

# TUNING GUIDE

## OPTIMIST RADIAL

### MAST RAKE

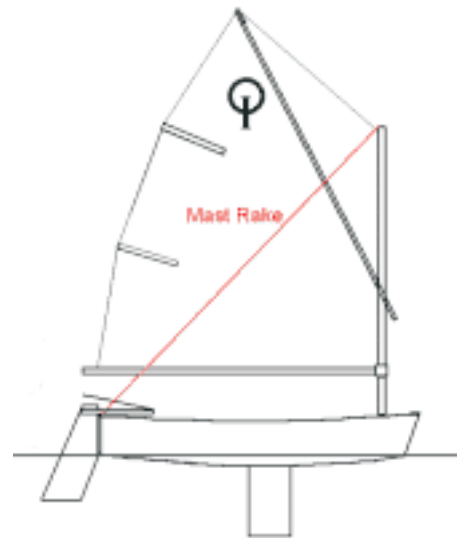
It is required to place the mast rake so that the helm is well balanced.

Follow the complete guide according to the sailor's weight (for approximately 8-12 knots of wind)

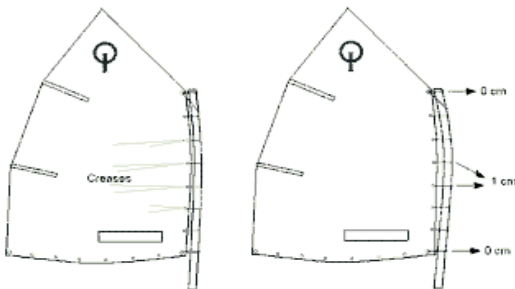
30-40 Kg/up to 80lbs	2.78-2.81
40-45 Kg/80-95lbs	2.80-2.83
> 45 Kg/95-100lbs	2.83-2.86

A well-balanced helm will prevail over the previous measurements.

Note: In case of heavy weather helm, first try swinging the centerboard backwards, if this does not work, increase the mast rake by 1-2 cm (move the mast forward).



### SAIL TIES ADJUSTMENT



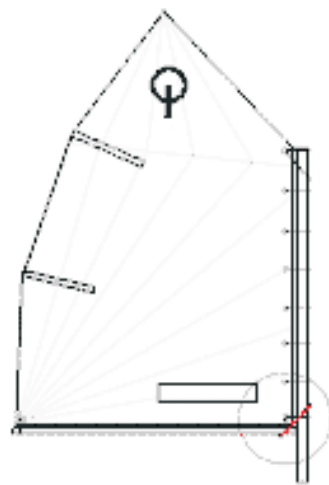
For luff tie adjustments maintain the luff between 1-2 mm distance between the sail & the mast.

For proper shape in strong wind conditions is important to keep the top & the bottom eyelets close to the mast. (0mm)

For a sailor's weight of more than 44 kg/97lbs, it is possible that some creases may appear from the luff to the clew, if this happens try to loosen the middle sail ties (where the creases are generating).

## CUNNINGHAM

The cunningham is very important on the radial sail (especially the light and medium models). Without tension on the luff in low wind conditions (tension on the stop tie) we would lose pointing angle and ability. In high wind conditions, we can loosen this tie to move the camber forward and open up the leech.



## KICKER / VANG

When sailing in light air conditions you need to sail with little to no vang tension. In these conditions try to adjust it before the start by putting the sail in the downwind mode adjusting the vang until the top batten is firm and not falling off leeward. With high wind conditions you will have to pull much more tension (especially with the light & medium models.) With the heavy and X-heavy models, stop pulling the vang if you have creases appearing from the luff to the clew.

## SHEET TENSION



From 8 till 14 Knots you can pull the sheet until the boom is around 4-7 cm inside the hull corner in order to achieve more pointing angle (especially with the light and the medium models) . Please remember that you will have to ease the sheet when the boat is slowing down and trim it when the boat has speed.

## Peak

You should adjust the peak so there are as few creases as possible from the head of the mast below. When in doubt, it is better to sail with less tension than with too much.



QUANTUM SAIL DESIGN GROUP - ONE DESIGN

[www.quantumsails.com](http://www.quantumsails.com)

Terry Flynn [tflynn@quantumsails.com](mailto:tflynn@quantumsails.com) Phone: (281) 474-4168