## **A**DJUSTING **DUAL IGNITION POINTS**

By Bill Allard

Some cars, both Classic and non-Classic, utilize dual ignition points to improve highspeed performance. But adjusting and synchronizing these points can appear to be a challenge for the "do-it-vourself" mechanic lacking a distributor machine.

However, a basic adjustment, without addressing advance issues, requires only a few automotive tools and a little home-style engineering. The following describes how I use these tools and techniques to adjust an 8-cylinder dual-point distributor:

**Step 1:** Remove distributor cap and crank motor to verify direction of rotor rotation. Mark rotor position on distributor housing and note distributor positioning on block, so unit can be returned to the same spot. Then remove distributor.

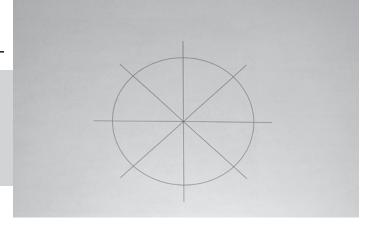
**Step 2:** Gap both points-sets to shop manual specifications. (You can use a dwell meter while spinning the distributor shaft with an electric drill. High RPMs are not necessary).

**Step 3:** Measure the inside diameter of distributor body. Calipers make the job easy.

Continue with steps 4 through 9 as detailed in the article.

Congratulations, you're done and you didn't need a distributor machine!





Step 4: Draw a circle of that diameter, and divide it into 8 equal segments using a sharp pencil. If you've forgotten your high school math skills, check the Internet. (Some computer programs will also do this task).



Step 6: Tape or hot-glue a fine, non-stranded wire onto the rotor as pictured. The location of the wire doesn't matter; only that it be a small diameter and be securely fastened so it doesn't move. The end must sit just above the top edge of the distributor body.



Step 8: The first step will involve the stationary points (lefthand points in photo). Temporarily insulate the other points-set with a piece of thin plastic between the points. With rotor in place, rotate shaft by hand in the correct direction (don't touch rotor) until you reach any spot where the test light goes out. This means the stationary points have opened. Spray-glue the underside of the paper segment and adhere it to the distributor body such that the right-hand line on the paper (left line for counter-clockwise rotor) is directly below the wire pointer.



Step 5: Cut out one of the 8 segments as pictured.



**Step 7:** Attach a test light between the coil terminal on the distributor body and a battery. (Car battery, flashlight battery; doesn't matter. Use appropriate bulb). Place a ground wire from the other battery terminal to the distributor body. As you rotate the distributor shaft, the light will go on when either points are closed, and off when both points are open.



**Step 9:** Remove plastic insulator, and slowly rotate distributor shaft. If both points-sets are correctly synchronized, the light will come on, and then go out as the pointer crosses the left-hand line on the paper segment. If the light goes out (points open) before or after the wire meets the left-hand line, move the base (not gap) of the moveable points (right points in photo) until the light goes out when the wire crosses the line.

## **Audible Turn Signal Flashers!**

A Technical Tip from Bill Allard

Have you tailed a vintage car whose non-cancelling turn signals have been flashing for the past several miles? This situation usually occurs because the flasher unit is inaudible to the driver.

A solution to this problem is the easy, under-dash installation of a small, inexpensive piezo buzzer that emits a "beep" each time the signal light on the turn switch flashes.

The example pictured here is a Radio Shack 3-16VDC, #273-0074 retailing for \$3.99. Piezo buzzers are also available online.

Installation begins by soldering pigtails onto the two extending wires. Piezos are polarity-sensitive and terminals are marked "+" and "-". To install the buzzer, the "hot" terminal is connected to the center terminal of the flasher. For my positive-ground vehicle, I attached the "hot" (negative) piezo wire by slipping the end into the center flasher connector and then pressing the flasher into position. The positive wire is grounded at any convenient nearby location.

If the "beep" is too loud, cover the sound port with a piece of tape.

(Incidently, if you have a 6-volt positive-ground car with turn signals that refuse to work properly, the problem may be the flasher itself. Try using a flasher with a "BV" prefix; it's designed for positive-ground systems).



