

## **RIGGING EZZY CAMBERED SAILS**

- Note to non-Ezzy mast users:
  - I) You must calibrate your sail and mast. Please refer to guide titled "Calibrated Rigging Guide".
  - 2) You must adjust the cams to fit your mast. Please refer to the guide titled "Custom Fit Your Cams To Your Mast".

# Rigging Steps I to I0:

- I) **SLIDE MAST IN ABOVE CAMS:** lay your sail on the ground and insert your mast into the mast sleeve, sliding the mast ABOVE the cams.
- 2) CHECK ADJUSTABLE HEAD: once the mast has reached the top of the sail, walk up to check that the mast tip is properly seated in the head cap. Also check to make sure that the adjustable head is set to its shortest setting.
- 3) THE INITIAL DOWNHAUL: attach your downhaul line, but DO NOT TENSION IT YET.
- **4) THE INITIAL OUTHAUL:** refer to your sail's boom specifications located at the tack and outhaul to the **maximum** boom length.
- 5) POP CAMS ONTO THE MAST: open the velcro slots at the cam and pop the cams onto the mast. Do this by pushing down on the batten while lifting the cam onto the mast (fig. I).

  Note: If you have difficulty getting the cams onto the mast, make sure you have no downhaul tension and that you have your sail outhauled flat.
- 6) FINAL DOWNHAUL: downhaul your sail until the calibration mark on the sail lines up with the bottom of the mast (fig. 2). For a fuller/light wind setting, downhaul until the "Min" line of the gauge lines up with the bottom of the mast. For a flatter/high wind setting, increase the downhaul until the "Max" line of the gauge lines up with the bottom of the mast. For more information, please read the guide titled "Calibrated Rigging Guide". Note: if you are not using an Ezzy mast, you must pre-calibrate your sail and mast. Refer to the "Calibrated Rigging Guide".
- 7) **FINAL OUTHAUL:** The three colored cords sewn at the clew indicate how much positive outhaul is needed for varying wind conditions. The longest cord indicates the maximum positive outhaul for strong wind, the middle cord indicates the medium outhaul setting and the shortest cord shows the minimum positive outhaul for lighter wind. Follow these steps to set the outhaul:
- a) Correctly set the downhaul.
- b) Release the outhaul tension completely.
- c) Gently pull on the outhaul cord and set your boom to the end of the cord (fig. 3a).
- d) Outhaul your sail to the end of the boom (fig. 3b).

#### Additional Information:

- When setting your boom to the cord, don't pull the clew.

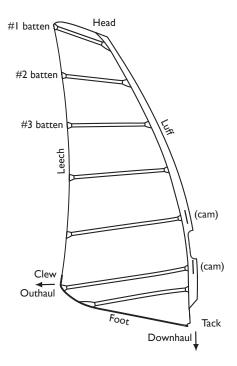
Always match your outhaul to your downhaul. For light wind downhaul to the "min" mark on the gauge and outhaul to the shortest cord. For strong wind downhaul to the "Max" mark on the gauge and use the longest clew cord to set your outhaul. Note: the Lion can take up to 10 cm of positive outhaul. If you feel back-hand pressure, add more outhaul.

8) CHECK THE BATTEN TENSION: when correctly tensioned, there should be no wrinkles running perpendicular to the batten pockets. If the battens need adjusting, use the screwdriver key that is stored at the tack of your sail and tighten the battens until the wrinkles through the batten pocket disappear. WARNING: OVER-TENSIONING THE BATTENS COULD DAMAGE THE SAIL.

Note: You only need to check your batten tension the first or second time rigging.

9) TACK STRAP: Tension the tack strap until you get a small wrinkle running out from the corner of the sail. Then, wrap the end of the tack strap around your mast extension and loop the end of the tack strap under itself and secure the strap with the velcro. Store your downhaul line in the mesh pocket located inside the pad. (see fig. 4).





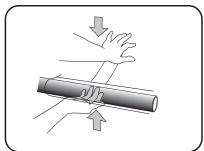


Fig. 1: popping cams onto mast

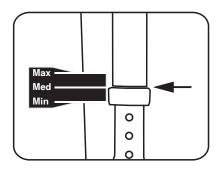


Fig. 2: downhaul until the calibration mark lines up with the bottom of the mast.

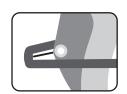


Fig. 3a: set the boom length to the outhaul cord



Fig. 3b: outhaul sail to the end of the boom

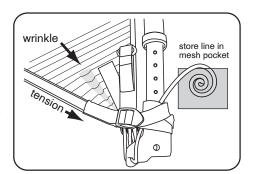


Fig. 4: tension Tack Strap

# De-rigging:

- 1) Outhaul sail flat.
- 2) Un-thread the tack strap and unfasten the mast pad velcro.
- 3) Release downhaul completely.
- 4) Open the velcro openings at the cams and allow the sleeve to slide up the mast.
- 5) Wiggle the cams back and forth to loosen them on the mast, then pop the cams off the mast.
- 6) Spin the mast while slowly pulling it out of the sleeve.
- 7) Roll the sail beginning from the head. After rolling, tuck the mast pad along the sail, then wrap the tack strap around the pad and sail, then fasten the velcro (see fig. 5).
- 8) Insert the sail into the sail bag with the SLEEVE-END first (fig. 6).

Fig. 5: wrap the tack strap around the pad and sail.

# Using Your Sail Without the Cams:

You can use your sail with both cams, with a single cam or with no cams. To remove the cam the sail should be unrigged. Open the velcro slots and remove the cam and the cam pocket. Close the slots and you are ready to rig.

## Sail Care:

- Sunlight will break down all sailcloth in a relatively short time (300 hours of direct sunlight).
   Don't dry off your sails in the sun!
- 2) **Creasing** damages sail cloth. When rigging and de-rigging, try not to crease your sail or let it flap in the wind.
- 3) Sand will scratch the sailcloth and accelerate camber wear. Try to roll your sail sand-free.
- 4) Cleaning: Use a mild soap and water with a rag to clean your sail. Harsh solvents may damage the sail cloth. Contrary to what most people think, you do not need to fresh-water rinse your sail.
- 5) **Storage:** It will not damage your sail to store it with the battens fully tensioned. If you are storing your rolled sail vertically, make sure the sleeve-end of the rolled sail is supporting the weight. This prevents the clew from getting damaged.



Fig. 6: to avoid damaging your sail, insert the sleeveend first into the bag.

# **Problem Solving:**

# It is difficult to pop the cams onto the mast when rigging.

- I) Make sure you have your sail outhauled flat.
- 2) Make sure you have no downhaul tension.
- 3) Cam pocket may be too short or you may have the wrong cam inserted. Refer to guide titled "Custom Fitting Your Ezzy Cams To Your Mast".

## If you can't close the velcro openings on the mast sleeve.

Your Cam Pocket is too short.

#### The sleeve is too loose around the cam.

Your Cam Pocket is too long.

## If your sail feels too powerful.

- I) Sail is too deep: try more downhaul and outhaul.
- 2) Mast is too stiff: check that you are using the correct mast.

### If your sail lacks power.

- 1) Sail is too flat: try less downhaul and less outhaul.
- 2) Mast is too soft: check that you are using the correct mast.

## If your sail pulls too much on your back arm.

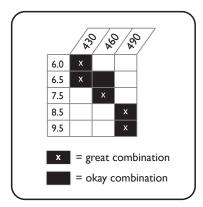
- I) Need less downhaul.
- 2) Need more outhaul.
- 3) Harness lines need to move back.
- 4) Move your universal further forward on your board.

#### If your sail pulls too much on your front arm.

- I) Need more downhaul.
- 2) Need less outhaul.
- 3) Harness lines need to move forward.
- 4) Move your universal further back on your board.

#### How can you "soften" your cam rotation?

- I) The fuller your sail is set, the "harder" the cam rotation will be. Applying more downhaul and outhaul will give a softer cam rotation.
- 2) Using one size longer cam pocket will also soften the rotation.



Suggested Masts