The Model A electrical System

The electrical system of your Model A Ford as designed is very simple and reliable however electrical system problems contribute most to the reasons our cars will not start or run. The first of our Model A's were assembled ninety years ago and today we still find some cars with original wiring or other electrical components. If your Model A has old deteriorated wiring, replace it with good quality wiring available from the better parts suppliers.

The battery is heart of the electrical system and having a good fully charged battery is necessary for reliable starting the engine and operating the ignition system, lights and horn. Today, we can purchase original type "Lead Acid" wet cell batteries as well as Optma Batteries with Spiralcell technology. The Optma battery will not discharge over time and will last 2-3 times longer than a lead acid battery. Whichever type of battery you use, it is still necessary to be sure the battery is well secured and the cables are in good condition with clean tight connections. A master battery cut off switch is recommended when storing your Model A and you will also find this very useful when performing repairs and maintenance.

A charging system in good working order is necessary to keep the battery fully charged. If you are using the original 3 brush type generator, refer to the Model A Instruction Book (Owner's Manual) for the proper adjustment of the generator output for your type of driving. Aftermarket regulators are available for the original Model A generator which will automatically adjust the output of the generator to keep the battery fully charged. Alternators with built in regulators are also available for those who want a more modern charging system. Alternators with up to a 30 amp output will work fine with the stock Model A electrical system but the use of a higher output alternator will require other modifications.

The original Model A ignition system in good condition will perform well for most owners. Most ignition system problems encountered involve the distributor. Distributors that are worn out or the use of poor quality components are responsible for most of these problems. Good electrical components and new or rebuilt distributors are available from the better parts suppliers. Beware of all electrical components made in China as they usually are very poor quality and subject to failure.

The best way to keep your Model A running well is to first perform the necessary repairs to get the electrical system in good condition and then drive your Model A often.







Tech Tip

When replacing a 6 volt battery in your Model A, be aware of the correct polarity of the electrical system. All original Model A Ford electrical systems are <u>POSITIVE GROUND</u>, most other cars are Negative Ground. When installing a new battery, attach the "Hot" cable first and the "Ground" cable last. First, connect the "Hot" battery cable, the one that goes to the starter switch, to the smaller Negative (-) post of the battery and then connect the "Ground" cable, the one that goes to the frame, to the larger Positive (+) post of the battery. Installing the battery with the polarity reversed will cause the charging system not to work and may damage some components of the electrical system.

Beware of charging systems that have been modified or converted to 12 volts. Some modified 6 volt systems and most 12 volt systems are Negative Ground.