

Questions?
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JEEP/BUICK 225 HEI Installation Instructions

These instructions are intended for 1966-71 Jeep CJ's or Jeepsters equipped with the Dauntless Buick 225 V6 engine

STEP 1: Disconnect your negative battery terminal.

STEP 2: Locate your #1 spark plug wire on your distributor cap and mark the cap accordingly if it is not already identified.

STEP 3: Remove all spark plug wires AND all spark plugs from your engine.

STEP 4: Put the appropriately sized socket wrench on the center bolt of your engine's lower crankshaft pulley. Put your finger in the #1 spark plug hole and turn the engine over until you feel or hear compression escaping the hole then bring the timing mark on your crankshaft pulley until it is lined up perfectly with the TDC 0° mark on the front of your engine. You are now at top dead center.

STEP 5: Lift off your distributor cap and note the position of the rotor. It should be pointing towards the #1 position on the cap which you previously marked. If it is NOT, then secure the distributor cap and repeat steps #4 and #5.

STEP 6: Trace the lead coming off of your ignition coil all the way back to where it is connected. It is usually connected to a white ceramic block on your firewall called a ballast resistor. Disconnect the coil lead from this resistor.

STEP 7: Remove the old ignition coil and distributor from your engine. **Note that your rotor will turn counterclockwise a little when you pull the distributor out of the engine.**

STEP 8: **Carefully** remove the distributor cap from your **new HEI distributor**. **Make sure you unplug the wire harness from the cap first!** If it is not already marked, mark the spark plug terminal #1 on the distributor cap which is just to the RIGHT of the battery power lead (the square block on the edge of the cap) as position #1 as you are looking down on the cap if it was installed.

STEP 9: Holding the distributor with the vacuum advance pointing directly towards the front of your Jeep, position the rotor so that it will aim directly at position #1 on the cap.

STEP 10: With a flashlight, look down into the hole of the engine where the distributor fits. You will see a "slotted" shaft. With a long flat headed screwdriver, turn the slotted shaft to the correct position so that when you put your distributor into the engine, your distributor shaft will fit into the "slot" down inside the engine.

STEP 11: Now, begin lowering the new distributor into the engine. You will notice that when you try to lower the distributor into the engine block, the distributor is slightly blocked by the front of your intake manifold at the driver's side of your engine just in front of one of the bolts. Take note of the area blocking the distributor housing and remove the distributor, temporarily.

STEP 12: Remove the bolt from the intake manifold at the area blocking your new distributor. Using a hand-held grinding wheel, grind off just enough of the manifold to allow the new distributor to pass by. Don't worry, this WILL NOT negatively affect anything at all. See pictures. You will have to test fit a couple times.

NOTE: When the distributor is installed in the correct position, **the vacuum canister will point directly at the fan.** You have two options to solve the vacuum canister to fan interference. Install a thicker fan spacer or use the factory fan spacer and a side outlet vacuum canister (Part # PD1116163S)

STEP 13: Reinsert the new distributor and be sure it sits ALL THE WAY DOWN and rests flush against the engine block. If it doesn't, pull it out and try again until it does.

NOTE: You will have to turn the rotor counterclockwise a little so that when you set the distributor into the engine, it will turn clockwise as the distributor drive gear seats into place. (Turn rotor back approximately the amount that the gear turned as you pulled it out in STEP #7)

STEP 14: Line up the TAB on the distributor cap with the slot in the distributor housing and make sure the rotor is aiming toward the #1 position on the cap. If it is NOT, turn the distributor slightly, so that it will be. Now, tighten the distributor hold down clamp so the distributor will not move.

STEP 15: Install provided new button headed bolt into the intake manifold.

STEP 16: Place your new distributor cap back on the distributor and secure it with the hold down screws. **Be sure to reattach the distributor wire harness plug to the distributor cap.**

STEP 17: Re-gap each of your spark plugs to approximately 0.045". Reinstall all of the spark plugs.

STEP 18: Using the proper firing order for your engine (1-6-5-4-3-2 clockwise on the distributor), begin attaching your new HEI spark plug wires at the #1 terminal on the distributor cap. Your engine's pistons are numbered 1,3,5 on the driver's side. #1 is closest to the grille and #5 closest to the firewall. #2,4,6 are on the passenger side, # 6 closest to the firewall. (Make sure you use at least 8MM spark plug wires for your new HEI Distributor. Your stock wires will have the wrong ends and WILL NOT carry the voltage!

STEP 19: Connect the 12 VOLT power lead from your new HEI Distributor to a "switched FULL 12 VOLT power source." (ON when your ignition key is on and OFF when the key is off.) The BEST thing to do is remove the BALLAST RESISTOR from your firewall and connect the 12-volt power lead directly to the lead that fed the ballast resistor. **(You can also leave the ballast resistor and connect the power lead to the 12 VOLT SIDE of the resistor. Just be sure NOT to connect it to the resisted 9.6 VOLT side. Your HEI requires a FULL 12 volts of power to function properly.)**

STEP 20: Reconnect your negative battery terminal.

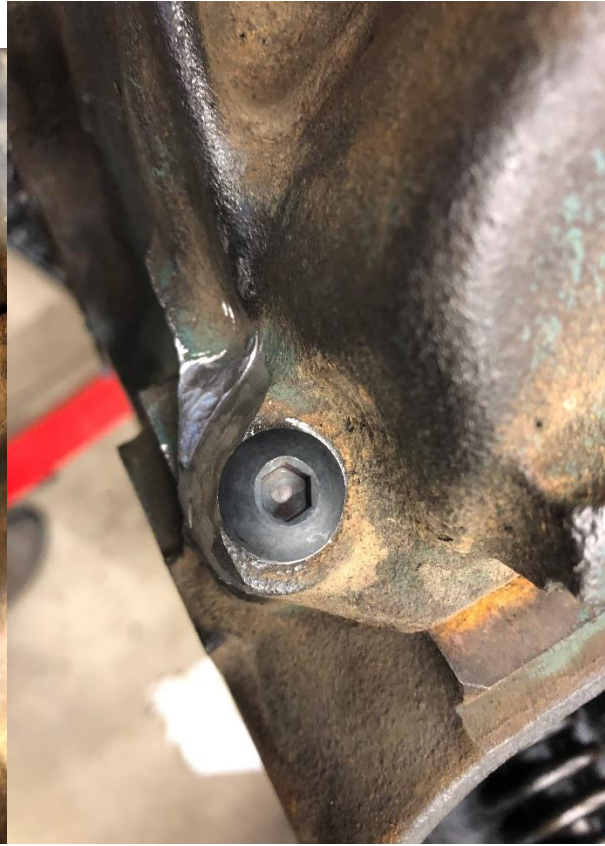
STEP 21: You're now ready to start your engine! When you start it for the first time, it will probably run fairly rough. You can loosen the hold down clamp and turn the distributor a little in either direction until the engine smooths out a little. Retighten the hold down clamp and let the engine warm up COMPLETELY to **full operating temperature** before you can time it properly with a timing light.

STEP 22: Once the engine is completely warmed up, loosen the distributor hold down clamp just a little. Using a timing light, turn the distributor whichever way is necessary to bring the timing to approximately 6 degrees BEFORE TDC.

STEP 23: Tighten the hold down clamp. YOU'RE DONE!

Since every vehicle's engine is slightly different, you may need to experiment with the timing to achieve maximum results. I have found that most 225 engines with this HEI distributor run best timed somewhere between 6 to 10 degrees BEFORE TDC.

You will surely notice an improvement in gas mileage, overall performance and a smoother idle



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