

Technical Tips

Building and using a Gin Pole

Raising your mast with less effort

By Dale Mack, Crocus, #8244

I've always used myself and one other person to raise the mast. We stand on the cabin top on either side of the mast, grab hold and pivot it up. After watching some C25 sailors use a gin pole, I became curious about adapting it for single-handed raising and lowering of the mast.

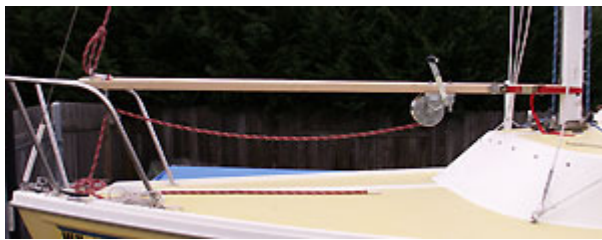
Drawing inspiration from various gin pole methods described on the Internet, this photo essay walks you through the construction details of the rig I built for the February 25th Catalina 22 Fleet 20 Mast Raising and Rigging Workshop.

I built a temporary gudgeon mounted mast support with a roller to fill in for my homemade telescoping mast carrier, built by a previous owner, that was damaged in a wind storm (more on that in a future article). I'll also cover a modification I plan to make to the gin pole now that I've used it several times.

I've been very impressed with how easy it is to raise and lower the mast by myself using the gear. While it takes longer to setup than just grabbing the mast and swinging it up, it makes the whole process a lot less stressful particularly if something hangs up and you need to go and clear it.



The gin pole is constructed from materials you can get from Home Depot and Walmart. It includes:

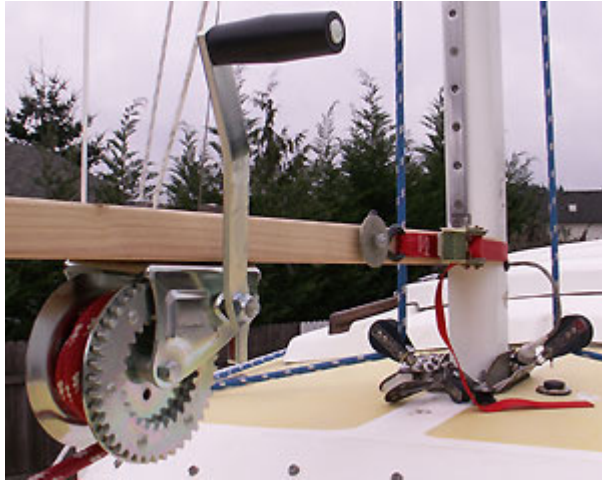


- A 2x4 (85" long)
- Two U-bolts
- A Block (I used a spare one I had laying around)
- A trailer winch
- A red nylon strap with ratchet tensioning
- A 4" Eye-Bolt with a fender washer
- Line to run from the winch, through the block and to a bow cleat. (I used some spare line)
- The jib halyard connects to the eye-bolt and should be tensioned so the gin pole is perpendicular to the mast. The forestay is not used in the mast raising process, therefore it will be free to attached to the stem fitting once the mast is up.
- Note: Because of the way my current wire to line jib halyard is setup, I had to add a length of line from the end of the gin pole to my jib halyard.

I've seen eye-bolts used in place of the u-bolts, but I liked the idea of spreading the load over a larger area. To each u-bolt I added additional nuts and fender washers so the 2x4 was sandwiched between a nut and washer on the top and the bottom.

I rounded off the end of the 2x4 to avoid any sharp corners.





The winch can be found for about \$20. I spent another \$8 and went with a winch that ratchets in both directions.

You can do away with the winch, block, and line by simply using your boom vang between a cleat on the bow and the end of the gin pole.

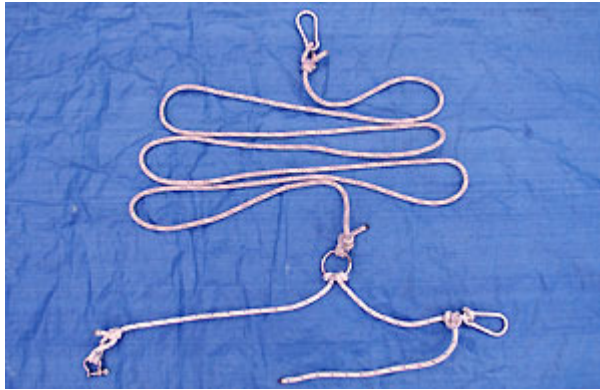
Whether its the ratchet locking mechanism of the winch or the cam-cleat of a boom vang, having the ability to lock the line in place is essential if you want to stop anywhere in the lift or lowering process and untangle something.

The end of the gin pole that rests against the mast was cut and sanded to fit the contour of the mast. The nut end of the eye-bolt anchors one end of the nylon strap. The strap passes around the mast and the black hook attaches to the eye-bolt. With everything in place the ratchet mechanism is used to tighten the strap and secure the gin pole to the mast.

Modification Note: While the strap does a great job, I found that the pole's length provided enough leverage to allow the end of the pole to move either up or down on the mast if the pole weren't kept perpendicular to the mast. I plan to glue and screw a ten inch piece of 2x4 (cut to the same curve as the mast) to the top and bottom of the pole. This modification will provide a bigger foot and discourage the pole from moving.



Raising the Mast by Yourself



When you have a helper, they can steady the mast and keep it from swaying from side to side as you use the gin pole. What about doing it all by yourself? To do that you are going to need a bridle that can provide the side to side support you get from the shrouds once the mast is up.

The bridle (you need two) is made of a ring, a shackle, two carabiners, and some low-stretch line. None of the hardware has to be stainless steel since you'll probably be storing the gear in your garage when not in use.

Your substitute shroud needs an attachment point that is at the same height as your mast bolt so the substitute shroud remains taut throughout the mast raising or lowering operation. In the case of the bridle that means the top of the ring needs to be at the height of the bolt.

The shackle connects to your forward shroud's chain plate. I have open-style turnbuckles so I connected the carabiner to the aft shroud's turnbuckle. If you have closed-style turnbuckles then I'd look to using the aft shroud's t-bolt toggle as an attachment point since there is usually a gap between the clevis pin and the t-bolt.





The upper end of the bridle is attached to the main halyard. A short length of line is tied around the mast and through the two carabiners. This line keeps the upper end of the bridle close to the mast.

The next step is to pull the main halyard tight, thus tensioning the bridle.

With all the gear in place and tensioned, you are ready to raise the mast. Move to the winch and start cranking the mast up. Watch for shrouds and stays snagging along the way. The beauty of the gin pole combined with a bridle is that you can stop with the mast at any position if you need to step away to free something that has fouled.

Your aft shrouds will keep the mast from going too far forward. In fact you don't even need to have your backstay attached.

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