

Converting the Ahooguh

By Tom Endy – Westminster, California

There is an inclination for many members of the Model A kingdom to convert the electrical system from 6-volts to 12-volts. This is becoming more and more common. The purpose of this article is not to encourage the conversion, but to aid those who have made up their mind to do so.

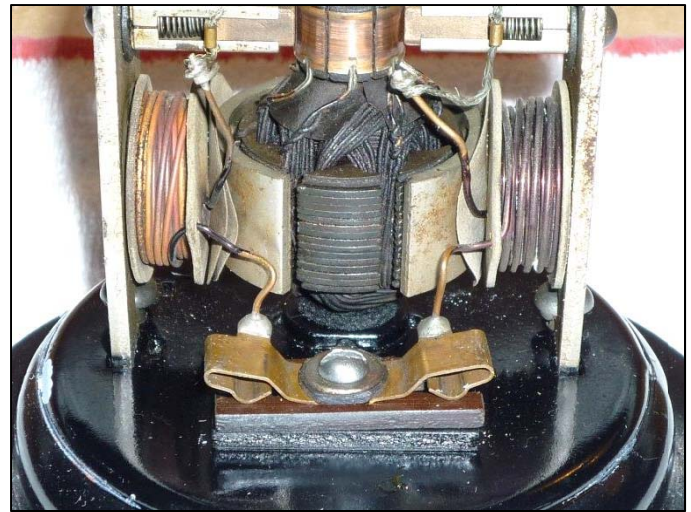
One consideration is the conversion of the ahooguh horn to be able to operate with 12-volts. In the past most people installed a dropping resistor that can be obtained from any of the suppliers. This however is not always the perfect solution. The dropping resistor has to be a very low ohm value and a high wattage value. If the ohm value is not correct the horn will sound sick. If the wattage value is not correct the resistor will burn out. Many of the dropping resistors on the market today cannot handle the power requirement and will burn out with repeated use of the ahooguh.



An ahooguh dropping resistor that burned out

A better solution is to rewire the horn from 6-volts to 12-volts. It is an easy task that anyone can do; you don't need to be an electrical engineer. The job does not require a complete disassembly of the motor section of the horn.

What is required is the rewiring of the two field coil windings. Each original field winding is made up of a nominal 10 feet of #20 gauge insulated wire. Each field winding is replaced with 20 feet of #24 gauge insulated wire.



The field windings are on either side of the rotor

Each field winding is attached at one end to a brush connection; the other end is attached to a terminal connection. The two field windings are wound in an opposite direction of each other.

Remove the front and rear section of the horn. Attach the center motor section to a piece of plywood with two screws and C-clamp it to a workbench. This will provide a stable work platform.

Unsolder both ends of a field winding and unwind the wire from its core. A measurement will show it is a nominal 10 feet long. It is not an accurate 10 feet and one side may not be exactly the same as the other side. Replace with 20 feet of #24 gauge wire around each core and solder it to the brush and the terminal. The windings do not need to be uniform or stacked in neat layers.

A roll of #24 gauge wire obtained from a local electronics store and the removed #20 gauge wire from one of the two fields.



The task is not difficult, only tedious. Best to have two people to do the job, one to guide the wire onto the core and the other to start out 20 feet away and loop the wire around the core for each wrap.

When reassembling the motor end of the horn line up the striker button blade in the center even with the rotating ratchet wheel, otherwise you will have a sick sounding ahooguh.