

# J/80 Notes from 2008 Worlds, Kiel Germany

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## RIG TUNE

We tuned the standing rigging to the base settings provided by Uli Muenker, the sail designer.

### Base Settings

Headstay length – 10,060mm

Upper Shrouds – 350k

Intermediates – 190k

Lowers – 150k

Pre-bend at first spreaders – 55mm (hold the main halyard tight at the intersection of the aft face of mast and the top edge of the lower black band and then measure distance from aft face of mast to the halyard at the height of the first spreaders). To achieve this prebend we moved the mast butt all the way forward at the base which resulted in the aft face of the mast being approx. 280mm forward of the main bulkhead.

We never had light enough wind conditions to consider loosening the rig from the base settings so can't comment, except to share what our plan was for light air. Here is the simple tuning grid we used for the regatta:

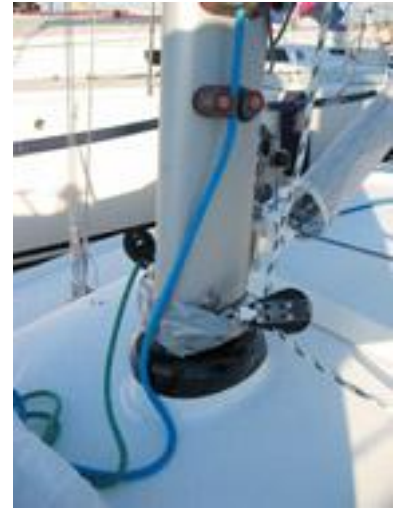
Wind Strength	< 10 kts	10-13	13-17	17+
Uppers	-1 turn	Base	+1 turn	+2 turns
Intermediates	-1	Base	+1	+2
Lowers	Base	Base	+1/2	+1

1 turn = 360 turn of the turnbuckle

Keep in mind that this grid is only valid for the standard turnbuckles. We did not have an accurate tension meter, so do not know the actual tension in kilos at the +/- turn settings.

### Sail Set-Up

The two most important non-dynamic sail controls for us were the jib halyard and the jib car position. For the jib halyard we set up a simple random grid on the mast and a mark on the halyard so that we could at least duplicate settings from day to day. The marks ended up being about 15mm apart and we generally were in between the #5 and #7 position representing a total jib halyard range of about 40mm between 10 and 25 knots. We thought in general that most boats didn't carry enough jib halyard tension in the windier conditions. With the Kevlar jib, it's important to have a low stretch halyard that will hold its position. It's also important to at least have a way of running the jib halyard tail to a winch. We rigged a block to the mast eye near the deck and then another at the stanchion base in order to be able to lead the halyard to the cockpit. (CAUTION – the mast ring at deck was not designed for high halyard loads so you must rig a short rope strop around the mast to the other eye – also the same for the stanchion base – run a short strop around the entire base, don't just shackle to the little leg).



We drilled intermediary holes in the jib track so that we didn't have to reverse the jib car in order to fine-tune the jib lead position. The stock Ronstan jib track has holes every 50mm, so we drilled two intermediary holes spaced at roughly 17mm apart. For the regatta we found that we used three different positions. Our all purpose medium air setting was what we called the #3 hole, which was very close to the front of the cabin window. We liked this lead when we were sailing with full crew on the rail and  $\frac{1}{2}$ - $\frac{3}{4}$  backstay tension. In this position, we found we could trim the jib hard enough to get a firm leech and point high in the flat spots, but also ease the sheet 30-40mm and twist off the leech forgoing fast through waves. Once we reached full backstay tension and were starting to carry some bubble in the main to depower, we slid the lead aft to the #4 hole, which was the first stock track hole in front of the shrouds. When it got windier (over 18 knots) we slid back one more hole to #5. On Day1 and 4 of racing we shifted between the #4 and #5 lead. On Day 2 and 3 we were mostly in #3 all day. If lighter (under 10 knots) we would have likely gone to #2.

For the other non-dynamic controls (cunningham and outhaul) we followed the normal procedure of pulling harder when it got windier. We did notice that many boats did not have enough Cunningham tension in the windy races. The mainsail draft should be at about 50%. If you pull the backstay down all the way and don't pull the cunningham hard enough to remove wrinkles, then the draft will be 60% or more aft, which is not a good airfoil. For the outhaul, it is also very easy to let it out too much downwind. Yes you want to release to increase the foot but if you let out too much you reduce projected sail area.

### **Other Boat Prep tip:**

One of the key boat preparation items we spent time on was how to reduce the friction and likelihood of ripping the gennaker when launching and lowering the sail. Many of the boats at the regatta had a few of these anti-chafe measurers, but I don't believe anyone spent as much time as we did on it. Here are some of the "little" things we did:

- 1) Add mylar vang cover over the boomvang purchase.
- 2) Install a small pvc roller across the port corner of the companionway opening.
- 3) Add a cover, tube or Teflon tape to the port side upper shroud.
- 4) Add a cover, tube or Teflon tape to the port side lifeline.
- 5) Add a rubber tube/hose to the mainsheet strop to reduce chafe on the sheet.

After getting the gennaker under the boat on our first hoist of the practice race, thereafter we banded

the first 10 feet of the tack (with elastic rubber bands) for every first set of every race. We really liked this as we were able to prefeed the tack all the way to the bow, even during the tight offset legs without worrying about the foot catching the water.

