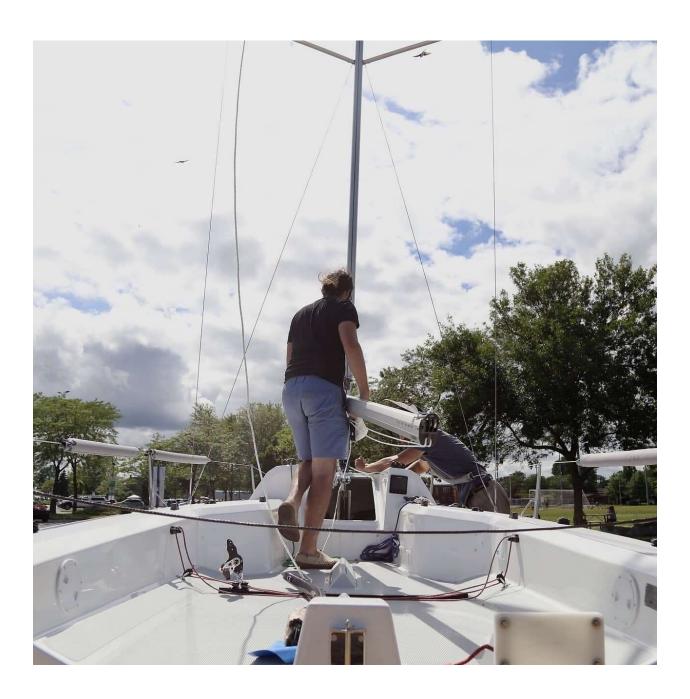


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# **INTRODUCTION**

Welcome aboard and welcome to the Fareast family of owners. Your Fareast 19R is designed and engineered to be fun, easy to sail and fast. With this manual, you will master your rigging knowledge on the FE19R. The Fareast 19R can be assembled alone, but we do recommend having at least one sailing friend for the first time. It is also a lot more fun.



### I. Tools needed

- 1) Step ladder to go on the FE19R and install the wind indicator.
- 2) Tension gauge (Loos PT-2)
- 3) Flathead screwdriver (optional)
- 4) 1x set of Allen key
- 5) Metric Wrench or adjustable wrench

## II. Mast rigging

The rigging method for the first time you will take delivery of your Fareast 19R or the first time you rig it at the beginning of the season is very similar. It should take you 3h for the first time and less than 45 minutes with practice.

- a) Remove the top cover on the Fareast 19R. If it is wet, let it dry and roll it.
- b) Remove the stern ratchet strap for the hull. KEEP THE FORWARD RATCHET STRAP AND THE TRAILER BOW STRAP ATTACHED. KEEP THE TRAILER ATTACHED TO YOUR VEHICULE.
- c) Screw in the wind indicator to the top of the mast.
- d) Move the mast back until you can insert the mast's cutter pin through the mast feet and heel. A flathead screwdriver can be used to open the split ring.
- e) If the side stays were removed from the mast, find the lower and upper side stays of the FE19R. The upper stay is longer than the lower stay. The upper stay also has a T terminal and the lower stay has a stem ball terminal with a cup. The forestay has a T terminal with an eye.



Image 1: T-terminal for upper side stays



Image 2: Stem ball terminal with a cup for lower side stays



Image 3: T-fork toggle for forestay

f) Insert the top of the lower side stays to the spreader's bracket. To do so, the stem ball terminal and the cup must be inserted from the bottom of the bracket and through the furthest hole of the bracket. Once the cup is through, the terminal and the cup stay in the closest hole of the mast bracket.



Image 4: Assembly of the stem ball terminal and cup with the spreader's bracket

g) The spreader can now slide onto the spreader's bracket. To secure the spreader in place, insert the cutter pin and open the split pin at least 20 degrees. Use rigging tape or electrical tape to cover the split pin. This will prevent the gennaker to get ripped by it.

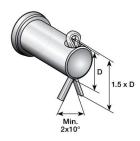


Image 5: Cutter pin and split pin assembly

h) If all three halyards were pull to the top of mast, bring them down and tie the snap shackles to the gooseneck. Make sure the mainsail halyard is behind the mast and the jib/gennaker halyards are in front of the mast.

i) Insert the T-terminal of the upper side stays to the top of the mast. The FE19R comes with two T-terminal retaining plugs. Add those above the upper side stays and if possible, tape them in place. They can fall off while raising the mast. The T-terminal can only go in an out the fitting from one angle. If it doesn't work, try the other way.



Image 6: T-terminal retaining plug

j) If the upper side stays were removed from the spreaders, you need to open the clamping end plugs of the spreaders. Use an Allen key to loosen the bolt. The side stays will slip in the cap shroud. Tighten the bold again to keep the side stays in place. The side stays should not be able to come out, but it should also be able to move freely up and down.

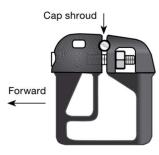


Image 6: Cap shroud and upper side stays assembly

k) Assemble the turnbuckle of the upper side stays to the threaded fork toggle end. The upper side stays are always attached to the most forward hole of the chain plate. The upper side stays can either go inside or outside the lifeline. It is important to have it screwed in an equal amount at the bottom and top of the turnbuckle. Otherwise, one end could be fully threaded in before the other end. It is also important to not have it fully threaded in as it will be too tight to raise the mast. Having them one third threaded in is a good reference.





Image 7: Threaded fork toggle end

Image 8: Turnbuckle also known as rigging screw

- l) The lower side stays do not need to be attached while raising the mast.
- m) Insert the forestay T-fork toggle to the fitting at the top of the mast. Remove the cutter pin and the split pin of the fork toggle at the bottom of the forestay. Make sure they are in a safe place, and they won't fall in the water. It is recommended to raise the mast onshore specifically for this reason. If you have a furler, it is easier to attach the drum to the FE19R and let the wire of the forestay lose. Otherwise, the drum can do a few scratches on the deck while raising the mast.
- n) Feed the gennaker halyard through the fairlead and cleat.

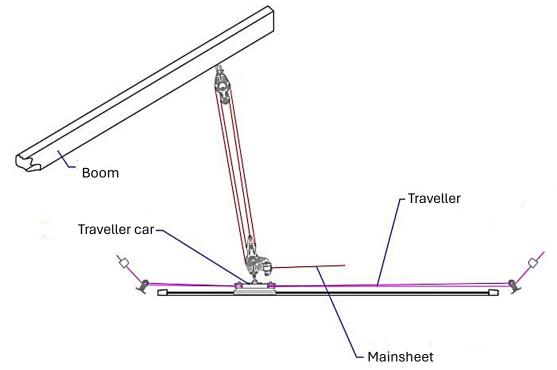
## III. Raising the mast by hand

- a) Clear the deck to have less obstacles while raising the mast. The boom, rudder and control lines are not needed.
- b) Make a bowline at the end of the tackline. Take the end of the shackle of the gennaker and tie a bowline into the bowline of the tackline. It should look like a loop in a loop.
- c) Make a knot after the cleat of the tack line. Cleat the tack line. This knot is used to prevent the tack line to slip if it gets release by accident.
- d) Pull all the slack of the gennaker's halyard.

- e) Make sure the threaded fork toggle end for the upper side stays is parallel with the FE19R and it will follow the motion of the mast going up. Failing to do so will bend the threaded fork toggle end.
- f) Ask your helper to pull the gennaker's halyard while you lift the mast.
- g) Walk towards the stern of the boat, lift the mast to your shoulder and walk forward until the mast is fully up.
- h) Cleat the gennaker's halyard.
- i) Attach the forestay to the FE19R forestay chainplate or drum.
- j) The lower side stays can now be assembled with the threaded fork toggle end onto the chain plate. Add electrical tape or rigging tape around the cutter pin.
- k) The gennaker's halyard and the tack line can now be released.
- l) Assemble the boom to the gooseneck of the mast.
- m) The mainsail halyard can be used to keep the boom horizontal by tying it to the end of the boom. Watch your head until the mainsheet is attached to the boom.

#### IV. Control lines

n) Attach the mainsheet to the boom and traveller car.



**Image 9:** Mainsheet assembly. It is easier to start from the cam cleat. The mainsheet must be fed through the bigger block first and the inner block after. There shouldn't be any twist in the mainsheet.

#### o) Attach the boom vang.



Image 9: Triple block referred as "TB"



Image 10: Triple ratchet block with becket



Image 11: Reference on the triple block

For the assembly, the block reference will be #1 to #3. Block #1 being the most port block and block #3 being the most starboard block.

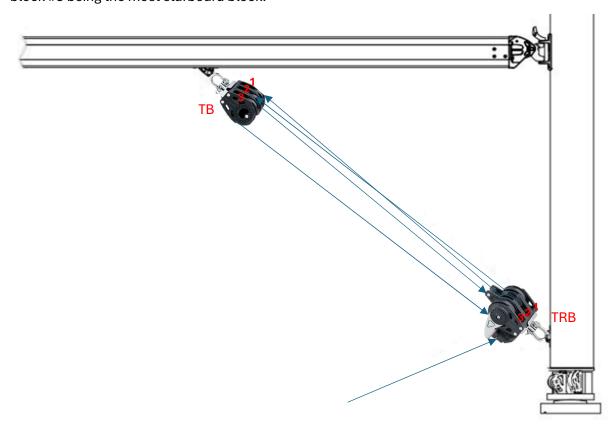


Image 9: Boom vang control line assembly

The boom van is the only control line that won't have all the purchase parallel to each other. It is easier to start from the cam cleat and go through the middle of the bottom triple ratchet block (Cam cleat -> #2TRB). Feed the line from the top and in the middle block of the triple block (#2TRB->#2TB). Feed the line to the bottom triple ratchet block. Feed it from the bottom and use the starboard block (#2TB->#3TRB). Feed the line to the top triple block from the top. Use the starboard block (#3TRB->#3TB). Feed the line to the triple ratchet block. Do it from the bottom and use the starboard block (#3TB->#1TRB). Feed the line to the top triple block. Do it from the top and use the port block (#1TRB->#1TB). Bring the end of the line to the becket and make a bowline (#1TB->Becket).

Please note that for an optimal angle of the cam cleat, you can switch it upside down or change its angle by removing the 3 screws of each side and moving the cam cleat to the desired angle. It is easier to pull up than down to release the boom vang.

## V. Rig tension

As a starting point, both side stays on each side should have an equal number of treads on each side. The mast should look straight. It shouldn't have any bend or S-shape. To verify the mast bend, go in front of the mast, position your head next to it and look at the top of the mast. Very rarely, the cup from the lower side stays doesn't sit well in the spreaders. Make sure they sit well in their spot before moving to the next step. When the cup is not well positioned, there is an awkward angle to the lower side stays leaving the spreader.

To increase the tension, make sure you use an adjustable wrench or a metric wrench on the flat spot of the turnbuckle. A vise grip is NOT an appropriate tool. You well damage the turnbuckle. Make sure you add cutter pins to the top and bottom or the threaded toggles for each side stays and for each side.

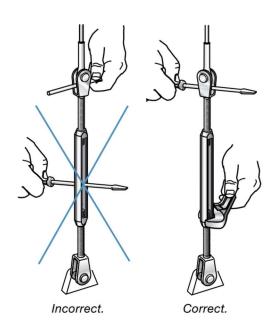


Image 9: Correct technique of turning the turnbuckle

## VI. Gennaker set-up

The gennaker is a fantastic downwind sail to use. It increases the sail area by 50%. This may seem a lot for a novice, but it is an incredible fun and easy sail to use. The FE19R use an asymmetrical gennaker. If you are more familiar with a symmetrical gennaker, you will find this way a lot easier. On an asymmetrical gennaker, you always need to sail it with an angle higher than downwind. It will not work if you try to sail it straight downwind. Sailing a higher angle expose the gennaker more wind which increase its power. The more exposed it is, the faster you can go. This is true until the wind starts to fill in on the other side of the gennaker which typically happens if you sail higher than 100 degrees when it is fully sheeted in.

The following steps are for a hoist with the gennaker on port. This means the FE19R is sailing on starboard but the gennaker is flying on port. This is the safest tack to do it as you have priority.

- 1) Secure the gennaker bag in the cockpit.
- 2) Find the head of the gennaker. It will say "HEAD" next to it.
- 3) Grab the gennaker's shackle and attach it to the head. The halyard should be above the forestay and go between the side stays and the mast.
- 4) Find the middle of the gennaker sheet by folding it in half.
- 5) Find the clew of the gennaker. It will say "CLEW" next to it.
- 6) Do a cow hitch with the middle of the gennaker sheet on the clew. The gennaker sheet is now attached to the gennaker's clew and is in the gennaker bag.
- 7) For the leeward sheet, grab one end of the sheet and feed it forward between the mast and the side stays. It should also go on top of the jib's sheet.
- 8) Now bring the leeward sheet to the stern gennaker's block. This section of the gennaker's sheet should be outside the lifeline.
- 9) Feed it through the second gennaker's block. This block is a ratchet block.
- 10) Some sailors prefer to do an eight knot to prevent losing the sheet while sailing. If you are new, it is better to do not any knot at the end of the sheet. This way, if you did a mistake, it is easier to let go the sheet fully and re-rig it properly.
- 11) For the windward sheet, feed it forward between the mast and the side stays. It should also go on top of the jib's sheet.

- 12) Keep walking forward with the end of the windward sheet and pass it in front of the forestay.

  Grad the end from the other side of the forestay and walk back on starboard all the way to the stern. Make sure the sheet is always outside of the lifeline and **side stays**.
- 13) Feed the end of the windward sheet into the stern gennaker's block.
- 14) Feed the end of the windward sheet into the second gennaker's block.
- 15) Make a knot or not depending on your level.
- 16) Grab the tack line at the front of the FE19R from the **port side**. Feed the line from port between the mast and the side stays. It is VERY important to make sure the tack line is on top of the jib sheets and on **top** of the gennaker's sheet. If the tack line is not on top of the gennaker's sheet, it won't be possible to gybe.

Tip: TACO. **Tack o**ver the lines.

17) The gennaker is now rigged. Congratulations.

# VII. Annexe I: Control lines layout

