

# Rigging Guide

Please study the following rigging information carefully so you can get the best performance and most fun out of your new Goya sail. It is recommended that you rig to the basic specs given for each sail as a starting point. Optimal tuning is unique for every rider, so please take the time to experiment with different settings and try them on the water to find the sail trim settings that are right for you. Re-tune your settings after you use your equipment for the first time, as materials will stretch slightly. Re-check your outhaul whenever your downhaul setting is changed. Always have at least 1 cm of outhaul tension.

## Rigging Process

- 1. Before rigging.** Make sure you have all rig parts ready to go and mast, extension and boom set to the recommended spec printed on the sail.
- 2. Insert your mast.** To ease mast insertion, start by inserting the top section of the mast first, then slide the bottom section in to the top and push the mast all the way up in to the mast sleeve. To make the mast easier to slide in to the sail, make sure the top and bottom of the boom cut out are pushed together (greatly reducing the overall luff curve and friction as the mast slides in) and push the mast in to the sleeve while holding the mast sleeve at the top of the boom cut out with one hand, and pushing the mast inside with the other. Make sure you are pushing the mast in to the sail, not resting the mast base on the ground and trying to push the sail down on to the mast. Make sure the sail is unrolled and laying flat on the ground as you insert the mast, this ensures that the mast tip is sliding smoothly on a clear and unobstructed path into the top of the mast sleeve.
- 3. Downhaul.** With the mast all the way inserted, downhaul the sail to the spec. All sails (except Bounce) have a dot on the sail body that indicates where the looseness coming in from there leech should stop as you reach full downhaul.
- 4. Attach your boom.** Tighten it to the mast at the desired height.
- 5. Outhaul your sail to the spec.** With the downhaul set, you will apply about 2.5cm of positive outhaul from the neutral outhaul position. This is an average setting for most conditions. You can add or reduce outhaul (1.5cm max, either direction) to adjust for stronger or lighter wind.
- 6. Check your batten tension.** This is an important step, and will help you get the full performance from your new Goya sail. Tension all battens with the provided tensioner key until all vertical wrinkles running through the batten pocket in to the sail body disappear. The lower battens are longer and hold more shape, so they will require the most tension. The top battens are shorter and support less shape, so they will require less tension.
- 7. Safety Check.** Make sure all ropes are in good working order and secure. Make sure your mast foot universal joint is in good working order as well as the safety leash rope that backs up the joint in case it breaks. Make sure the universal/mast base connection is secure.

## Problem & Solution

- Wrinkles around batten pockets • Increase batten tension
- Battens don't rotate, or they bend into an "S" shape • Reduce batten tension
- Wrinkles around the boom area • Increase downhaul or reduce outhaul
- Leech is excessively loose and noisy • Reduce downhaul tension
- Too much front or back hand pressure • Set the boom to shoulder height or slightly higher
- Still too much front or back hand pressure • Move your harness lines backward or forward on your boom
- Sail is too powerful • Increase downhaul and outhaul tension
- Not enough power or forward drive • Reduce outhaul tension
- Sail does not feel stable • Increase downhaul tension
- Boom and/or luff don't meet spec • Use a tape measure to make sure your hardware is marked correctly

## Fine Tuning

The best rigging advice is to add sufficient downhaul tension. It is best to start with a little too much tension and then tune from there. Use the rigging mark on the top of your sail as a guide for down hauling. Down haul the sail until the leech goes loose in to this mark. The sail will perform best with this downhaul setting in nearly every condition. The correct downhaul tension will provide easy handling in high wind, and also smooth efficient twist in lighter wind. For extreme light wind, it may be beneficial to reduce the downhaul tension a little to induce more shape in to the sail which will provide more power. The outhaul is the main power control for the sail. Start with the recommended boom length, and adjust according to your conditions and style- Less outhaul will create more power in the sail, and more outhaul will create a sail that is flatter, less powerful and more neutral feeling in the hands. Please note- you should never add too much outhaul to the sail, no matter how strong the wind- over out hauling will make your sail very unstable, gutless and difficult to handle. Note that battens do not necessarily rotate around the mast although with some stiffer or bigger-diameter masts, the front of the battens may come closer in. A stiffer mast will make your sail more powerful, and a softer one will make your sail less powerful and more flexible feeling.

## Poly Clew Outhaul

The models Banzai and Guru feature the Poly Clew outhaul system. With a longer/upper, and shorter/lower clew position, the Poly Clew gives you the option to tune the sail for optimal performance by matching the sails power delivery and handling characteristic to your individual style. Use the upper clew ring for maximum lift and drive. Use the lower ring to achieve a more compact and flexible feeling rig. Bigger sailors tend to prefer the upper ring. More maneuver-oriented sailors tend to prefer the lower ring. Or you can thread your outhaul through both rings and feel the benefits of both positions.

- 1 Upper Ring • More Direct Feel.** Longer boom. Higher boom angle. Tighter lower leech. Higher power triangle engaging the upper Stretch Control tendon.
- 2 Lower Ring • More Flexible Feel.** Shorter boom. Lower boom angle. Softer lower leech. Lower power triangle engaging the lower Stretch Control tendon.
- 3 Both Rings • A Blend Of Both Feelings.** Medium boom length. Medium boom angle. A well balanced mix of the above handling characteristics. Engaging both the upper and the lower carbon Stretch Control tendons simultaneously.
- 4 Sail Power.** Pull the outhaul + 1.5 cm from spec for less power and more neutral handling. Release the outhaul - 1.5cm from spec for more power and more direct handling.

## Sail Care

Avoid rigging on rough surfaces such as asphalt or concrete. When you roll up your sail, make sure that it is free of sand and that you do not crease it. When not sailing, put your sail in the shade. Never leave your sail at the beach with sand blowing across it.

## Safe De-Rigging

Release the outhaul tension and unthread the rope from the sail and release the downhaul tension and unthread the rope from the sail. Detach the front end of the boom from the mast and remove the boom. Slide the sail off the mast, a bit at a time, while rolling it up the same way it was rolled originally. Store it in the sail bag. If it is wet with salt water you can store it as is, if it is wet with fresh water, you must first dry it thoroughly.

