

Options for the Model a Ford Ignition System

This is the third and last in the series of discussions about the Model A Ford distributor, how it may be improved and other options that may be available. Previously we talked about how to manually control ignition timing to optimize the performance of your stock Model A engine. We also discussed the value of using a distributor with centrifugal advance mechanism to automatically control ignition timing. This month, we will look at currently available aftermarket distributors and the use of electronic components to replace the points.

If you want to maintain the original appearance of the Model A distributor consider installing a Nu-Rex Automatic Advance Unit. This centrifugal advance mechanism is installed inside the valve chamber and takes the place of the lower distributor shaft. When starting the engine, ignition timing is automatically retarded to 0 deg. As engine speed increases, timing is advanced up to a maximum of 29-30 deg BTDC. The actual curve is very close to optimum for the stock or mildly modified Model A or B engine. When installed, the mechanism is undetectable, initial timing is adjusted in the same manner as before with the spark lever all the way up. After starting, you just leave the spark lever in the full up position and let the Nu-Rex centrifugal advance unit automatically adjust the timing. No other modifications are required when using the Nu-Rex unit. This design that has been around from the time our Model A's were just a few years old.

Another option is the Zipper Distributor. It looks like the original Model A distributor but is made with a centrifugal mechanical advance and Pertronix electronic module that replaces the points. If you are using a Pop-Out ignition switch, it must be replaced with a conventional ignition switch. Other minor wiring modifications are also required. I do not have any information about the "curve" of the advance mechanism or how closely it may be to optimum.

FS Electronics also manufactures and replacement distributor with centrifugal advance and an electronic module for Model A's. The advance curve designed into these distributors is not close to optimum but they could be modified for better performance.

Pertronix still lists a distributor for the Model A Ford with mechanical advance and an electronic module. I was not able to find any advance curve information.

For the most part, electronic ignition systems are reliable BUT one problem that all electronic ignition systems have in common is the difficulty of diagnosing the problem should your Model suffer an ignition related failure. This is especially aggravating when on an outing or touring with other Model A's.

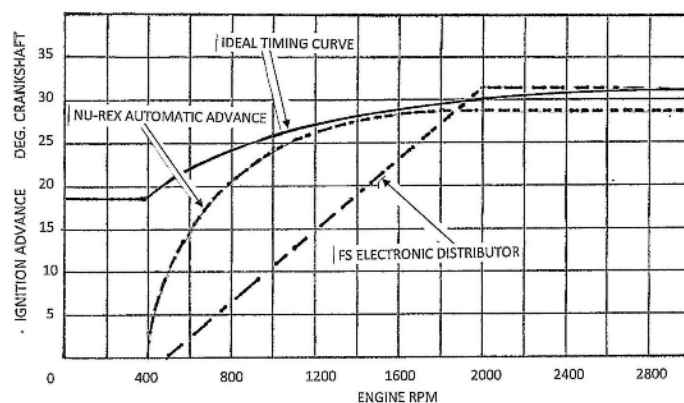
If you are using an electronic ignition, I always recommend to be sure to include in your spare parts every component that makes up the ignition system. If a component should fail, it is unlikely that another owner would have the replacement part you need. Just do not take along a used component that you think may be good, take with you only new or known good used components that have been tested on your car.

*Nu-Rex automatic advance
for a Model A Distributor*



*FS Electronics Distributor
for a Model A*

*Zipper
Distributor
for Model A*



Distributor Advance Curves

Tech Tip

When using any ignition system that incorporates a centrifugal automatic timing advance system always use a timing light to check and adjust the ignition timing. The best way to check timing is at 2000 RPM and NOT at idle. This will insure you do not have too much advance at normal highway speeds. For stock or mildly modified engines, timing should be set at 30-32 Deg BTDC at 2000 RPM with a max advance of 34 deg above 2500 RPM. For more heavily modified engines and engines with compression ratios above 6.0:1, Timing may have to be reduced to avoid detonation.