ALBACORE TUNING GUIDE

Although the Albacore is a 'restricted' class there is quite a bit of scope for tuning. The following guide provides a starting point from which you should be able to get your boat close to its ideal settings. After that, minor changes may be required to suit individual boats and helms. Remember to calibrate all settings to allow you to change quickly through the gears in different wind strengths.

Mast Step Position

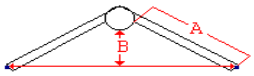
The class rules do not permit the Albacore mast to be stepped any further forward than 3330mm from the aft face of the transom to the foreside of the mast. Ideally the mast should be stepped as far forward as possible but it is not worth pushing this to the last mm

Centreboard Setting

When the boat is rolled on its side and the centreboard lowered, the distance from the transom to the leading edge should be just less than 8' 9" (2660mm)

Spreader Settings

There are two measurements for spreaders: Spreader Length and Spreader Deflection. Spreader Length affects the sideways stiffness of the mast and is taken by measuring the side wall of the mast to the shroud (A). Spreader Deflection controls the pre-bend in the mast and is measured by putting a straight edge from shroud to shroud and then measure to the mast from this edge (B).



	Superspar M7	Proctor D Sleeved
A: Spreader Length	420mm	425mm
B: Spreader Deflection	140mm	140mm

Lighter crews may wish to shorten the spreader lengths by 10mm (one hole in Super Spar masts & 1 full hole in Proctor masts) to allow the mast to bend to leeward sooner in the gusts. The spreader deflection measurement is only a guide to getting the correct pre-bend and is not in itself a critical measurement.

Rig Tension

Rig tension is measured on the shroud. Try to use the same rig tension gauge each time and measure at the same height e.g. eye level. We sail with 240lbs in all conditions. When running, the shrouds should be eased off so the rig tension is approximately 200lbs.

Mast Rake

We measure mast rake as the measurement from the top of the mast to the top of the transom. To do this, hoist the jib and pull the rig tension on with the shroud levers down. Shackle a long measuring tape to the main halyard. Hoist the halyard and measure 5640mm to the top of the black band at the gooseneck. Cleat the halyard off at this reference point and swing the tape measure round to the top of the transom to measure the mast rake. We sail with the following rakes:

Light Winds:	23' 6"	(7163mm)
Medium Winds:	23' 3"	(7086mm)
Strong Winds:	23"	(7010mm)

Pre-Bend

When you have the tension and rake set correctly, the final check to be made is the pre-bend. Pre-bend is controlled by angling the spreader tips forward and aft. Angling the tips aft increases the pre-bend by pushing the middle of the mast forwards. The spreader deflection measurement that we looked at earlier should have your spreaders in more or less the right position though some fine tuning may be necessary. We sail with a pre-bend of 1inch which is measured by pulling the main halyard tight against the mast at the gooseneck. The distance between the halyard and the mast at spreader level is the pre-bend. The pre-bend can be adjusted without affecting your mast rake and tension settings.

Mast Strut

The mast strut is used bend the lower part of the mast and control fullness in the lower part of the mainsail. The neutral position of the strut is its position with the rig tension on but with no forces acting upon the boat. In drifting conditions the strut can be pull forward about 1" to flatten the mainsail. In medium conditions (5-15knots) the strut can be pulled back ½" to add fullness to the mainsail and power up the rig. As the wind increases, the strut should be let forward to neutral and then beyond neutral (up to ¾") to de-power the mainsail.

Jib Fairleads

The position of the jib fairlead controls the tension in the leech of the jib. Moving the fairlead further forward causes the sheet to pull down more on the leech – increasing the tension in the upper leech of the sail while decreasing tension in the foot. Moving the fairlead further aft causes the sheet to pull more along the foot of the jib and decreases tension in the leech. Initially the fairleads should be set so that the 3 windward telltales on the jib break together although this can be difficult to judge (to begin with set the fairlead so the jib sheet roughly bisects the angle of the leech and foot). In windy weather; above 15knots, the fairleads can be moved aft to free off the upper leech while in light conditions (under 5 knots) the fairleads can be moved one hole further forward than normal.

Mainsail

The mainsail should only be hoisted to the bottom of the black bank even though some 'speed bump' crease will be evident on the luff when sailing. If you get a vertical crease running up the luff of the mainsail beside the mast then the mainsail is hoisted too high. Below 10 knots the mainsail should be ½ inch below the black band (dropped one notch on the halyard rack).

Kicking Strap

This is the most critical control when racing. In very light winds you should just take the slack out of the kicker when sailing upwind. As the wind increases however and the mast starts to bend you should aim to have the top leech telltale on the main flying approximately 80% of the time i.e. occasionally flicking behind the mainsail. In these conditions it becomes critical to adjust the kicker as you sail into gusts or lulls. Above 15 knots the telltale will fly continuously. The kicking strap then becomes a power control – if you are overpowered pull more on, if underpowered let some off.

Cunningham

The cunningham should only be used as you start to become overpowered. As the wind picks up you can start to apply it to remove some of the horizontal creases that are forming along the mast.

Outhaul

When sailing upwind the outhaul should be pulled out to the black band unless it is drifting conditions in which case it can be eased ¼ inch. On the reaches the outhaul should be eased $1^{1}/_{2}$ – 2 inches where as on a run it should only be eased ½ inch to keep maximum sail area to the wind.

If you have any questions or problems please contact us on 01922 455503 or sails@speedsails.co.uk and we will be happy to help. You can also see any special discounts we are running on Albacore gear on our website http://www.speedsails.co.uk