Catalina 28 Windlass Installation

The biggest problem with installing a windlass on the Cat 28 is that the anchor locker is very shallow, limiting the useable space below the deck for rode retrieval/ stowage. I would have preferred using the Lewmar V700 or similar to minimize the above deck protrusion but the vertical placement of the motor would not allow the required amount of vertical drop.

After much research (many thanks to bonniesusan2 for her info and pics), I decided to use a Lewmar 700 surface mount windlass for optimum use of the available space. The windlass must be mounted as far forward as possible for maximum vertical drop (locker is deepest forward). The result is that a shorter anchor was required to fit in the space between the windlass and bow roller. A Rocna type fits best- I used a Manson Supreme with ¼" chain and ½" 8 plait rode.

The original locker door can be used but the molded chain tunnel must be removed since the chain will feed over the top of the door. I cut the door into two sections as far forward as possible for maximum rear access to the locker. After cutting the chain tunnel off flush with the top of the door, I cut a piece of stainless sheet to cover the resultant hole.

Original Door

Stainless Cover Plate

I decided to use cutting board material to mount the windlass to the hull since it is inexpensive, strong, somewhat flexible and much lighter /easier to work with than stainless/aluminum plate.

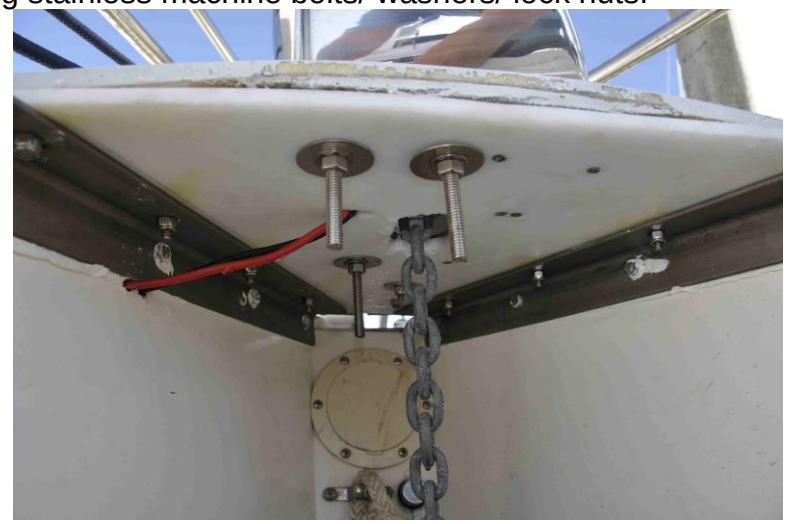
The original plan was to use 1" cutting board material as mounting rails but once cut, I instead opted for 1 ½" stainless angle iron for increased strength.

Cutting Board Plate and Original Rails

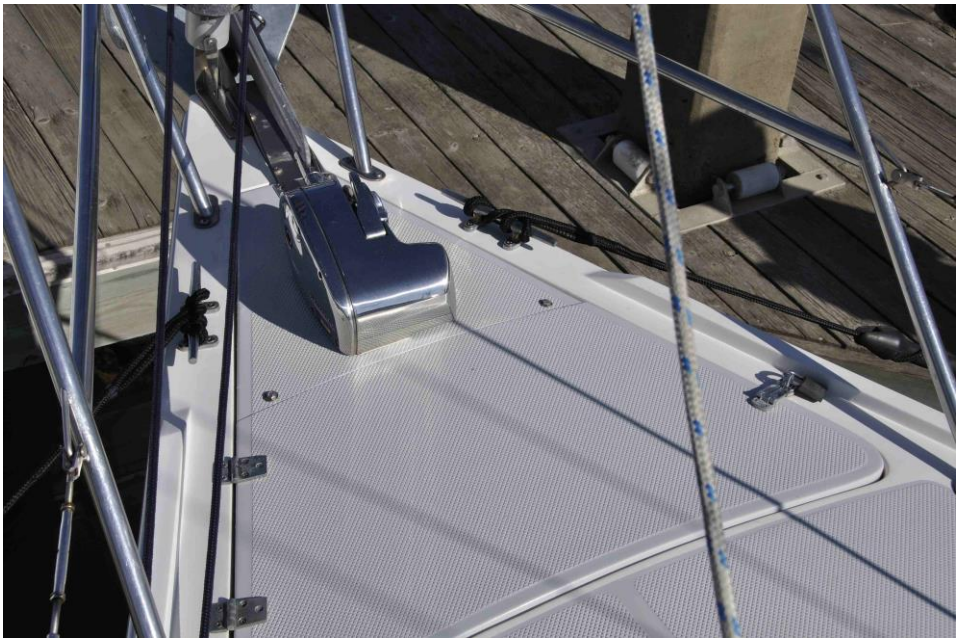
I laminated several layers of fiberglass matt to the bottom side of the forward door In order to provide additional strength and provide a flat surface for the cutting board to mate to. I also formed a slight ridge at the aft edge during this process to help support the forward edge of the aft door.

Once all the parts were completed I trial fitted it all together and marked the position of the mounting rails in the anchor locker.

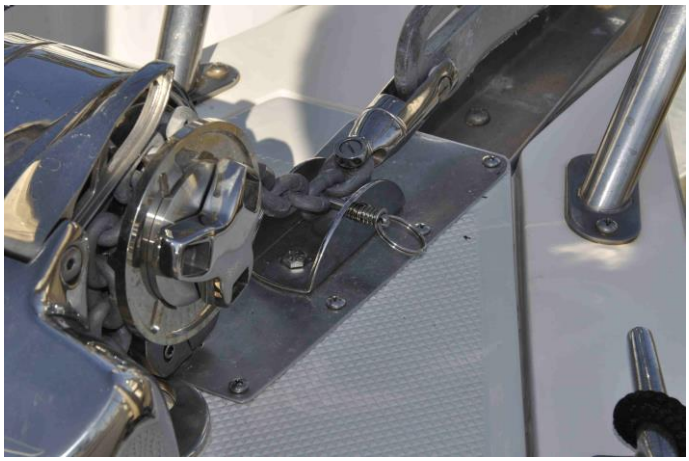
The rails were mounted with 4 lag bolts/ side and 5200 sealant since there is very little locker liner material to secure the lag bolts. The cutting board was then mounted to the rails using stainless machine bolts/ washers/ lock nuts.



The windlass mounting studs were fitted into the predrilled mounting holes and secured on the underside with large ss washers/ lock nuts. The fixed section of the door is held in place by the windlass/ mounting studs, making any external fasteners unnecessary. I did add a couple of small lag bolts to the aft edge to get it flush with the forward edge of the aft door.



After the installation was complete, I through bolted a small chain stopper to the ss plate covering the chain tunnel cutout.



This completed the installation with the exception of the wiring and the whole assembly seems strong. If I later determine that more strength is needed, I will add a metal backing plate or brace to the cutting board. The board is the intentional weak link- if it fails, the structure of the boat shouldn't be damaged.

Wiring

The batteries on my boat are behind the rear berth which required using about 30' each of red/ black 4AWG battery cable run to the forward end of the boat. Routing was through the head storage cabinet and then through the channel at the top of the port shelf (hull/ deck joint) in the main salon and forward cabin. I fished these wires into the space between the hull and anchor locker liner after cutting an access port in the aft part of the anchor locker liner. These wires then run down into the compartment behind the forward access panel. The battery cables are wired directly to the house battery(#1) terminals, positive through the circuit breaker to the control box, negative directly to the control box.

I mounted the control box (relay) to the forward side of this teak panel (forward bulkhead of v- berth) where it is out of sight but easy to get to if needed.

The circuit breaker is mounted on the forward side of the aft teak bulkhead below the shelf in the head. I chose this location since it is unobtrusive, easy to access, near the battery and easy to wire. This is used as a safety switch and left in the off position until the windlass is needed to prevent inadvertent activation.

Finally, I mounted a waterproof plug for a Lewmar corded remote on the forward cabin bulkhead where it is easily accessible from the deck through the forward hatch. Wiring was run forward to the control box using the same routing as for the battery cables. I may add a cordless remote to allow windlass activation from the cockpit.

Overall, this installation was a lot of work but well worth the effort.

Door Open (Added wiring access port visible)

Windlass, new anchor and stopper

Completed Installation