

# **FIREBALL TUNING GUIDE**

(For Proctor Epsilon or Superspar Mk2)

- 1. Mast Rake - 22' 5 1/2" (6845mm)**  
Measured with jib tension on hard (350 lbs on jib luff) and pulling a tape to the top of the mast on the main halyard. Pull the tape tightly and take the reading from the centre of the transom where it joins the rear deck.
- 2. Spreaders**  
Same again - rig tension on hard, but no deck level control.  
Length: - 1' 5 1/8" (460mm).  
Deflection - measured by placing a batten between shrouds and measuring to the back of mast. 5 1/2" (140mm).
- 3. Rig Tension**  
The importance of adjusting rig tension as a tuning aid cannot be over emphasised. As a general rule in medium conditions, pull on hard (350 lbs). With the mainsail up, look up the mast and there should only be a slight amount of pre-bend with no deck control pulled on. In either very strong wind or light wind (no-trapezing conditions), reduce the tension to approximately 280-300 lbs. Mark on the mast with a black pen these two settings for easy reference. Reducing the rig tension enables slightly more mast bend and allows the leech of both main and jib to open earlier, while still sheeting on the same amount and thus keeping the sails reasonably flat.
- 4. Strut or Other Deck Control**  
As a general rule with the mainsail hoisted, look up the mast and pull on the strut until the mast is straight. When sailing in medium winds you may require slightly more strut and in light or heavy conditions slightly less. Although this is an important control, do not become obsessed. It is far more important to achieve the correct kicking strap tension.
- 5. Sheeting Angle**  
Generally I do not honestly believe that jib sheeting position needs to be changed - provided that all the other factors mentioned above are adjusted as the wind strength changes. By that I mean - if you let the rig tension off in a strong wind, the jib leech will open earlier anyway and the tension on the sheet makes a tremendous difference to the jib leech - just have a look when out sailing.

The sheeting should be approximately 10"-11"(252 – 280mm) from the centreline of the boat and, on an HSP boat, down hard onto the jib bar. Try it and see!

As a general rule, set the boat up for the maximum power that you can handle in medium winds while ensuring that you do not stall the mainsail leech (look at the top tel-tale - it should be just breaking). As the wind increases pull on the Cunningham rather than let the sail out. Once this is pulled on hard, start to release some rig tension, after that **HANG ON!**