



You will need:

(Usually already on the boat)

- **Traveller** – the rope across the back of the boat
- **Main sheet ratchet block** – in the centre of the boat
- **Bow line** – ties the boat to the trolley and for towing
- **Boom** - including already rigged on the boom – outhaul and clew tie down
- **Main sheet** - this may also already be rigged on the boom, if not ...

(... from the storage shed)

- **Main sheet**
- **Main sail** - choose size according to your ability (Full, Radial or 4.7)
- **Mast** – Top section (one size)
- **Mast** – Bottom section (size depends on sail size)
- **3 Sail battens** - one small and two larger ones (all sizes need the same 3 battens)
- **Downhaul rope** - also called the Cunningham
- **Kicking strap** – also called the Vang
- **Dagger board**
- **Rudder**
- **Tiller and extension**
- **Bung** – this will usually be tied to the boat (unfortunately each of the two club Lasers are different so check you have the right one!)

1. SAFETY INFORMATION

- Before attempting to operate the boat, ensure that you have the appropriate experience to handle the boat safely in the anticipated sea and wind conditions
- Ensure that you have sufficient boating experience and are familiar with emergency procedures, capsize recovery, and towing
- Always check the weather forecast before leaving shore, and ensure that the predicted weather and sea conditions are suitable for the boat
- Clothing should be suitable for the anticipated weather conditions and footwear appropriate for boating
- Before going afloat, you should be wearing a suitable buoyancy aid which should be worn at ALL times whilst on the water
- The helmsman is responsible for the safe operation of the boat
- The helmsman's responsibilities include the proper preparation of the boat and safety equipment, and knowledge of the boat operation

2. Preparing the Mainsail (Do not put mast up until you are ready to sail)

- Put mast sections together, don't worry about them coming apart, the sail and gravity will hold them together when it is pulled on (see picture 2.1)
- Slide the sail over the end of the mast carefully (see picture 2.2)



Picture 2.1 Assembling the mast



Picture 2.2. Slide the sail over the mast

- Make sure that the foot (the bottom) of the sail is in line with the gooseneck (see picture 2.3)
- Ensure the sail is fully over the mast and fits into the sail end sock (see picture 2.4)



Picture 2.3 Aligning the sail



Picture 2.4 The sail end sock

- Put the 3 battens in the sail (see picture 2.5) – Shortest one at the top the other two are interchangeable



Picture 2.5 Inserting the battens

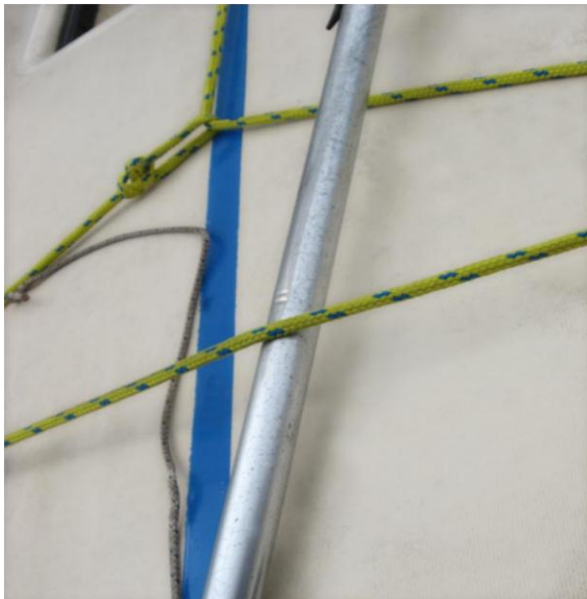
The Rudder

- Attach the rudder by placing the two pins on the rudder into the two matching holes on the stern (back) of the boat (see picture 2.7).



Picture 2.7 The rudder attached

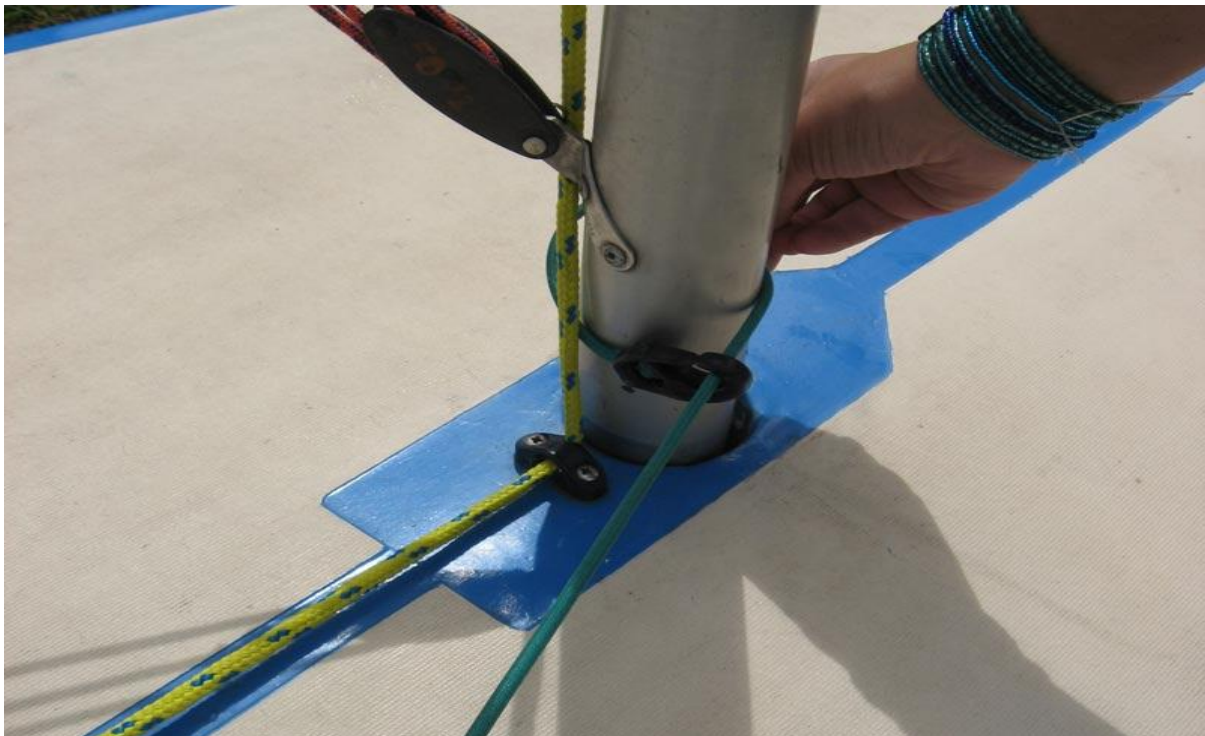
- Insert the tiller UNDER the traveller (see picture 2.8) into the rudder stock (see picture 2.9) and feed the rope from the rudder into it's jammer on the tiller - this is used to pull the rudder down and lock it into position when you're on the water
- The rudder should stay in the raised position due to friction – if not, tighten the pivot bolt, otherwise it will drag and get damaged, and also make launching and recovery difficult!

Picture 2.8 Tiller UNDER the traveller

Picture 2.9 Tiller inserted into rudder stock

The Daggerboard

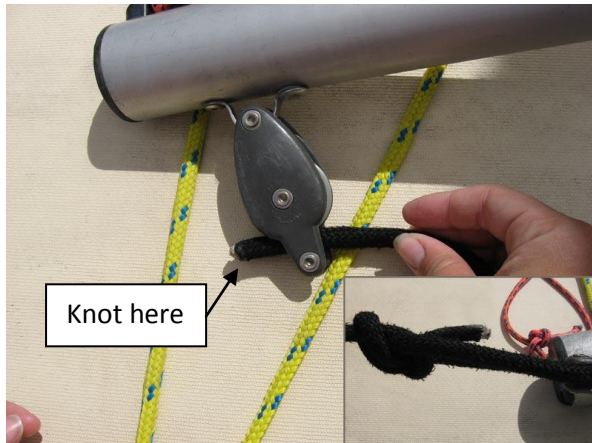
- Attach Daggerboard depending on the length of the shock cord (elastic) by running it around the mast and attaching it back on itself, or through the deck eye on the boat's bow. Usually there is a clip and eye, or Inglefield clips (see picture 2.10)
- The Daggerboard is attached now so it doesn't float off and sink when you're launching the boat



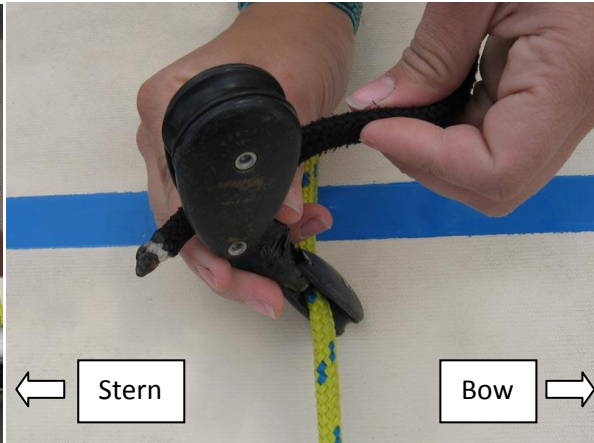
Picture 2.10 Attach the Daggerboard shock cord

The Main Sheet

1. Secure the end of the mainsheet rope to the block on the underside of the end of the boom, using a figure of 8 stopper knot (see picture 2.11)
2. Take the other end of the rope through the block on the traveller, making sure it goes from front to back (see picture 2.12), and then up and back through the first block, (see picture 2.13)
3. Next, the rope goes along the boom, through the eyehole (see picture 2.14), then through the block halfway along the boom (see picture 2.15)
4. Next it drops down and goes through the ratchet block at the front of the cockpit (front to back) (see picture 2.16) and **is secured with a figure of 8 stopper knot in the end of the rope**



Picture 2.11 Boom end block and bowline



Picture 2.12 Second block (on Traveller)



Picture 2.13 Through the boom end block



Picture 2.14 Through eyehole on boom



Picture 2.15 Through the middle boom block



Picture 2.16 Through main deck block

You should now get changed and ensure someone will be available to help you launch

3. Raising the mast and mainsail

- Make sure there is no dirt or grass on the bottom of the mast which would cause damage to the bottom of the mast and the mast step (see picture 3.1)
- Carefully raise the mast and place it into the mast step (the round hole in the deck) in the boat
- If it is windy or you need help please ask! (see picture 3.2)



Picture 3.1 Checking the mast foot



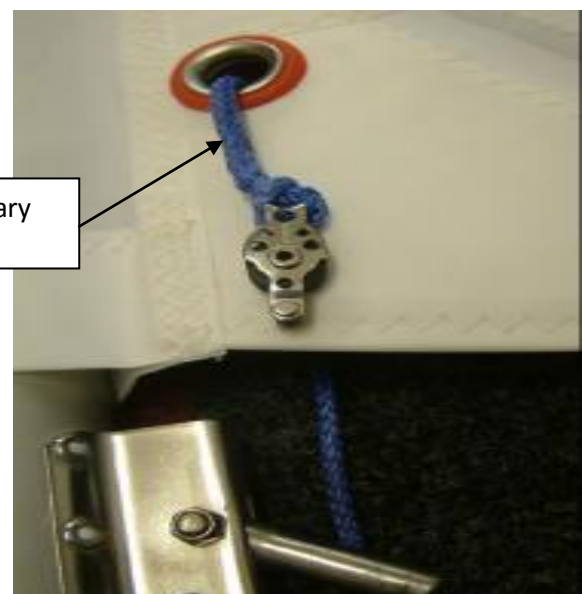
Picture 3.2 Mast in the step

The Downhaul (Cunningham) and Kicker attachment

- Ensure you have the complete set of lines (see picture 3.3)



Picture 3.3 The Cunningham lines



Picture 3.4 Through the tack eyehole

- Thread the primary line through the eyehole in the tack (front) of the sail so the small pulley block is up against the eyehole (see picture 3.4). Note: it should not pull through the eyehole!
- Pull the other end with a spliced eye down to the kicker mast tang and loop it over the tang or the lower kicker block (see picture 3.5)
- Attach the Tang block in a similar way over the mast tang or over the lower kicker block
- Finally attach the lower kicker block to the mast tang using the pin and ring (see picture 3.5)



Picture 3.5 The Primary loop and Tang block

- Take the secondary line working end (without the loop handle) through the deck cleat, through the eyehole on the deck just behind the mast, and up to the primary line small pulley block
- The secondary line is then led back down, through the tang block, back up to the primary line block and is finally tied off using a bowline on the becket of the primary line block (see picture 3.6)



Picture 3.6 The Secondary line tied off

Attach the Boom

- Insert boom onto the gooseneck, making sure it's the correct way up (the two pulley blocks should be underneath)
- Attach the kicking strap top end to the fitting on the underside of the boom (see picture 3.7)



Picture 3.7 Kicker top (tang) attachment

- Attach the outhaul clew (the hole in the bottom corner of the sail) using the hook if already rigged on the boom. If not...
- Tie the clew down to the boom with a short rope, using a reef knot (see picture 3.8)



Picture 3.8 Clew tie down



Picture 4.1 Screw in the bung

4. Completion

- Now you are almost ready to go Laser sailing. All that is left to do is:
 - Screw in the bung (usually it is tied onto the rudder stock) (see picture 4.1)
 - Check that all knots and shackles are tied securely
- Launch the boat carefully – ask for help if required
- As you get into deeper water insert the Dagger board
- Lower the rudder completely by pulling on the downhaul line and cleat off. Note - You may have to lean over the back of the boat and gently push the rudder down a bit first

Returning to the shore:

- When returning to the shore do so SLOWLY and always under control
- Remove the Daggerboard as soon as possible and lift the rudder by hand, either over the back of the boat, or when you are in the water
- Take care of the boom swinging – mind your head!
- Lower the mast/main sail as soon as possible – please DO NOT leave sails flogging as this drastically reduces their useable life
- Return all kit to the storage shed, although leave the boom or a mast top section on the boat, put the cover back, and secure the straps