

J-80 Tuning- France Boat

Class rule: C8.4 To control mast rake, the headstay length, measured between the centerline of the headstay pin on the mast to the intersection of the stem line and the sheer line at the bow, shall not be greater than 10065mm (33' ¼") nor less than 9995mm (32' 9.5").

Above is the class rule for headstay length, the headsay should be 32' 10" or 10.005m pin to pin. If your headstay has to be lengthened, add a toggle to the headstay at the top of the headstay. You want the tack of the jib to be as low as possible. We found that the boat had nice feel with this headstay length.

For a UK Main move the aft side of the mast step (at the mast) to 10.25" or 260mm forward of the bulkhead. This was all the way aft in the factory-drilled holes. This will allow your mast to develop around 2" to 3" or 50 to 70mm of prebend. We raced with the partners in the standard location with the standard plastic chocks around the mast.

Now we are ready to center the mast and tighten the shrouds.

Take a tape and measure from your tack fitting on your headstay to the rail on either side of the boat 9.5' back. Then attach a 30 LB weight on your jib halyard and let it hang over the side. The weight should hang so that the halyard rubs against the rail at the mark you just made. Now mark the halyard at the rail of the boat. After you made the mark on one side, pick up the weight and do the same on the other side. If the mast is centered, the mark on the halyard should hit the rail the same on either side of the boat. Your upper shrouds should now be hand tight with the mast centered. Now tighten the uppers 10 turns. Loose gauge should read 28.

After the uppers are adjusted tighten the intermediates hand tight and sight up the back of the mast to insure that it is straight. Adjust the tension until the mast is straight from side to side. The Intermediates can now be tightened , Loose gauge should read 5.

After the intermediates are adjusted, tighten the lowers hand tight and sight up the back of the mast to insure that it is straight. Adjust the tension until the mast is straight from side to side. The lowers can now be tightened, Loose gauge should read 12.

The mast should now be ready for sailing. The Rig should be adjusted for conditions that you face. Below is a chart of how I would adjust the rig for different conditions. The settings listed below are changes I would make from the settings listed above. They are the setting on the loose gauge. In essence these are the changes you would want to make for a given condition.

Knots	0-5	5-10	10-15	15-20	20+
Uppers	28	28	30	32	34
Intermediates	5	5	8	18	24
Lowers	5	12	15	22	26

By: Kerry Klingler
VP UK Sailmaker, City Island, New York