



# TUNING GUIDE

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## OPTIMIST

### **Mast Rake**

Measured from top of mast to top middle of transom. If measured with the sail up ease the kicker and ease the sprit so that mast bend is not affecting the measurement.

Max rake 2770mm Minimum rake 2850mm.

The amount of rake you choose to sail with will be determined by your weight and sail power. The heavier sailors will want to stay upright for more power and the lighter sailors will need to rake to de-power. Remember that you are stuck with your rake settings for an entire race so you should avoid the extremes. It is generally best to stay in the 2800 to 2820 range.

### **Outhaul**

We recommend 40mm +/-5mm from the clew to the inside edge of the outer boom fitting in most conditions. Use the lower leech tell tale to check whether you have too much eased. If it is stalling before the top telltale then try pulling a little on. Too much on and you will reduce your pointing ability.

Lightweight helms may need to pull more outhaul on in strong breeze. This will help reduce the power and the weather helm.

If it is possible try easing 2cm of outhaul downwind for even more power! Only if you are confident you can re set it up –wind

### **Luff tension**

Luff tension is difficult to measure but is vital. In light winds set the luff tension so that there are hints of creases coming from the eyelets. In more breeze you will need to increase the tension but never so that there is a vertical crease behind the mast!

Too much luff tension will pull the flow forwards and reduce pointing. If you are not pointing ease the tension until wrinkles appear.

### **Sprit tension.**

In up to 10 knots of breeze set the sprit so that on port tack you get a small 30cm crease in the throat-clew direction on the sail where the sprit touches the sail.

In more than 10 knots until over powered increase the tension so that you remove the crease but never pull enough to get the crease running along the line of the sprit.

Once over-powered ease about 1cm of sprit, which will allow a crease from throat to clew but opens the leech reduces weather helm and is faster than fighting the boat up-wind.

### **Kicker**

The kicking strap should be just slack up-wind. Mainsheet over-rides the kicker.

Down-wind you should have enough tension so that the top batten is parallel to the boom. Too much and the leech hooks and will not flick open over waves, too little and you have too much twist and the breeze exhausts out of the upper leech giving less drive and making the boat unstable.

### **Sail ties**

Set the sail 5mm from the mast in 5-10 knots of breeze. As the wind increases 10-15 knots reduce to 3mm and 1mm when overpowered.