

The Six Volt Battery

by Tom Endy 2024

Up until 1955 the automotive industry delivered cars with 6-volt batteries, and they worked just as well as 12-volt batteries. A myth among automobile owners and some members of the Model A kingdom is that the reason for the change to 12-volts was to provide more power. The truth is it was driven by economics. In 1950 when I was a freshman in 9th grade auto shop I recall the instructor told us that in a few years the automotive industry would switch over to 12-volt electric systems. The reason given was to be able to reduce the cross-sectional area of copper wire. Copper wire is expensive and in the coming years cars will have additional electric devices like air conditioners, turn signals, power windows and door locks requiring even more wire. The move to 12-volts and the reduction in copper would save car makers millions of dollars a year. The only thing I never understood was how my instructor knew all this five years before it happened. He must have read it somewhere!

Converting a Model A Ford to 12-volts makes good sense to me for several reasons, and we did that when we restored my grandson's 1930 Tudor. First, 6-volt batteries are becoming scarce, and secondly, accessories that owners may want to operate in their car, come in 12-volts now days. However, my 1931 Victoria that I have owned for 35 years, still has a 6-volt electric system. Years ago, I added a 12-volt converter so I can operate a GPS, A back up camera, and charge my cell phone.

The 6-volt batteries I have used in my Victoria have served me well and each had a long life. This was because I operate a 6-volt positive ground alternator that keeps the battery fully charged. I also drive the car regularly. The few times I was not able to drive the car for a while I put the trickle charger on it.

I recently had to replace the battery and I noticed the date was July 2015 when I had installed it. Of late I was noticing that the starter would hardly turn over. Even though the battery was fully charged it was lacking power, which I believe is referred to as capacity. The battery had plenty of water in it, and it had served for nine years. It had been purchased from O'Reilly Auto Parts and I remember I paid about \$80 for it. The new replacement battery also came from O'Reilly Auto Parts, and it cost \$102 in April of 2024. The new battery spins the starter as Henry had ordered.

In both cases I had looked O'Reilly Auto Parts up on-line and searched for a 6-volt group one battery. It pulled up a photo of the battery and provided all the physical dimensions so I knew it would fit the battery cage in a Model A. It also provided the on-line price. I printed it out and took it to O'Reilly Auto Parts and they sold it to me for the on-line price.

When installing a new battery it is a good idea to remove the ground strap from where it attaches to the frame. There is a raised boss there, run a disc sander over it and clean it to bare metal. Wire wheel the end of the cable and the nut and bolt. This is the most neglected electrical connection on a Model A Ford.

The 6-volt group one battery available today from O'Reilly Auto Parts. Exactly the same as the one I installed in July 2015.

