

1999 National & Inland National Championship RS 400 Winning Tuning Guide

Mast Position:

The mast should be positioned in the middle of the mast step

Length: 415mm long, measuring from the nearest point of the mast to the shroud.

Deflection - 135mm.

Mast Ram: Set the ram dependent upon the conditions

Wind Strength: Force 0 - 1.5 - Neutral

Force 2 - 4 - 20mm

Force 5 plus - Prebend to depower as required

Rig Tension: Force 0 - 1.5 - 30 -100 lbs (leeward shroud just slack)

Force 2 - 4 (max power) 500lbs

Force 5 plus - 400lbs (with mast raked and ram forward)

NB: if the wind increases during the race and we can't adjust the shrouds we will depower by slackening the rig tension

Measured using a Super Spar rig tension gauge.

Mast Rake: (all measured at 340 lbs and neutral mast ram, from top of the mast to the top of transom housing.

Force 0.5 -1.5 6930mm

Force 2-4 7010mm

Force 5+ 6900mm decreasing to 6860mm

Outhaul: Measure from side of boom above hoop to sail

Upwind: Force 0.5 - 1.5 - 25mm depth

Force 2 - 4 - 25mm depth

Force 5 + - Tight

Offwind: Ease off and in planning conditions ease off to the limit

Jib Tack: Use a long forged shackle - 40mm. (Bearing Surface)

Mainsail Tack: Use a long twisted shackle through the tack pin on the boom onto the tack eye on the sail.

Fairleads: Set all the back except in medium airs when the car is moved two holes forward.

Cunningham: Force 0.5 - 1.5 - Nil

Force 2 - 3 - Nil

Force 4 - Pull to remove wrinkles

Force 5 + Tight

General Tips

Kicker - Increase purchase to 16:1 by adding a double block at the end of the cascade and a single off the mast step, this makes the use of the kicker a lot easier in breezy conditions

Centreboard: Leave down in all conditions except in flat water on run raise the board head 100mm.

Gybe Lines - Mark centrelines.

Bowsprit - Mark pole out position.

Spinnaker Halyard - Mark when halyard fully hoisted.

Centre Bung - Hang centre bung off elastic to stop being sucked into hole. Tie elastic between the gybe line cleats.

Mainsheet - Add blocks to make 4:1 purchase using a 6mm rope to reduce the load in the jammer. To facilitate uncleating (playing) in heavy air raise the block 2" further off the swivel to prevent it cleating too easily when going upwind.

Big knot in end to stop going down self bailer.

Slot Gasket - we tape the front 6" of this up to prevent the water washing in when going downwind.