

J-80 Tuning- US Boat

To start with, the headstay should be 32' 10" from the upper bearing surface of the mast attachment to the center of the headstay pin. 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 8.5" forward of the bulkhead. 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. For tension setting on the rig we use a [Loos Pro model PT2 for all 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 8.

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 15.

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. In essence these are the changes you would want to make for a given condition.

Knots	0-4	4-8	8-14	14-20	20+
Uppers	18	22	28	30	34
Intermediates	0*	5	8	14	20
Lowers	0*	8	15	22	26

- 1 turn off 5-10 knot setting,

The key to the rig tension is to not have the leeward shrouds loose in over 10 knots of wind. So if we are sailing and see that they are loose we will tighten them until they are snug. Keep in mind that you want to tension both side equally. Again the key is that you tighten until the leeward side shrouds just come straight and are not loose. When sailing in lighter winds, under 5 knots, it is OK to have loose lowers and intermediates. This will allow the middle of the mast to sag to leeward and power up the main.

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