



T34C Tech Articles & photos

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34C Boom Conversion

See Appendix B for enlarged Boom Conversion images

Converting the T34 boom from roller reefing to jiffy reefing



Fixed gooseneck and mast mount. Note the reef hooks for securing the cringles.



Dual sheet stopper and winch. The teak box holds the winch handle.



Reefing cheek blocks mounted on teak fairing pads. Refer to the article notes for positioning.

The original Tartan 34C's were built with roller reefing booms, and adjustable goosenecks that slid up and down the boom to adjust luff tension. This innovation was considered a good one at the time; but, it was not long after that "jiffy reefing" came into being and proved much easier and faster, and less damaging to the mainsail, than roller reefing. Now, with the advent of rigid boom vang's to obviate the need to support the boom when reefing with the topping lift, "jiffy reefing" is even easier.

The first thing to do is replace the gooseneck fitting with a fixed gooseneck and mast mount. This will enable the luff of the mainsail to be pulled down and the reefing cringle placed over the reef hooks. Then re-hoist the luff to the new height. The gooseneck shown was built by Metalmast Marine in Conn. You'll see it has two heavy-duty stainless steel hooks for securing the luff cringles. Be sure your mainsail is equipped with a jackline at least up to the second reef point. Also, be sure the new gooseneck fitting preserves the "cut back" dimension of the mainsail that likely was made for the older boom.

The second thing is to design the reefing system to be and fast and secure. On the picture of the boom you will see that, at the forward end, there is a dual sheet stopper and an old fashioned bronze Merriman winch. Also, there is a small teak box under the boom in which is secured, by means of a nylon-webbing lanyard, a small bronze winch handle. This permits the reefing lines to be pulled firmly and easily as soon as the luff of the sail is re-hoisted. There is a back up cleat to the sheet stopper, if the sheet stopper fails.

Lastly, as the picture shows, there is a series of cheek blocks mounted on teak fairing pads (as are all the fittings). These are for the flattening reef, the first and second reef. My new mainsail will have three reefs but it will not be necessary to add a block as the first reef block will serve the third reef point by use of a messenger line for leading the reef line through the third reef clew.

When determining the position of the cheek blocks for the reefing lines, that the blocks must be placed sufficiently aft

of the reef point cringle to which the line is led. The lead angle is usually about 45 degrees. It is important that this be so in order that the line pulls the sail back forming a shelf along the foot. It is never the case that the reefed sail have any load on the grommets between the leech and the luff. These are only for "cleaning up" the folds of the sail.

I have used this system a number of times and can say that it is fast, easy and reliable. If you make the conversion, it will be important to carefully measure the locations of the blocks from the gooseneck in the event you're going to have a new mainsail made. This will insure the lead angles to the blocks for the reefing lines will be correct.

I used Series 30 Garhauer cheek blocks for the reefing blocks. They are of very good quality and have ball bearings so they are less likely to gum up from salt spray. The sheet stopper was a surplus item. Steve Madden of Madden Masts and Rigging in Annapolis was using it to hold down a stack of accounts receivable bills. He gave it to me when I paid him for my standing rigging, all the while admiring it and whining that I'd love to find one just like it for my boat.

A helluva guy that Steve Madden!

Meanwhile, this is an easy system to install. Basically, the whole job takes about 15 hours, except for varnishing the teak pads. I got the winch doing what John Sherwood once termed: "dumpster diving", though I didn't exactly jump into a marina dumpster.

Appendix B - Boom Conversion images



