

## **SUBJECT: C310 Boom Mount**

(Relates to Boom used with Standard Sails without In-Mast Furling)

(Posted 8/11/2003 on the Sailnet C310 Discussion List)

Back in June (2003) there was some discussion on this List regarding the boom mount. Apparently several C310 owners have noticed issues where the gooseneck shaft mounts to the boom forward end cap. From those messages I took a close look at mine, I suspected mine had the problem and so I contacted my dealer. A positive indication that something isn't quite right is if the boom forward end cap can rotate on the shaft it is mounted to, or has excessive fore-aft end play. There was also an annoying squeak from this area when sailing in light winds.

There were several comments on this discussion List about the size of the cotter pin (visible through the boom where the reefing line exits, forward port) and about the number and size of washers that go on just before the cotter pin. I even speculated that a clevis pin would be desirable in place of the small cotter pin. Well, it turns out that there is an easy fix. If yours is like mine, it is simply a case of a missing pin and perhaps an undersized cotter pin. There is supposed to be a 3/16-inch-dia x 2-7/8-inch long stainless steel pin that engages the boom end cap and the gooseneck shaft. This pin positively prevents fore-aft movement and also prevents the boom from rotating about its centerline axis (which isn't desirable with a solid vang as the C310 has). Additionally, there is a heavy flat washer and then an 1/8-inch-dia cotter pin as an additional measure.

My dealer and the factory were very helpful in resolving this issue and I'd bet they'd be helpful to others with this same issue. I installed the parts myself and it was easy and took about 15 minutes (30 if you count the time to get your buddy a beer), but requires two sets of hands. You basically loosen the outhaul line and disconnect the front of the boom from the mast (no need to remove the sail as the solid vang and topping lift tend to balance things by themselves). You then remove the four screws that hold the end cap and tap off the end cap (each side a little at a time) being careful not to drop it on the deck or hatch below it. If the cotter pin isn't 1/8-inch dia, then replace it. Then slide the 3/16-inch pin through the end cap and through the shaft. I coated all stainless steel-to-aluminum interfaces with anti-sieze compound for future ease of dis-assembly. Then tap the end cap back on, re-install the four screws and re-secure the boom to the mast. You may need an extra set of hands for this part and I found it helpful to adjust the vang line tension to aid in getting things to line up. Re-tighten the outhaul and that's it-all fixed. I have created an illustration that shows what the inside of this assembly looks like (see page 2 of this .pdf file).

I would suggest C310 owners (without in-mast furling) take a look at this boom-to-mast connection to see if this procedure needs to be done.

Regards & Happy Sailing,  
Gary Malcolmson  
2003 C310 #230 "Rhythm"

*C310 BOOM END CAP ASSEMBLY*

