Windlass Installation on Legend 37.5

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After researching the windlass issue, I chose the Five Oceans 2008RC-C-Series 1012 Anchor windlass (www.five-oceans.cm) and purchased it through Ebay ($800). In retrospect I wished I had chosen the windlass with a drum for going up the mast with less effort as my wife is not an Amazon.

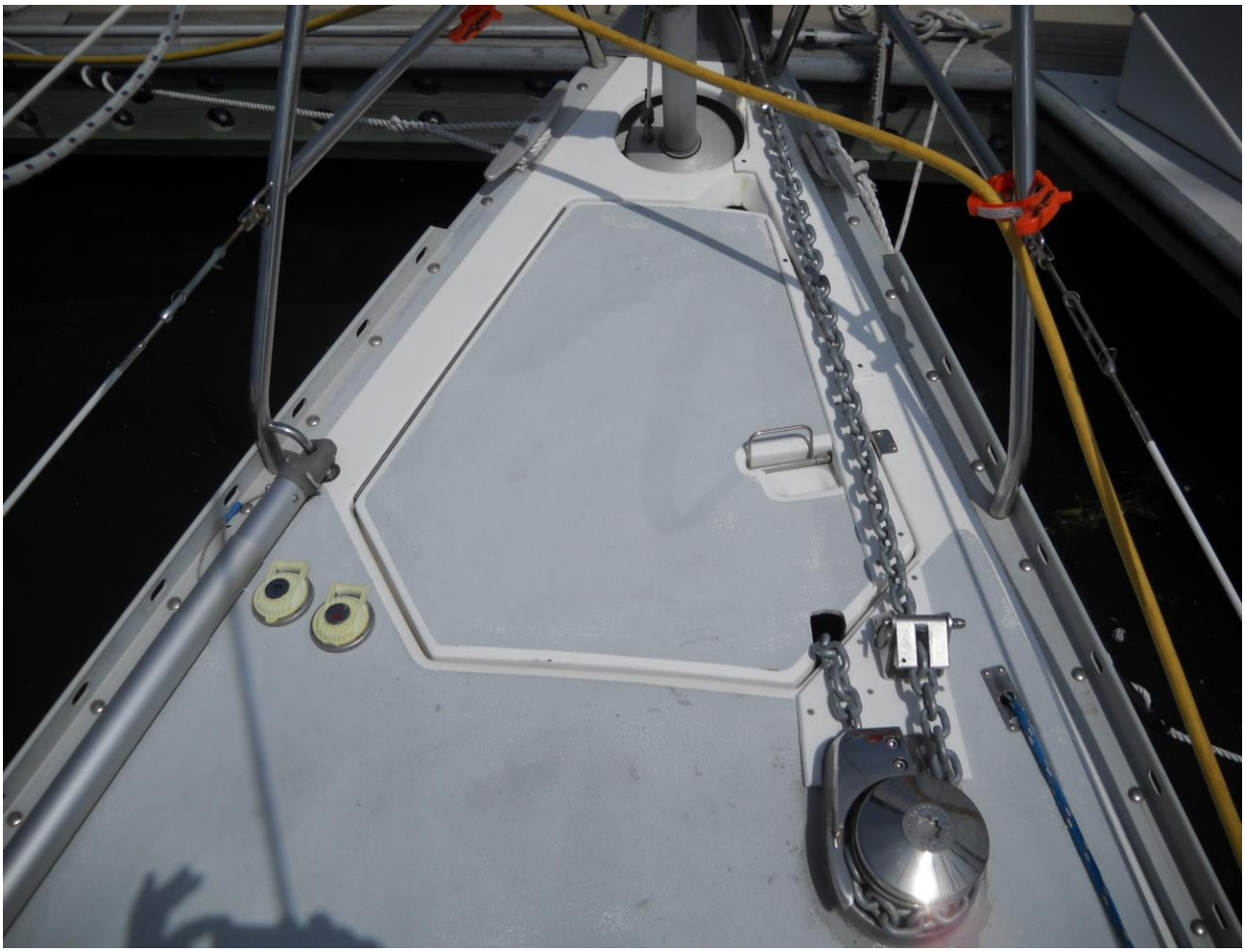
The existing anchor locker on the 37.5 is somewhat shallow and putting in a Horizontal windlass or even a vertical with a downward chain pipe would mean reconfiguring the locker so that the windlass could sit in or on the locker hatch. In this view you can see that the unit is not centered on the deck. This is because the anchor roller on the 37.5 feeds in at an angle and not directly in from the bow. By mounting the windlass a little off of center the feed to the bow roller is more of a straight line. It still requires clearing the line after the chain is all in, (In testing, the weight of the chain allows the chain to feed into the locker without assistance) as it comes in. I researched and pondered for over a year and a half before I actually cut holes and installed the windlass. In my research and input from those who have tackled this on the 37.5 and 35.5, I thought there was a better way to put this puppy in. What I ended up doing is using 2/0 welding cable as it is much cheaper than Anchor marine grade cable and can certainly handle the amps with virtually no voltage drop. After install the voltage at the solenoid is the same as at the battery. I did not like the idea of putting a battery in the forward compartment or mounting the solenoid in the hanging locker. I did not want to make the cable run go up and down the settee's as this adds length and potential voltage drop. However, I complement those who gave me input, especially Alex Lopez' installation on a 35.5, and applaud their installations as their installs work for them and gave me the mousetrap to improve upon for my installation. The HOW is a great group of sailors as all the different owner groups are. I would not have come to the method I used without them or their inputs. My basic requisites for installation were to minimize holes penetrating the deck, provide ease of access after installation, minimize cable run, use existing battery location, cut as few holes in bulkheads and such as possible. I feel I accomplished those requisites without compromise. I ended up with one hole in the deck for the windlass shaft and 4 holes for mounting bolts, one access hole in the shower, and two drill holes from the anchor locker through the V-berth bulkhead easily sealed with marine grade RTV.

Windlass detail looking aft

I had a machine shop cut an opening in my windlass so the chain would feed 180 degrees and into the locker so I did not need to modify or cut any holes for a chain pipe to the anchor locker.

The template provided by the mfg. worked well. I used a drill bit for the windlass base bolts and a hole saw for the shaft hole.

Deck view from aft looking forward

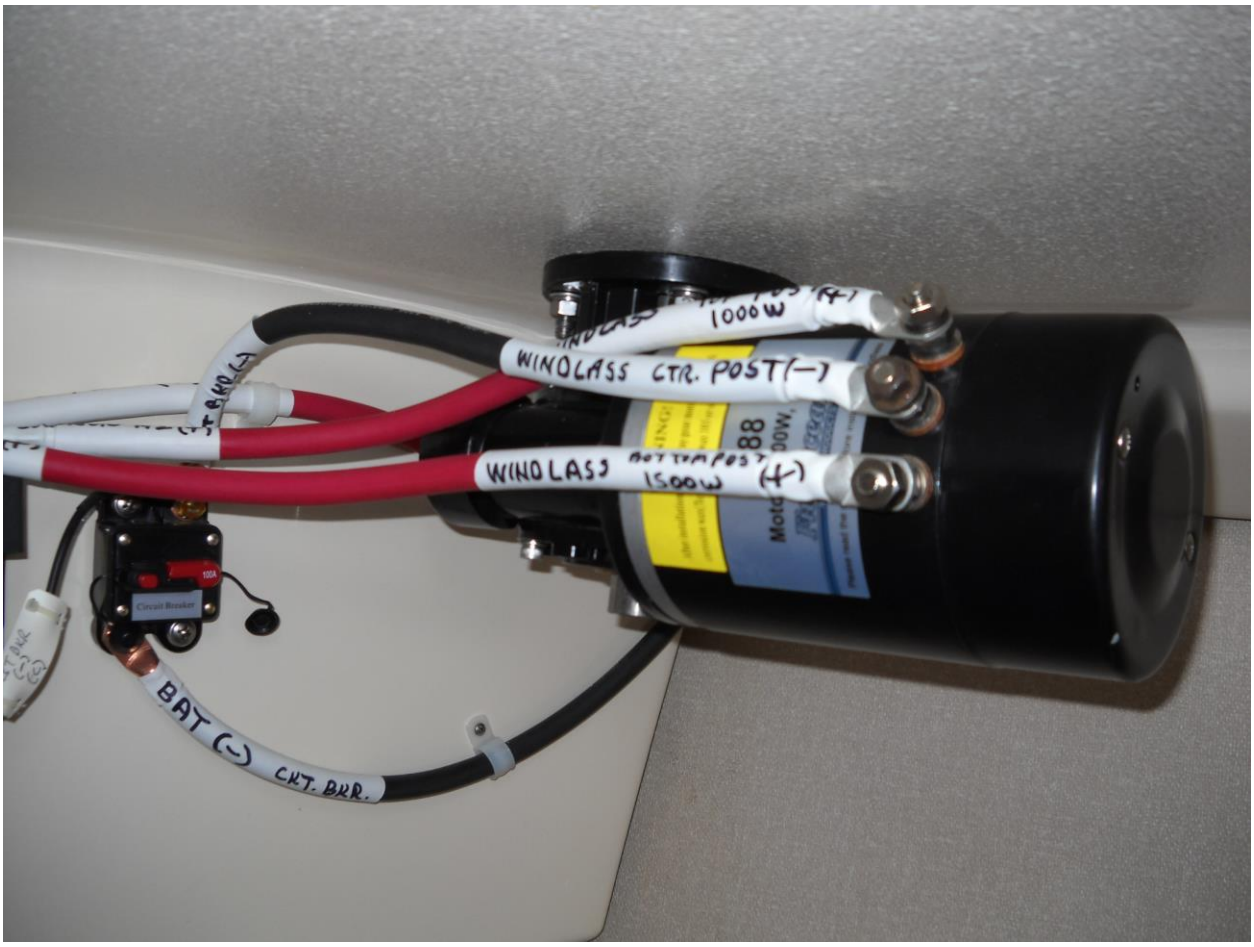


In this view you can see that I positioned the foot switches to the port side of the ***locker just aft of the lid but still over the locker itself. When drilling the foot switch holes I positioned them so that I wood only drill into the anchor locker and not the people tank. When measuring and cutting the holes for the windlass as well as the foot switches it is important to allow for working room in the anchor locker (for switches) and V berth(windlass). My switches do not penetrate the people tank. All connections for the floor switches and toggle switch are in the anchor locker or V-berth. I also used starboard to protect the deck from the anchor chain and provide a bearing like surface. I made cardboard templates for the starboard pieces.***

Up/down switch in anchor locker

Make sure to measure both above and below decks before determining the best place to cut or drill holes. When drilling the foot switch holes I positioned them so that I wood only drill into the anchor locker and not the people tank. After drilling the mounting bolt holes and cutting out the shaft hole. I was pleased to discover that Hunter used two layers of plywood as core in the area where I drilled the bolt and shaft holes and that it was dry. There was a 3/8" gap between the deck and headliner. I used four small pieces of 3/8" plywood between the four mounting bolts to make up the gap, provide a solid footing for the windlass, and not crush the deck and headliner. I epoxied the edges of the plywood and the four backing pieces of plywood to seal them.

Close up of V-berth of motor



In this view you can see how I ran the primary power wires (2/0 welding cables). I ran the cables in the headliner down the starboard side using a fish-tape. I drilled holes and used tie wraps to secure cables to headliner. Be sure to pull wiring already in headliner away from spot when you are drilling holes for tie wraps. I have a hydraulic crimper which made crimping lugs on the cable real easy and very secure.

V-Berth Tie Wrap secure cable

Toward the port and starboard sides of the boat in the V-berth the space between the headliner and the deck diminishes to a very thin space. I chose to drill straight through anchor locker and V-Berth bulkhead headliner to pass foot and toggle switch wires to the V-Berth. I used marine RTV to seal holes on both sides after passing wires through to V-Berth.

There is a small access plate under the chain locker on the starboard side that will allow you to reach up into the cavity between the chain locker and the headliner and over the headliner and grab the cables pulling them aft.

Windlass motor, solenoid, CKT Breaker, and wires coming from foot and toggle switches

Solenoid wiring detail

I labelled all wires with white heat shrink for easy identification. I have spare 5 amp fused ready in case of need. 5 amp fuse is for toggle and foot switches.

Starboard speaker used for first pull

I removed my starboard saloon speaker for the first cable pull using fish-tape.

Shower stall access hole

Access hole drilled in the shower stall for second pull with fish-tape from speaker hole. This access hole now allows me easy access to the shower head valves and easier access to all things behind the shower stall. The cable actually runs over top of NAV panel cavity to first pull at salon speaker. It took a few try's to get the fish tape to salon speaker as it kept sticking in wiring that was already run. A helper really helps with all wire pulls.

Aft starboard light

After removing the aft cabin light cover in the aft starboard corner of the cabin above the shelf, you can pull the cable further aft with a fish-tape (my third pull with fish-tape). The cables come into the aft cabin in the headliner above the starboard side locker and shelves. From there you can feed them into the battery locker. To pull the cables into the battery locker you need to unscrew the mounting bolts to the battery switch panel and pull out of the way to gain access to the cables feed from the aft stateroom. You shouldn't need to disconnect cables from batteries at battery switch as there should be enough cable to allow you to do this.

Picture of isolation switch in battery compartment

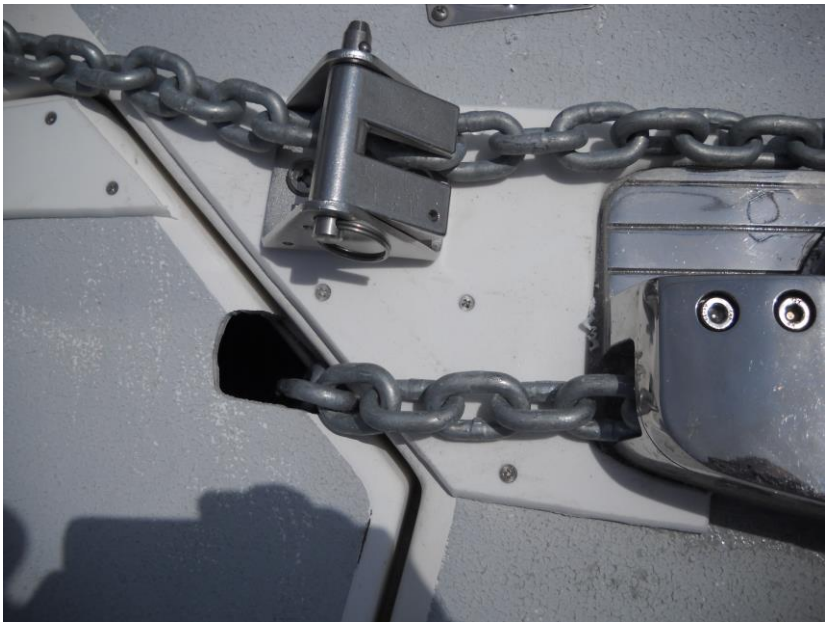
I installed a dedicated battery type switch for the windlass in the battery locker.

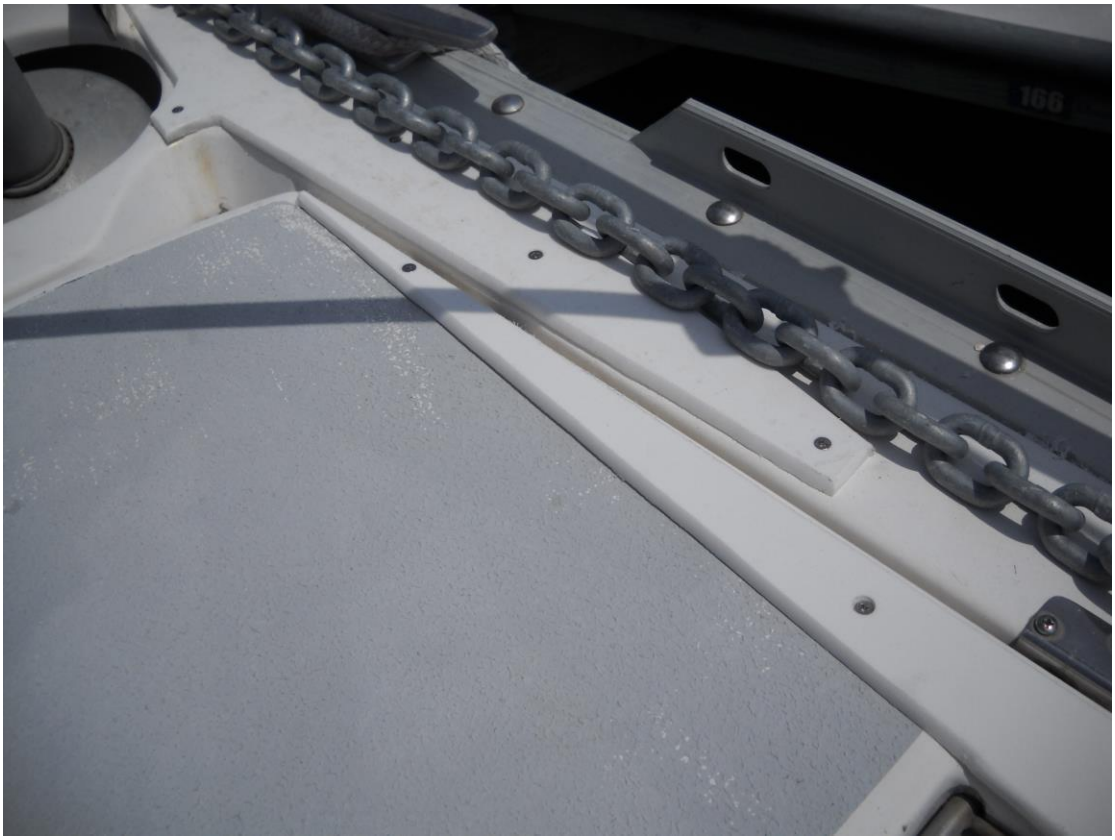
Cover for windlass motor and wiring

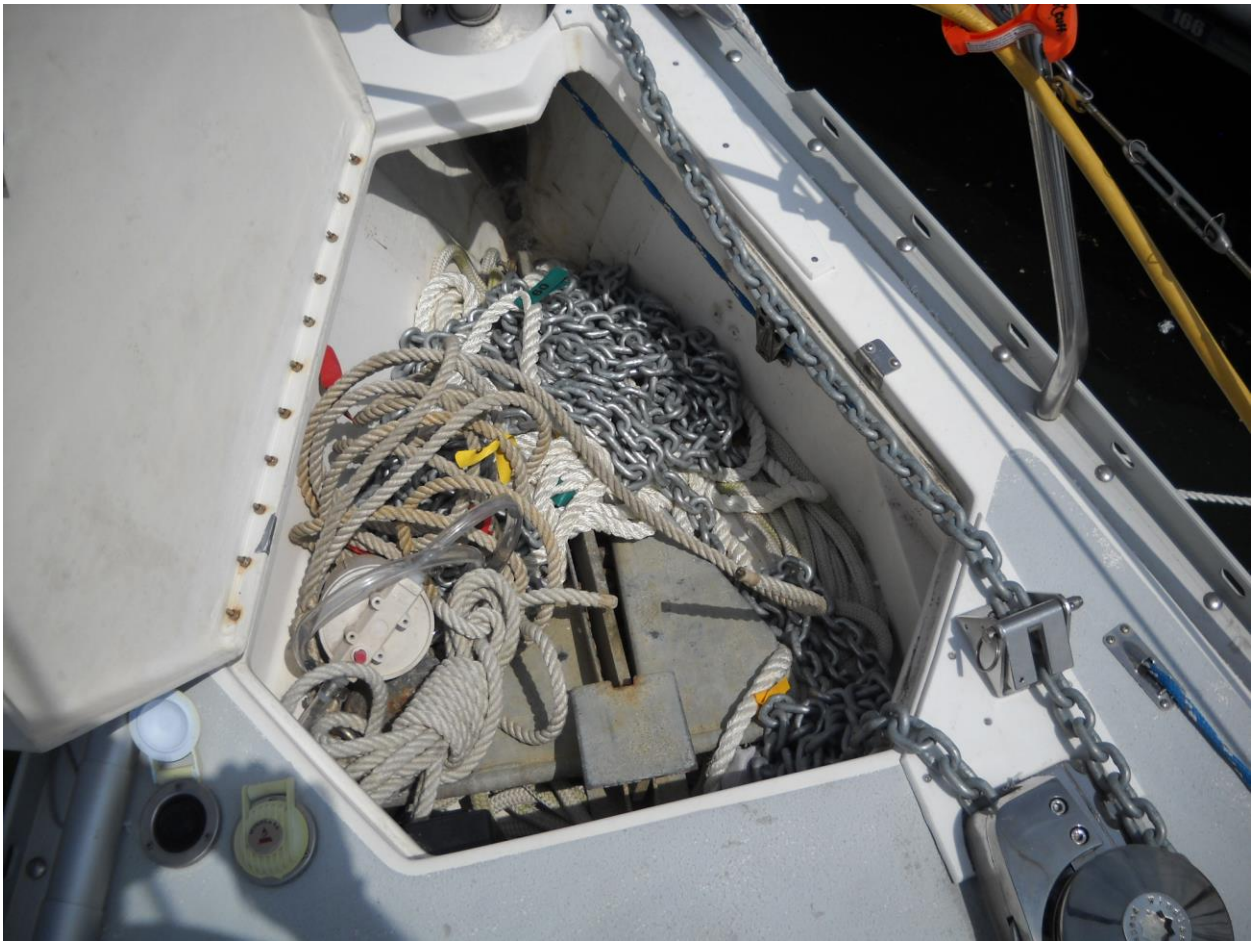
I used luan paneling from Lowes and scrap teakwood I have from building the Schooner VIRGINA to make the cover for the windlass motor and wiring in the V-Berth.


5 AMP.
ATO
WINDLASS CTR. POSITIVE
WINDLASS
BAT
CKT. BKR.

Topside details







If you have any specific questions, Email me at squatty11@verizon.net