

Neb-Sails Tuning Guide

The Mast

Tuning of the sails always starts by tuning the mast. On a Norlin Mark III, you can use the following system in order to get the mast into the right position.

Start with tightening the top shrouds to a good portion of strain (you do not need lower shrouds at all), when the mast is in vertical position. Use a tape measure that starts from zero, in its very end, and connect it to the main halyard. Hoist and secure the halyard as if you had hoisted a mainsail with it. Read the measurement to the intersection of the deck and the bottom in the stern. This measurement should be 560 cm when the backstay has no tension. With maximum backstay strain this measurement should be 542 cm. Mark the lines to find the right positions when racing.

The Mainsail

Be sure that the sail is fully hoisted. In light air, it is enough to fasten the tack as close to the mast as possible. No cunningham is needed. When beating, the boom should be trimmed to the centerline of the boat, but pay attention that the uppermost batten is parallel to the boom. The foot should be tight (the sail shall be very flat in the lowest third). If the waves are big compared to the wind force, you must ease the outhaul with a couple of centimeters. At a location middle boom, the foot should be about 5 cm apart from the boom. Keep the backstay taut, without bending the mast. When the wind increases, you must tighten the backstay more and more being careful not to exceed its' maximum. At a wind force of 10 m/s, tighten the cunningham until no wrinkles appear near the mast.

In heavy air, the foot should be very tight. A wrinkle from the luff to the clew should occur, at cunningham height. The boom is still kept in the middle and the uppermost batten is still parallel to the boom. This means a very tight sheet. It is quite difficult to sail in heavy air with this kind of trimming, but it is wonder-working, when you find the right pointing.

Downwind you can use two different techniques. The heavier the wind the more I strongly recommend the following: Let the boom as far out as possible where it is lightly touching the shroud. Be sure the

foot is strained. Adjust the boom vang to get the top batten twisting ahead of the shroud. Steer the boat with the wind coming in a little from leeward and let the boat heel to windward. In light winds and shifting conditions, luffing is the way to be fast. You may have to luff even up to 30 degrees. Loose the outhaul, but not to much because it makes the sail area smaller. Make the sail as full as possible and move the mast forward to at least an upright position. Gybe when the wind is shifting in your favor because it will give you more profit than any adjustment to the sail.

The Jib

The jib should be hoisted just until the roach of the foot touches the deck when sailing close hauled. No matter what the conditions the cunningham is used only for flattening the wrinkles. In light air, the leech should nearly touch the spreader end and the foot should follow the sheerline. In heavy air, the leech should be at the same position but the foot is straight. World Champion Marko Dahlberg does not use barberhaulers at all in heavy air. Going downwind the two former mentioned techniques have to correspond to each other. When running, you have to use a short whiskerpole and sheet the jib quite strongly. The clew should be much more backwards than the tack.

The idea is to make the wind flow enter the mainsail at the leech and to leave the jib at the leech as well. When luffing, the whiskerpole should be as long as possible and the sail should have a fuller shape.

In both cases, the jib halyard should be loosened, in order to allow the jib to "fly" away from the mainsail. Remember that loosening the halyard gives you the same effect that shortening the whiskerpole does. This is why luffing, at bigger angles, needs a tighter halyard.

Finally

The 2.4 Metre is a boat with a smooth shape moving easily in the water. Consequently, you can sail a very small angle to the wind when beating. The windward telltale can be in an almost vertical position where you do not lose any speed at all. Healing is not critical which means that the 2.4 Metre can be driven with tight sheets even in heavy air. In very light air, with only some puffs now and then, you have to make the sails fuller and ease the sheets, as well as bear

off a little. This works also in conditions where the waves are big, compared to the wind force.

The 2.4 Metre is a very good sailor and offers you many options in tuning & trimming. This is why the above mentioned should be regarded as one suggestion of how to sail the boat. In no way it is meant to exclude other techniques to be fast on the course. Happy sailing!!