## Windlass Installation for 1989 C36

In 2006 I installed a Lewmar 1000 lb class Pro series windlass in the bow of my boat. This windlass will handle both chain and rope rode, and now sells for around \$750 on line.

I did not have a lot of experience working with fiberglass so wanted to avoid modifying the boats structure if possible. I had experience with metal so I designed a structure that would minimize transfering stresses to the fiberglass structure of the boat, and securely mount the windlass and handle the 1000+ pounds of load it applies.

The windlass is mounted to a 6061 T6 aluminum frame fabricated from  $2 \times 2 \times 10^{12}$  tube and  $2 \times 2 \times 10^{12}$  angle (I bought 3' of each and it was more than enough). The frame fits against the end of the existing anchor roller frame, and all of the windlass load is transferred into the roller frame.

The aft end of the frame is attached to the anchor locker wall with two angle brackets made by cutting off the end of the angle. The loads on this attachment are minimal.

The angle and tube are securely bolted together with 3/8 X 3" SS bolts in 3/8" diameter holes. I used 4 bolts for each connection between the angle and tube.

It took a bit of planning to get the windlass mounted as high against the closed anchor locker lid as possible. One thing that cannot be seen in the photos, is that the angle does not run continuouly under the windlass. It is cut off to allow the chain to fall through under the capstan.

The power wires to the windlass are routed through the bottom of the windlass into the 2"tube, and then through a hole drilled in the back of the anchor locker. The leads on the windlass are long enough to reach into the V-berth area, so the wire connections are in a protected environment.

A pendant to control the winlass is passed out through the starboard opening window. The pendant we use was designed for industrial hoists and has up and down buttons.

We have used this windlass for 5 years, and have never had any problems. There is no flexing of the frame, and we have never had the chain jumping problem on the capstan. The windlass is aligned so the chain leads straight from the bow roller to the capistan.

It would have been nice to have a little more chain drop under the windlass. We have 170 foot of all 5/16 chain rode, and we have to push the pile under the windlass over about 3 times when retrieving the anchor.

Gary Teeter "AnnieG"

1989 C36 Hull 966

**Everett Washington** 





