

## Model A Ignition System

The ignition system of the Model A Ford seems to be the cause of most of the problems that prevents the engine from starting or not running correctly. Actually, the ignition system is very simple and once it is in good condition, it requires very little maintenance to keep it in good order. The basic components of the ignition system are the coil, spark plugs, the ignition switch assembly and the distributor.



First, the spark plugs. Good quality spark plugs should last many thousands of miles with little attention. If your engine is in good condition and you drive your car on a regular basis, spark plugs should last 10,000 miles at a minimum. I have over 18,000 miles on the spark plugs in my Model A Tudor and they still

perform well. I have only cleaned and re-gapped them once. I like the reproduction Champion 3X plugs because they look like the originals but the replacement Champion W16Y plugs seem to work equally well and are less expensive.

The coil is another component that rarely causes a problem but I would strongly suggest an original coil be exchanged for a good quality replacement or reproduction. The old insulation in the original coils can fail causing the coil to short out internally. Quality name brand 6 volt coils are still available from your local auto parts store or one of the better Model A parts suppliers. Good quality reproductions of the original Model A coil are also being made. Just beware of any electrical component made in China.



The original "Pop-Out" ignition switch is a very good quality component but they are now more than 90 years old and are subject to failure unless they have been restored by a reputable re-builder. A problem with the switch assembly can often be traced to the insulation failing on the original internal wire and grounding out the switch.

Now for the distributor. This little item, while very simple in design can cause a multitude of problems. If it has been properly rebuilt with quality components, it is actually very

reliable and needs little maintenance but the key words here are "properly rebuilt" and "quality components". Good service and reliability can be experienced with a distributor in the same configuration as Henry's original designed with two exceptions. The only modifications I make is to use the shaft and cam screw that has the provision to be able to better lubricate the upper bushing and to use the better designed Model B distributor cam. The Model B cam is configured for an increase in dwell time which increases coil saturation when the points are closed which results in a hotter spark. Model B cams are a direct replacement for the Model A distributor cam and are readily available.



For good reliability, be sure your distributor has the original type extra flexible fine multi strand lower plate wire, a new "burn out proof" condenser and good quality original type points. The lower plate wire must flex every time you move the spark lever and rotate the upper plate. Normal automotive wire is not intended to be this flexible and will eventually fail. A new "burn out proof" condenser is much less likely to fail due to the heat from the exhaust manifold. I also like to use original style points instead of the "modern" points that are being sold.

Modern points are very hard to adjust. Good quality original type points are available both from the better parts suppliers and even some local auto parts stores and they are very easy to adjust. Just be sure you do not buy points that are made in China. They have very little tungsten and will easily burn which will cause the engine not to run. I buy Standard brand Model A points from my local O'Reilly's Auto Parts. Quality points will last a long time. As with the spark plugs, I have over 18,000 miles on the points in my Tudor and have cleaned and adjusted them just a couple of times. I do put a little lube on the cam every time I change the oil.



## Tech Tip

Always adjust the point gap before setting the ignition timing. Changing the point gap will also change the timing so be sure to check the timing after setting the points.