



# **Chevrolet V8 Distributor Installation instructions**

## **Mechanical Distributors - SUM-850050, 50055**

### **Ready to Run Distributor - SUM-850205**

#### **Please read these instructions before installing.....**

You should always disconnect the battery, negative lead first, before working on the ignition system. When you are done, reconnect the battery, installing the positive lead first.

**The drive gear installed on this distributor is melonized and therefore compatible with flat tappet or hydraulic roller camshafts. If this distributor is being used with a mechanical roller camshaft, a bronze or other such compatible gear for a 0.500" shaft, will need to be purchased and installed.**

#### **Included with the distributor:**

- 1 - Machined Chevy V8 Distributor
- 1 - Rotor
- 1 - Distributor Cap
- 1 - Wire Retainer & (2) -1.5" self tapping screws to hold retainer to cap
- 1 - Advance Kit (3 colored bushings, 2 sets of springs)
- 1 - Harness (for Ready to Run distributors ONLY)
- 1 - Gasket
- 2 - O-Rings

#### **How to Install the Distributor.....**

1. If the distributor to be replaced has not already been removed from the engine, remove its cap. Do not remove the spark plug wires at this time.
2. Crank the engine slowly until the rotor blade aims at a fixed point on the engine or firewall. Note this point for future reference.
3. Unplug all external connectors coming from the distributor.
4. P u t the existing cap back on distributor; note and mark on the cap, which spark plug wire the rotor (blade) is pointing at. Then number the wires according to cylinder and remove the wires. If in doubt you can leave the wires connected to the old cap and transfer them to the new cap, later in the process (see point #7).
5. Loosen and remove the distributor hold-down bolt and clamp. Lift the old distributor out. At this point the rotor may spin and move from its position.
6. Slide the flat gasket over the gear and onto the new distributor. Slide distributor into engine block. The rotor should be aimed at the same fixed point as was the rotor from the old distributor. After the new distributor has been lowered into place, you may find that it hasn't seated firmly against the intake manifold. 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. OPTION 1- Remove the distributor and use a long screwdriver to turn the oil pump shaft until it properly aligns with the distributor shaft. OPTION 2- Install the hold-down clamp and thread the bolt just enough to exert a very slight pressure against the distributor. Manually rotate the engine until the distributor drops down into place.

7. 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. Remove the plug wires one at a time from the old cap and install them in the corresponding positions of the new cap. After all wires have been transferred, verify that the spark plug wire on 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. Tighten down the distributor cap securely.

## **Wiring – Mechanical SUM-850050 & 850055**

A high performance ignition system, must be installed with these Mechanical distributors. Please refer to the instructions, included with your ignition control box, for wiring connections utilizing a 2-wire magnetic pick up.

- Black Wire with Orange Tracer = Positive (+)
- Black Wire with Violet Tracer = Negative (-)

## **Wiring – Ready to Run SUM-850205**

Summit's ready to run distributor does not need an ignition box to run.

There are three (3) wires coming out of the distributor, terminating in a Weather-Pack 3-pin connector. The wire colors are Orange, Red, and Black. These plug into the mating 3-pin harness supplied with the distributor.

Red: Connect to Coil (+)

Orange: Connect to Coil (-)

Black: Connect to frame or chassis ground

**Note:** Check your coil location to ensure that all of the wiring will reach the distributor.

**Note:** It is recommended to use Summit coil number SUM-850500. This coil is matched to the needs of the circuit board in the Ready to Run Distributor. If you do not choose to use the Summit recommended coil, then a **coil with 0.70 Ohms primary resistance or less MUST be used with our Ready to Run distributors.**

**Note:** To install with a CD ignition box, refer to the instructions that came with the ignition box.

## **ADVANCE BUSHING – selection & installation....**

There are 3 different advance bushings included in the hardware package. The distributor comes with a blue 21° bushing already installed. If a different degree of maximum advance is desired, follow the procedures below to change the bushings.

**Bushing Sizes:**      28°       25°       21°       18°   
                                 **Red**                      **Silver**                      **Blue**                      **Black**

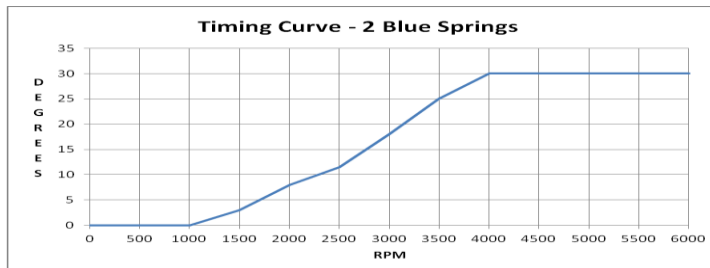
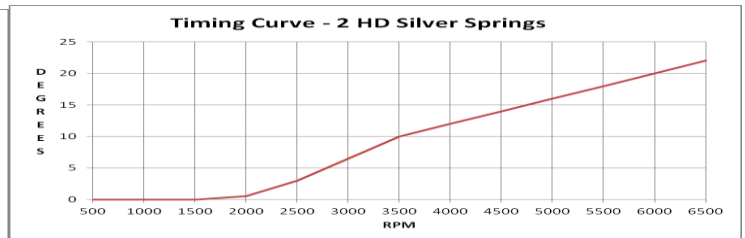
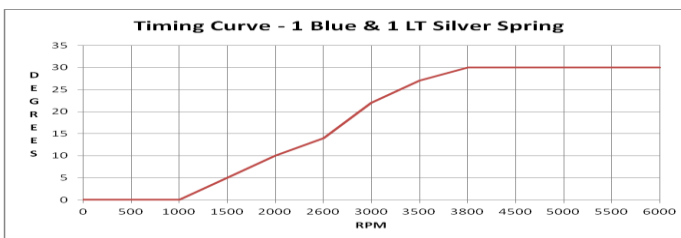
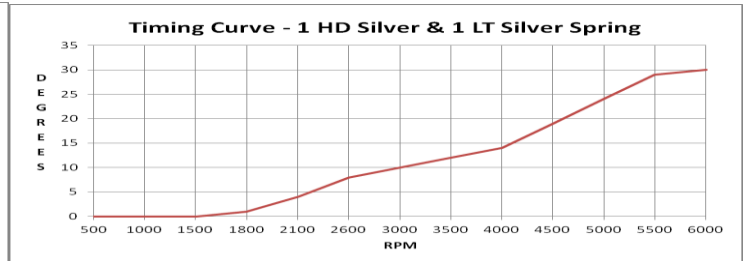
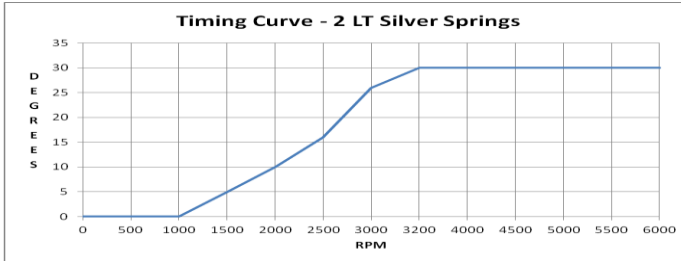
## **INSTALLATION Procedure...**

1. Take off the locknut and washer underneath the advance assembly. This is located directly below the bottom of the bushing pin. The bushing should slide off. If not, wiggle assembly.
2. Select the new bushing and slide onto the bushing pin.
3. Install the washer and locknut.

## ADVANCE CURVE - Spring selection...

This distributor comes with the blue (medium tension) springs installed. In the included advance parts kit you received two sets of optional tension springs. The silver-metallic springs are heavy tension and the light silver springs are light tension. The springs can be used in sets or mixed depending on the advance curve you desire. **See charts below for specific set up combinations.**

To change the springs you will need needle nose pliers. First remove the distributor cap and rotor. You will find the springs under the rotor. Take the needle nose pliers and carefully lift the springs off their posts (so you can reuse them if needed). (Do not permanently stretch the coil of the springs). When installing the new springs make sure that the eyelet of the spring sits completely in the groove on the post.



## How to set up the Mechanical Advance Lock-Out...

1. Remove the springs, weights and the advance stop bushing from the advance assembly.
2. Remove the roll-pin and gear at the bottom of the distributor.
3. Push the shaft from the bottom so about 2" protrudes out of the housing. DO NOT remove the shaft.
4. Turn the shaft 180° so the bushing pin lines up with the small hole in the advance plate.  
Pull shaft down so pin slides into hole.
5. Put the locknut and washer back onto the advance bushing pin, which locks the advance in place.
6. Install the drive gear and roll-pin.

## How to install the Vacuum Advance Lock-Out...

1. Remove the two allen head screws that mount the vacuum advance canister.
2. Rotate snap ring that secures the magnetic pick-up mounting plate, so it is accessible, & remove.
3. Lift the mounting plate slightly, and slide out the vacuum advance canister.
4. Install the black plastic lock-out plate in place of the canister. Install the two retaining screws.
5. Install the supplied screw and washer through the lockout and tighten.
6. It is important to make sure the pickup plate is parallel with the housing of the distributor. If it is cocked or slanted, the paddles of the reluctor may contact the pickup and destroy one or both of them. Check the clearance by rotating the distributor shaft. If necessary, use the supplied shims under the lockout hold-down to correctly position the pickup plate.

**Note:** If no shims were required, use one beneath the washer of the Lock-out hold down screw.

**Note:** Do not forget to plug the original vacuum advance hose.

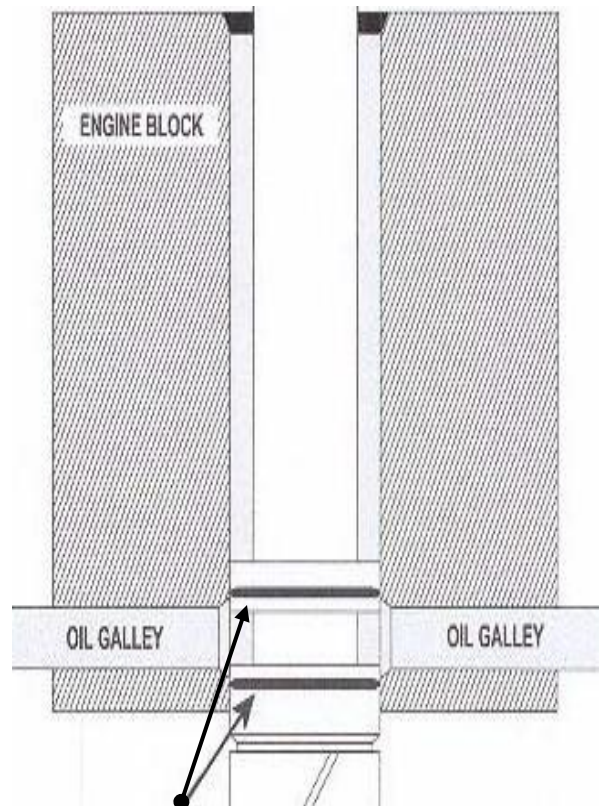
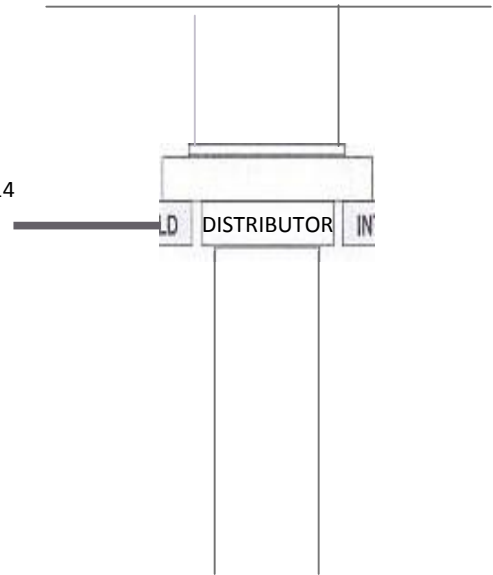
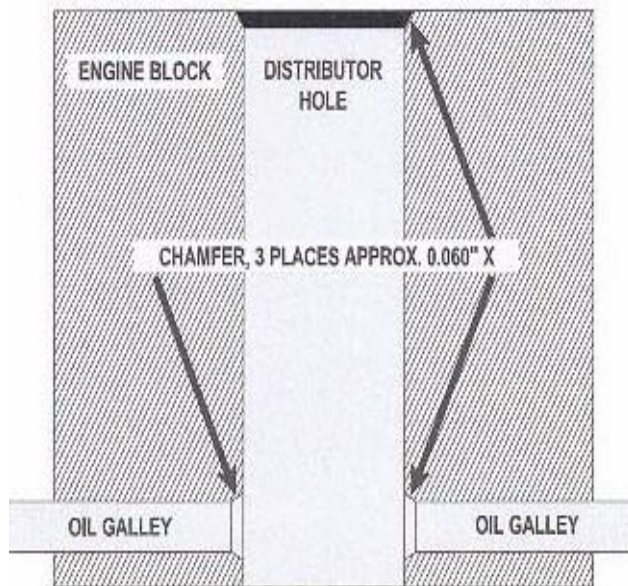
# Engine modifications are required if using O-rings on your distributor

## GENERAL INFORMATION...

Some distributors for Chevrolet engines have TWO o-ring grooves on the lower shank. These distributors require the engine block's distributor hole and oil galley holes to be chamfered approximately 0.060" x 30°. Rev (3) 6-14

This is to remove the sharp (cutting) edges of the distributor hole and oil galley holes.

**DO NOT USE O-RINGS IF THE ENGINE IS NOT MODIFIED for O-rings.** Installing O-rings in engines not machined for them, WILL result in damaged O-rings. During the installation of the distributor, debris from the o-rings will fall into the crankcase and lodge in the oil galleys causing sever engine damage.



**NITRILE O-RINGS**  
OD= 1.165 +/- .020  
THICKNESS= .0735 +/- .003