

The Volt Vette Project

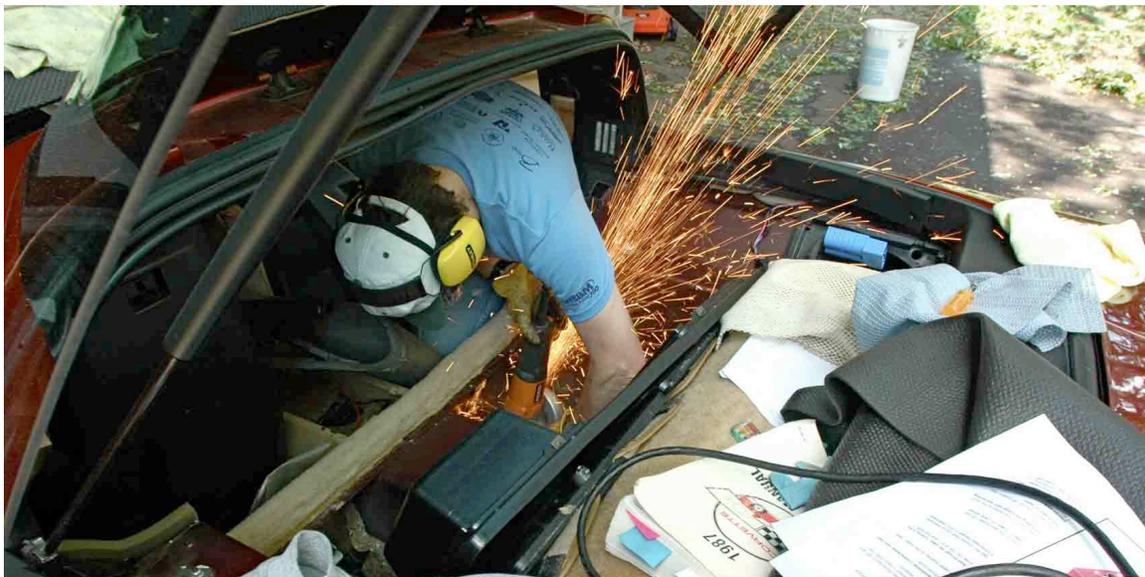
Chapter 28

The Battery Charging System

I have been saving my nickels and dimes, for some time now, to buy a state-of-the-art charging system. Charging up the 14 batteries one by one gets really old, really fast.

Some months ago, Lee called up Russ, who makes the Russco brand charger, and put in an order for an upgraded charger. Once I knew what its dimensions would be, I could start looking for place to put it. The cargo hold behind the passenger seat looked possible.

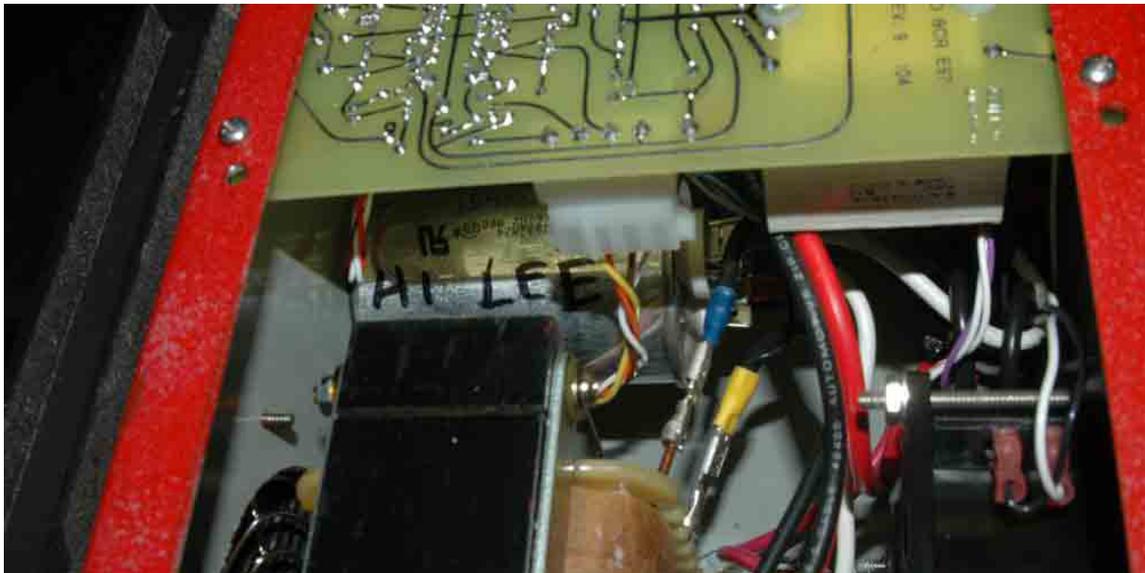
It would be a snug fit, but doable.



First, I had to cut away the large bolt that was used to mount the car jack. This gave me the maximum usable space.



Some months later, the 144 volt charger arrived and I was happy to see it fit the spot.



Lee took it apart (note the indication that Russ knew he was going to) and coated the circuit boards with a special clear plastic. I was told that this would help make the charger more resistant to pot-hole induced vibration.

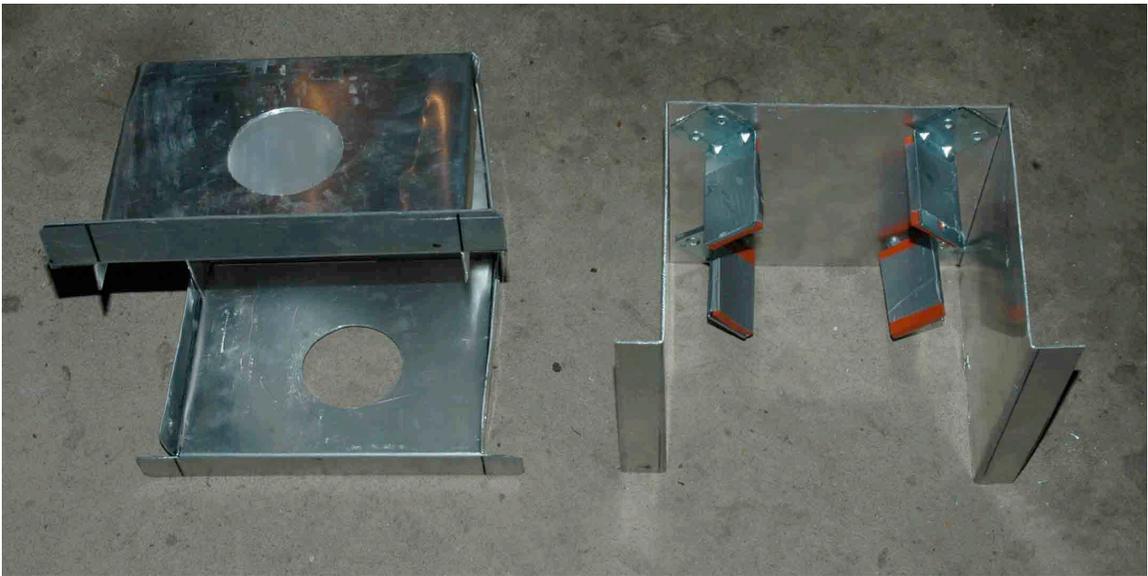


Photo shows transformer at bottom of cargo hold.

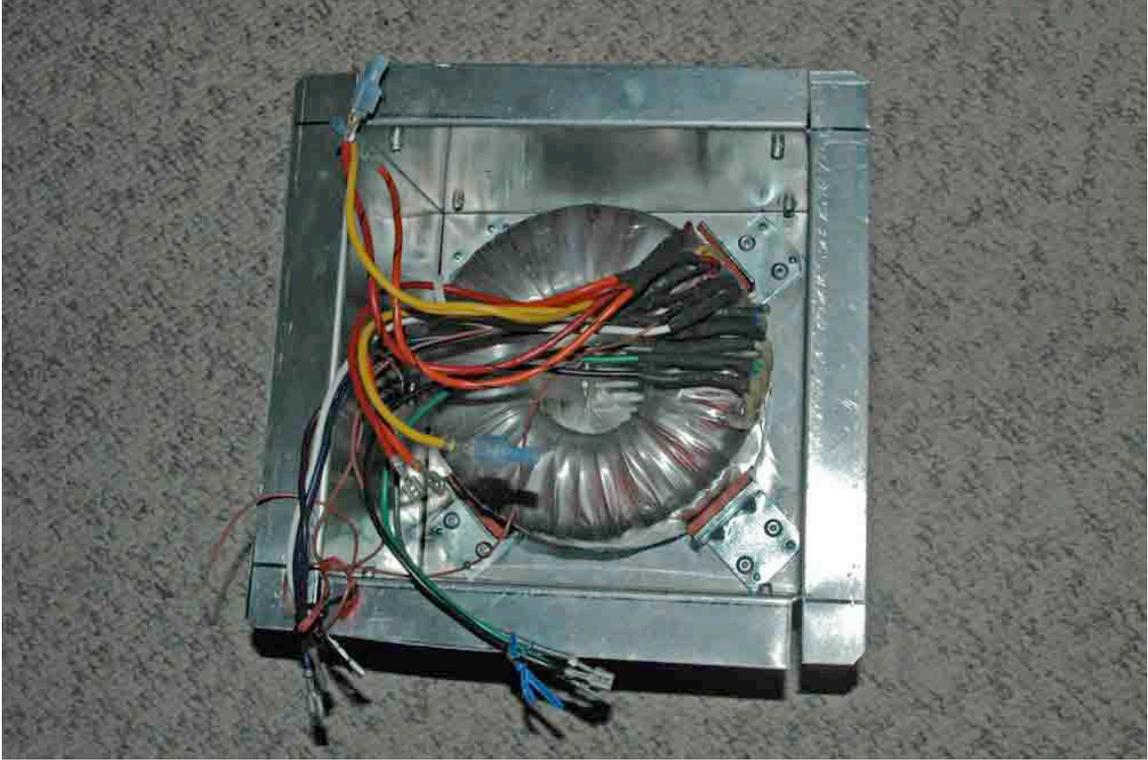
To get 156 volts from a 144 volt charger, we needed a boost transformer to increase the voltage, and a box to mount it in.



Eric, who has a metal shop in his garage, helped me make a box for the transformer.



I hoped to mount the charger to the top of this box, so I designed it with a large lip.



This large transformer is heavy, so I used “L” brackets and rubber pads to keep it from shifting around.

Lee added a cooling fan and a on-off switch, then wired the charger to the transformer. I then used 10 gauge copper wire to bring the electricity to the electronics box in the nose of the car.



I lowered the heavy boost transformer and charger into the cargo hold, and everything fit.



Lee had to modify the box, to allow the cargo hatch to close, but everything finally fit in place. The cargo area was still useable. We even have room for a two by four foot solar panel some day. It might be used to power a cooling fan on hot summer days.

That project will have to wait a bit. Right now I need to think about winter!