

# **Calibrated Downhaul System**

## 1) To set your downhaul:

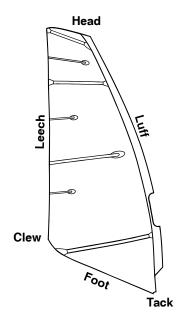
- a) Use the correct Ezzy mast combination and check that the length of your mast falls within the recommended length (chart 1). See "Troubleshooting" if your Ezzy mast combination does not match with the lengths in Chart 1.
- **b)** Downhaul your sail until the calibration mark lines up with the bottom of the mast (figure 1).

#### Which Calibration Line to Use?

- For extremely strong wind, use the MAX line.
- For normally powered conditions, use the MEDIUM line.
- -For light wind, use the MIN 1 line.
- -For very light wind, use the MIN 2 line.

#### Additional Information:

- We have set the adjustable head cap to its shortest setting. **Do not readjust the head webbing.**
- Do not over-downhaul. Too much downhaul will make the sail unstable.
- -If you feel back-hand pressure, apply more outhaul.
- To get maximum power, reduce the outhaul as well as the downhaul.
- -The Taka has been designed to have a fold of material extending along the luff from the #2 batten at the top, down to the foot batten. This allows the sail to depower during transitions.



|     | Mast Combinations<br>Bottom Top |     | Total Length<br>(including tip plug) |
|-----|---------------------------------|-----|--------------------------------------|
| 3.8 |                                 | 370 | 355.5 cm                             |
| 4.1 | 370                             | 370 | 370.5 cm                             |
| 4.5 | 370                             | 400 | 385.5 cm                             |
| 4.7 | 370                             | 400 | 385.5 cm                             |
| 5.0 | 370                             | 400 | 385.5 cm                             |
| 5.3 | 400                             | 400 | 400.5 cm                             |

Chart 1: correct Ezzy mast combinations.

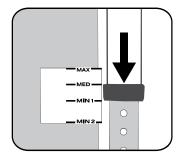


Figure 1: Downhaul until the calibration mark lines up with the bottom of the mast.

# 2) Setting the Downhaul <u>Without</u> the Correct Ezzy Mast:

- a) Set your mast extension to the correct height.
- b) Slide your mast into the luff sleeve, making sure the mast sits <u>above</u> the foot batten (figure 2). Do not apply any outhaul.
- c) Begin downhauling slowly while observing the front of the foot batten. Continue downhauling just until the front of the foot batten "pops" to the other side of the mast (figure 3) and then stop downhauling.
- d) This is your medium wind setting.
- e) Now, remove the downhaul gauge from the velcro and move it so that the medium mark lines up with the bottom of your mast (figure 4).
- f) The downhaul gauge is set. From now on, just downhaul until the gauge lines up with the bottom of your mast.

#### Additional Information:

- See the previous page for an explanation on which gauge line to use.
- Do not over-downhaul.
- The Taka is not designed to rig with a floppy leech.
- -The Taka will have a loose fold of material running along the luff for all downhaul settings.

# 3) Tension the Tack Strap:

Tension the tack strap until you see 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 (figure 5).

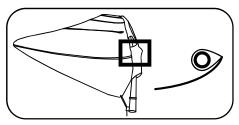


Figure 2: Slide the mast in above the foot batten.

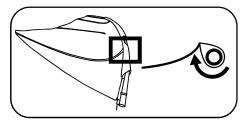


Figure 3: Downhaul slowly until the front of the foot batten "pops" to the other side of the mast.

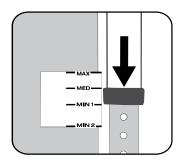


Figure 4: Move the calibration gauge so the medium mark lines up with the bottom of the mast.

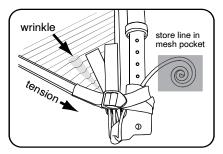


Figure 5: Tension tack strap and store downhaul line in mesh pocket.

### 4) Set the Outhaul:

The Taka requires more positive outhaul than most sails (figure 6).

The three cords sewn at the clew indicate how much positive outhaul is needed for varying wind conditions. The longest cord indicates the maximum outhaul, the shortest cord the minimum outhaul, and the middle cord indicates a medium outhaul setting.

## Follow these steps:

- a) First, set your downhaul correctly.
- **b)** Then, release the outhaul tension completely.
- **c)** Now, gently pull on the outhaul cord and set your boom to the end of the cord (figure 7).
- **d)** Finally, outhaul your sail to the end of the boom (figure 8).

#### Additional Information:

- When setting your boom to the cord, don't pull the clew.
- We suggest starting with the medium length cord. If you feel over-powered (back-hand pressure), increase the outhaul about 1 to 2 cm. If you feel under-powered, reduce the outhaul by about 1 to 2 cm.

# 5) Tensioning the battens:

Use the tensioner key that is stored in the pad of the sail and tension the battens until you eliminate any vertical wrinkles that extend out from either side of the batten pocket (figure 9).

**Warning:** Do not over-tension the 3/4 batten. It requires only slight tension.

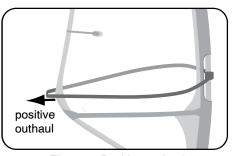


Figure 6: Positive outhaul

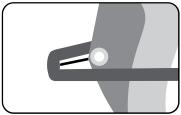


Figure 7: Set the boom length to the outhaul cord

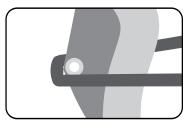


Figure 8: Outhaul sail to the end of the boom

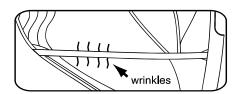


Figure 9: Tension the battens until there are no vertical wrinkles on either side of the batten pocket.

## 6) Sail Care:

- To avoid mold and mildew, do not store your sail when it is wet with fresh water. Mold and mildew will not grow on sails rolled wet with saltwater.
- Creasing damages the sail cloth. Avoid creasing your sail when rigging and de-rigging.
- Sunlight kills all sail cloth. Keep your sail out of the sun when not sailing.
- Don't rig on sharp objects.
- After rolling the sail, tuck the pad so it rests along the sail, wrap the tack strap around the pad and the sail, then attach the velcro (fig. 10).
- Insert your sail sleeve-end first into the sail bag (fig. 11).
- Never store your sail upright on the clew.

# 7) Troubleshooting:

- > I am using the correct Ezzy mast combination, but my mast is 3.0mm longer than the lengths listed on your chart, what should I do?
- a) Lower the downhaul gauge 3.0mm from the factory setting.
- > My Ezzy mast is 3.0mm shorter than the lengths listed on your chart, what should I do?
- a) Raise the downhaul gauge 3.0mm from the factory setting.
- > My sail has too much back-hand pressure.
- a) Apply more outhaul.
- b) Reduce downhaul

