

The Volt Vette Project

Chapter 23

Electric Power Steering

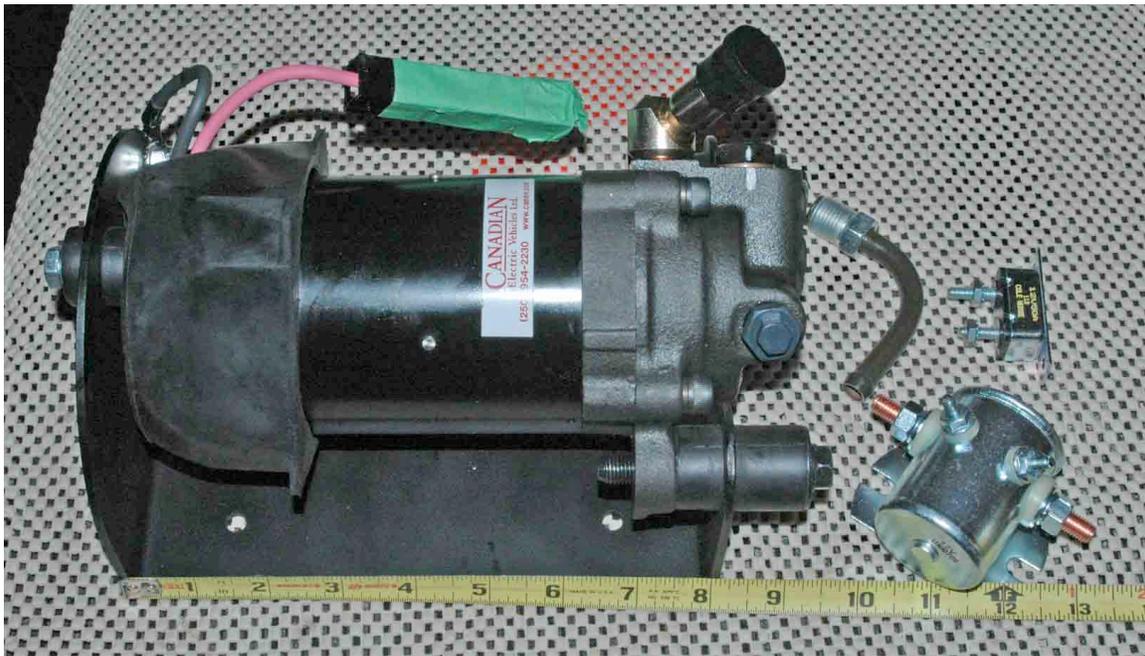
I throw in the towel.

Two months of trying to come up with a cheap but brilliant way to maintain power steering, and I come up empty.

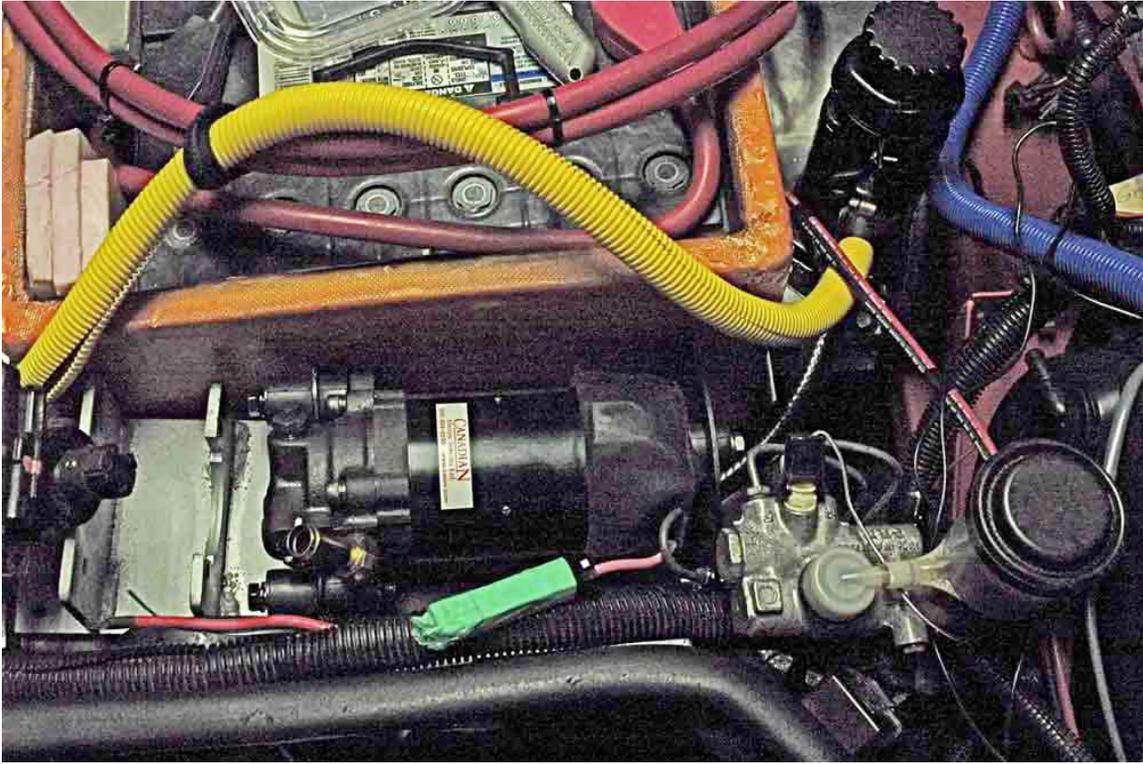
Tim tells me that an electric car parts company in Canada sells a power steering unit that might work.

I call Canada. They are certain their unit is powerful enough for a 3400 lb. Corvette.

I buy.



Seven hundred dollars later the unit is in my hands... but no instructions. Get on the phone to Canada EV. They tell me no one has ever asked for instructions on how to install their power steering before. I explain that I am really, really stupid and really need directions.



The unit fits perfectly in the spot where I had planned to bolt it.

A wiring diagram is sent my way. I study it very carefully. And a darn good thing! In the upper left of the drawing is a small note that says that the power steering must be mounted vertically! Do you see any vertical space in the above photo? I didn't think so. Another call to Canada.

I'm told that \$700 does not entitle me to a sealed motor. If the unit is mounted horizontally, the power steering fluid will flow into the electric motor and destroy it! My head hurts. Must think. I think I'm in a pickle. Finally, I decide on Plan "O", as in ouch!

I will have to put the pump where the steering fluid tank is. There is just enough room to make it work.



The steering fluid tank is removed and the middle battery box is tilted out of the way. This gives me just enough room to bring in a hand drill. I drill and countersink-mounting holes in one of the battery box supports. Next, I make a bracket to bolt on to the bracket that holds the power steering unit.



I mount all this vertically to the battery box support.

Next, I mount, what I believe are technically known as “electrical do-dads”.



The little guy in the photo above is a momentary switch. Basically a circuit breaker that resets itself. And the larger do-dad is a relay. Dave T. helped me wire it up and



Matt put in the new stainless steel high-pressure hose.

I bolted the steering fluid reservoir on to the old steering pump bracket and filled it up. After working the air out of the system, Dave and I went for a test drive. It was 9:30pm as we took a spin around Twin Lake.



The new pump worked perfectly. The feel of the steering wheel was just what I wanted! The wheel turned easy and smooth with one hand, but still gave me a feel for the road. With the moon shining bright, Dave and I were all smiles.

The Volt Vette is finally fun to drive!