

# DAYTONA SENSORS

## **Chevrolet™ V8 Distributor Installation Instructions, Including SBC/BBC/409, Mechanical Advance and RTR**

### **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 it is to be installed with a mechanical roller camshaft, a bronze or other such compatible gear for the 0.500" shaft will need to be purchased and installed.**

### **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. Now put the existing cap back on and note and mark 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 and distributor later in the process (see point # 9).
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. This is because of the distributor gear
6. Install the gasket and lower the new distributor into position. 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.
7. Either remove the distributor and use a long screwdriver to turn the oil pump shaft until it properly aligns with the distributor shaft, or reinstall 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.
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.

- 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 wire in the terminal post that is aligned with the rotor, leads to the 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.

## **Mechanical and Mechanical/Vacuum advance 2-wire distributor**

A high performance ignition system, such as a Digital CD Ignition, must be installed with these distributors. Please refer to the instructions, included with the 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 (-)

## **Ready to Run Mechanical/Vacuum advance 3-wire distributor**

The ready to run 3-wire 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 connector supplied with the distributor.

Red: Connect to Coil (+)

Orange: Connect to Coil (-)

Black: Connect to frame or chassis ground

**Note:** Check to see that your coil location will reach the distributor when wired.

**Note:** For best performance, use a coil with 0.70 Ohms primary resistance or less

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

## **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.

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). When installing the new springs make sure that the eyelet of the spring sits completely in the groove on the post.

## **ADVANCE BUSHINGS**

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 advance is desired, follow the procedures to change the bushings.

**Bushing Sizes:**    28°     25°     21 °     18° 

**Red**                      **Silver**                      **Blue**                      **Black**

## **How to set up the ADVANCE BUSHINGS**

1. Take off the locknut and washer at the bottom of the advance assembly, at the bottom of the bushing pin.
2. The bushing will slide off.
3. Select the new bushing and install.
4. Install the washer and locknut.

## **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. Lift the shaft at least two inches out of the housing, but do not remove the shaft.
4. Turn the shaft 180° so the bushing pin slides into the small hole, on the advance plate.
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 the snap ring that secures the magnetic pickup mounting plate, so it is accessible, and remove.
3. Lift the mounting plate slightly, and slide out the vacuum advance canister.
4. Install the Lockout 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. 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.

## **Included with the distributor:**

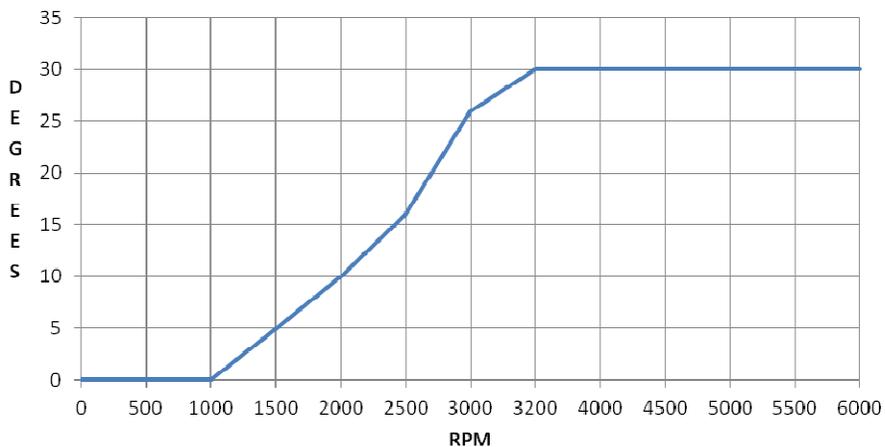
- 1 - Machined Chevy V8 Distributor
- 1 - Rotor
- 1 - Distributor Cap
- 1 - Wire Retainer
- 2 - 1.5" Self Tapping Screws
- 1 - Advance Kit (3 bushings, 2 sets of springs)
- 1 - Gasket
- 2 - O-Rings

## **Daytona Sensors LLC**

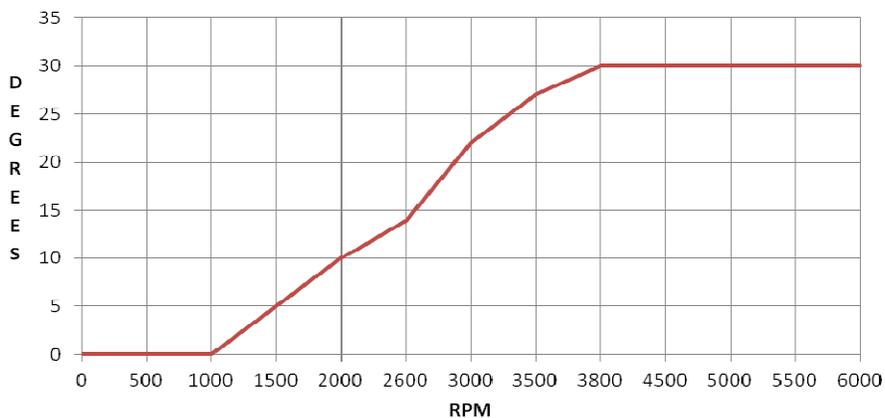
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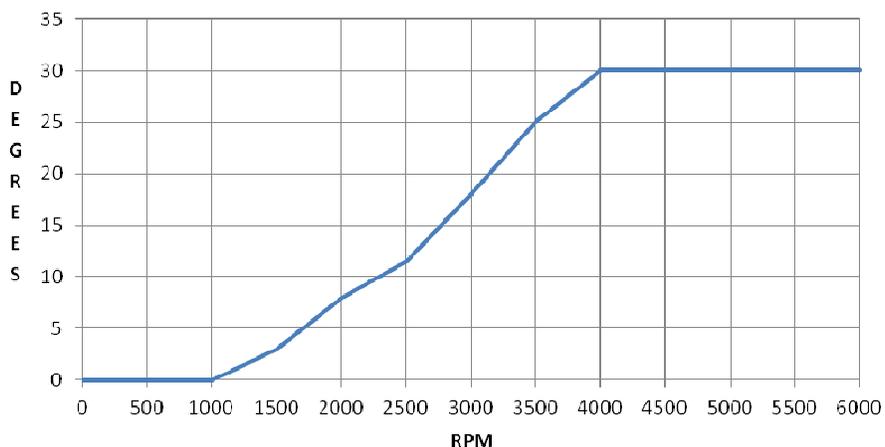
**Timing Curve - 2 LT Silver Springs**

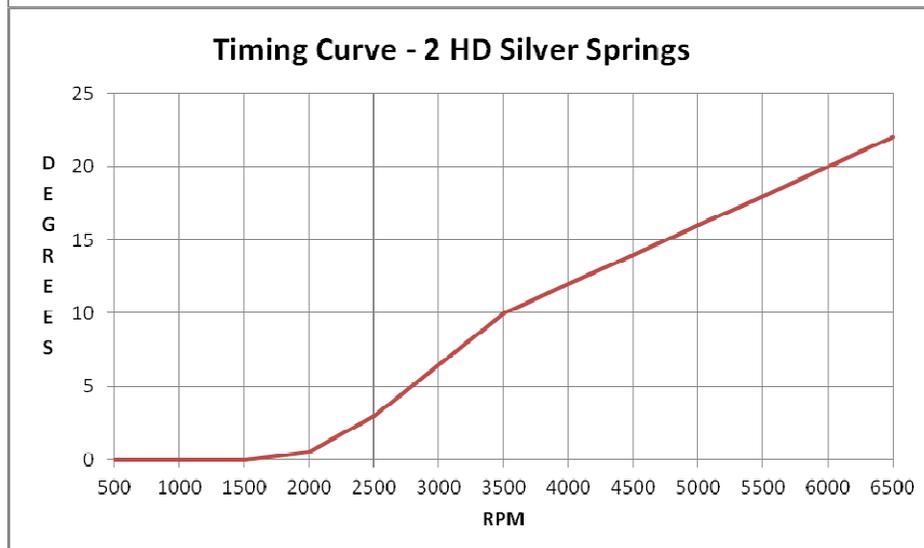
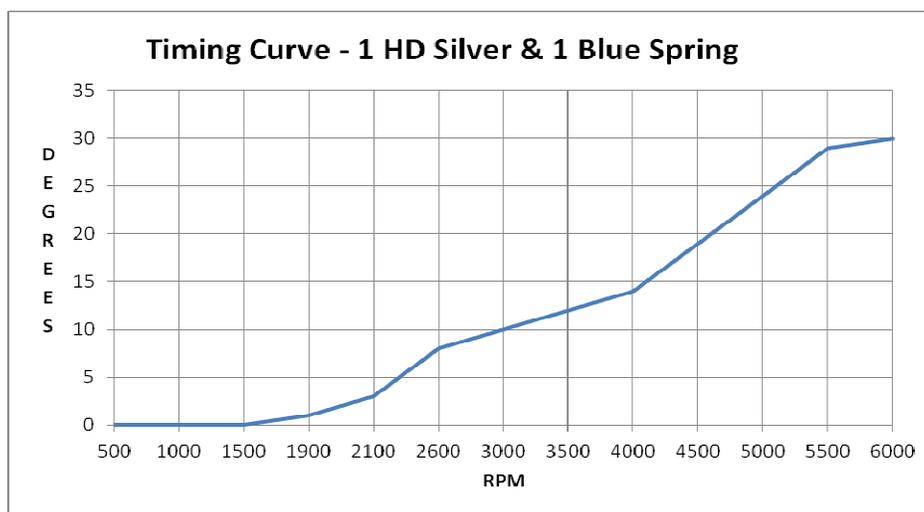
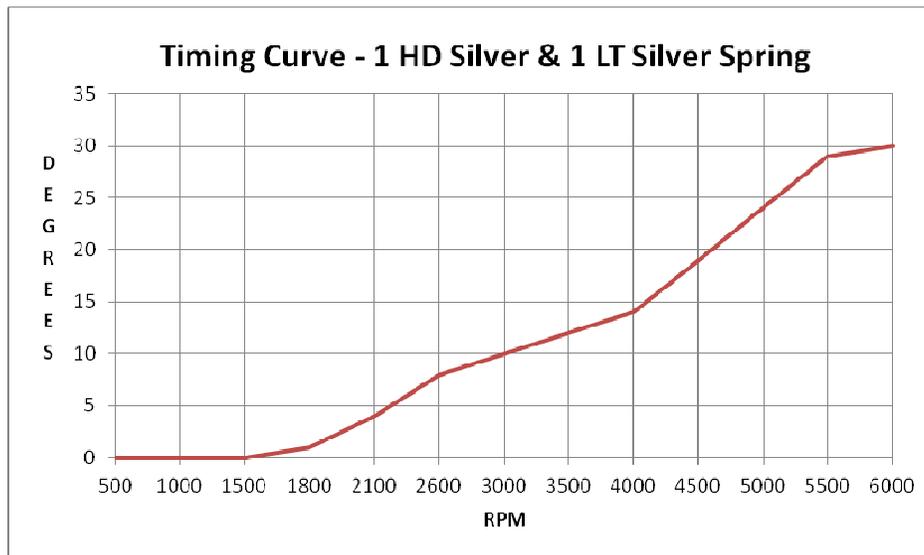


**Timing Curve - 1 Blue & 1 LT Silver Spring**



**Timing Curve - 2 Blue Springs**





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