

# The Volt Vette Project

## Chapter 6

### The Electric Motor Is Here, Or should it be there?

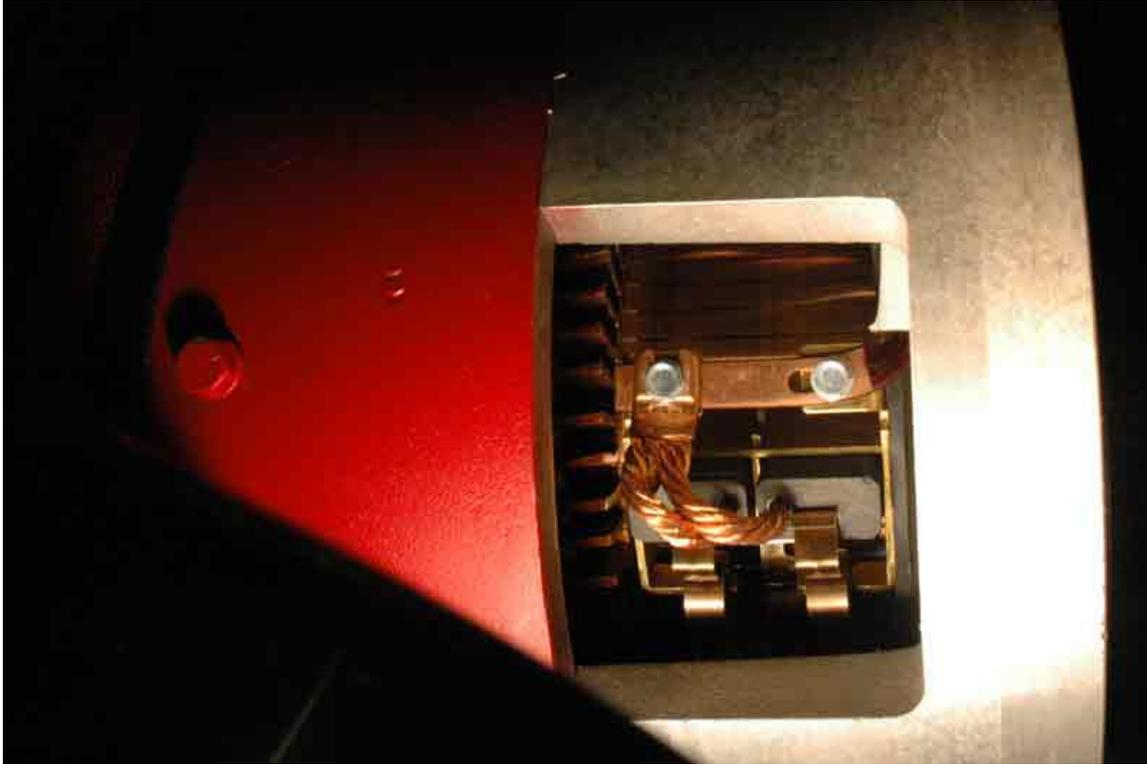
Sept. 27, 2007 is a big day for the project. I go to the monthly meeting of the Minnesota chapter of the Electric Auto Association. Lee Hart is there to give an informative talk on batteries, and deliver my electric motor!

After the meeting, four of us muscle the 240-pound motor from Lee's minivan to mine. Everyone gathers around to take a look.



V8 Engine and transmission next to electric TranswarP motor

So let's take a closer look. It's called the TransWarP 11, designed (by people who really like Star Trek movies) and marketed by NetGain Technologies. It is made in Chicago by Warfield Electric. The TranswarP has a double ended armature shaft; one end to propel the car, the other to run an alternator, air conditioner, or what have you. It's 11.45 inches in diameter and about 24 inches long.



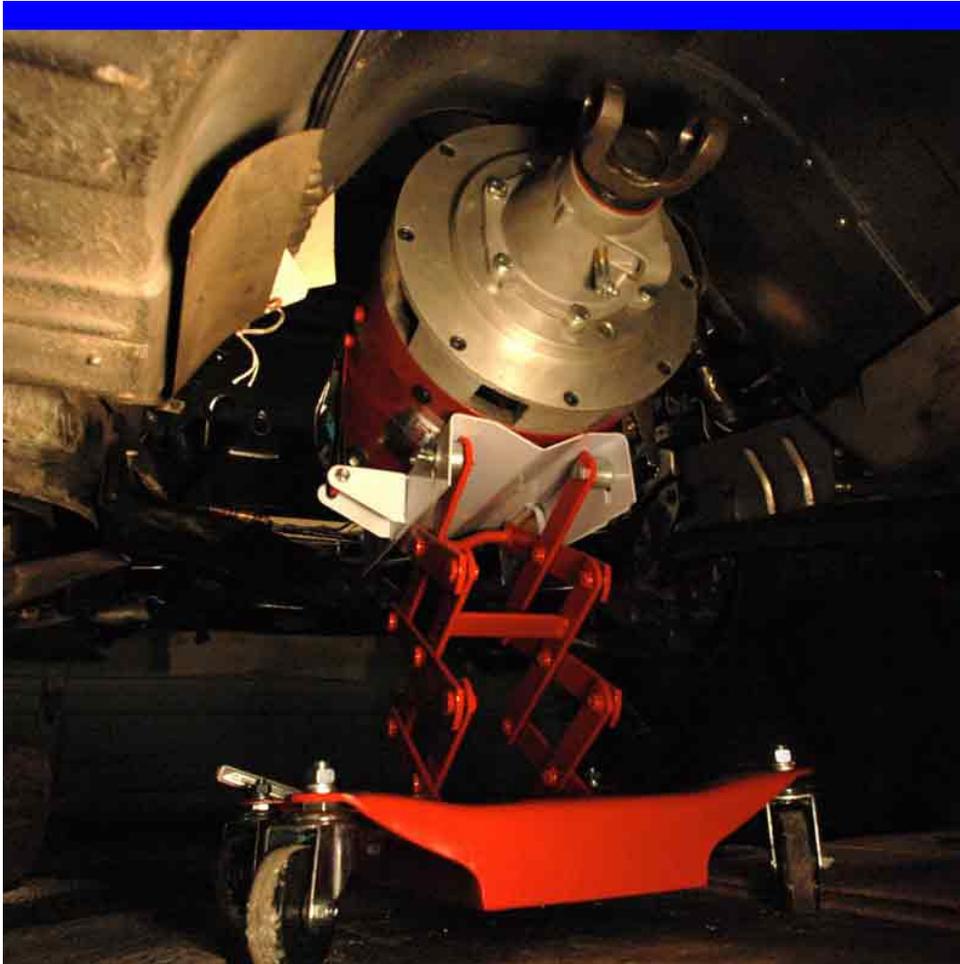
The motor has double wide bearings and wear indicators to warn you when it's time to replace the brushes; about every 80,000 miles! Unlike the WarP 11 motor, the TransWarP is fitted with a tail shaft housing from a Chevy Turbo 400 transmission, allowing it to connect directly to a car's driveshaft.

It was suggested that I put the motor on a wooden dolly, so we could move the 240 pound beast into mounting position. At the hardware store, I looked at what they had, and began to think. After about 30 minutes, my brain got up to speed. The electric motor had to be placed at just the right spot, so it could be

**mounted firmly to the frame of the car, and line up and mate perfectly with the drive shaft.**

**The dolly could move in any direction, side to side or back and forth, but not up and down.**

**Looking around I spotted a transmission hoist sitting on the floor. This was the answer! It rolled easily in any direction and could hold and lift heavy motors with the precision needed.**



**The guys thought the trans hoist was a winner and would save a lot of time. I strapped the motor to the transmission hoist and rolled it under the Vette. We centered the motor and moved it up into the vacant transmission hump.**

**The TransWarP was completely swallowed up. Most of the guys thought this was good, since that would leave the engine compartment completely free for batteries and lots of other good**

**stuff. But, I wasn't happy. When we show the car to the public, I think the public should be able to see the electric motor. It is, after all, the heart of the Volt Vette.**



**Also, by moving the motor forward, we can bring the WarP closer to the original engine mounts and all that steel that recently held up a big V-8.**

**It's something to think about. But for now we will tackle the most dangerous part of this project, removing the gasoline tank.**