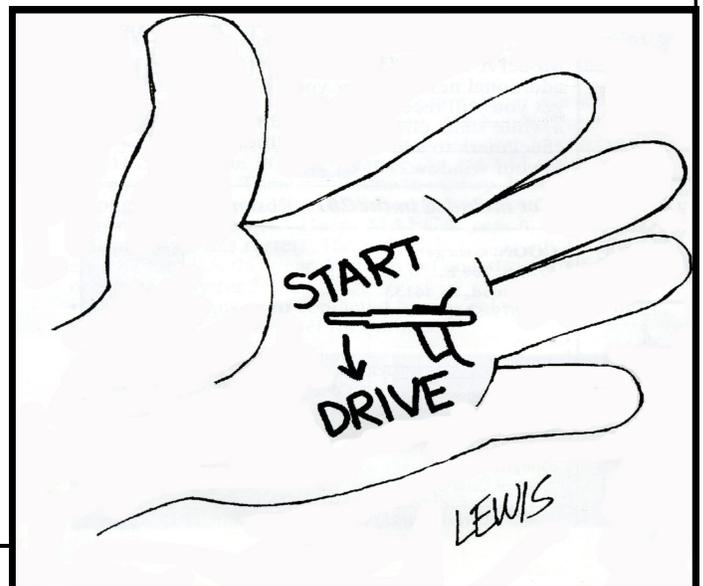


# ***LETS KEEP OUR MODEL A HAPPY***

*By Claude Sipe, Tech Advisor*

## **PROPER USE OF THE SPARK ADVANCE**

Have you ever wondered what that lever on the left side of steering wheel really does? No its not the turn signals, at least not on a stock Model "A"! Why are we supposed to move it? When are we supposed to move it? What "could" happen if I just leave it alone? I will try to clear up the "mystery & myths" about this very important and often misunderstood control. First I will tell you about the worst things that can happen if this control is improperly used. Remember these things can happen - its not a case of "it will" happen, it depends on the severity of abuse. You may break a bendix spring in the starter. You may cause the engine to become overheated. You could burn a piston, or valve. Your engine will lack power, and have poor mileage. The forgoing should be enough to convince you to learn how to properly use the "spark advance" lever. This lever controls the timing of the sparkplugs, in relation to the pistons compression cycle. If the spark is too early or too late the engine will lack power and the problems noted above may be experienced. Basically the faster the engine is turning the earlier the spark plugs need to fire. When the lever is in the up position the spark plugs fire when the piston is at "top dead center" as you move the lever down the sparkplugs fire earlier and earlier up to a preset maximum of about 25 degrees. You will never require that much advance in a stock Model "A". The first thing to remember is to "retard the spark", lever up toward the windshield, before you engage the starter. The spark needs to be retarded so the engine does not "kick backward" when cranking over with the starter. When doing this the extra load on the bendix spring can cause the spring to break. After the engine starts you can move the lever down about 1/3 of the way, the engine will pick up speed and run smoother. When you no longer hear the engine picking up speed stop moving the lever, as a spark that's too advanced is not good. Every Model "A" is slightly different so you need to adjust yours by ear, and best running position. The position between 1/3 or slightly more is usually about right for running around town and speeds up to about 35 miles an hour. If you are out cruising



and running about 45 m.p.h. you can advance the spark a little more, say to about ½ way down or slightly more. If you are driving in the mountains and going up a long hill you should retard the spark slightly from your open cruise setting. Too much spark advance under heavy load {going up a hill} can cause what is called “predetonation” and this can cause excessive heat and may burn a piston. If you just remember that the faster your engine is turning the more advanced the spark needs to be, to make it run properly. When you stop your engine and turn the fuel off, get in the habit of returning the spark advance lever to the full retard position [up toward the windshield]. When you get ready to start it next time it will be ready! This will help keep your Model “A” happy, and when “she’s happy” our life is a lot nicer!



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