### **Musto Skiff Rigging Guide**

This rigging guide is to be used in conjunction with the Class Rules and CE Owners Manual, both available at <a href="http://www.mustoskiff.com">http://www.mustoskiff.com</a>

Please take your time to rig your boat up prior to your first sail. You will, no doubt, be in a hurry to get out on the water and enjoy some serious skiff sailing but a few extra minutes spent checking your boat is correctly rigged will make sure you have an enjoyable sail and may prevent you damaging your kit.

You can rig the boat in a different order from than that described here but we know this method works.

NOTE: The following rigging fittings that are designed to be adjustable may be adjusted when not racing using only the fitting functionality – (i) the angle and length of the mast spreaders, (ii) inboard, outboard and forestay shroud adjusters, and (iii) the batten tensioners."

Below; shows the starting point, you should have one of everything in this picture.





1. The boat comes supplied with everything (except the forestay tensioning device) you need to go sailing, if you are missing an item please call your dealer



2. You have to start somewhere so lets start by attaching the Harken Carbo Ratchamatics for the spinnaker sheets. One each side. They are not handed so you don't need to worry about which way round they go.

## **Rigging the Boom**



3. The first step is to fit the Harken blocks to the boom for the mainsheet. Thread a string through the block



4. Pass the string through the top of the block.



5. Take it through eye on the top of the boom and back through the top of the block. Then back through the body of the block.



Repeat the process until you have several wraps around the boom. Finish the process by tying/splicing the ends off leaving the block "snug" to the boom.



7. Repeat the process for the second block.



8. Bolt the double kicker bar to the boom fitting



Make sure you don't over tighten this as it will need to move up and down as the kicker is adjusted.

## **Fitting the Wings**



10. Fitting the wings is simple; make sure you align the white end fittings with the male fitting on the deck.



11. Insert the wing pins. If they are difficult to insert you may not have the wings in properly. Give them a little "wiggle" until the pin can be inserted.



12. Clip the elastic over the pin end between the bar and the deck eye



13. With the elastic between the wing and the deck eye the elastic can never get knocked off and you won't lose any pins. The folded ends of the pins should preferably be away from the cockpit so that ropes don't get caught on the pin.



14. With the wings fitted ensure that the line for the downhaul (pink in this picture) is on top of the wing bar.

## **Stepping the Mast**



15. Before stepping the mast lay it out (on padding, you don't want to scratch your new carbon mast). Check the lines and wires are not twisted up. LOOK UP to check you are not going to hit anything when you raise mast, especially power lines!! NOTE: The trapeze T terminals go in the upper slots.



17. Attach the lower shroud to the inboard rig adjuster. Five holes down on the front row is a good start but check <a href="www.mustoskiff.com">www.mustoskiff.com</a> for tuning information



19. Step the mast and loosely the forestay with the rig tensioning device (not supplied) to the upper eye (arrowed)



16. Fit the rig adjusters onto the chain plates



18. Check the mast step is clear for the mast to be stepped. The 2 intermediate bolts may be relocated to different holes in the mast step between the front and back bolts. The back bolt may be moved to the back holes. The kicker control line block may be relocated to another part of the step.



20. With the weight of the mast now on the forestay attach the lower shrouds to the plate on the mast. Do both sides and the mast will now be self supported.



21. Attach the shroud to the outboard rig adjuster. Five holes down on the front row is a good start but check <a href="https://www.mustoskiff.com">www.mustoskiff.com</a> for tuning information



22. Now you have both shrouds and lowers are attached tension the rig using the tensioning device and then locate the lower eye (shown blue arrow in step 19) into the chainplate and insert the pin. Then remove the tensioning device. NOTE: Please don't over tension the rigging; call Ovington Boats if unsure on required rig tension.

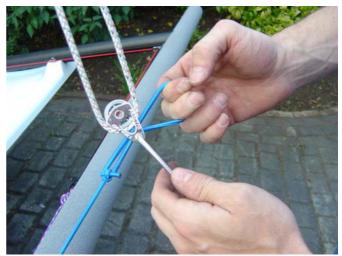


22a. Now tape or cover the chainplate AND the upper eye that the rig tensioning device was attached to to prevent the spinnaker snagging

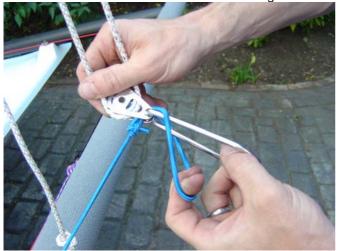
# Attaching the Trapezes (One of the styles allowed)



23. Now the rig is tensioned the trapezes can be connected to the elastic that is available on the wing bar.



24. Take the loop and pull it through the ring block.

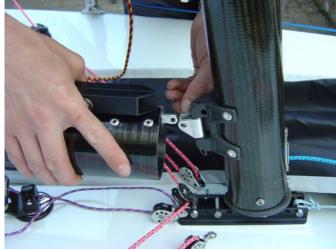


25. Take the loop around the trapeze ring

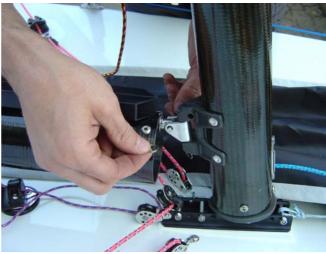


26. Pull it tight and that's done. Repeat the other side.

# Fitting the boom, vang and mainsheet



27. Place the rigged boom in the cockpit



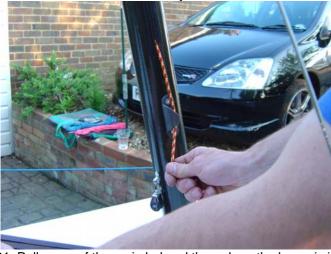
28. Remove the pin in the lower gooseneck and fit it through the boom.



29. Attach the main halyard to the outhaul



30. Cleat the outhaul off in the centre of the boom



31. Pull some of the main halyard through so the boom is in the approximate position that you would expect when sailing



32. Rig the mainsheet starting with a knot at the block attached to the mainsheet bridal. The method of tying is optional. Then thread it through the front block on the boom.



33. Then thread it through the block on the bridal then back through the aft block on the boom and through the jammer. MAKE SURE YOU GET IT THE RIGHT WAY THROUGH



35. Pull the sheet on a little bit and we recommend putting a stopper knot of your choice into the mainsheet; this will stop the boom hitting the shroud when the mainsheet is not cleated.



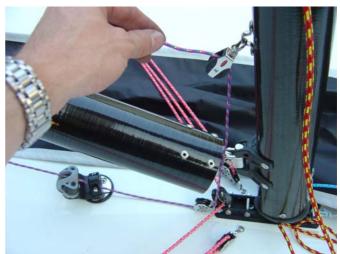
37. Locate the two kicker bars together. Note if they will not then just adjust the height of the boom by adjusting the angle of the boom with the main halyard.



34. Push the boom out to the shroud and cleat the mainsheet.



36. Fit the other kicker bar to the upper gooseneck.



38. Thread the kicker control line. From the cleat, through the block on the mast step then through the block on the mast.



39. Then take the rope through the block on the end of the kicker bar and back towards the mast.

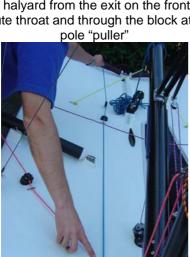


40. Then tie the end of the rope to the eye on the mast.

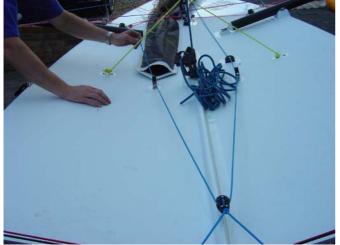
# **Rigging the Spinnaker**



41. Take the halyard from the exit on the front of the mast, under the chute throat and through the block attached to the



43. Preferably over the downhaul line (pink) and under the vang line (purple)



45. Through the "take up" block at the back of the boat and through the block at the back of the chute.



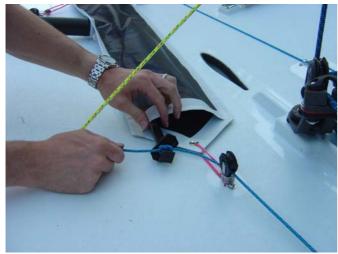
42. Take it back under the chute throat



44. Through the cleat on the deck and through the block behind it. Note: Make sure you go under the bridle.



46. Use the tiller extension to thread the halyard through the chute.



47. Tie the halyard on the tiller extension



49. Tie the halyard onto the forestay eye, otherwise the elastic will pull it back again.



51. Then you may attach the kite sheets to the clew. There are various options for attaching the sheets, some are shown on the class website, The method shown involves finding the middle of the sheets and push the loop through



48. Pull the extension out of the chute



50. Roll the kite out and tie the tack on the clew line eg with a bowline.



52. Then post the end of the sheets through to make a "larks foot" on the clew.



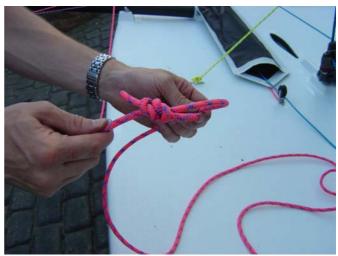
53. Thread the sheet ends through the ratchet blocks, observing the arrow on the blocks to make sure that the ratchet is working in the correct direction



55. Make sure you have run the kite sheets on top of other ropes and behind the mainsheet.



57. Un-tie the downhaul from the forestay eye (remember step 49) thread it through the ring on the kite. Make sure you are under the kite sheets



54. Tie the sheet ends together eg using a fishermans knot. Note: You can tie the sheet ends to the clew if you want but I prefer this method. There are also other options for this.



56. Tie the head to the kite halyard.



58. Tie the downhaul to the upper patch on the kite.



59. If it is the first time you have rigged an asymmetric spinnaker it's a good idea to hoist it on the shore AS LONG AS IT IS NOT TOO WINDY.



61. Have a quick look up to make sure the halyard is not twisted or inside a shroud.



60. Then drop the kite, make sure you do not get it caught on the trolley handles on the way down, they of course won't be there when you are sailing.



62. Your cockpit should now look like this ...

### Fitting the Rudder



63. Offer the stock up to the pintles and insert the pin from below the bottom pintle plate



65. Clip the tiller extension onto the tiller.



64. Insert the split ring at the top to hold the pin in place. Once on the stock it can be left on the boat permanently.



66. Insert the rudder blade. Friction will keep it up.

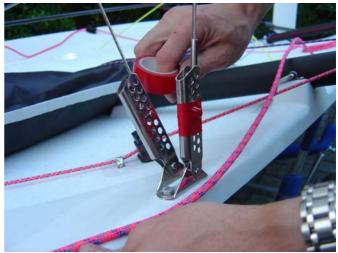
### Fit the Bung and Tape EVERYTHING up

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67. Don't forget to put the bung in!!!!

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68. Tape everything up -, "if in doubt, tape it up"
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### Hoist the mainsail



69. Check the halyard doesn't have any twists and shackle the head on.



70, Slowly pull the main up, as it's fully battened it can be stiff so go steady. A good spray of suitable lubricant on the track can make this easier.



71. Once it is at the very top give the halyard a good pull and cleat it off.



72. Coil the halyard up. It may be placed in the pocket on the side of the main or into some shockcord on spar.



73. If using the pocket, close it using the Velcro.



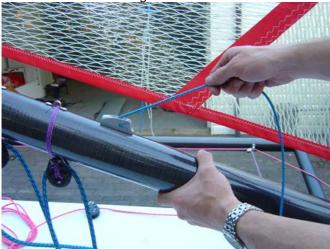
74. Post the clew strap over the end of the boom.



75. Take the outhaul through the clew cringle



76. Back through the hole in the boom.



77. Give the outhaul a pull and cleat it off.



79. Slot the kicker bars together. You may need to apply some leech tension with the mainsheet to achieve this. Make sure the boat is head to wind and if it's windy get some help otherwise the boat can get blown off the trolley.



78. You may tie the slack end of the outhaul to the bolt of the kicker bar to keep the end tidy, or leave it loose knotted.



80. The bolt should be in the top of the four available holes.



81. Hook the port downhaul block to the port loop



82. Then the starboard one



83. Make sure there are no twists in the system and everything is the correct side of boom and not twsited.



84. Zip the sleeve up



85. All the way to the bottom



86. Buckle up the two straps.



87. Place the daggerboard in the boat



88. You are ready to go ....



89. The cockpit should look like this



90. Just add water.