IGNITION TIMING - by Les Andrews, 1998

Here's the procedure I use to set timing. It works every time for me and a way to insure you have set the timing correctly every time.

1. Set the points to .020.
2. Check the clearance between the distributor rotor and each of the four contacts inside the distributor body. You can carefully bend the rotor tab or file each of the body contacts to get .025 to .030 clearance between the rotor and each contact.
3. Set the timing pin in the timing gear cover to the detent. Remove #1 spark plug and look down the hole to make sure #1 piston at the very top of the stroke. (make sure you are observing the piston and not the valve).
4. Set the steering column spark lever full up position (full retard). With the distributor body in place, make sure the distributor plate arm is fully against the far end of the body opening. Then pull the spark lever full down and check to see that the distributor arm is fully against the other side of the body opening. This checks to see that you are getting a full 20 degrees of advance. Now reset the spark lever full up.
5. From the right side of the engine, the rotor should be pointing to about 5 o'clock position. Loosen the distributor cam screw and rotate the distributor cam clockwise to the point just before the points open on the lobe. Tighten the cam screw down.
6. With the cam screw tight, try to move the cam clockwise again, i.e., remove all backlash movement. The points should be at a position just before the points open.
7. Here is the final check. Attach a light or volt meter leads to the tip of the points arm. I made up a test light from a tail light socket with alligator clips on both pigtail wires. Clip one alligator clip to a good ground point and the other clip to the end of the point arm. When the points are closed the light is off, when the points open the light comes on.
8. Turn the ignition key on. The test light should be off. Now slowly pull the spark lever down and count the number of detents the spark lever arm passes before the test light comes on. The idea is to adjust the points so they open (light on) as the spark lever on the steering column passes the first or second detent on the column. You may have to adjust the distributor cam several times to get this adjustment. The car should start easily with the spark lever in full up position.

With this setting, drive the car with the spark lever set about two notches from the bottom position. At 50 mph on the highway, move the spark lever to full down position for full 20 degrees advance.

If the starter is turning over slowly, it will help to improve the ground connection from the battery to the starter. This is done by adding another battery cable from where the braided battery strap connects to the frame cross member, and connect the other end to one of the bell housing bolts just behind the starter motor. You will need a GM battery cable about 30" long. This will provide a better ground connection for the starter and sometimes allow it to turn faster.

-- Les Andrews, Technical Director, 1998