

# North Sails One Design Atlantic Tuning Guide

North Sails One Design's Atlantic tuning booklet will cover mast tuning, sail care, boat preparation and sail trimming tips. If you have any questions or need any advice please feel free to contact us. Our phone number, fax number, address and e-mail addresses are at the end of this guide.

Remember, this is the general mast set-up and tuning used by the top Atlantic sailors. If you tune your boat by these instructions you will give yourself that advantage you need to win the season series, fleet championship or Nationals.

## Tuning the rig

### Before stepping mast

Make sure spreaders are solidly fixed and the brackets tightly riveted to the mast. Check to see that they are even height at the shrouds.

### Check Rake

Hook tape to main halyard and hoist completely to top of the mast (use a safety line in case tape breaks.) Measure to intersection of transom and deck at centerline of boat (back of boat) 40' 8" to 40' 5", adjust head stay so that you fall in this range.

### Tensioning the Shrouds & Centering the Mast

Remove all gear from boat and make sure that ballast is centered. Hook a tape measure on jib or spinnaker halyard and measure down to water on each side of boat alongside of chain plates. Make sure that with tension on the tape being equal that this measurement is also equal on both sides of boat. For future reference, make note if it is equal to the rail on both sides of the boat. On most, it's 1/8" or 1/4" different. Tension the upper shrouds to 880 lbs. Check the rake and adjust the head stay if necessary.

### Blocking the Mast at the Partners

Put wedges or blocks behind the mast to push the mast forward until you have 2" - 3" of pre-bend. Also, put wedges or blocks at the side of the mast to keep it centered in the boat. The center of the boat is not necessarily at the center of the mast partners. Position the mast so it is straight sideways. This may be more easily done after tensioning the lower shrouds.

### Tensioning the lower shrouds

Tension so that the mast is straight sideways. Tension should be 620 lbs. Pre-bend should now be 1 1/2" - 2". Head stay should be barely measurable on the gauge - approximately 5-10 (See attached Tension Gauge Conversion Chart). If it is more, push the mast further forward in the partners (thicker blocks behind) and re-tension lower shrouds accordingly. Check rake again to see that it hasn't changed too much.

## Important items to remember

### **For breezes under 5 knots**

1. Make certain you loosen head stay 3 - 5 turns and use some backstay tension. This will optimize your main and jib shape for light air performance.
2. Put a shackle or line to let the tack of the jib 4" above deck. If it is too low, the foot will lie on the deck and you won't be able to get sufficient leech tension.

### **Setting your jib leads**

2' 2" apart at 8' 2" back from head stay. Use a barber hauler to pull the lead outboard 2" in slop or heavy air (over 20 knots.) Range of fore and aft sheeting is 8' 1" to 8' 6" with 8' 3" to 8' 4" being the average - forward for light air and slop (with 2" barber hauler at same time.) Aft for smooth water and medium air or for heavy air.

### **Setting the Main Outhaul**

Loosen the outhaul so some shelf opens in light air approximately 4" for smooth water or 8" for rough water. Tighten progressively as the wind blows harder.

### **Setting the Main Cunningham**

Allow slight wrinkles to come in luff of main up to spreaders in anything under 12 knots. In stronger winds, when the boat is easily heeled down to her lines, pull the luff smooth. If in doubt, allow slight wrinkles in the lower 1/3 of the sail.

### **Setting the Jib Luff**

Loosen halyard until you get a slight wrinkle at each hank for light air. In more wind, pull it just smooth.

### **Proper Mainsheet trim**

Trim to make top batten parallel to the boom. The sail trimmer should get under the boom and sight up to check for this. It needs to be checked each time another adjustment is made. For flat water moderate breeze conditions, the mainsheet can be over trimmed to make the top batten point to weather 5 degrees. In light air, slop or in heavy air, under trim so the top batten points to leeward 5 degrees.

### **Proper Jib Sheet trim**

Trim to make the middle batten parallel to centerline. Top batten in light to moderate air points to leeward 10 degrees to 45 degrees, depending on wind pressure -- less wind pressure ease some more. More wind pressure, trim harder. As the wind blows harder, the top batten gets more nearly parallel to the middle batten and hence the centerline.

## Atlantic Sail Care

Your North Atlantic sails are constructed with the best materials available on the market. Before we made your sails we tested many different fabrics from the best suppliers in the world.

### Mainsail

It is not necessary to remove the battens from the main when storing it. Be certain to roll the sail up parallel to the battens to avoid putting a permanent twist in them.

Watch the mainsail for signs of wear on the batten pockets and where the sail hits the shrouds. Wash the sail off with fresh water when it gets salty and dry thoroughly before storing.

When lowering the mainsail have a crew member at the leech pull back on the leech to help keep the sail from folding on itself.

### Jib

When rolling the jib, keep the battens parallel to the leech. Roll from the head to foot. Avoid stepping on the sail when lowered for downwind sailing. Attempt to pull back on the leech when lowering the jib. Wash the jib off with fresh water when salty and dry thoroughly before storing.

### Spinnaker

To prolong the life of your spinnaker, always store it dry and clean. Rinse with fresh water when it gets salty and dry before storing. Fold your spinnaker to store it if possible.

**Good Sailing!!**

## North Atlantic Experts

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# Tension Gauge Conversion Chart

Provided by [Chris Snow](#)

Over the past few year Loos Co. has introduced it's new style PT-1, 2 and 3 professional tension gauges to the market. Since many of us are replacing our older model A and B gauges with these new models we are posting the following conversion chart for your convenience. Please give us a call or drop us a line if you have any questions. Good Racing!



Figure 1 model A



model PT-1

MODEL A	MODEL PT-1		
	3/32	1/8	5/32
5	6		
10	9		
15	12	14	
20	16	16	
25	20	19	
28	23	21	
30		22	
35		27	25
38		30	28
40		33	30
42			33
44			36
45			38
46			39
47			40

<b>Model B</b>	<b>Model PT-2</b>			<b>Model PT-3</b>
	<b>3/16</b>	<b>7/32</b>	<b>1/4</b>	<b>9/32</b>
10	11			
15	13			
18	15			
20	16	18		
22	18	20		
24	19	22		
26	21	24		
28	23	25		
30	25	27	25	
32	27	29	27	
34	29	31	29	
		33	31	
		36	33	6
		37	36	7
			37	9
				10
				11
				12
				14
				16
				18
				20
				25