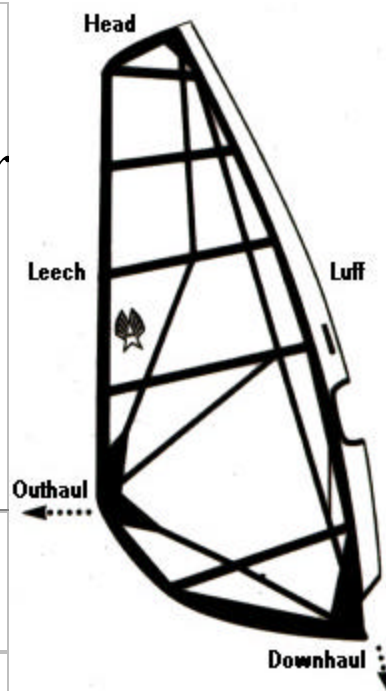


# 1997 Transformer Bump & Jump

## Rigging & Fine Tuning Guide



**1) Roll out the sail, insert the foot batten and tension it.**

**2) Slide the mast through the luff sleeve (see diagram 1).**

**Note: When rigging with the cam, slide the mast above the cam (do not attach the cam yet.)**

**3) Attach the mast extension with no downhaul tension; just clear the downhaul line.**

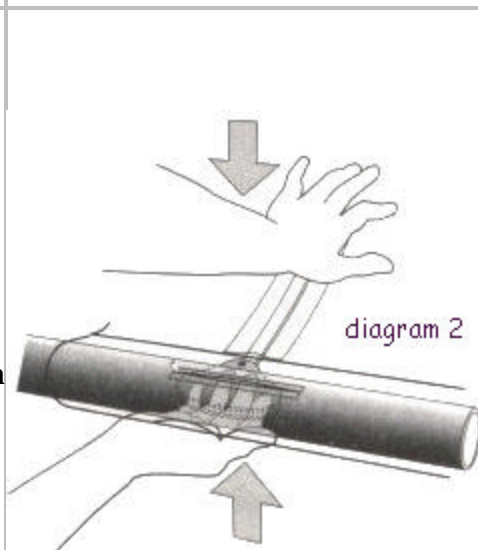
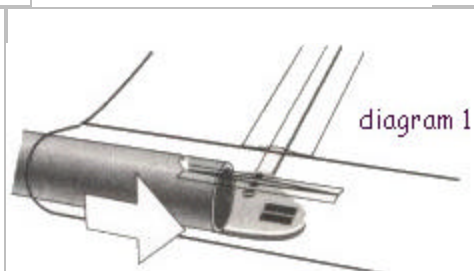
*Quick Tip:* It is easier to attach your boom onto the mast when there is no downhaul tension.

**4) Attach the boom and outhaul the sail to the boom length (printed on the sail). The sail should be outhauled flat in the boom area.**

*Quick Tip:* Attach your boom at, or below the center of the boom cut-out to prevent the top of the boom cut-out from getting caught on the boom while downhauling. (To use as full-batten, i.e.: without the cam, ignore step #5.)

**5) Attach the cams to the mast by pushing down on the batten with the palm of your hand, approximately 12" (30cm) from the luff sleeve, and snap the cam onto the mast with your other hand (see diagram 2).**

*Quick Tip:* If the cams are difficult to put on the mast, check that the batten tension webbing is loosened until the Velcro touched the buckle (see diagram 3). This will allow the cam to slide further into

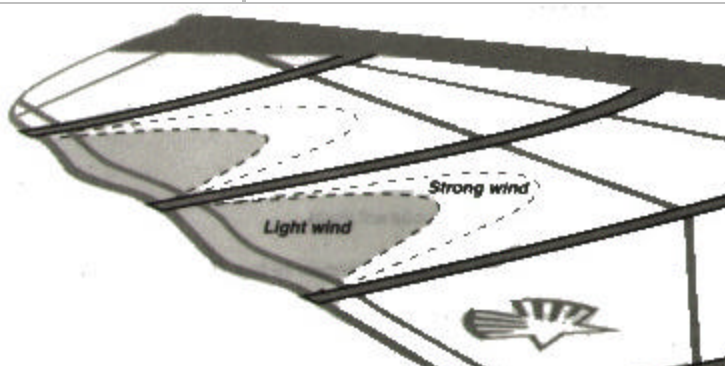


the sail and will make it easier to get the cam on to the mast. Also, make sure the sail is outhauled flat before attempting to snap cams onto the mast.



*Quick Tip:* Opening the zipper will make it easier to snap the cam on to the mast. To avoid damaging the zipper, be sure to close the zipper before tensioning the cam batten.

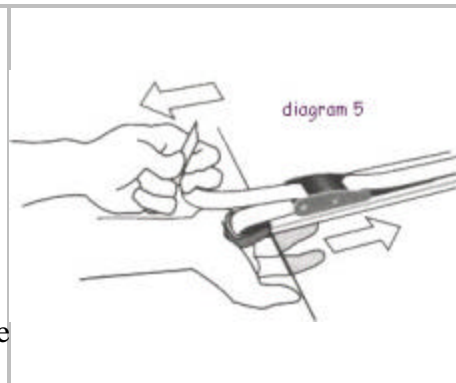
**6) Downhaul the sail until the leech goes loose between battens #1 and #2 and battens #2 and #3. The looseness should extend approximately 12" (30cm) for light wind and 18" (45cm) for strong wind.**



*Quick Tip:* The amount of downhaul tension will vary for different wind conditions: A high-wind setting requires more downhaul tension, which loosens the leech and give more twist, increasing your top-end speed. Then for lighter wind, the sail will perform better with less downhaul. This gives the sail a tighter leech and better low-end power, which you will need to get on a plane quicker and be carried through lulls faster.

*Quick Tip:* Always keep your base extension at its shortest possible setting. If there is not enough space for downhauling and you have mast extending from the top, use the adjustable top to raise the sail up on the mast rather than extend your base.

**7) Tension all of the battens, starting at the batten above the boom, by pulling on the batten strap while pushing the palm of your other hand against the batten end-cap (see diagram 5). Tension all battens until the vertical wrinkles running through the pockets disappear.**



*Quick Tip:* It is possible to over-tension the cam batten, which will cause the cam not to rotate. A quick check of this can be done by holding the sail up on land and rotating the cam by pumping the sail. the cam should rotate smoothly; if it doesn't, decrease the batten tension.

**8) Release the outhaul totally and then re-tension it. For light winds, pull the outhaul until the edge of the foot has slight tension. for stronger wind, outhaul until the foot is fully tensioned.**

*Quick Tip:* The Bump'n'Jump Transformer requires slight positive outhaul, and should not be used with negative outhaul.

## Rigging a 1997 Ezzy Transformer Bump & Jump Sail



*Foot is loose, need more outhaul.*



*Foot is tight, outhaul correct*

**9) Check that the camber is not over-rotated. This will fatigue the cam and the batten and lead to possible breakage. If the cam is over-rotated, you need more downhaul.**



*Cam is not over-rotated, downhaul is correct*



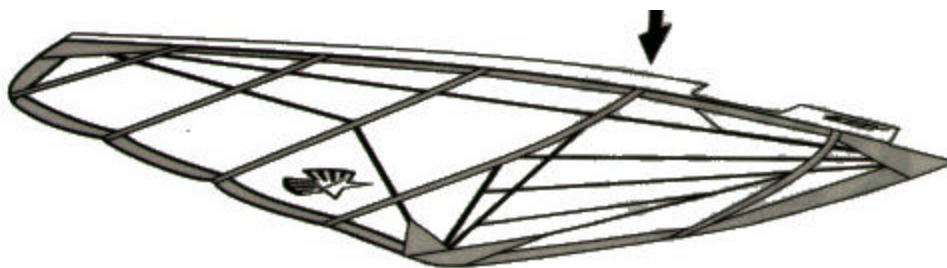
*Cam is over-rotated, need more downhaul*

**10) Tension the tack-strap until the edge of the sail beside the tack grommet touches the side of the mast.**

*Quick Tip:* The correct shape in the lower part of the sail will be attained when the tack-strap is fully tensioned.

### To Use As Full Batten:

- 1) Outhaul sail fully.
- 2) Release cam batten tension at leech end.
- 3) Snap cam of mast
- 4) From the opening in the sleeve, pull out the camber and batten.



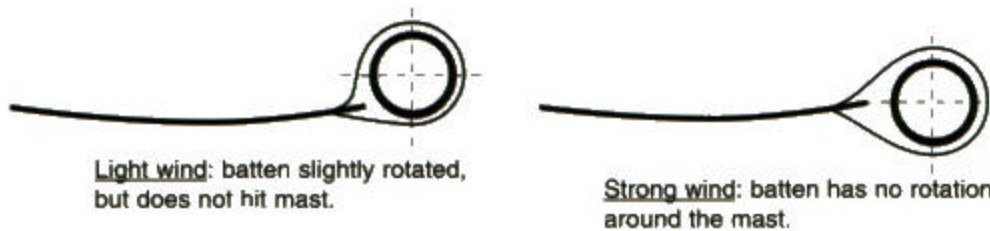
5) From the leech end, insert the tapered end of the batten into the lower batten pocket opening.(see diagram 8)

## Rigging a 1997 Ezzy Transformer Bump & Jump Sail



6) Tension the batten.

7) Adjust the outhaul so that the batten above the boom is not touching the mast when it rotates. For strong winds, outhaul until the batten above the boom is resting directly behind the mast.



## De-Rigging

Following this de-rigging sequence will prolong the life of your sail and avoid possible sail damage:

- 1) Release batten tension (pushing the release lever located on the center of the buckle) and tack-strap.
- 2) Release downhaul.
- 3) Snap cam off mast.
- 4) Release outhaul and remove boom.
- 5) Slide mast out of luff sleeve without creasing sail.
- 6) Roll the sail from the top tightly, to prevent creasing.

### HELPFUL SAIL CARE HINTS:

#### Sunlight:

- Sunlight will break down all sailcloth in a relatively short time (300 hours of direct sunlight).
- Don't dry your sails off in the sun! It is better to roll them up wet.

#### Creasing:

- Creasing damages sail cloth. When rigging and de-rigging, try not to crease your sail or let it flap in the wind.

### 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.

### Storage:

- Sail cloth should not be left under tension. After sailing, always release your batten tension.
- Never leave sails fully rigged for long periods of time. If your sail is to be left rigged, release the downhaul and outhaul until the mast has no bend. It is also advisable to unhook the Power-on Head elastic during extended periods of rigged storage.

## TROUBLE SHOOTING:

Problem:	Possible Solution:
Camber is difficult to get on the mast	1) Make sure th batten tensioner is completely released while snapping cam on. 2) Make sure the sail has no downhaul tension and is outhauled fully before snapping cam on.
Camber does not flip	1) Camber batten too tight, release a little batten tension. 2) Cam is over-rotated, need more downhaul.
Camber comes off mast	1) Camber is over-bending, need more downhaul 2) Mast diameter is larger than normal, lengthen the webbing straps on the cam.
Foot batten does not flip	1) Foot batten has too much curve, give more downhaul and outhaul 2) Foot batten is over-tightened, release some tension.
Sail jerks you forward when starting off	1) Leech too tight, try more downhaul.
Sail feels too powerful	1) Sail is too deep, try more outhaul and downhaul 2) Mast is too stiff, check that you are using the correct mast.
Sail lacks power	1) Sail is too flat, try less outhaul and less downhaul. 2) Mast is too soft, check that you are using the correct mast.