can be attached to the distributor by connecting a wire anywhere on the housing and running it to the chassis, body or negative side of the battery.

4) If you suspect an electronic part to be defective, the following steps will allow you to test the coil inside the cap and the magnetic pick up coil. You will need a ¼" nut driver and multi-meter to check these top coil cover. To test the resistance of the coil, loosen the 3 screw (2 screws on 6cyl. Models) holding the top coil cover. Remove cover to expose the coil and you will see a red and yellow wire. Using the multi-meter on the ohms setting, touch the positive lead to the red wire terminal and the negative lead to the yellow wire terminal. The primary resistance value should be 0.6 -1.5 ohms. To check the secondary resistance, remove the 4 screws that hold the coil in the cap. Pull the coil out of the cap and turn it upside down. Touch the negative meter lead to the ring terminal on the black wire (between the red and yellow) and touch the positive lead to the bottom of the coil where the rotor bushing makes contact. Your secondary reading should be 6.0k-10kohms.

5) If the resistance checks on the coil are within spec, the next test would be to test the magnetic pick up coil. The pickup is located underneath the top plate of the shaft and has a green and white wire coming up from it that plugs into the module. Remove the green and white wires from the module and touch the positive meter lead to the terminal on the green wire and the negative lead to the terminal on the white wire. The normal reading should be *800-1000* ohms.

6) The remaining electronic part that would keep the distributor from firing is the Dyna-Module. The Dyna-Module is located inside the distributor and has the green and white wires from the pickup attached on one end and a terminal block on the other. Unfortunately there is no test that can perform with an ohm meter on this part. You will need to remove it and take it to an auto parts store that has a module tester. Have them test the module 3-5 times as the module may not show to be bad until it develops some heat.

7) After you have conducted all of the testing procedures and you are still having a problem with the distributor, please call our tech line at 901-396-5782 during the hours of 9am-5pm.