

Mercury Class Sailboat. Deck Stepped Mast

Goal

Simplify stepping the mast.

Benefits

Reduce the physical strain and scary aspects of stepping the mast.

Encourage skippers to sail more often and stay in the class longer.

Discussion and Demonstration

Measure, measure, measure.....

Don't do this alone, double check your every move.

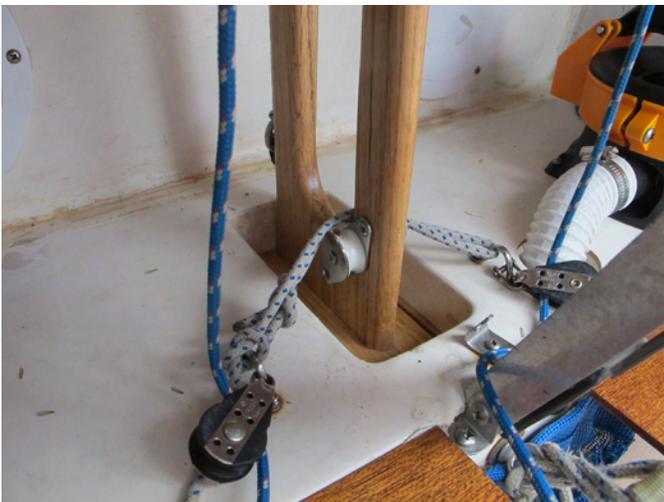
The objective is to put the mast in the same location on deck as keel stepped.

All existing standing rigging should fit as before.

.....measure, measure, measure



A mast support post must be strong enough to carry the mast's weight and downward pressure.



Mast strut installed, it should fit snugly and be tied down or pinned so it won't pop up when stepping the mast.

The cut mast piece, which fits the original mast step, could become part of the strut.

Construct and install tabernacle strut first to determine correct mast height.

Use MCYRA By-Laws to insure proper mast height.



Mast strut, the aft facing holes lead the halyards, vang and cummingham to their original under deck blocks and cleats.

Mast Butt Construction

Cut the mast 1/4" to 3/8" longer than measured for settling and rounding.

A 6" to 10" mast plug made out of teak, oak or synthetic (preferred) takes mast butt wear.

Caution, soft woods may absorb water and expand.

Leave a slot for drainage.

After cutting the mast use the tabernacle fitting to determine the tabernacle pin height and location.

Drill a hole and insert a stainless steel tube slightly larger than the pin.

Leave 1/16" to 1/8" of the tube on each side of mast.

Shim any gaps to avoid mast movement.

Partially round the fore and aft edges of the mast butt to facilitate raising the mast and letting it forward for downwind.

Stepping the Mast

Leave the on deck mast chocks in place and secured until the mast is up.

Attach lowers and back stay, in the slack setting for down wind sailing.

Attach a forward mast puller from the goosneck to the bow and back to a nearby cleat.

The forward mast puller can stay attached and be used to steady the mast downwind.

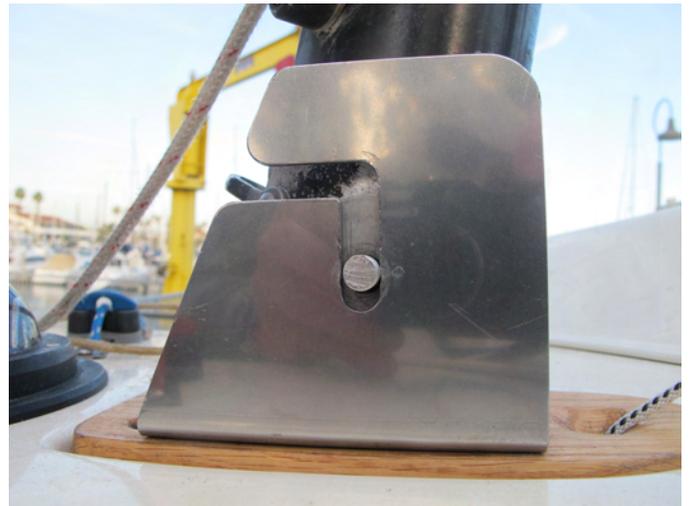
1. Check rigging and clear the cockpit to ensure a snag and stumble free mast stepping.



3. Raise the mast and

5. Attach the uppers and forestay and your done.

With proper preparation the task will be faster, easier and can be accomplished single handed.



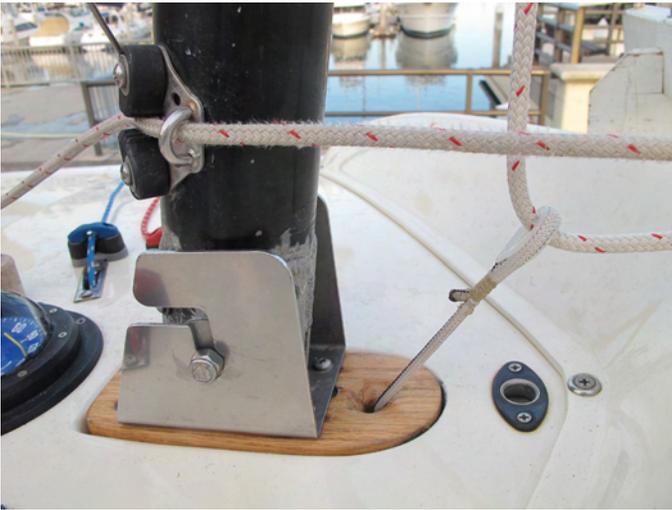
The mast rests on it's butt, not the tabernacle pin.



2. Slide the mast back on the aft chock and attach the mast butt to the tabernacle.



4. immediately tighten and cleat forward mast puller.



The forward facing shock cord pulls the mast puller line down so it won't foul the jib sheets.



When the standing rigging is secured the halyards, vang and cummingham may be lead below or secured at the mast base.



Raising the mast from the cockpit floor, how civilized!

Conclusion; I have not noticed and difference in my boat's performance.

If you have any questions please email or call.
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The forward face of the mast at a point 5' above the deck must not be less than 82-7/8" from the stem when the mast is at its forward-most position with the backstay and all other aft-loading running rigging maximally eased.

The fitting shown is from Dwyer Aluminum Masts.
Go to Dwyer Masts / Hardware /
Tabernacle & Pins, Part number DH21745
Other fittings may be available or home made.
Google "Tabernacle Masts / Images" for a ton of ideas.