

Soling Guide by Peter Feldman

Boat Setup/Tuning

Solings are not identical from boat to boat, keels and rudders can be in slightly different locations and masts can be different lengths, therefore it can be difficult to take one set of measurements from boat to boat. There is a maximum allowed dimension of 45-3/4" from the deck to the jib halyard eye on the mast. Assuming this maximum dimension is true on your boat, the rake dimension range of 48-3/4" to 49-1/4" from the headstay eye to the bow should be used. If your jib halyard eye is short of the 45-3/4" dimension you may have to adjust the rake dimension for your boat. I use more rake (to induce weather helm) in light air and less rake as the wind increases (reduce weather helm).

Main and jib halyard tension – I leave wrinkles in the luff of both sails when the wind is light and take them out as the wind increases (at about 8 knots of wind I sail with no wrinkles). Be careful not to have the jib halyard too tight in light air especially.

Main and jib outhauls and clew tie downs - I use clew tie downs on both sails – without them the outhauls do not work properly and the sails end up too flat. The importance of the outhauls seem to me a little bit overblown. I ease them in light air and tighten as the wind increases through a range of about 2" to 1-1/4" of depth.

Before The First Race

It is very important to setup your boat correctly before the first race of the day. There is one big thing I try to accomplish in this time and that is getting the boat balanced sailing upwind (close hauled). In all but the lightest and heaviest of winds the Soling should generally sail upwind (while the breeze is steady) **on both tacks** without having to move the rudder.

There are two aspects to getting the boat balanced –

- (1) Setting up the fine tune rudder adjustment on your transmitter so that your boat sails the same angle to the wind on both tacks.
- (2) Setting your rig tune for today's wind strength so that you do not have an excess of weather or leeward helm.

Weather helm is the tendency for your boat to drift up into the wind when sailing a close hauled course. Leeward helm is the opposite. In the lightest of winds you will probably always have some amount of leeward helm and in the heaviest of winds you will probably always have a fair amount of weather helm. In between you should have very little of either. If you do error on one side I recommend having just a little bit of weather helm, this is quite a bit better than having a little bit of leeward helm.

Here's an example. You put your boat in the water and it sails perfectly close hauled on starboard tack but when you tack to port you notice you are always drifting up into the wind and your sails are frequently luffing. You will want to move the rudder fine tune on the transmitter a few clicks to starboard until you get the same feeling on both tacks. In this example, once you get the boat sailing the same on both tacks you may notice that you have too much weather helm overall. Here are some tips for decreasing weather helm (reverse them to decrease leeward helm).

- (1) Decrease the mast rake (shorten the headstay).
- (2) Trim the jib sheet bowsie.
- (3) Move the jib tack from the middle hole to the forward hole. I sail with the jib tack on the middle hole for all wind conditions until it gets above about 12-14 mph when I move it to the forward hole. You will notice moving the jib tack will have a large effect on the amount of weather helm.

Sail Trim

I tend to sail with my jib sheet eased out and my headstay tighter than most boats I see. The additional backstay allows me to still point high and the eased out jib sheet allows the slot to stay open. My maximum jib trim is around 2.5" off of centerline (for the end of the jib boom) but I do that only in medium/heavy wind. As the wind decreases toward a drifter the end of the boom is closer to 3" or more off of centerline. My mainsail boom is near the corner of the boat in lighter air and trimmed in from there as the wind increases.

It's important to find the set of measurements that works well for you and your boat. You may find your mast rake needs to be shorter or longer than the dimension above to neutralize your helm. Keep track of your sailing settings and your boatspeed from session to session. Always have a baseline set of dimensions to get back to in moderate wind conditions if you are feeling slow.

Happy sailing!

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