Tuning guide – The Brazilian Way

Settings for Mainsails CRC series

Below find the tunings given by Alexandre "Careca" Paradeda to set your rig for best performances with our new models CRC1 Main and AR2 series Jibs. The way used by the Brasilians might sound a bit "empirical" … but THEY'RE FAST!

In the opinion of Paradeda this tuning guide is suitable for all mast models! The only thing he says referring to Sidewinder Standard and Gold models is that the wang and back settings are more sensible and need a longer practice to trim correctly. We find it hard to clearly explain the system they use to set up their rig for top performances, but we hope you will understand.

When setting up the mast the first thing you do is, start by attach a 10 meter steel tape measure to your main halyard and pull all the way to the top and lock the halyard in position. All settings start with a "first rake" where the rig is just leaning forward against the shrouds and then finish with a tensioned rake (2nd rake) where the jib halyard is pulled on to sailing tension.

Procedure: pull the mast forward just to take the slack out of the sidestays. Then measure the distance from the top of the mast to the middlepoint of the transom. This measurement is your 1st. RAKE. Now hoist the jib and tighten until you measure 18 cm more. This is your 2nd. RAKE. The way we get the 1st rake is to pull lightly in the forestay to the point when you JUST take the slack out of the sidestays, or, imagine if you put the boat on a steep hill facing downhill, the mast will fall forward until the sidestays holds it back, that's the kind of tension you should be looking for to get the 1st. rake measurement. We hope this is clear enough for you!

INTENSITA' VENTO Nodi & m/sec	4 - 8	9 - 17	Notes
RAKE DIFFERENCE	18 cm		
SHROUD TENSION	25	28	With Tensiometer Loos&Co mod. 91M – Metric. Cable diameter 3 mm
SPREADER LENGHT	43 cm	43 cm	From the mast side to the shroud center
DISTANCE BETWEEN SPREADERS	74 cm	78 cm	Tip to top
SHROUD FASTENING	//	//	FIRST HOLE from the fron

Careca says: "In Snipe it's impossible to talk about tunings not considering mainsail traveller, mainsheet wang and "back" (the mast control lever or the fore/aft guys) all together. This because changing one of this setting have direct influence to all others."

Onedesign - Snipe

Light Wind (up to 7 knots)		Medium Wind (8 – 11 knots)	
RAKE	6,56 m	RAKE	6,54 m
TRAVELLER	In the middle	TRAVELLER	In the middle
MAINSHEET	Very critical tuning. Sheet in just enough to avoid closing the leech	MAINSHEET	Just enough to give a bit of tension to the leeward arm
WANG	No tension	WANG	Appena puntato
BACK	3-4 cm avanti (dal segno neutro)	BACK	No tension but locked
Strong Wind (12 – 18 knots)		Very Strong Wind (18 – 25 knots)	
RAKE	6,50 m	RAKE	6,50 m
TRAVELLER	Loose it progressively as the wind increase to avoid loosing only mainsheet.	TRAVELLER	Loose at about 20 cm from the middle.
MAINSHEET	With wang and traveler loose, the maisheet helps to keep the jib "under presure". In this condition the leeward arm have still to keep some tension.	MAINSHEET	In this condition it does not have influence on the leech, but only to move in and out the boom. The leeward arm is always loose.
WANG	It's needed to flatten mainsail as the wind increase. In this condition you don't wish to open the leech too much, so you don't have to tighten it too much and close the leech too early.	WANG	It's the "responsible" to keep the main flat, together with cunningham. The main's leech must be open to make possible to control the boat.
BACK	Neutral. This position helps keeping pressure on the jib and not open the main's leech too much.	BACK	2-3 cm forward from neutral, to ease the pressure on helm, lighten the boat and keep her fast .

Settings for Mainsail RS series

Basic settings for light-medium wind

SIDEWINDER Standard and Black mast

Push the mast until you obtain 1 cm bend at spreader level and measure the distance between the top measurement band (halyard position should be the same as that of mainsail properly hoisted) and the centre of the deck at the stern. Adjust the shroud length to 6470 cm, hoist the jib and set halyard length to 6510 mm.
Verify that you have obtained the following measurements:

PRE-BEND: 25 mm at spreader level for Sidewinder mast.

SHROUD TENSION: 19 mm (with first version aluminium shroud tensioner). In case the measurements mentioned above were not obtained shroud length should be modified.

DISTANCE BETWEEN SPREADERS: from 44,5 cm (heavy crews) to 43 cm (light crews). It is measured from the mast side to the shroud centre.

DISTANCE BETWEEN SPREADERS: From 70 to 80 cm. Measurement should be taken with the mast on the ground, from the centre of the mast to the centre of the shroud while bringing the spreaders as close as possible. Pay attention when tightening the screws on the adjustable spreaders: the number of turns should be the same. Make sure that the spreaders have the same angle.

SHROUD FASTENING: Third hole from the front on Persson hulls; second hole from the front on Lillia hulls.

Proctor Miracle mast

Basic concepts are the same as above. However, Proctor masts are more flexible fore and aft, so rake should be reduced by 2 cm to counterbalance increased bend. When sailing, rig position will be the same.

PRE-BEND: 45 mm at spreader level.

SHROUD TENSION: 19 mm (with first version aluminium shroud tensioner). In case the measurements mentioned above were not obtained shroud length should be modified.

SPREADERS LENGHT: 43,5 cm.

DISTANCE BETWEEN SPREADERS: 76 cm

SHROUD FASTENING: Third hole from the front on Persson hulls; second hole from the front on Lillia hulls.

	Sidewinder	Proctor	Notes
PRE-BEND	25 cm	45 cm	At spreader level
SHROUD TENSION	19 cm	19 cm	With first version aluminium shroud tensioner
SPREADER LENGHT	Da 44,5 a 43 cm	43,5 cm	From the mast side to the shroud centre
DISTANCE BETWEEN SPREADERS	Da 70 a 80 cm	76 cm	Tip to tip
SHROUD FASTENING	//	//	Third hole from the front on PERSSON hulls, second hole from the front on LILLIA hulls

The measurements listed below refer to Persson and Skipper hulls. For Lillia hulls, which have a different stern, add about 4 cm.