

# RS Vision Rigging Instructions

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1. Remove the cover noting how it fits so you can replace it.
2. Note the boat number which is on a sticker on the port side of the transom.
3. Go to the right hand storage garage and collect the correct mainsail, jib and rudder. All should be marked with the boat number. Please use the mainsails in the yellow bags. The sails in blue bags are reserved for training.
4. Fit the rudder. Note that the uphaul does not lift the rudder high enough so raise it by hand and tighten the wing nut. Most boats have a split ring to secure the rudder but it's use is optional because the rudder is unlikely to come off and the Vision rudders float anyway.
5. Attach the jib. (It must be fully unrolled.) The boats are stored with the jib halliard attached to the bow furler (Fig. 2) and the halliard is kept under a bit of tension using the pulley block tensioning system attached to the bottom of the mast (it has a black rope). De-tension this pulley block system, remove the hook from the jib halliard rope and keep the hook ready for tensioning the jib later You then need to disconnect the halliard from the bow. Note that the rotating joint stays on the halliard as it goes at the top of the jib. **Before attaching the jib make sure the bow furler is rotated fully counter clockwise.** If it isn't you won't be able to furl the jib.

**Day-hire Vision:** This is 799 located on berth N504 to the right of the South Lagoon slipway. The sails and rudder are normally kept in the boat. If not they will be in the garage (see last page). The sail bags have a yellow label. It is a condition of hire that the mast head float is always used.



Figure 1 Boat number location



Figure 2 You should find the jib halliard stored like this



Figure 3 Jib tack attached to furler



Figure 4 Rotating joint attached to head of jib

Attach the tack of the jib to the spigot of the bow furler. Be careful not to lose the split ring. Now attach the head of the jib to the rotating joint on the halliard after checking that the halliard runs clear to the sheave near the top of the mast. Pull the halliard tail at the mast to raise the jib. There may be a bit of resistance as the halliard rope/wire joint goes through the sheave on the mast. When the wire loop on the halliard emerges from the mast put the tensioner hook into it after making sure the pulley block system is not twisted and runs free. Free the halliard rope from the hook so the hook only contacts the wire loop. **Now make sure the main sheet and kicker are un-cleated.** Next put tension on the jib halliard using the pulley block system. Pull as hard as you can. This applies the rig tension. Check that the shrouds are taut. Coil the jib halliard rope and put it in the halliard bag under the starboard fore deck leaving the end of the rope out of the bag to prevent tangles.

Put the jib sheets through the cleats and tie a knot on each of the ends or tie the ends together.

Furl the jib using the furling line under the starboard foredeck.



Figure 5 Jib tensioner hook inserted in halliard loop

6. It is now safe to leave the boat. Do not raise the mainsail until you are ready to go on the water.
  
7. Raise the mainsail: Unroll the mainsail on the starboard side of the boat. (You have to raise it from that side because of the gnav fitting on the mast.) Next ensure the boat is pointing head into wind. Remove the halliard from the notch at the end of the boom and allow the boom to rest on the floor of the boat. Double back the halliard end about 150 mm and put the doubled end through the loop on the mast head float and then through the cringle at the head of the mainsail. Put the loop over the bobble and pull tight.

Check that main sheet and kicker are un-cleated. Feed the mainsail luff into the groove on the mast and use the main halliard to raise the sail (easier with two people). To prevent wear keep the halliard out of the halliard cleat whilst raising the sail. Check that the mainsail is right at the top of the mast by standing back away from the boat where you can see. Stow the halliard in the bag.

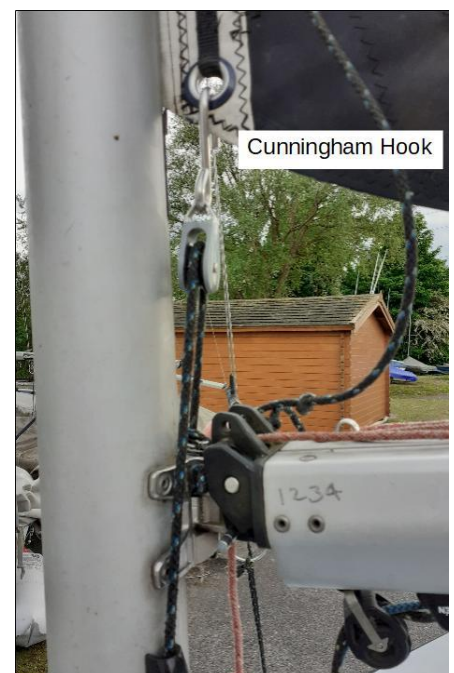


Figure 6 Cunningham Hook

Attach the Cunningham hook (Fig 6).

Do not attach the sail clew to the boom until you have launched, but identify which rope at the end of the boom is the outhaul. On most boats the outhaul is blue and the white rope is the reefing line (see later). On some boats the colours are different but on all boats the outhaul is on the port side. The cleats for the outhaul and reefing line are under the boom near the mast. The outhaul cleat is the aft one.

8. Check that all hatches are in place and the bung in the transom is in. Choose whether to launch into the N or S lagoons according to wind direction. You need to launch with the boat as near to head to wind as possible. After launching lower the centre board and rudder. Make sure the rudder is fully down (you should hear a clunk). Attach the clew of the sail to the end of the boom using the outhaul. Avoid getting the outhaul crossed over. The end of the outhaul goes in a notch at the end of the boom. Tension the outhaul. You should aim for a small amount of curvature in the foot of the sail with no horizontal creases.

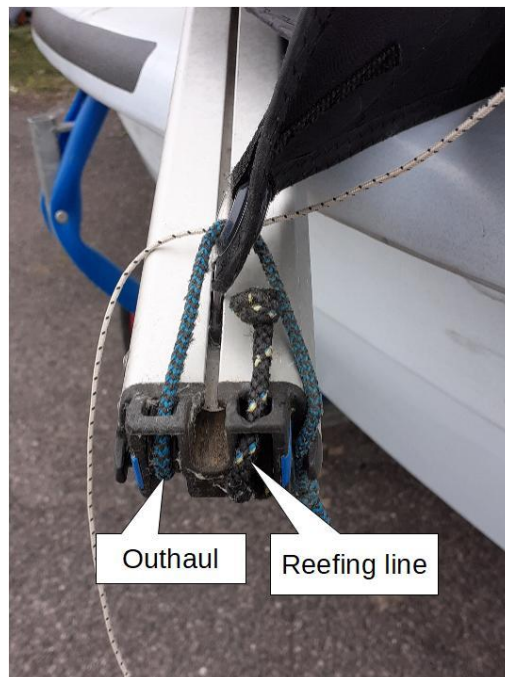


Figure 7 End of the boom with the outhaul rigged.

9. Adjust the sail controls: Do not put any tension on the Cunningham unless it is windy and you need to depower. Put some tension on the kicker – it needs setting properly when you are sailing.
10. Unfurl the jib. (The furler can jam so best check before you leave the pontoon.)
11. Away you go! Once on a close-hauled course with the main fully sheeted in adjust the kicker tension so the slack is just taken up. That is the correct setting for lighter winds. Apply more kicker and Cunningham if you need to depower in stronger winds.

## Derigging

Derigging is the reverse of rigging. Just a few points to note:

1. When raising the centreboard prior to getting the boat out of the water make sure no ropes are trapped at the forward end.
2. Disconnect the clew of the mainsail from the boom before recovering the boat.
3. **When removing the jib always unfurl it before lowering it.** Never store the jib furled up.
4. If you have capsized unscrew the bung in the transom and raise the bow to see if any water has leaked in to the hull.

## Reefing

All our sails have at least one stage of reefing. Some have two and a few have three. These notes mainly refer to the first stage of reefing. If in any doubt about the weather conditions it is always best to reef. It is easy to take the reef out even when on the water. The reverse is not the case.

1. Start with an unreefed sail with the outhaul attached.
2. De-tension the mainsheet and kicker and remove the Cunningham hook from the sail. (It is not used when reefed.) Identify the reefing line at the end of the boom - normally white but it is always the one on the starboard side.
3. Pull the reefing line a long way out of the back end of the boom and zigzag it down through the three cringles running down from the back of the sail. The line goes from starboard to port at the top cringle. Tie the line in a bowline round the boom (note it does not go back to the end of the boom)
4. Lower the sail till the reefing cringle (see Fig 9) is about 75 mm above the boom. Cleat the halliard. Uncleat the outhaul.
5. Pull out the reefing line at the mast end of the boom on the starboard side (Fig 10). Pass it through the reefing cringle from the starboard side and back down to a cut-out in the top of the boom. (Fig 11) Insert the second knot on the reefing line into the cut-out and push it forwards to secure it.
6. Roll the luff end of the sail tightly making sure all the coils are lined up then put the reefing line over the coil as shown (Fig 13). Whilst keeping the sail rolled up pull on the reefing line end. This will concertina the clew end of the sail (Fig 12) and then it will pull the loop round the mainsheet luff coil tight. Put a lot of force on the reefing line to trap the sail coil tightly. Stow any spare reefing line in the rolls of the sail. Re-tension the outhaul. Tie the reefing ties around the sail and boom. Use a reef knot! Tension the kicker. (Note the sails for 635 and 1489 have no bolt rope below the reefing cringle so you can't trap the rolled luff. Instead you have to rely on the reefing ties.)



Figure 8 Reefing lined laced through cringles and tied around boom



Figure 9 Location of reefing cringle



Fig 10 Foreword Reefing line emerging from boom



Fig11 Knot on line goes in this slot after passing through the cringle



Fig 12 Sail leach concertinaed by line



Fig 13 Luff roll trapped by reefing line

7. If the wind is blowing down either of the slipways then launch from that one with the main raised. If the wind is across the slipways then you will need to lower the main partially. The reef should stay in place but it might be necessary to de-tension the reefing line and the outhaul when raising the main again otherwise there can be too much backward tension on the luff in the mast groove.
8. If you want to use the second reef the procedure is the same except you will need to take off the outhaul and roll the whole of the bottom of the sail from the starboard side. You get a neater job if you put a fold in the clew end of the sail before rolling. After rolling put the clew bullet back in the boom and, for now, put on just enough outhaul to keep the bullet from coming out. Tie the reefing line to the boom as before but do not lace it down through the cringles. After that it is the same as for the first reef.

## FAQs

### 1. **The jib furler is very stiff.**

Make sure the spigot of the bow furler lines up with the jib luff. The black cylinder rotates to allow you to adjust this.

### 2. **How do I set the sail controls.**

The Vision, in common with virtually all dinghies, has three secondary sail controls. (The mainsheet is the primary control). These are the kicker (or gnav), the Cunningham and the outhaul. Since the Vision is a training/family boat these controls are much less powerful than on a racing dinghy where they can make a dramatic difference to the shape of the sail. (This is why the Vision has a reefing system as standard. Racing dinghies rarely have reefing and must rely on the sail controls to depower the mainsail in strong winds.)

In light (F2-3) winds the kicker is used only to prevent the boom rising when the main sheet is eased, either in a gust or downwind. To set it for these conditions sail on a close-hauled course with the main fully sheeted in. Adjust the kicker tension so the slack is just taken up.

In stronger winds apply more kicker. This will bend the mast and take some fullness out of the sail and so make it less powerful.

On a downwind course the kicker should ideally be adjusted so that the back of the top batten is parallel to the boom. In strong winds the kicker can be eased to allow the top of the sail to twist off and spill wind. Easing the kicker before a gybe in strong winds will help avoid a capsize.

The Cunningham should not be tensioned at all in light winds. In stronger winds applying Cunningham will depower the sail by flattening the luff.

The outhaul is the least critical of the controls. For most purposes it can be set to allow a small amount of fullness in the foot of the sail and then left alone.

### 3. **The Vision is an asymmetric dinghy. Does that mean the centreboard stays down at all times?**

It is true that on asymmetric dinghies the centreboard stays down at all times, but only if you are using the spinnaker downwind. If you are not using the spinnaker you should adjust the centreboard according to course as with a non-asymmetric dinghy.

### 4. **The steering feels heavy**

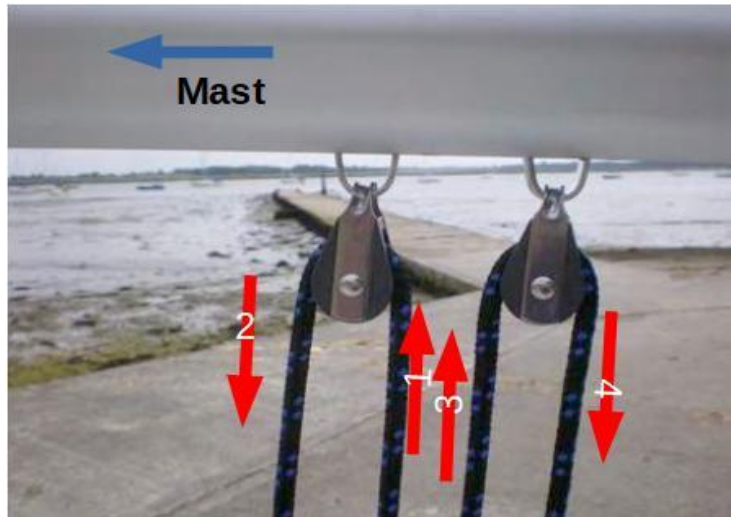
This is probably because the rudder isn't fully down, either because it wasn't put down properly in the first place or because you have run over some shallows. Even if it is slightly up it affects the steering.

5. **What is the difference between a kicker and a gnav?**

A kicker (short for kicking strap) pulls the boom down by a rope or wire pulley system. A gnav pushes the boom down by means of a strut between the boom and the mast. Both have a similar effect but the gnav has the advantage of leaving an unobstructed space below the boom for the crew to move about in. The gnav gets its name because in the US a kicker is called a vang and so the gnav is just a backwards vang.

6. **How do I re-rig the mainsheet if I find it unriggered?**

Assuming the mainsheet is still attached at its fixed end take the free end and pass it through the forward block on the boom **from aft to forward** (a bit counterintuitive). Then backwards through the block on the floor of the boat and back through the aft block on the boom from forward to back. It then goes through the ratchet block in the direction of the arrow on the block and then through the cleat. Tie a knot in the end. Check the ratchet block operates correctly. They are auto-ratchets so only lock up under tension.



7. **How do I get into the storage garage?**

The keys to the garages are stored in the radio cabinet in the workshop. Open the workshop using your club gate card. There is a sensor on the left of the door. Inside the workshop the radio cabinet is on the left. Again this opens with your gate card. The sensor is on the right side. The garage keys should be on the right hand, orange, hook on the back of the door. The silver key opens the right hand garage. Make sure to return the keys! The sails are on the racks on the left and the rudders are also on the left beyond the rack.