

RS700 Rig Settings Guide - 2005

These readings are based on a survey of the fleet taken at the Stokes Bay open meeting in 2005. No two boats were set up exactly the same. However the vast majority clustered very closely around a mid point which I would therefore recommend as a baseline starting point.

Rake

(masthead to top edge of transom 'bump' with the rig tension on)

Set up the boat with 730 - 740 cm This is normally hole 2-4 on the shrouds.

Rig tension

(measured on the forestay)

Use 450 – 550lb. generally speaking more is good. Ensure that you have a mark so that you can repeat the setting and a second mark if you rake the mast further in high wind conditions

Spreaders



A lot of variation as seen in the spreaders but a base setting appears to be 79cm between the shrouds and 18cm measured from a line tied between the shrouds and the back of the mast track. On my boat this is achieved by using

- aft hole at the outer end of the spreader bracket
- second hole from the front at the inboard end of the bracket
- 2nd hole out at the outboard end of the spreader

n.b. Some of the bigger boys go for wider set spreaders.

Pre-Bend

(measured at the point of maximum bend with the rig tension on, using a line from the masthead to the bottom of the sail track)

Again a lot of variation but the majority of people were using 40-50 mm. The extremes ranged from 90mm to 10mm, both of whom interestingly finished in the top 5.



Figures measuring from left to right rake, pre-bend and lowers deflection.

Lowerns deflection

(checked without the sail up but with the rig tension on)

These will normally be slack before the sail is hoisted – the length varied quite a lot from boat to boat ranging from 'just tight' to up to 5cm of lateral movement with about 4cm being the norm in medium conditions. This is roughly hole 3 on the back holes of the standard stay adjuster.

The lowerns need to be adjusted according to the conditions but within a very small band of adjustment (e.g. I change no more than '1' on the Sta-master calibration scale).

- If the boat feels like it is staggering all of the time, however much kicker and cunningham you use, loosen the lowerns.
- If the boat is always 'loose' underfoot and points poorly, tighten them.

The ability to adjust the lowerns on the water becomes increasingly important as you become experienced with the boat and I would strongly recommend the use of either the optional Sta-Masters or as a minimum fit quick pins on the standard stay adjuster.

Mainsheet Strop



It is impossible to measure how long these should be as every boat has a slightly different rake and arrangement for tying the blocks to the boom. What we are aiming for is a strop which allows you to use maximum mainsheet tension when you are trying to power the boat up but which allows the leeward strop to go loose as soon as you start applying more kicker tension.

As a starting point apply maximum mainsheet tension with some kicker and adjust the strops so that the blocks are almost block to block. Working from here with a little experimentation you should be able to find a length which works in all conditions. N.b. to ensure both sides are the same length, pull the lower block forward onto the hull and ensure it lies on the centreline

Helm

(best not measured on a Saturday night)

The most important aspect of boat tune and the place where you should look first for issues is the helmsperson. These are infinitely adjustable and you'll find that on the water tuning of the nut on the end of the tiller will almost always deliver more benefit than micro adjusting the rig on shore.

Please therefore use these settings as a baseline, spend time on the water and practise. If it doesn't feel right and the boat isn't performing well, look at the helm first and if you sure it's not you make controlled adjustments from this baseline settings.

Changing Gears on the water

A rough guide only...

| Conditions | Mainsheet | Kicker | Cunningham | Outhaul | Board | Rake |
|--------------------------------|---|------------------------------|--|---|--|---|
| Light (F0-1) | Light tension – sheet in during the gusts | A little to flatten the sail | None | Mid setting | Down, (back elastic) | A few people reduce the rake by one hole |
| Max Power (F1-2) | Max, almost block to block at times | Lots | A little – should still have creases up the luff | Mid setting | Down (back elastic) | Normal |
| Overpowered (F2-4) | Play lots, never block to block | More | Increase to de-power the sail | Ease slightly to stop the foot fluttering | Some people rake (front elastic) | Normal |
| Very Overpowered (F4-6) | Ease and play even more | Even more | Lots | Ease slightly to stop the foot fluttering | Rake (front elastic) Some people raise 5-10cm | Rake one hole (reset rig tension, lowers and mainsheet strop) |