

# North Sails Flying Junior Tuning Guide

[www.northsailsod.com](http://www.northsailsod.com)

## MAINSAIL

### Main Cunningham :

For the main halyard/cunningham it is best to leave a hint of horizontal wrinkles from the luff of your main at all times to make sure you have not pulled it too tight. On FJ's with a sliding gooseneck, it is effective to tie the downhaul line up to the spinnaker ring. This will prevent the gooseneck from sliding down the mast and overtensioning the luff of the main. It is better to err towards the loose side than to pull too tight.

### Outhaul :

In light winds it is best to pull the outhaul tight enough so there is a hint of a horizontal crease in the foot of the main parallel to the boom. In medium winds (above 5mph), pull the outhaul tighter so that the crease is apparent. In heavier winds (above 12 mph), pull the outhaul very tight so that there is a hard crease in the main just above the boom.

### Mainsheet trim and Boomvang :

The mainsheet should be pulled tight enough so the upper batten becomes parallel to the boom on a vertical plane. This is sighted from underneath the boom looking up the sail and lining the batten and boom on that plane. In light winds it is impossible to keep the upper batten from hooking slightly to windward because of the weight of the boom hanging on the leech of the sail. In choppy conditions or after a tack, ease your mainsheet approximately 6" to open the upper batten slightly past parallel to the boom. This allows the mast to straighten slightly and the main to become flatter. When the boat becomes overpowered the boomvang is used to help hold the boom down and keep the upper batten parallel to the boom. The mainsheet will then act as a traveler. When a puff hits, with the boomvang on hard, the mainsheet will simply be eased off so the boom and will move to leeward and depower the boat. The heavier the winds, the heavier the boomvang tension. Always aim at keeping the upper batten parallel to the boom. Unless sailing on the open water or longer courses, we have found it is never necessary to use the traveller. 95% of the time the traveller is left cleated in the center of the boat.

Downwind, the vang should be trimmed enough to keep the boom down and the leech set with the upper batten parallel to the boom. There is a telltale placed on the upper batten on your North mainsail which should flow straight off the leech when the boomvang is set properly downwind.

## JIB

Jib sheet trim:

Unfortunately there is no easy guide for jib trim. We are looking for a parallel slot between the exit of the jib and the entry of the main. A guide that has been used is to imagine a batten on the jib at mid leech. This "batten" is usually set parallel to the centerline of the boat, making the upper batten of the jib twist outboard slightly and the lower batten twist inboard slightly. It seems that 90% of the time boatspeed problems are due to faulty jib trim. Much of the faulty jib trim is caused by an undertrimmed jib.

Jib lead placement :

The Vanguard College FJ has been built with two different jib lead positions. The most common position is with the tracks on the side decks, approximately 8" outboard of the vertical face of the seat tanks. The other placement of the jib lead, which is less common, is on the inside vertical face of the seat tanks. These two placements require two very different jibs. But the method of positioning the jib leads is similar. For the both jib lead placements, your North Jib is designed so the lead should be placed nearly in the center of the track when the boat is tuned with proper rake. To fine tune the position, luff the boat slowly into the wind with the jib properly trimmed and note how the jib breaks. If the jib breaks higher first, move the jib lead forward until the break is even. If the jib breaks low first, move the lead aft until they break is even. This "break even" luff position for your jib leads is proper for all wind and sea conditions until it is blowing over 12 mph. At this point, move the jib lead progressively aft until a maximum aft position of 2" aft of the "break even" position is achieved.