## Installation Instructions for 40020 HEI Distributor for AMC/Jeep

## **Installation Instructions:**

- 1) Familiarize yourself with your new distributor. Notice that on top of the coil cover the connecting terminals are marked "TACH" on the left, and "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 in the distributor cap. 18 gage wire is 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 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 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, note 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 retainers about one quarter turn counter-clock-wise and lift 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 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) If you ever find it necessary to disassemble the weight assembly, use markings to help you reassemble these parts and retain the original "curve".
- 7) Re-Install the rotor placing the cut out notch on the proper side and carefully re-tightening the nylon screws.
- 8) Removal of 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 firewall and mark where rotor points with chalk.



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

9) Re-installing the distributor:

- A) Position the rotor to where it was when the distributor was just removed from the engine.
- B) Slide distributor down into the engine. Be sure rator 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 if 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 against the intake manifold. DO NOT check 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 you have any up and down movement with no gasket, add your 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) Re-install the hold-down clamp and bolt finger tight.

- E) Put the distributor cap on. Bottoming a distributor can severely damage the oil pump, carn, and distributor gears!!
- 10) Install the cap and transfer the plug wires (now is a good time to replace the plug wires with a good quality set of 8MM metallic core wires).
- 11) If you have converted your Ignition from a breaker 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 your spark plugs at .050"-.055". This setting is also recommended to those of you that already had a stock electronic distributor.
- 12) 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 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 plnging 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 objectional. 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 counterclockwise 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 Chev. 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.



Not legal for sale of use in California on pollution controlled motor vehicles.

