



# J/105 Tuning Guide



bottom thread of the turnbuckle should be three turns out. This will allow you to easily shorten your headstay in heavy air.

## Before Stepping Your Rig

1) Remove your backstay toggle and put it at the top of your headstay. The toggle reduces the throw of the backstay adjuster and limits your ability to get enough tension in heavy air. Set your headstay to 13.035m or 42.76 ft. This measurement is taken from centerline of the headstay pin on the mast to the intersection of the stem line and the sheer line at the bow. This is the class maximum controlled by rule 7.4 (See picture). The



2) Set your mast butt such that with the mast in place, the distance from the aft edge of the mast to the bulkhead is .244m or .8 ft sails. (see picture). You should lubricate the plate with grease prior to stepping the mast.

3) Put contrasting tape line on the lower spreaders at .2 ft and .4 ft. in from spreader tip.

4) Add tuff luff prefeeder to headstay .1 ft. below feeder on headstay (Schaefer 1205.01).

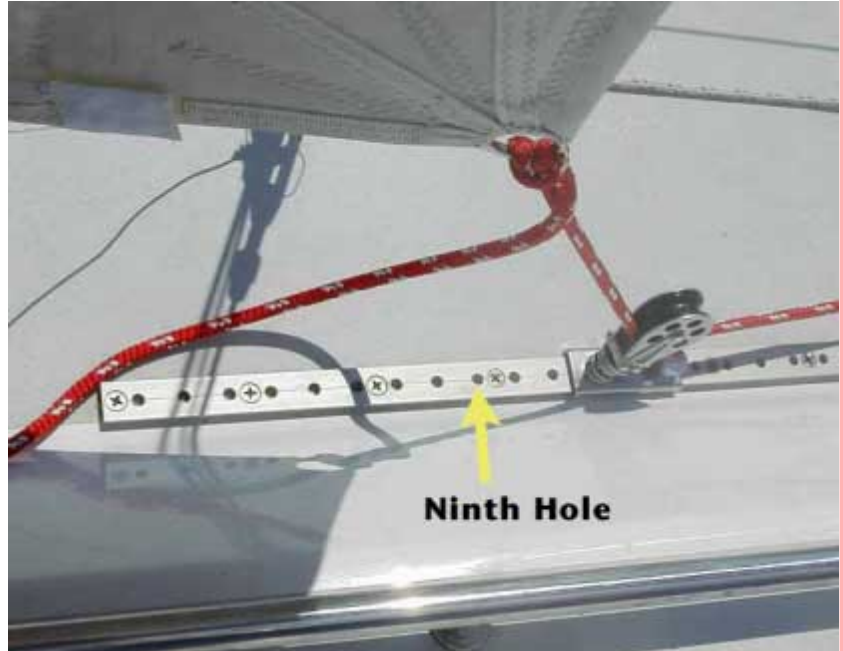
5) Add "J" lock to jib sheet. Only one is necessary if you will only be using the class jib.

6) Calibrate your jib sheet. Make a mark on both sheets 13.75 ft from the bearing surface of the J lock. This will insure that you are trimming the jib the same from side to side.

7) Replace the Harken furling line with a stiffer line to reduce bunching on the drum. 5/16" Marlow pre-stretched or similar line will work well.

8) Mark jib sheet track for easy adjustment and repeatable settings. In Key West, we measured four boats and found the track locations were more than an inch different. This tuning guide is based on the ninth hole from the front of the track being 15.28' back from the centerline of the Harken clevis pin. You will need to adjust your up-wind setting chart if your track is further forward or aft.

9) Move the mainsheet swivel in front of the traveler.



10) Add a snap shackle at the base of the stanchion to retain the spinnaker halyard.

11) Attach a batten to your backstay with 10 calibration marks spaced every .1 ft. apart. Position the battens such that the backstay just begins to be firm at the .9 mark.

12) Tie a 1/8" cord between the upper and intermediate shroud about 6" above the lower spreader. This will prevent the spinnaker from jamming between the shrouds on the take downs.

13) Mark your asymmetrical tack pendant at 1.0, 1.25, 1.5, 2.0 feet off sprit.

14) Tools required: RT 10m Loos rod tension guide, 3/4" and 9/16" wrenches



# UK SAILMAKERS J/105 SAIL AND RIG SETTING MATRIX

Head stay	True Wind	Uppers*	Interm.	Lowers	Bkstay Tension	Jib Lead	Traveler	Jib Halyard	Cunningham
Max.	0-6	20	5	10 cm play	9.5	9 showing	Full Up	Large Wrinkles	0
Max.	6-9	20	5	10 cm play	9	10 showing	9" above center	Medium Wrinkles	0
Max.	9-12	30	5	10 cm play	8	10 showing	4" above center	Small Wrinkles	Remove wrinkles
Max.	12-15	40	15	5 cm play	8	11 showing	Center	No Wrinkles	Remove wrinkles
-3	15-19	45	25	15	7	11 showing	4" below center	No Wrinkles +1"	No wrinkles + 1"
-3	20+	50	30	30	6	12 showing	9" below center	No Wrinkles + 2"	No wrinkles + 2"

\*In flat water add 2 turns

## Mast Tuning

Tighten the uppers so that they are hand tight. Now check that the mast is in the center of the boat. Raise a steel tape up on your jib halyard. Then measure to the rail on both sides to confirm the mast is in the center of the boat. If the mast is not in the center, loosen one side or tighten the other until it is. Now take the uppers up eight full turns on both sides.

2) After the uppers are set, tighten the intermediates until they are hand tight. Now sight up the back of the mast to insure that it is straight. Adjust the tension by easing one side and tightening the other until the mast is straight from side to side.

3) After the intermediates are adjusted, tighten the lowers to hand tight and sight up the mast to insure it is straight. Adjust the tension until the mast is straight.

## Downwind

### Light Air: 0 –7 True

1) Ease backstay, cleat the furling line and tension the jib sheet to fraculate the rig forward.

2) Two or more crew members should be down below to help minimize the movement of the boat. One crew member should be forward of the shrouds and all other crew members, including the mainsail trimmer, should be between the companionway and the shrouds. Heel the boat approximately 5 degrees to leeward.

3) The spinnaker halyard should be eased off approximately .5' and the tack pendant



should be eased off approximately 1.25 to 1.5 ft. (see picture).

### Medium Air: 7 – 16 True

- 1) Ease backstay and fraculate.
- 2) All crew members except the mainsail trimmer should be on the weather rail between the shrouds and the companionway. The mainsail trimmer should move forward to the companionway.
- 3) The spinnaker halyard should be eased approximately 1.0 to 1.5 ft off. The tack pendant should be eased approximately 1.5 to 1.75 ft. off.

### Heavy Air: 17+

- 1) Ease backstay to light air upwind setting.
- 2) Mainsail trimmer positioned to pump the sail on the waves. Crew to windward 3 feet aft of shrouds to 2 feet aft of companionway.
- 3) Ease spinnaker halyard 1.5 ft. and ease tack pendant 2 to 3 feet.

