

# A Power Inverter!

by Tom Endy

## 6-volt positive ground:

The Model A Ford was designed and built with a six-volt positive ground electrical system. It has for many years served the car well and will continue to do so. However, many Model A owners have converted to a 12-volt negative ground system for various reasons. This is a matter of personal choice. To make the conversion one must replace the battery, the generator (or alternator), the ignition coil, and all the light bulbs. A dropping resistor will be needed for the ahooguh horn, and it would be prudent to change the starter to a 12-volt version, however, a six-volt starter will work on 12-volts.

## Personal thoughts:

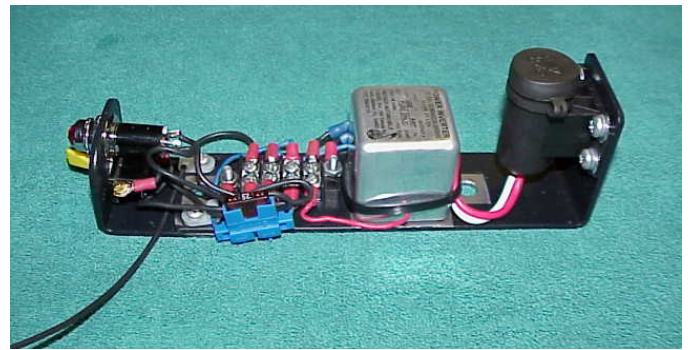
If I were starting from ground zero with a Model A restoration I would definitely convert it to 12-volts. Since I would have to buy a battery, alternator, ignition coil, starter, and all the light bulbs, the cost would be about the same regardless of which I chose, 6 or 12 volt. The advantage of the 12-volt system would be that I could recharge my cell phone and operate a portable GPS system while on a tour. I would also be able to replace a failed alternator on a tour by going to most any auto parts store. It would be difficult to obtain a 6-volt positive ground alternator while on a tour.

## An alternative:

My Victoria already has a 6-volt positive ground electrical system and because I did not want to go to the expense of converting it, I found an alternative solution. Bratton sells a device called an inverter that will provide a low power 12-volt negative ground voltage from a 6-volt positive ground system that is capable of operating a cell phone, and a GPS. Bratton actually stocks two types. One has a 1.2 amp output that will support a cell phone or GPS (\$70); the other has a 2.5 amp output that will support a radio or tape player (\$100). I selected the 2.5 amp unit. The inverter is very small, just one and three quarter inches square. It uses a common ground for both input and output. The unit is grounded to the chassis and there is one lead for a negative 6-volt input, and one lead for a positive 12-volt output.

## The installation:

A power outlet of the “cigarette lighter” type was obtained from an auto supply store. The inverter and the power outlet were attached to a homemade bracket that fits up under the dash rail on the passenger side of the car. It mounts to two existing bolts five inches apart. An off-on switch controls the inverter and a power on lamp was included to indicate power on. Both the inverter and the power outlet are pretty much out of sight. I now have the ability to power my GPS and recharge my cell phone while rolling down the road in my 6-volt positive ground Vic.



The complete assembly is shown above. The inverter is the square looking device in the center. The power outlet is to the right. The power outlet points straight down when installed under the dash rail. A single wire runs from the terminal strip to the negative 6-volt battery voltage. The power switch and the indicator lamp are to the left. The entire assembly is grounded by virtue of mounting it under the dash rail.



Shown above is the entire assembly installed under the dash rail on the right side of the car and ready for use. ☺