

Laser Rigging

We have two types of Laser/Laser rigs currently available:

- 5 new pro-rigging (white) hulls
 - 5 full sail pro-rigs (one of them is slightly different, the older "Gilbert" rig, but is rigged the same way)
 - o 1 radial sail rig (smaller sail, shorter mast)
- 1 old (yellow) hull
 - o 1 full sail rig
 - 2 radial sail rigs (smaller sail, shorter mast)

The pro-rigs go only with the new hulls, and the old rigs go only with the old hull.

All gear is currently in the sail room behind the work shed. The masts and booms are pre-rigged, all lines are already on them. **Please, take note of that before you rig so that you know how far to derig when you come back.** It is important that you do not derig the pre-rigged parts! The foils (both rudder and daggerboard) are in their bags stored on the floor below the sails.

Rigging the new (Pro) Lasers

Preparation

- move the boat closer to the water (bow to the wind)
- close all plugs (cockpit and stern)
- collect a mast and a boom from the shelves in the storage room (they should be stored together side by side)
 - while interchangeable, you should take the mast that has a matching number for the boat you are to sail
- the bags with the foils are on the floor below the sails
- bring it all down to the beach (typically 3 trips)

Mast

- untie the clew tie down, then unroll the sail (standing with your back to the wind helps)
- insert battens (the curved tip hooks into the elastic inside the batten pocket)
- position the mast with he top into the wind, wipe any sand or debris off the foot of the mast.
- grab the mast with your hands separated by ~75cm, and raise the mast, letting the wind assist you; then gently insert the foot into the mast step vertically.

Boom



- thread the boom onto the gooseneck
- attach the outhaul by clipping the hook block at the end of the boom into the cringle in the sail.
- tie the clew tie around the boom, should go twice around the boom, through the cringle in the sail, secure it with a reef knot; make sure the (red) outhaul line is not caught under the clew tie down



Cunningham (yellow line).

- untie the loose end of the cunningham, lay out the vang (red line) on the hull
- thread it through the starboard (right) block at the mast foot then through the cleat in front of the cockpit
- tie a loop at the end (large bowline + optionally make a handle)

NOTE: this line prevents the mast from falling to the bottom of the river when turtling, make sure the knot at the end is secure.

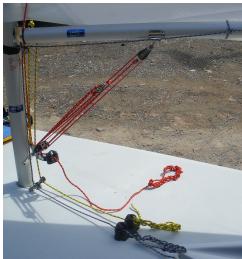
Vang (red line)

- straighten out the vang and attach it to the boom
- tension it a little so that the boom doesn't slip off the gooseneck



Outhaul (dark blue line)

- thread the loose end of the blue line of the outhaul through the free block on the mast by the gooseneck
- then through the port (left) block at the foot of the mast
- and then through the cleat in front of the cockpit
- tie a loop at the end (large bowline + optionally make a handle)



Mainsheet

- run the free end through the block on the traveler, front to back
- then back through the block at the end of the boom
- then along the boom through the fairlead then block about mid boom
- then through the main block in the cockpit
- tie a figure eight-knot at the end



Rudder



- move the boat closer to the water (bow to the wind)
- attach the rudder (keep it lifted so that you can push the boat deeper in the water the new rudders have a brake to allow them to stay up)
- attach the tiller (make sure it goes through the triangle of the traveler, with the aft (rear) section of the traveler above the tiller!)

Daggerboard

- lift the hull off the gunwale supports of the dolly
- move into the water, head to wind if possible. Aim to launch in the waist deep water, close to the dock.
- hang onto the painter line, and gently push the boat off the dolly. Leave the dolly very near the shore where it will not float away.
- move the boat off into the deeper water
- partially insert (~40cm) the daggerboard so that it doesn't get caught by the boom or the vang
- tie the bungee around the mast
- tie the loose end of the vang line to the front of the daggerboard

After push-off

- when you lower the rudder, make sure the rudder downhaul is tied securely around the tiller so that it doesn't fall out of the cleat on the side of the tiller. It's meant to keep the two parts together. If they get separated during a capsize the tiller will sink. The retaining pin on top of the rudder is not sufficient and is only meant to keep the parts together for the brief period before the rudder is lowered and the downhaul is tied.
- the daggerboard can be lowered once the boat is well into the deeper water

De-rigging the new pro-rigged Laser

Approach

- pull up the dagger board
- loosen the rudder downhaul line, make sure the rudder blade is up.

Loading

- take the dagger board out, and put it either flat on the deck or into the cockpit.
- now the boat can be loaded on the dolly, and pulled into the shallow water so that it doesn't float away (bow into the wind)
- lift the hull up onto the gunwale supports of the dolly

Foils

- remove the rudder/tiller and put it into the foil bag (do not put rudder on hull or into the cockpit!)
- remove the daggerboard and put it into the foil bag

Mainsheet

- unthread the mainsheet from all the blocks
- do not untie it from the boom-end!
- coil it up and tie the loop around the boom

Outhaul (red & blue-line)

- release the hook/shackle at the end of the boom from the sail
- unthread the outhaul from the cleat and block on the hull
- unthread the outhaul from the block by the gooseneck
- stop there! do not derig the rest!
- loop the loose end and tie it around the boom

Vang & cunningham

- untie the clew tie down from the boom, carefully rest the boom end on the hull
- unlatch the vang, lay it out straight on top of the hull
- remove the boom
- unthread the cunningham from the cleat and block on the hull
- stop there, do not derig the rest of the line!
- lift the vang up along the boom and tie a loop around it with the cunningham
- let the rest of the vang hang down and tie another loop around the end of the overhang with the cunningham
- tie the rest of the cunningham around the mast

De-step the mast

• lift the mast from the hull, rest the top of the mast on the stern of the hull

- remove battens
- hold the foot of the mast and roll the sail onto it by rolling the top of the mast over the stern,
- straighten the sail as you roll
- tie the clew tie down around the sail and mast to keep it rolled up
- put the 3 battens into the rolled sail so the ends are still visible

Stow-away mast, boom and foils

- take the mast and boom and the foil bag into the storage room
- put the mast and boom together on one of the shelves (if the sail is wet hang the mast with it in the clubhouse to dry)
- leave the foil bag on the floor below the sails

Park the boat

- roll the dolly and boat up the beach
- carefully place chocks (rocks) behind each dolly wheel
- place a tire under boat's sterns and boat's bow
- make sure all plugs are open
- tilt the boat up from the bow until all water drains from its plugs
- if the boat has a cover, put it on
- report any issues into the maintenance log, fixing those you can first, and mark the boat out of service if the issue makes the boat unseaworthy