

Nordic Folkboat Tuning Guide

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Introduction

The purpose of this Nordic Folkboat tuning-guide is to give our clients in the class some guidelines on how to get the most out of their North Sails. The tuning-guide is made by Henrik Kold and Theis Palm.

Always experiment and try finding your own trim using these guidelines. The weight of the crew, the balance of the boat, the mast together with specific local wind and sea conditions all have influence on the fastest and final trim.

Mast Trim

The mast on the Folkboat is one of the vital areas of trim as the quality of the wood is incredibly important to the mast stiffness and flex ability. The ultimate bend characteristics are hard to define, but the bend, measured 5,0 m from the top of the mast should be between 10,5 and 14,5 cm.

1. Control that the mast is straight in the boat. This is best done by leading the shrouds in along the mast and put a mark at the height of the gooseneck mark. Then measure from this point to the turnbuckles in the deck – the distance should be the same on both sides.
2. Hereafter measure the distance from the bottom of the mast (where the rail enters the mast) to the aftmost point of the boat (just next to the rudder). This distance should be between 4,97 and 5,0 m., all depending on the stiffness of the mast and the inaccuracy in the alignment of the mast hole. Under all circumstances the mast should touch the aft edge of the mast hole. Here the mast stiffness plays a part; if the mast is stiff it should be pressured against the aft edge of the mast hole to induce a nice, even curve in the mast. If the mast is soft, it shall only touch this same edge slightly.
3. The mast rake is measured in the following way: The forestay is lead in along the mast and the wire is stretched as much as possible. Then put a mark at the height of the gooseneck mark. The forestay is then fixed in its proper position; the distance from the black mark to deck along the forestay should be 1,31m.
4. The jumpers are adjusted by pulling the backstay. Then look up along the sail track and check that the jumpers are equally tight in both sides. If this is not the case, the jumpers should be adjusted till the mast is completely straight. They are set quite loose in light and in heavy winds, whereas the turnbuckles are tightened 2-3 times in medium winds. The draft in the top of the sail is then moved back 47% of the chord measured from the luff. The most important thing is that the mast curve is even from deck to top. If

the jumper is too tight, the mast will curve too much in the bottom and be too straight in the top, whereas the bottom will be straight and the top will curve if the jumpers are set too loose. The even curvature gives the leech a nice, even twist.

5. Using this trim the shrouds help control the tension of the forestay. The pressure forward from the aft end of the mast hole makes sure the forestay is loose. In light wind the forestay-sag should be 8 cm. This is best done by tightening the shrouds while sailing until the 8 cm are fixed. When the wind increases the shrouds are tightened 2ft rounds and further 2ft in heavy wind. This way the forestay is tightened as the wind increases. On soft masts a 2 cm thick wedge is set on the aft edge at the height of mast hole to achieve the same effect.

Mainsail Trim

The mainsheet is critical in setting the shape of the sail and small adjustments can have a big effect on speed and pointing. If the mainsheet is sheeted tight, the leech will close and put more pressure on the rudder – on the other hand pointing ability is improved. This can especially be used in medium winds and flat water, where the boat can be kept flat by hiking. In light winds the mainsheet is eased so that the top tell-tale flies straight. In heavy winds sheet tight and pull the backstay until the rudder feels light again (but without losing pointing). In large waves let the leech twist a little more to have a wider steering angle to steer in. This at the same time increases speed (and hereby pointing). As a thumb rule the top batten is trimmed parallel to the boom in almost all wind strengths.

Outhaul

The outhaul is also an important factor when trimming as it controls the draft in the bottom of the sail. In very light winds (0-5 knots) the sail should be 3 cm from the mark. In medium winds (5-12 knots) about 1,5 cm from the mark and in more wind than this pull the sail all the way to the mark.

Cunningham

Do not set the cunningham in light winds. In medium winds set the cunningham so that the creases in the luff disappear. When the wind passes 15 knots it is pulled hard to open the leech and keep the draft forward in the sail.

Traveller

It is a good idea to have two cars on your traveller. They are then connected by two wires of about 40 cm. leading to a mainsheet block. This facilitates sailing in light and medium winds. In light winds (0-6 knots) pull the traveller cars 15-20 cm to windward. In medium winds (6-14 knots) set them in the middle. In higher wind the cars are eased to leeward to decrease heel and thus rudder pressure.

Backstay

The backstay has two functions: To control draft in the mainsail and to control forestay-sag. When the backstay is tightened the mainsail flattens and the leech is opened, there is less forestay-sag and hereby a jib with less draft. It is a good idea to put marks on the backstay e.g. every 20 cm to facilitate finding the right trim after mark roundings etc.

Kickingstrap

The kickingstrap is used when sailing upwind in a breeze. It opens the leech in the bottom part of the mainsail and keeps the boom down when easing in the gusts. Never use the kickingstrap upwind in less than 18 knots and use caution. Remember always to ease the strap for downwind sailing when bearing off, otherwise the boom might break. Downwind the kickingstrap is trimmed so that the top batten is parallel to the boom – on all sailing angles and in all conditions.

Jib

North Sails jibs are made for sheeting points both on deck and on the cabin top. However, we recommend sheeting from the cabin top to make the jib-leech twist more freely and making the gap between main and jib as wide as possible. Furthermore the control of the jib is improved (particularly in heavy winds) because of the shorter distance from clew to block. The jib-lead track is placed with its centre 58 cm from the boats centreline. When sheeting from the cabin top we recommend using a swivel block, so that the jib sheet does not kink on the winch.

Sheeting Point

The position of the jib lead is crucial for the jib trim. As a reference point measure 2,65 m from the pin in the forestay to the centre of the block (if the lead is on the cabin top). The jib shall luff evenly, i.e. tell-tales must fly at the same time in top and bottom.

Jib Sheet

As a general rule sheet the jib so that the middle batten is parallel to the centreline in most conditions, but in light winds (0-5 knots) leave 2-3 degrees of twist. If the sea is lumpy, move the jib lead two to three “holes” forward to get more draft and power in the jib (the middle batten shall still be parallel to the boat’s centreline). In heavy winds move the lead on to two “holes” back without letting the foot of the sail become loose and flutter.

Halyard Tension

Never pull the halyard too tight. This will cause the draft of the jib to move too far forward. Pull it until the creases in the luff disappear. In light wind the best shape is

obtained when leaving small creases in the luff.

If you have any questions regarding trim or Nordic Folkboat sailing in general, please contact Theis Palm.

Good luck on the water!
