



## **THOUGHTS FROM THE MODEL T GARAGE...**

**By Ed Moran**

For the past half dozen newsletters we have been discussing the Model T electrical system and how to get the best out of our coils, magnetos, sparkplugs and the accessory distributors. That about finishes the electrical system but before we leave the topic let's take a brief look at using a 12 volt battery instead of a 6 volt one.

The T was originally intended to run without the need of any battery and the fact that you could do so was advertised as a plus. In the early years, most folks did connect a set of dry cell batteries for easier starting though. When used only for powering the coils while starting the T, the dry cells would usually last an entire driving season.

In 1919 the closed Fords came out with a 6 volt storage battery, generator and starter as standard equipment. The open cars were still magneto only. Then Ford added the battery system to open cars for an additional \$75.00. The starter was very well made and really overbuilt for 6 volts. This certainly makes the 6 to 12 volt conversion more practical! The generator was another story. It was marginally designed at best and gave problems even when the T was the main transportation on the road. But... marginal or not, it can charge a 12 volt battery just as well as it can charge a 6 volt battery as long as the charging rate is cut in half.

There are certainly advantages in converting the T to the modern 12 volt system. A 6 volt system will not run the coils well at speeds about 20 or 25 miles an hour! A 12 volt battery will make the coils work at pretty much any speed. A real plus if you have a poor magneto. A 12 volt battery will give you QUICK starts! If you don't believe that, listen to any 12 volt T when the driver cranks it up! This brings up an important point. Your starter and Bendix MUST be in good shape or 12 volts will cause you to wish they had been! Timing should also be correct. You do not want the engine to kick back when the starter is spinning at 12 volts! A broken bendix or bent starter shaft are very likely!

The Model T generator is pretty dumb. It doesn't know 12 volts from 6 volts and will happily put out 10 or 12 amps to a 12 volt battery just as it will a 6 volt one... for a very short time! It will then self destruct with hot solder flying everywhere. If running 12 volts, you should set the charge rate at not more than 6 amps and probably 5 would make your generator happier. You will need to change the cutout from a 6 volt one to a 12 volt one.

I'd suggest considering one of the 12 volt alternators that all the Model T suppliers



offer. They not only offer higher output but they automatically adjust the charging rate based on the battery's charge. This is a real plus. The higher output lets you put brighter bulbs in the headlights and the automatic charging give you much longer battery life and longer periods between adding water.

The only other change needed is to replace the 6 volt light bulbs with 12 volt ones.

By the way... The Model T battery should be installed with the negative terminal attached to the frame and the positive terminal attached to the starter cable. Because the Model A reversed these connections, you will sometimes find Model T's with the connections reversed.

So... what does all this work give us? A T that will start faster and, I believe, will run better on coils or distributor with lights that make it possible to actually see where you are going after dark! I've got a set of 55 watt halogen bulbs in my 12 that you have to see to believe!

I'd like to hear from you if you have any questions or comments concerning anything we've covered in past issues. Whether you agree or disagree, just write, call or email. My number and address is on the front cover.

See you down the road☐