



INTERNATIONAL DESIGN AND TECHNICAL OFFICE

Headsail Tuning Guide for the Beneteau 331

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The Beneteau Oceanis 331 built in the USA and supplied with Neil Pryde Sails is equipped with a 140% headsail. The following features are built into this headsail:

- The genoa size is optimized to sheet correctly to the factory track.
- The sails are equipped with the Neil Pryde Multi-Track Foam Luff System™, which allows for smooth and correctly shaped sails when reefed. (*See the Technical brief for details on this system, either online or from your Beneteau Dealer*)
- The sails are equipped with ‘buffer’ patches at both head and tack that are designed to distribute the loads on the sail when reefed.
- The buffer patch at the tack is marked with two reefing bands that provide a visual cue for pre-setting the genoa lead positions.

You will find that once the initial settings are made to the genoa lead (car) position (which is critical to good performance) that the cars will not require much movement fore and aft for different conditions.

The basic guide below will help you achieve proper upwind sailing genoa trim.

There are several points to consider:

- We used the outer shroud where it intersects the deck as our ‘zero’ point in measuring the car location aft along the track.
- The front of the car has a lever that is lifted up to disengage the pin that holds the car in place. When moving the car, always move the ‘lazy’ sheet, so that there is not any load on the jib sheet or car when making adjustments. Lift the pin and slide the car forward or aft. Note: this lever and pin should always face forward, never aft.
- There are evenly spaced holes on the genoa track (fore and aft) that the adjustment pin of the car will lock into place.
- Be prepared to mark the car location with permanent marker, tape or adhesive marks.

Marking the Lead Position:

When measuring out the lead positions (as described below) we suggest that you mark the track at the forward edge of the genoa car. You can do this with permanent marker, tape or some sort of self-adhesive ‘dots’. These locations on the track will coincide with the reefing marks at the tack of the genoa and will take the guesswork out of setting the leads when reefing. The lazy genoa cars can quickly and easily be moved forward to a marked location and then during a slow tack, reef the headsail to the mark at the tack and you are off and sailing.



LEAD POSTION:

Full Size:

When your genoa is completely unfurled for sailing, the forward edge of the genoa car should be 6'-4.5" / 1943mm aft of the outer shroud. This will be your 'all-purpose' lead position. The pin was in the 3rd hole from the rear of the track...but this can vary so it's best to use the tape measure.

- This will be appropriate for wind strengths of 7-12 knots true wind.
- In fewer than 7 knots of true wind move the lead position forward one hole. This will make the genoa more powerful for light air sailing.
- In more than 14 knots of wind, you may move the lead aft one hole or begin to consider reefing the headsail.
- The genoa should be sheeted so that there is sufficient tension on the sail to bring the leech to between 3"-7" / 76-177mm from the tip of the spreader. The sail should be between 4"-8" / 100-203mm outside the shroud base.

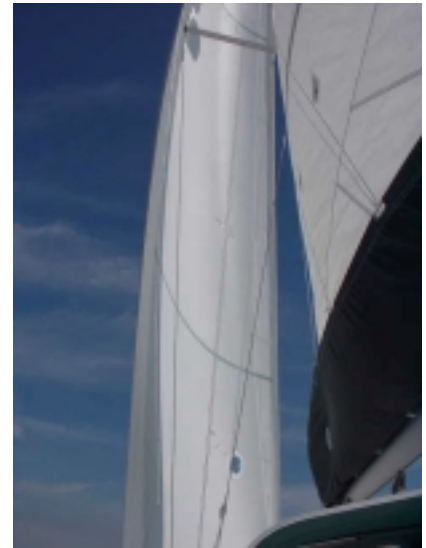
First Reef Mark:

With the genoa furling to the first 'reefing' mark just aft of the tack of the sail, the lead car should be moved forward until it is 5'-4" / 1625mm aft of the outer shroud. We moved the car forward 4 holes from the all-purpose setting. The leech will have moved forward of the spreader at this setting, so the sheet tension should be adequate to keep the leech of the sail so that it appears 'inside' of the shroud.

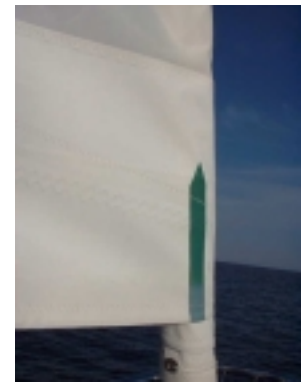
Second Reef Mark:

With the genoa furling to the second 'reefing' mark just aft of the first mark, the lead car should be moved forward until it is 4'-3" / 1295mm aft of the outer shroud. We moved the care forward 4 holes from the first reef mark and 8 holes from the all-purpose setting.

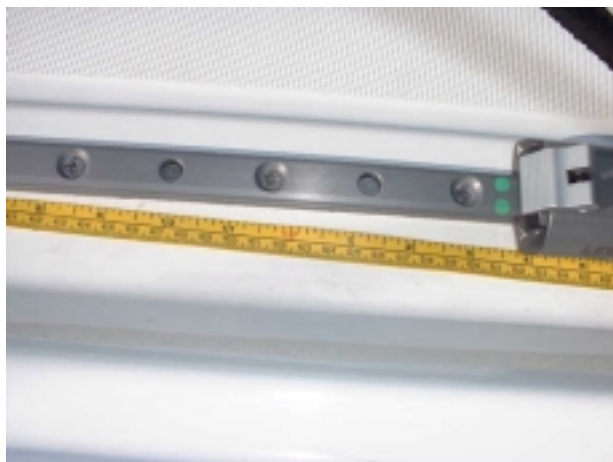
The leech will have moved even further forward of the spreader at this setting, so the sheet tension should be adequate to keep the leech of the sail so that it appears 'inside' of the shroud. This will be more difficult to visualize as the leech will be well forward of the spreader.



Leech trim, closed hauled and with full size sail



Sail reefed to first mark



Car location when reefed to first mark



Car location when reefed to second mark

Notes:

Generally, sail trim is a bit science, a bit feel and a bit common sense. As a basic rule, we like to say *that if it looks right, it probably is* and as these sails are fine tuned to the boats you should be able to achieve proper trim using this guide. Below you will find a few photos of the genoa, trimmed and sailing for reference.

Occasionally, you find that the leech flutters a bit. If this happens, it's usually that the sheet tension is not tight enough (you need to winch the sail in a bit tighter). Assuming you have the leads in the right location and the sail still has a bit of flutter, you should adjust the leechline to keep the leech from fluttering.

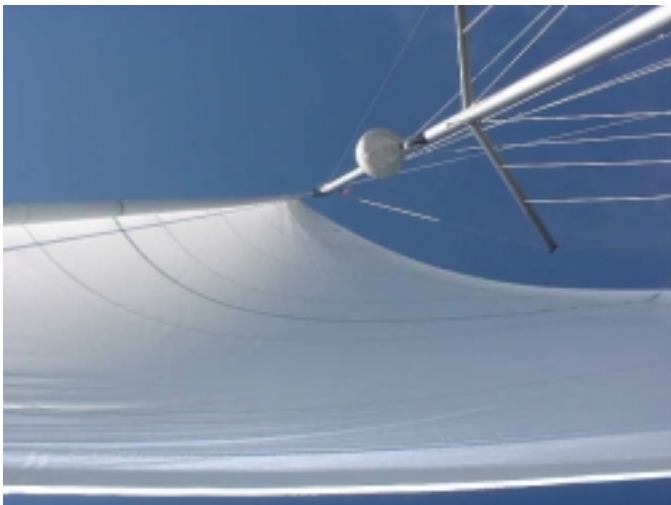
The first photo shows the leechline pocket opened up to reveal the leechline, snubbing eyes, cleat and the 'tail' pocket. The snubbing eyes help to take the load from the line making cleating and nucleating an easy task. The 'tail' pocket is on the inside of the leechline cover and you can put the excess leechline tail into this pocket before closing the cover



Leechline, cleat and 'tail' pocket



Here the genoa is completely unfurled and trimmed up for sailing upwind in about 8 knots of breeze.



Here the sail has been reefed to the first position. Note that the overall shape is much flatter than in the previous picture and that the luff is very smoothly furled.



Here again in the first reefed position, with the leech of the sail in about the same relative position (inboard/outboard) as the sail would be full sized.