



## Optimist Tuning Guide

We have put together this tuning guide to help you set your Optimist up as close to its ideal settings as possible. Although it is not worth getting overly immersed in boat tuning, it is important to try and get everything close to the correct setting so that your boat speed is good in all conditions.

### Speed Sails:

**FX:** Radial Sail for sailors up to 40kgs.

**F1:** Crosscut sail for sailors up to 40kg. One of our most successful sails and used mainly by lighter helms.

**FX+:** Radial Sail for helms in 38-45kg range. Designed as a more powerful option to the FX, the FX+ provides extra power in the moderate conditions yet still de-powers effectively in the stronger winds.

**F2:** Crosscut Sail for helms above 45kg. Full and powerful design. Extra seam shaping provides the power without sacrificing height upwind.

### Mast Rake

This is one the most important areas in the set up of your Optimist as it controls the balance of your boat. We recommend sailing with a rake of **110" -112"** inches. In light winds sail with the mast rake closer to 112". When you have to ease the mainsail upwind to de-power, rake the mast aft to 111" (this will obviously happen earlier for lighter weight sailors). In very windy conditions when you are really overpowered, rake the mast back to 110". This will help to de-power the sail. You should mark these positions alongside the heel of the mast so that you know where to move the mast if you have to do it on the water.

### Mast Ties

Class rules state that the distance from the spar to the sail shall not exceed 10mm. The basic set up that you are trying to achieve here is to have the top and bottom sail ties at 6mm from the mast and the middle ones set so that the sail will tack smoothly without getting caught on the back of the mast. The Speed sail is a bit more forgiving than some other sails and the ties don't really need to be adjusted for different wind strengths. \_\_

## Boom Ties

These are not as important as the mast ties. In light winds, set them close to the maximum distance of 10mm. As the wind increases tighten the tack and clew ties so they are just off the boom (about 2mm).

## Sprit

The main function of the sprit is to control the leech tension of the sail. It is used in conjunction with the kicker. The creases that appear in your sail will give you clues as to whether or not your sprit is set correctly. If there is not enough sprit tension, you will see a crease running from the top of the mast to the clew. This is slow except in survival conditions when the sprit can be eased off to de-power the sail.

Any crease running from the peak of the sail to the tack indicates too much sprit tension. This will be particularly evident in light winds when sailing downwind if you forget to ease the sprit. A well set sail will still have little horizontal 'speed bump' creases along the mast. Don't worry about these.

**Light winds:** The sprit should be let off a little to help open the leech and help the air flow smoothly across the sail.

**Choppy conditions:** You should sail with slightly less sprit to help power up the sail.

**Heavier conditions:** Lots of sprit to help close the leech. When it becomes survival conditions you can let the sprit off. This will give a horrible crease from running diagonally down towards the clew, but it will de-power the sail by letting the upper leech fall to leeward.

**Downwind:** Ease to remove any crease running from peak down to the tack.

## Luff Tension

Luff tension is controlled by the line that attaches to the boom jaw and goes over the pin at the front of the mast (tack diagonal tie). Adding twists to this rope raises the boom and reduces luff tension. A vertical crease running parallel to the mast indicates that there is too much luff tension (put in some twists). Horizontal creases in force 3 and above that do not quite reach the luff are good and show power in the sail.

## Outhaul

This controls fullness in the bottom of the sail. It should be generally be on tight when sailing upwind, except in medium, choppy conditions when it can be eased about 1/2" to help put some power in the sail and prevent the boat stalling.

## **Kicker**

When you pull in the mainsheet in light to medium winds, pull on just enough kicker to take up the slack. When the wind increases so that you have to ease the main upwind start to put on more kicker to stop the boom rising as you spill wind. When you are overpowered pull on lots of kicker.

We hope that this guide is helpful to you. If you have any further queries, please do not hesitate to contact the Speed Team on +44 (0)1922 455503 or e-mail us: [sails@speedsails.co.uk](mailto:sails@speedsails.co.uk)