

Electric Yacht



# X Yacht 1-Ton Conversion

New life to a US Yacht 1-Ton racer  
s/v Chilly Bear



It has been a fun project. Once the old saildrive bit the dust, I made the decision for convert to electric so sourced a good electric saildrive from Sillette Sonic. While the bolt pattern was slightly different, I fabricated an aluminum plate to allow the new electric saildrive to use the existing saildrive foundation.

I had the electric saildrive shipped directly to Electric Yacht and Scott did a great job in assembling a bracket to match the electric saildrive with the Electric Yacht motor. It was \$300 well spent, heavy duty, and it greatly simplified the installation.

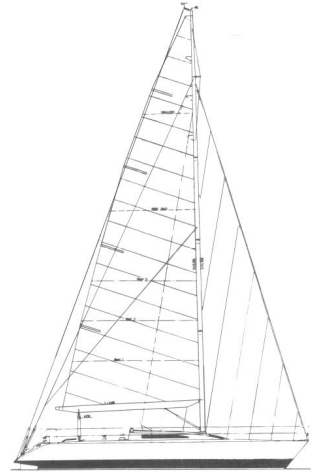
Since the sailboat was on the hard, I decided to do an overhaul on the hull which had accumulated a few dings along the way as all well used boats do! My sons and I did the bottom paint and then fixed the many imperfections. After that a 2 part epoxy primer, and a 2 part finish coat (Perfection). Never one to take the easy way, I decided on Royal Blue, instead of 'safe' white. If I wanted safe, I wouldn't have bought a sailboat! I love the colour (sorry...Canadian spelling!).

Once the hull was done, the boat's maiden voyage took place as we sailed in March from Washington State to BC Canada, its new home port. The Electric Yacht system worked flawlessly. Whenever the wind died, we popped the throttle up to about 30 amps for 10 or 15 minutes until the wind picked up. Going at 3-4 knots allowed for lots of mileage if needed. We arrived in Vancouver in about 9 hours with the batteries at about 50%. Reading the % DOD for lead acid batteries is a tad tricky, but EY was helpful in explaining the reading.



My goal was always to have Lithium batteries when the price drops, but for now I am happy with the lead acid performance. I had also provisioned a small 2000 W Inverter Generator (gas powered) and tested it for about an hour as a range extender. It allowed us to maintain 3-4 knots by itself. A good test.

Once in home port, I cleaned up the interior and added a Genasum charger to allow my solar panels to also become part of the charging system if I'm ever off the grid. I have 4 - 40W panels and with the Genasum, I can apparently charge the 48v system. It will be very cool if it works! Stay tuned.



Regards  
Gerard