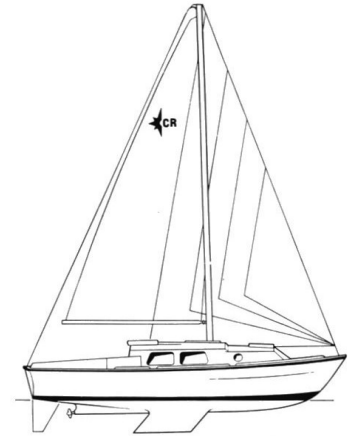




Converting Westerly 26

Hull Type: Twin Keel
Rig Type: Masthead Sloop
LOA: 26.00' / 7.92m
LWL: 21.33' / 6.50m
Beam: 8.42' / 2.57m
Displacement: 6700 lbs./ 3039 kgs.
Ballast: 2800 lbs. / 1270 kgs.



- The installation was simple, and Mike and company from Electric Yacht have been great to work with.
- I installed my Electric Yacht on the existing motor mounts. I did have to drill some new holes on one side, but putting the motor in and adjusting it to the prop shaft took an afternoon.
- For a 26' sailboat, most of my time was spent figuring out where to put the batteries and the battery charger. I'm using four large Lifeline AGM 4D's (220A each). I built a ramp from my pickup to the deck, and used a wench to slid them up into the cockpit.
- Once on deck, there is access to the engine compartment from the cockpit. I built a platform from marine grade plywood and teak to receive the batteries, and buckled the batteries down with straps.
- For the marine plywood I laminated together 2 x 3/4" pieces using epoxy to form a rugged surface for the batteries to sit on. 1 1/2 inches is probably overkill, but it works great. I used teak to anchor the frame to the frame of the boat with lag bolts.
- Everything was painted with bilge paint, 2 coats, before placing the batteries into position.
- I can fit three batteries this size in my engine compartment. The fourth battery went into a port side storage compartment under the quarter berth.
- The wiring was simple. I made my own battery cables, so everything is right sized to fit.
- I also decided to use a voltage converter to step down 48v to 12v so I can run lights, instruments, and other equipment on board. This little 300watt converter works great. With a small boat, I am not trying to run a lot, no windlass or macerator pump, but there is more than enough to add things in the future. I've heard that some folks also add a separate house battery to service these things.
- In all, the weight difference between this setup and the old diesel is about 50 pounds, not enough to change the waterline, which was the goal.
- Mounting the thruster and the display was easy. Treat them like any other thru-hole situation. My only mistake was putting the display too low in the cockpit. I could have picked a visually more convenient spot, but I was trying hard to keep things out of the way as we move around.
- Yes, we have the older display, but I really like the "how much running time is left" feature, as well as the #rpms. For any number of RPM's it tells you just how much running time is left. This is great when you're under way, and there's a storm coming and you want to know if you can punch it a little and out run it.
- The Electric Yacht is very responsive. It's instant on and full torque all the time. It also has the sensitivity to move slowly in and out of the marina or around other boats. There's been plenty of power for us.
- We love the quiet! On days when we must to motor sail it is not a bother. Coming into the dock, we can also converse with folks on land. It has become quite the hit with our slip mates in the marina, as the try and hear us as we pass by. If they aren't watching for us, they miss us.
- In the Pamlico Sound at Oriental, there's not a lot of tide, but there's always current. On days with a North wind there's also chop as it beats against the river current. The Electric yacht motor cuts through this just fine.

- What's the furthest I have motored? To date it was about 15nm, and there was plenty of juice left in the batteries to have gone further. That day, for most of the day, we had gotten pounded by wave and storms while trying to sail. We were drenched and getting tired. We decided we just wanted to get home, so we did. Being able to see from the display was really helpful.
- How far can we go on a single charge in our area under our "normal" conditions? Don't know yet, but probably somewhere in the 20's.
- Three knots is my average motoring speed. If there's current, I bump that up. The difference is somewhere between 1200rpms versus 1500rpms. I can cruise a full day at these speeds, but prefer to sail when I can.
- For longer passages, I decided to purchase a 2000w portable generator. These are also quiet, and I've run mine on occasion when underway. So yes, you can charge as you're motoring. Rain is the only issue, and I still need to create some type of cover to protect it.
- Right now, the generator just sits in the aft cockpit area, and is lashed to a stanchion poll; the fumes drift off the back. Make sure you have a spark arrestor on your muffler.
- But let's not forget the regeneration system on the Electric yacht. When I'm sailing and getting anywhere upwards of 3.5-4knots, with the thruster in neutral and the key on, I'm charging the batteries.
- Many times I have left the slip, motored through our rather long channel to get to open water, thrown up the sails, and in 3-4 hours have recharged the batteries. This happens even while running instruments onboard.
- I did switch my lighting to LED, and most of the time I use a handheld GPS, or my iPad for navigation.
- I'm still trying to figure out the windgen or solar panel angle. Yes, I am confident I can install either on the boat. For me, space is the main issue, so figuring out the best way to mount them without losing space onboard is the trick.
- After a day of motoring, my onboard charger takes most of the night to recharge the batteries. This can be anywhere from 8-12 hours for my smart charger. The Electric Yacht display will say 100% long before the charger cuts off. In the beginning this confused me until I realized that the charger charges on a curve. That is, at the end of the cycle it slows way down for the last little bit, which is what you want to preserve battery life.
- My portable generator will run for about eight hours on 0.90gal, which is the size of the tank. So for about one gallon of gas, I can recharge the batteries when on the hook. I set it up and turn it on just before we go to bed, and just let it run overnight until it runs out of gas. I close the hatch boards, and it is quiet enough in the v-berth to sleep. In the morning there has always been enough charge for us to get to the next anchorage, or have a fun day sailing.
- For the difference in price between the generator and the price of a windgen, I can buy a lot of gas. Some will want to be a purest about this, go straight to the renewable energy methods, and that's fine. But having a generator on board gives us the option of using a portable A/C unit to sleep by on the hot summer nights. The comfort of a good night's sleep can be worth the generator's weight in gold. Along with the economical piece of mind to recharge, it was appealing to us. [we probably can't recharge and run A/C at the same time with this generator. It just means the recharging just starts sooner, or finishes up in the morning before pulling up anchor. They also make onboard generators for my size boat, but for the price of one of these I could have a windgen and solar panels. It's all about tradeoffs.

So what's next for us? Some longer distances for one thing. A day's sail for us is 20-40 miles. From Oriental to Ocracoke, or Oriental to Cape Lookout is just beyond this, maybe 55 miles, and are two places we hope to sail out to next year. [We don't do much sailing in winter.] For us, the limitations are more with ourselves, being relatively new to sailing. Right now, the boat can handle a lot more than us, and the Electric Yacht can handle a lot more too. We're still learning the limits, but so far this setup has allowed us to get where ever we've wanted to go with confidence.

Mike & Lynda