

## HIGH PERFORMANCE HEI DISTRIBUTOR INSTALLATION INSTRUCTIONS

(Read fully before starting installation!)

- Step 1-** Unpack the distributor carefully and inspect it for possible shipping damage. Inspect again after removing the cap.
- Step 2-** If the distributor to be replaced has not already been removed from the engine, remove its cap. On GM HEI distributors, unplug the pickup-to-coil harness from the cap. Do not remove the plug wires at this time. Crank the engine slowly until the rotor blade aims at a fixed point on the engine or firewall. Note this point for future reference.
- Step 3-** Find the connector in the wiring from the distributor to the ignition switch, and unplug it.
- Step 4-** Note the exact position of the vacuum advance canister. Put a reference mark on the engine or firewall so that the new distributor may be easily installed in the same position.
- Step 5 -** Loosen and remove the distributor hold-down bolt and clamp. Lift the old distributor out. If the engine had been running within the past few minutes, the distributor housing may be hot and coated with hot engine oil. Wrap a shop towel around the distributor to avoid burning your hands and dripping oil.
- Step 6-** Lower the new distributor into position. The rotor should be aimed at the same fixed point as was the rotor of the old distributor, and the vacuum canister aligned with the reference mark. After the new distributor has been lowered into place, you may find that it hasn't seated firmly against the support boss. This indicates that the lower end of the distributor shaft is not properly aligned with the oil pump drive rod. Do not attempt to force the distributor into position.
- Step 7 -** Reinstall the hold-clamp and thread the bolt just enough to exert a very slight pressure against the distributor. If the distributor was not firmly seated, manually rotate the engine until the distributor drops down into place.
- Step 8-** With the distributor properly seated, tighten the hold-down bolt just enough so that the distributor is held in place, but can still be rotated with a little effort. Again, make sure that the vacuum canister is aligned with the reference mark
- Step 9-** Remove the plug wires one at a time from the old cap and install them in the corresponding positions of the new one. (On GM HEI distributors, it will also be necessary to transfer the coil and coil cover from the old cap to the new one.) After all wires have been transferred, verify that the wire in the terminal post that is aligned with the rotor leads to number one cylinder. If you are unsure of cylinder number position or firing order, this information can be found in the service manual that covers your particular engine. Put on the distributor cap. HEI distributors, plug the pickup lead connector into the new distributor cap.
- Step 10 -** Reconnect the wiring leading from the distributor to the ignition switch. On GM HEI distributors, plug the pickup lead connector into the new distributor cap.
- Step 11-** Connect a timing light. Start the engine and allow it to warm up sufficiently to idle smoothly. It may be necessary to rotate the distributor (either clockwise or counterclockwise) before a smooth idle can be achieved. If the engine will not idle smoothly, the firing order may be incorrect or the rotor may not have been properly aligned during installation. Consult a service manual for corrective procedures.
- Step 12-** Consult the appropriate service manual to determine the factory-recommended initial timing and idle speed. Set initial spark timing with the vacuum advance line disconnected and plugged. Advancing timing two to four degrees from the factory setting will usually provide improved performance and fuel economy. However, timing advanced beyond factory specifications may result in detonation, which can cause engine damage. Listen carefully—if you hear the engine knocking or pinging, retard initial timing as required to eliminate it.

### BREAK-IN PROCEDURES FOR DISTRIBUTOR GEAR

**IMPORTANT: Premature gear failure and resulting engine damage may result from failure to follow these precautions!**

- Coat gear thoroughly with zinc or moly break-in lubricant prior to installation.
- DO NOT use synthetic oils during the distributor gear break-in period. Subsequently, any suitable oil may be used.
- Use 30 or 40 or multi-viscosity oil (i.e. 10W-30).
- For engines that are highly modified and have oil pressure exceeding 70 psi (cold), the gear should be broken in with a racing grade mineral oil.
- Oil filter bypass should be removed (if vehicle is so equipped).
- Carefully observe gear wear after the break-in period for several hours. Look for proper mesh, tooth alignment or excessive wear of gear teeth.