
NORTH SAILS

One Design

For any question you may have on tuning your Soling for speed, contact our Soling experts listed below:

**ONE DESIGN WEST**
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# Soling Tuning Guide

# NORTH SAILS

## Soling Tuning Guide

The following tuning guide is meant to be a good starting point in setting up your boat. Depending on your crew weight, strength, sailing style and local conditions, you may have to alter your rig slightly. As you read this, write down any questions you might have, and we will be happy to discuss them with you in more detail.

We are trying to achieve a rig set up that is fast in all conditions: upwind, reaching and running. Your new North sails are design around this " all purpose " philosophy.

### MAST RAKE AND SHROUD TENSION

Most boats have an adjustable forestay which allows the crew to change the mast rake for different wind velocities. Our rake is checked by measuring the amount of forestay that exceeds the mast length. Hold your forestay along the front of the mast and simply mark the forestay at the point where the bottom of the mast would be. We check our rake by measuring the distance from this mark to where the forestay intersects with the deck. We suggest you set the rake at 29" inches. After the rake is set, It is possible to make marks on the mainsheet, backstay, and jib clew heights for different wind and wave conditions. In light wind conditions (under 7 knots) we suggest a 30" inches rake. This will increase " feel " and make the boat easier to steer. Remember that every time you change the rake, all these control marks have to be changed.

### SHROUDS TENSION

Our shroud tension is measured with the shroud in the forward position, and the backstay on, so the headstay is snug at 29" inches of mast rake. Uppers should be at 700 lbs. at all conditions.

Lowers should be set so the mast (when sailing), have 1 1/2" inches (one and half inches) of sag at the spreaders, for light air; increasing tension to 500 lbs. at 18 knots of wind.

### NOTES:

- Please remember that the more upper shroud tension you have, the more pre-bend you will have.

- If you have a soft mast, and or the mainsail looks a bit flat, you may need less upper tension.

### SHROUD POSITION

We have five settings for the fore and aft movement of the shroud position at the deck. The total travel is 12" inches.

| TRACK POSITION | WIND | WIND RANGE |
|---|---|---|
| #1 full forward | Light air | 0-7 Knots |
| #2 | Light to Medium | 7-10 Knots |
| #3 middle track | Medium | 10-16 Knots |
| #4 | Fresh | 16-20 Knots |
| #5 full aft | Strong | 20+ Knots |

Be careful not to de-power the boat too quickly, especially with waves.

### SAIL COMBINATIONS

We recommend the following sail combinations:

**0- 14 knots**
ES-12 Main and V-1 plus Jib

**8- 20 knot**s
ES-12 Main and V-1 Turbo Jib

**18 knots and above**
ES-12 Main and A-1 Jib

### BACKSTAY

There are two things that the backstay does. Controls the fullness in the mainsail and also the forestay sag. This is probably the most important adjustment in the Soling. The more backstay tension, the flatter the main, and the less forestay sag results in a flatter jib. I have my backstay marked on every inch, so is easy to repeat fast settings and have the boat ready, quickly after mark rounding. Our mainsail is designed so that the mast bend and forestay sag are matched for the conditions.

### MAINSHEET TENSION

The mainsheet controls the top part of the mainsail. The quickest and most accurate way to trim the mainsail is to watch the angle of the top batten. Sighting from under the boom, the top batten should be parallel to the boom most of the time, if not in overpowered conditions. In flat water, the top batten can point five degrees to weather of the centerline, and when overpowered, it should open from centerline until helm balances.

### BOOM VANG

The rule of thumb, is to have the vang adjusted for the downwind legs, so the top batten is parallel to the boom.
This control is also important when close hauled, by helping control the forestay sag and making the jib either more or less powerful. In smooth water, the vang should not be used, so the forestay is as straight as possible. In choppy waters, boom vang should be used, and by experimenting you will be able to find the perfect tension, which is normally when helm is almost neutral.

### MAINSAIL TRAVELER

The boom should be about 4 to 5 inches above centerline until both crews are over the side and boat is overpowered. At this point traveler should be placed on the centerline (not very often the traveler should be placed below centerline).

### JIB TRAVELER

A good starting position is 10 to 11 inches athwart ship centerline. In heavy air, it should go outboard 2 to 4 inches (20 knots and above), this will help stop the back wind on the mainsail under heavy breezes.

### CLEWBOARD POSITION

This will vary from boat to boat, but the third hole for the V-1 jib and the A-1 jib will be a good starting point. When it is light and crew is inside or not fully hiked, make the jib fuller down low, by going to a higher hole (or just by moving the whole jib up). When crew is fully hiked and the wind is stronger, make the foot flatter, by moving to a lower clew hole (or by moving the whole jib down). For full power conditions, the jib should luff evenly from top to bottom.

### LUFF TENSION

All jibs should be set with minimum luff tension, just enough to take most of scallops out; DON'T OVER STRETCH. Too much tension moves the draft forward, which is very slow.

### OUTHAUL

In light air the outhaul should be stretched to about 1 to 1 1/2" inches from maximum out. As the wind increases, pull the outhaul all the way out so the sail is perfectly flat right of the boom. In reaching, the outhaul should at maximum ease (about 3" inches).

### RUNNING AND REACHING WITH SPINNAKER

A lot can be done in terms of speed when running and reaching, and if you are faster than the competition, that could be the necessary edge you need to win.
Is a well know fact that, when sailing downwind, the fastest setting is by moving the mast as far forward as your backstay would allow.

The other important controls are the pole fore & aft and up & down. For fore & aft adjustments try to have the luff of the spinnaker perpendicular right out of the pole.

For up & down control, the pole should be adjusted so the clews are even height from the water.

## Sail Care

Always store your sails away from the sun and make sure they are clean and dry.

Be sure that you always "roll " your upwind sails, this will help them last longer and stay wrinkle free.
If you have any questions or comments about our Soling Tuning Guide, don't hesitate to call us anytime.

## Contact North Sails

For tuning information and complete details on how to setup your Soling sails contact the North Soling experts listed on the cover of this guide.

**Good Sailing!**

## NORTH SAILS ONE DESIGN
## QUALITY CONTROL CHECK

**Soling**

| MAINSAIL | | JIB | | SPINNAKER | |
|---|---|---|---|---|---|
| Corners | | Corners | | Corners | |
| Cunningham | | Battens | | Numbers (one side only) | |
| Measurement stamp | | Luff Hanks | | Country Code (one side only) | |
| Leech Cord | | Measurement stamp | | Measurement stamp | |
| Royalty | | Telltales | | Royalty | |
| Numbers | | Leech telltales | | North Logo | |
| Country Code | | Leech Line | | Bag | |
| Battens | | Trim chord | | | |
| Leech Telltales | | Royalty | | | |
| Insignia | | North Logo | | | |
| North Logo | | Bag | | | |
| Bag | | | | | |

Checked by: _____

Date: _____ / _____ / _____

*Figure 4 - Mast "neutral" position, note marks in front of and behind neutral mark.*