

RIGGING, TRIMMING, TUNING & TROUBLESHOOTING

Please follow these instructions assuring your MORPHO SAILS works optimal in a wide variety conditions.

RIGGING - IN 3 STEPS:

1. Join bottom and top of your mast and make sure they are tight together, if needed tape both parts so they won't separate. Insert the mast properly but please make sure there's no sharp edges on the mast tip that may damage the inside of the mast sleeve. Walk to the top of sail and properly set the mast top in the top cap of sail until you feel it's going no further, DO NOT start pulling downhaul furiously as you may break the cap in case it's not properly inserted.
2. Set the mast extension to the values as printed in the sail, lace the rope properly so it's not intertwined and give downhaul at approximately 60% of the tension. When in doubt of the correct length please measure distance from bottom of mast to top side of the pulley on your mast extension, the difference should correspond with the values as printed on the sail.
3. Attach the boom properly to mast, do NOT tighten too much causing damage to the mast. Use a RDM shim if your boom front doesn't have an integrated adapter, set the height according to your preference but realize that a high boom results in less pressure on the board and a low boom puts the pressure on which may cause your board to spin out, set the boom length as indicated in the foot of your sail and fasten the outhaul and pull only 60% of the total travel.

TRIMMING - IN 2 STEPS:

1. DOWNHAUL - Trim your sail according to the wind conditions by pulling the downhaul to the setting as indicated in the print on the foot of sail, this is the ballpark setting for 'sweet-spot' conditions. Should you think there's not enough or too much downhaul applied, please check the leech of the sail where the 'loose' in low/medium wind setting should not extend further than between batten #1 and #2. In stronger wind you may wish to apply 1-2cm more downhaul, however never causing the loose leech to extend further than batten #3 (counting from top). In lighter winds you may decide to loosen the tension by 1 or 2 cm's, this will result in a fuller shape of sail and more power. Please note that using another mast than our standard mast may cause your downhaul settings to vary a little, softer masts need more extension and stiffer masts less.
2. OUTHAUL - The outhaul tension follows the downhaul tension you set. More downhaul calls for more outhaul. And the other way round, less downhaul equals less outhaul. Yes it's that simple. Now how can you check if you have the right amount of outhaul pull? We suggest you sit on your knees at the mast-side near the boom front. Push the sail down with both hands flat on the cloth and check how much shape the sail will generate in full wind - in any case the sail should NOT touch the boom anywhere. If you think it's too full, just pull a few cm more outhaul. Please note there's quite some shape coming out the mast sleeve and as a result our sails need a fair amount of outhaul tension, probably more outhaul than you are used to.

TUNING & TROUBLESHOOTING:

TUNING: Your sail comes factory tuned. This means it has been rigged in our Sri Lanka loft and the battens have been set to the optimal tension. We STRONGLY recommend to NOT tighten anymore unless you see

clear wrinkles on the batten pockets, which may occur after some years of intensive use. Should you wish to apply more or less batten tension than the standard setting, please use the little tool inside the pocket on your sail bag but do NOT overtighten as this may cause your battens to S-bend! Release excess batten tension back to the standard setting after you have sailed, do NOT leave battens OVER-tightened in your drying sail.

TROUBLESHOOTING: Please send us a picture of the sail in case of doubt – power@morphosails.com - it's our pleasure to assist you finding the perfect setting. Here's some standard problems you may encounter:

- 1) Your sail does not have enough power;
 - a) Release downhaul with 1cm steps and
 - b) Release outhaul with 2cm steps at a time.

- 2) Your sail has too much power;
 - a) Increase outhaul tension with 2-3cm steps and/or
 - b) Increase downhaul with 1-2cm steps (but do NOT loosen leech further than batten #3!).

- 3) Your sail has too much backhand pressure;
 - a) Increase outhaul with 2cm steps,
 - b) If needed slightly pull the downhaul with 1cm steps,
 - c) Move harness lines a bit further back,
 - d) Consider the original or a slightly stiffer mast.

- 4) Your sail is pulling you forward;
 - a) Increase downhaul tension with 1cm steps and
 - b) Give more outhaul tension with 1-2cm steps.

- 5) My board is spinning out;
 - a) Check your fin for damages or upgrade to aftermarket model,
 - b) Up your boom with a few cm to release pressure from fin,
 - c) Your sail is too full, see point 2.

- 6) My board is slow to plane up;
 - a) Your sail is too flat, see point 1 and/or
 - b) Lower your boom with a few cm and/or
 - c) Move your mastfoot forward with 1-2 cm steps and/or
 - d) Mount one size bigger fin or
 - e) Get a bigger board.

PLEASE NOTE

- Increasing or decreasing downhaul tension is done with 1cm to max 3cm from the spec setting , please do not apply too much downhaul tension as this will only shift the shape backwards and cause sail to work worse.
- Outhaul tension can be increased with 2 to 5 cm, over-pulling outhaul only results in flatter and less powerful sail which may feel nervous in your hands but will handle more wind.