

# Laser 2000



## **RIGGING MANUAL**

# **Safety Afloat**

This instruction manual is not a guide to sailing your craft and it should not be considered suitable for the task of learning to sail a boat. Please read the manual before rigging and sailing your Laser 2000.

## **Before you go sailing:**

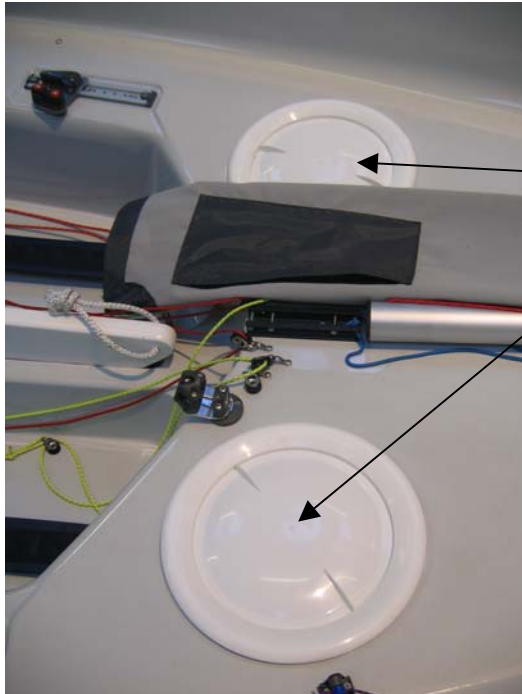
- Check you are wearing suitable clothing and safety equipment for the conditions and time of year.
- Always wear a buoyancy aid or life jacket
- Make sure a third party knows where you are sailing and how many there are of you.
- Check the weather forecast
- Check the time of high and low tides if applicable.
- Seek advice of local conditions if sailing in a new area.
- Always check the condition of your craft before setting off.
- A sailor's safety knife should be carried on board.
- **Check for overhead cables when rigging, launching and recovering.**

## **On the water:**

- Conform to the sailing rules of the road.
- Look out for changing weather conditions.
- Never sail beyond your ability or that of your crew. Ensure that you and your crew can cope with any changes in the wind conditions
- Understand and be competent in the sailing skills and righting techniques.

## Important information

There are three hatches and one transom drain bung on the Laser 2000, these must all be checked to ensure they are fitted correctly and done up tight prior to every time you sail:



Hatches 1 & 2 are found at the aft edge of the foredeck. (Fitted to facilitate additional on the water storage only)



Hatch 3 can be found on the inboard surface of the stern deck.



The transom drain bung can be found below the lower rudder gudgeon.

Example of INCORRECT hatch fitment:



**NB: Correct fitment of the transom drain bung and hatch 3, is fundamental to on the water safety and performance of the Laser 2000.**

## **Laser 2000 Rigging Instructions**

The Laser 2000 rigging instructions are a guide to rigging your boat. Due to production supplies certain parts may be different from those shown in description, colour, and specification. Performance Sailcraft Europe reserves the right to change specifications without prior notification.

### **LASER CENTRE**

Options, accessories and spares are available from Laser Direct +44 (0) 1327 841610

[www.lasersailing.com](http://www.lasersailing.com)

The Laser Centre  
Station Works  
Long Buckby  
Northampton  
NN6 7PF  
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## **Contents**

	<b><u>Page</u></b>
<b>1. Glossary</b>	<b>5</b>
<b>2. Useful boat terminology</b>	<b>6</b>
<b>3. Maintenance and service</b>	<b>7-8</b>
<b>4. Cordage Lengths</b>	<b>8</b>
<b>5. Sail number positioning</b>	<b>9</b>
<b>6. Rigging and raising the mast</b>	<b>10-13</b>
<b>7. Rigging The Trapeze</b>	<b>13-14</b>
<b>8. Boom &amp; Vang</b>	<b>15</b>
<b>9. Sails:</b>	<b>16-23</b>
<b>a. Jib</b>	<b>16-17</b>
<b>b. Gennaker</b>	<b>18-20</b>
<b>c. Mainsail</b>	<b>20-21</b>
<b>d. Outhaul</b>	<b>21</b>
<b>e. Cunningham</b>	<b>22</b>
<b>f. Reefing The Mainsail</b>	<b>22-23</b>
<b>10. Rudder</b>	<b>23</b>
<b>11. Launching &amp; basic safety on the water</b>	<b>24-25</b>
<b>12. Laser 2000 Capsize Technique</b>	<b>26</b>

**Customer Help Line: Please contact Customer Services on Tel: 00 44 (0) 1327 841608.**

## **Glossary**

**Bow:** Front of the boat

**Stern:** Back of the boat

**Fore:** Forward

**Aft:** Rearward

**Clew:** Back lower corner of a sail

**Tack:** Forward lower corner of sail

**Head:** Top corner of sail

**Luff:** Forward edge of the sail

**Foot:** Bottom edge of the sail

**Leech:** Rear edge of the sail

**Burgee:** Wind direction indicator (usually a small flag)

**Batten:** A thin stiffening strip in the sail to support the leech

**Mast:** Main vertical spar supporting the rig/sails

**Boom:** Spar at the Bottom of the mainsail

**Gennaker pole:** the Pole, which extends to fly the gennaker tack from.

**Cleat:** A fitting used for holding /securing ropes

**Forestay:** The wire supporting the mast at the bow of the boat

**Shrouds:** Wires that hold mast in boat and supporting the mast from  $\frac{3}{4}$  up and out to hull side. Attached with shroud adjuster to shroud anchor point

**Lower shrouds:** Wires that tie off  $\frac{1}{4}$  up mast and shackle to shroud anchor points

**Jib:** Front sail

**Sheet:** Rope for controlling the inward/outward position of the sail

**Gennaker:** Isometric sail hoisted when sailing downwind

**Gunwale:** The outermost edge of the boat

**Gudgeon:** Fitting on the transom and rudder used to hang rudder

**Cunningham:** Purchase system for tightening the forward edge/luff of the sail

**Gnav:** Purchase system for tightening the rear edge/leach of the sail

**Vang:** Otherwise known as the Kicking strap or Gnav

**Outhaul:** Purchase system for tightening the bottom edge/foot of the sail

**Halyard:** A rope or wire used to lower or hoist sails

**Mast Heel:** Fitting on the bottom edge/foot of the mast

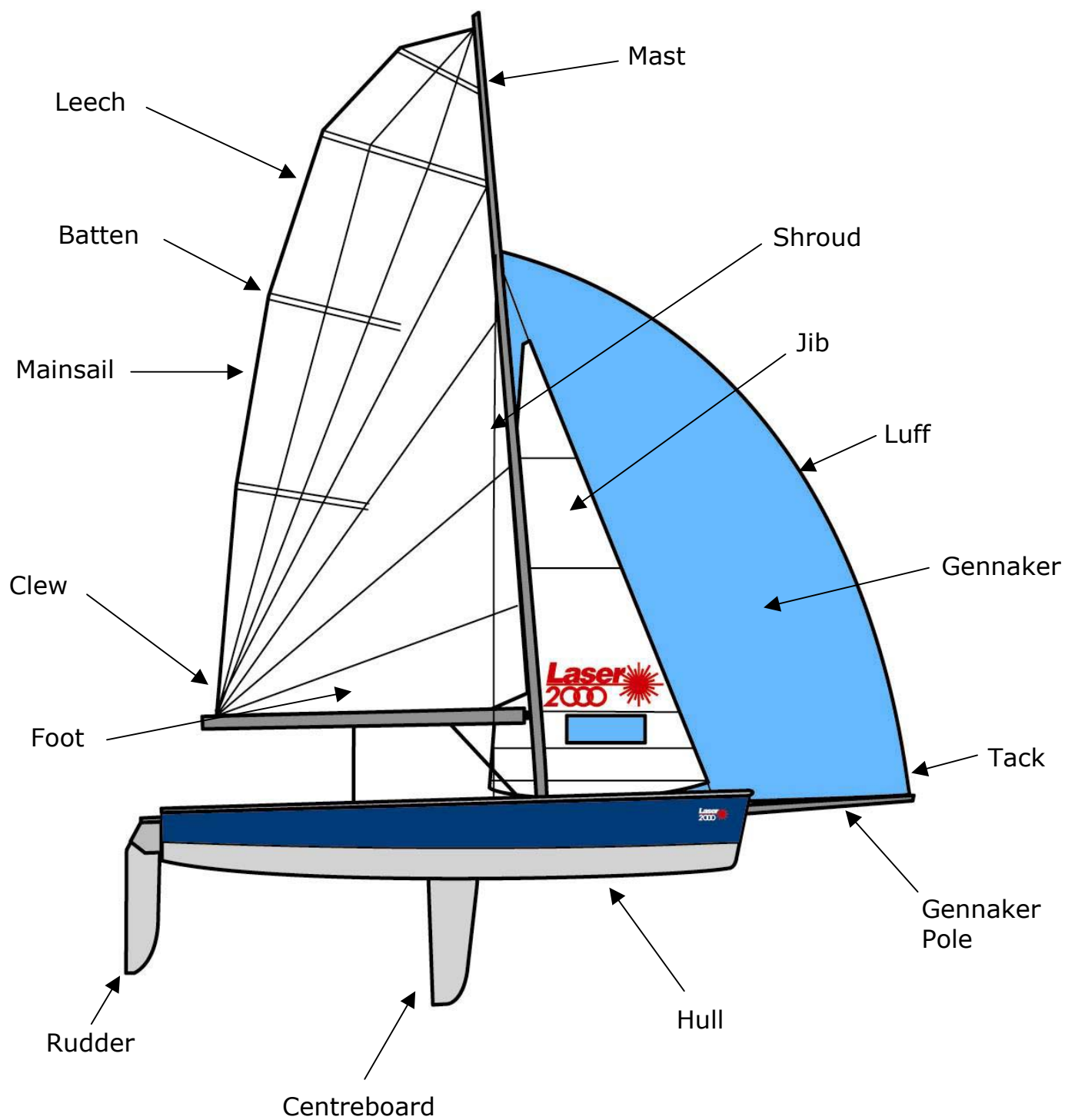
**Mast step:** Fitting on the boat where the mast heel/foot of the mast is located

**Spreaders:** Metal struts placed in pairs to support the mast side ways and control the bend in the mast

**Stem fitting:** Stainless fitting at the bow which the forestay attaches

**Rudder:** Blade and attachments used for steering the boat

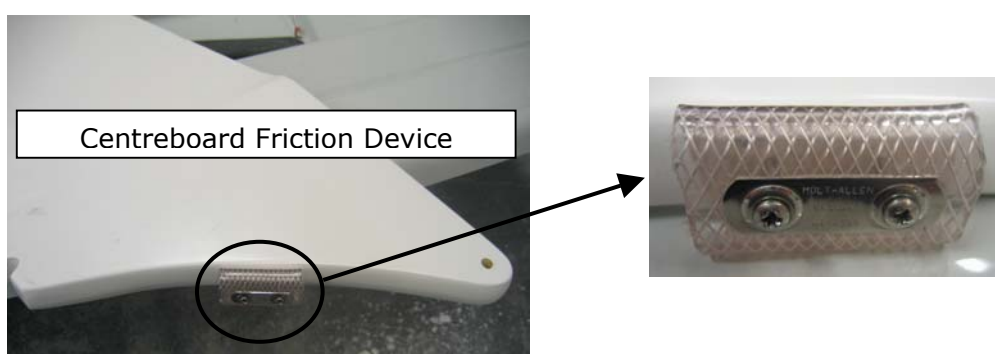
## Useful Boat Terminology



## **Maintenance and Service**

- Keep the equipment clean by frequently flushing with fresh water. In corrosive atmospheres stainless parts may show discoloration/brown staining around screw holes and rivets, this is not serious and can be removed with a fine abrasive.
- Excess water should be removed from the hull.
- Ropes, rigging and fittings should be checked at regular intervals for wear and tear.
- All moving parts should be lightly lubricated to avoid jamming, i.e., McLube, Dry Teflon or a dry silicone based spray. Do not use Oil.
- Inspect shackles, pins and fittings – tape up to stop snagging and coming undone.
- When refastening screws do not re – use Nylock nuts more than three times and be careful not to over-tighten, as there is a risk of stripping the thread.
- Damaged or worn parts should be replaced.
- Sails should be thoroughly washed down with fresh water, dried and stored in a dry place.
- Trailers and trolleys should be rinsed with fresh water and checked at regular intervals.
- It is recommended that the trailer/road base be serviced annually.
- The trailer/road base should never be immersed in water.
- Trailers and Trolleys supplied by Laser are designed to transport the hull in the best possible manner to avoid damaging the hull. For instance Laser does not recommend supporting hulls on rollers except on the keel line. We also recommend gunwale-hung trolleys for our smaller products. Hulls supported by a trolley bunk or wide strap must have the ability to drain the water away from the hull. Trolley bunks padded with carpet or foam can cause blistering and changes to the hull colour. Please do not transport your Laser product on a trailer or trolley that has not been specifically designed for the product. Hulls damaged through using an incorrectly designed or wrongly set up trailer or trolley are not covered under warranty.
- Only people with relevant equipment and skills should undertake repairs to the glass fibre hull. Contact Laser Centre for advice.
- Under covers for Laser products should be produced from breathable or semi breathable fabric to allow moisture to evaporate away from the hull. This is essential to prevent damage to gel coat. However, the hull should never be left in the undercover wet or damp. A combination of moisture and heat over an extended period can also damage the gel coat. The under cover is designed to protect the hull when being transported and should be removed when the hull is being stored. Typical damage includes small bubbles or blisters, excessive print through of glass reinforcement, foam or wood.

- UV light will cause fading to some components and fittings, a cover is recommended to reduce the UV degradation.
- **WARNING:** When wearing a trapeze harness, take particular care when climbing on to the centreboard and back in to the boat after capsize. (As the trapeze harness hook could easily damage the hull or deck)
- If your centreboard will not stay down during sailing, tighten the screws on the plastic friction device on the leading edge of the centreboard within the centreboard case. (As the presence of water changes the coefficient of friction within the case, this device is best "tuned" using a long shaft posi-drive screwdriver whilst on the water on a relatively calm day)



## **Cordage lengths**

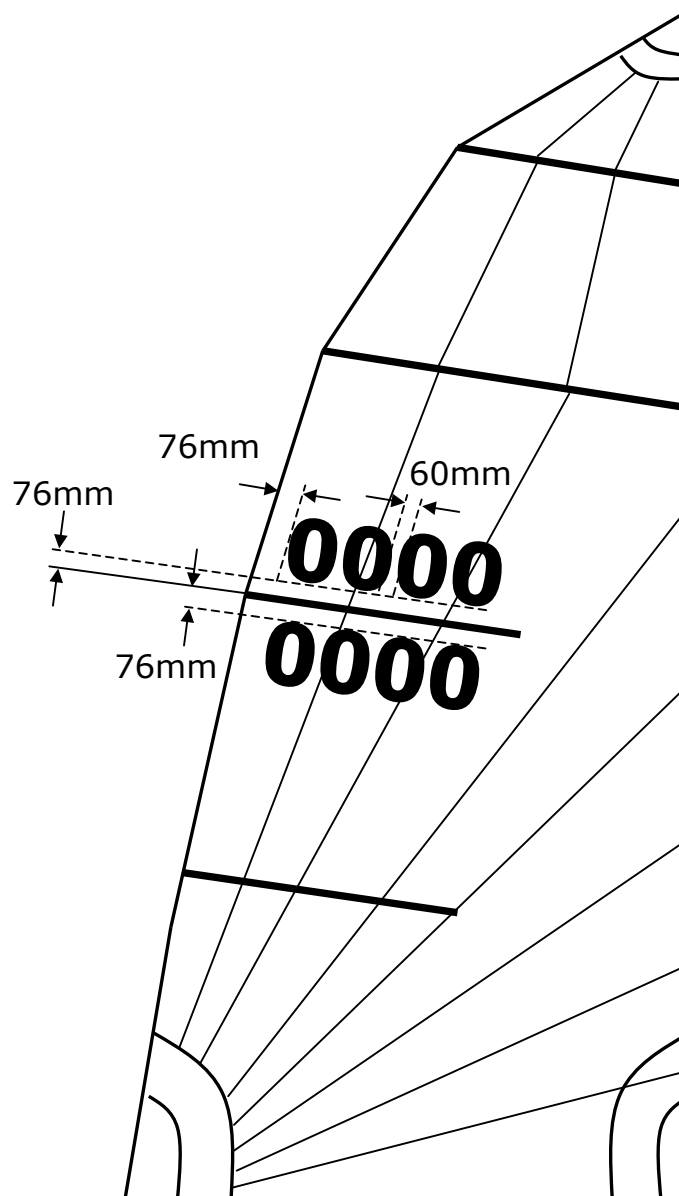
Mainsheet	1 x 6.0 metres, 8mm, 8 plait, matt, white
Jib sheet	1 x 6.6 metres, 8mm, 8 plait, matt, white
Gennaker sheet	1 x 9.0 metres, 6mm, 8 plait matt, blue
Mainsheet Bridle	1 x 2.2 metres, 4mm, Excel Racing, purple
Cunningham Part 1	1 x 5.0 metres, 4mm, 8 plait p/s, lime
Cunningham Part 2	1 x 0.8 metres, 4mm, 8 plait p/s, lime
Kicker/Vang Part 1	1 x 5.5 metres, 4mm, 8 plait p/s, red
Kicker/Vang Part 2	1 x 2.5 metres, 5mm, Excel Racing, red
Toe-strap Lashing	4 x 0.6 metres, 6mm, 8 plait p/s, black
Lashing	3 x 0.2 metres, 1 x 0.8 metres, 8 plait, white
Rear Toe-strap Shock-cord	1 x 0.3 metres, 5mm, Shock cord, blue
Main Toe-strap Shock-cord	1 x 2.0 metres, 5mm, Shock cord, blue
Righting Line	2 x 1.5 metres, 4mm, 8 plait p/s, red
Righting Line Shock-cord	2 x 0.9 metres, 5mm, Shock cord, blue
Centreboard Line	1 x 0.75metres, 8mm, 8 plait p/s, white



## **Sail Number Positioning**

It is advised to apply the sail numbers in a dry, clean and wind free environment.

1. Lay the sail on a flat surface starboard side up.
2. Numbers on the starboard side of a sail are always higher than those on the port.
3. Mark a parallel line 76mm above the third batten down from the head of the sail.
4. Mark a point on the line 76mm in from the leech.
5. The first number in the sequence should be positioned on the parallel line you have drawn commencing 76mm in from the leech.
6. Subsequent numbers should be spaced 60mm apart.
7. Turn the sail over and position the port numbers 76mm below the third batten down from the head.
8. Work backwards, commencing 76mm in from the leech.



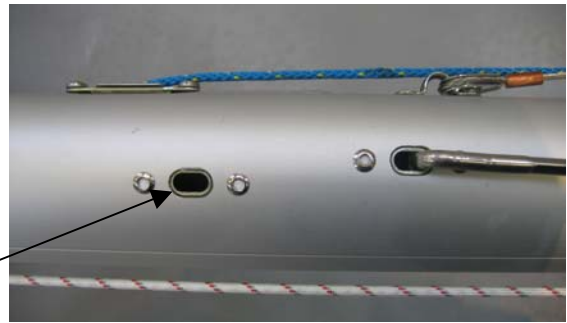
**Starboard (Right Hand) side of Mainsail**

## **Rigging And Raising The Mast**

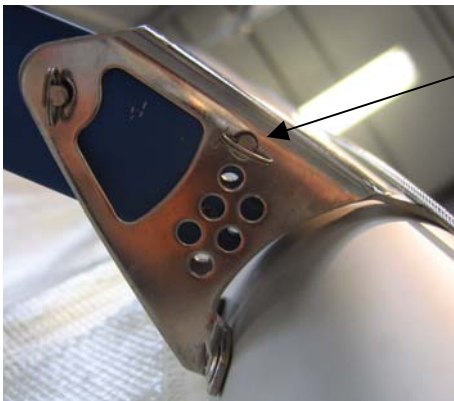
1. Unwrap the mast.



2. Ensure the halyards, shrouds and lowers shrouds are led to the gooseneck/base of the mast and each halyard rope end has a knot tied in it.

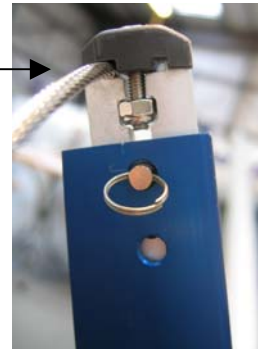


3. If applicable, fit trapeze wires in the top "T" terminal positions on the mast. (Please note: The Laser 2000 Trapeze kit is optional and is not supplied as standard)



4. Fit the spreaders. (See page overleaf for fitment diagram.)

(Tip: Best practice is to fit the clevis pins from above to ensure all split rings are positioned on the underside of the spreader bracket/bars.)

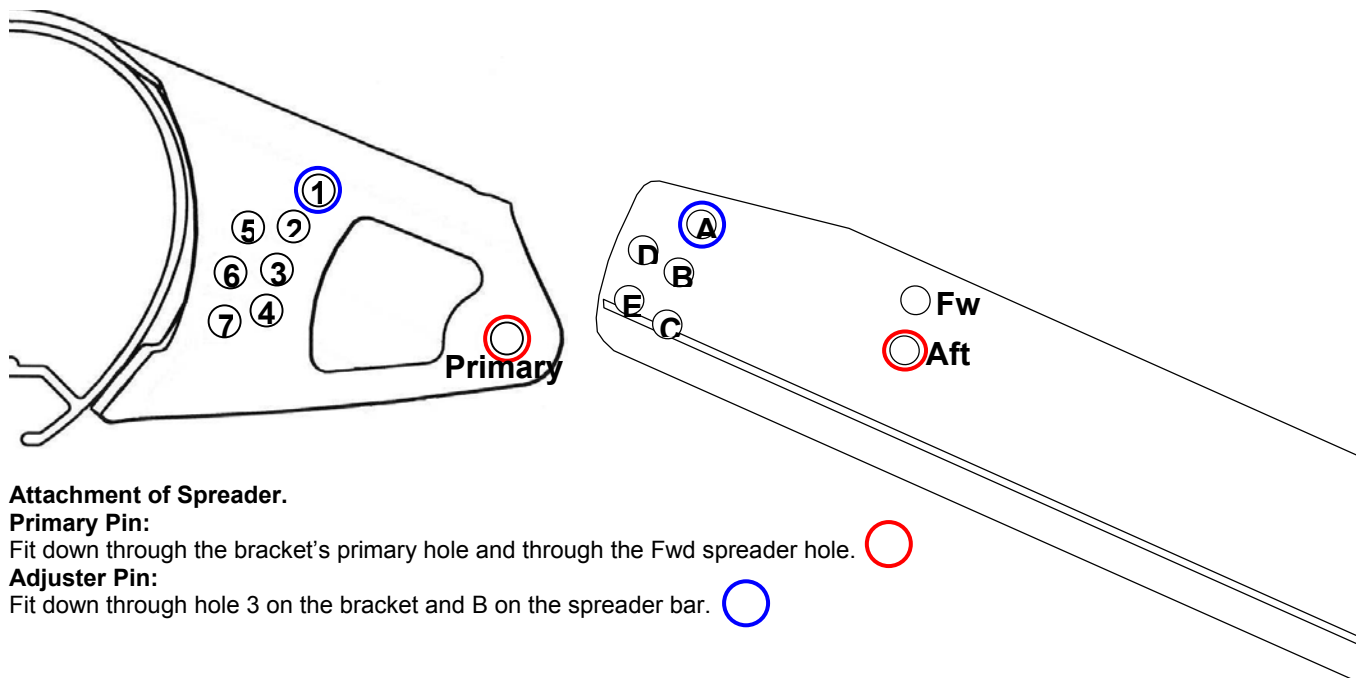


5. Ensure that all the spreader pins and rings are taped up or serious damage could occur to the sails.






## Laser 2000 Spreader Instructions




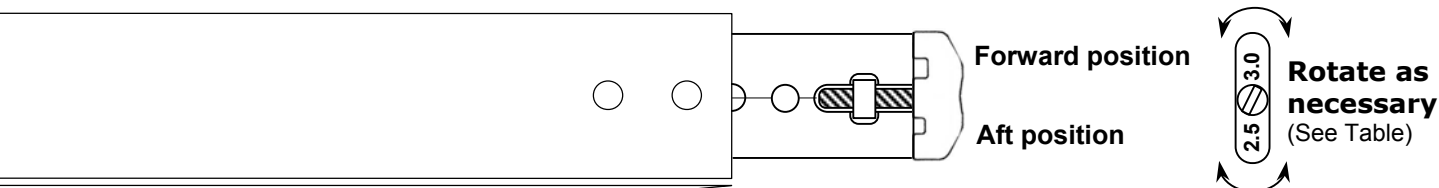
### Attachment of Spreader.

#### Primary Pin:

Fit down through the bracket's primary hole and through the Fwd spreader hole. 

#### Adjuster Pin:

Fit down through hole 3 on the bracket and B on the spreader bar. 



### Spreader Ends

#### Spreader End Cap:

The spreader end cap incorporates two shroud wire slots to give a tight grip on either 2.5 or 3mm wire. The sizes are identified on the front face of the end cap (See diagram above). To find which wire slot you require for your mast, please see the table below.

The end cap can also be rotated so that the shroud can be positioned at either the forward or aft position of the spreader end (see diagram above). To find out which position is required for your mast, please see the table below.

To attach the shroud, slacken the end screw, rotate the end clamp if necessary, then insert the shroud.

Ensure that the shroud is tensioned between T-Terminal and spreader tip, and then tighten the screw firmly.

This method "locks in" the dihedral angle.

#### Length Adjustment:

Described by the number of adjustment holes visible, (e.g. In the diagram above there are 1 ½ holes visible). **Please see the table below for your class specific positions.**

### Security

All clevis pins must be fitted with the flat head on top, and locked with a split ring. Tape all split rings, pins and the outboard end of the spreader extrusion. This will reduce chafe on the mainsail and prevent flailing sails/halyards becoming damaged.

Self-amalgamating tape is best, but PVC electrical tape is an adequate alternative.

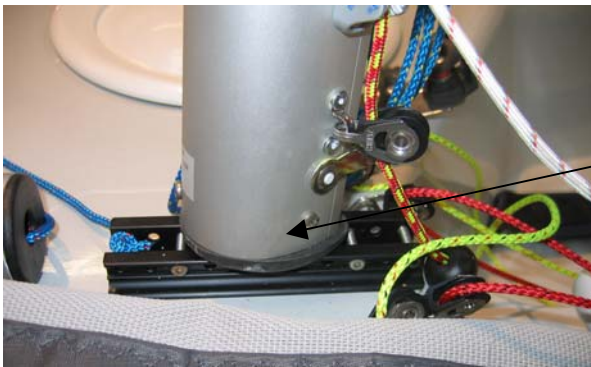
Class	Bracket Connection Pin		Outer End		
	Primary	Adjuster	End cap pos'n	Wire Dia.	Visible Holes
Laser 2000	Aft	1A	Aft	3.0mm	0



6. Raise the mast and position the mast heel in the centre of the mast step. (Note - This is a two person operation as someone will need to hold the mast upright while the shrouds and forestay are connected)

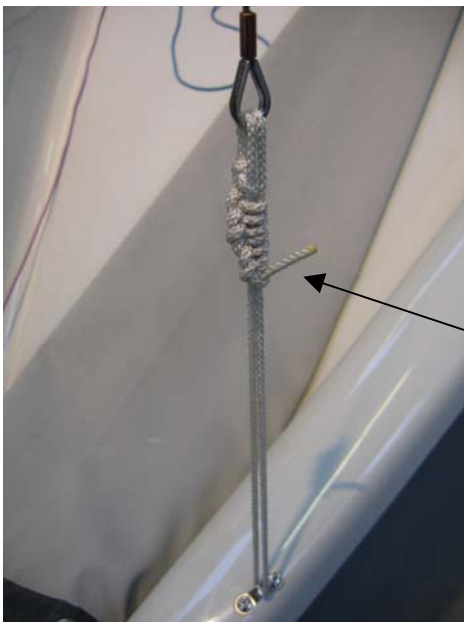
**CAUTION**

CONTACT WITH OVERHEAD ELECTRICAL WIRES COULD BE FATAL, EXERCISE EXTREME CAUTION WHEN RAISING THE MAST LAUNCHING & SAILING.



7. Ensure the mast heel is positioned and engaged correctly as shown.

8. Attach the shrouds to the shroud anchor point with the adjuster pin position in the 3<sup>rd</sup> hole down on the back of the vernier adjuster.



9. Attach the forestay on to the deck fairlead on the port bow deck as shown.

10. Temporarily fasten the jib and gennaker halyard to the forestay and and the main halyard to the port shroud anchor point.

(This simply ensures these elements do not inpinge upon other activities and are in the best positions for ease of rigging.)



### **Rigging The Trapeze**

(Please note: The Laser 2000 Trapeze kit is optional and is not supplied as standard)

1. Attach the trapeze wires in the highest T terminal positions on the mast. (Previously covered by "Rigging And Raising The Mast" item 3)

2. Ensure the trapeze wires hang down the aft face of the mast behind the spreaders.

3. Tie the separate pieces of trapeze shock-cord elastic to the respective port & starboard gennaker sock "P" clip attachments behind the jib tack bar.



4. Lead the shock-cord elastics down either gunwale towards the respective shroud anchor points.

5. Feed each elastic through the respective shroud anchor points from the inside-out then tie a loop in each as shown.



6. Attach the trapeze rings to hull mounted shock cords by feeding the elastic loop through the ring at the bottom of the pulley.



7. Loop the elastic shock cord over the metal trapeze ring and pull tight.



8. Tip - Best practise is to tie two double half hitch stopper knots a hand width apart in the adjuster line.

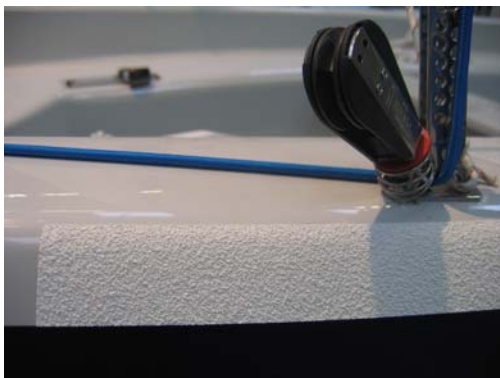


9. Attach the lower shrouds to the lowest central hole of the shroud vernier adjusters with the shackle facing forward as shown. (Please note: The lower shrouds are part of the trapeze kit and are not supplied as standard)

10. To avoid obstruction, ensure the shackle pins are fitted from the inside-out, the more favourable longer term solution would be to discard the shackle pins in favour of the pan head machine screws also supplied.

11. Loosely attach the other end of the lowers to the eye on the front face of the mast just above the gooseneck.

12. The lower shrouds cannot be tuned and tied off until the jib is hoisted and rig tension is applied, at which point they should be adjusted until both wires are equal, JUST in tension but not pulling the mast aft and tied.



13. Grip tape should be applied parallel to the gunwale edge commencing approximately 200mm in front of the shroud anchor points extending aft.

**PLEASE NOTE:** The lower shrouds are supplied to support the mast and protect it from the loads applied through use of the trapeze –  
**THE TRAPEZE SHOULD NEVER BE USED WITHOUT PRIOR FITMENT OF THE LOWER SHROUDS.**

## **Boom and Vang**

1. Unpack the boom.
2. Attach the boom to the mast as shown.



3. Ensure the lower vang purchase system is shackled securely to the tang on the lower aft face of the mast.

4. Hook the vang upper purchase assembly on to the boom ensuring there are no twists or fouls in the system.

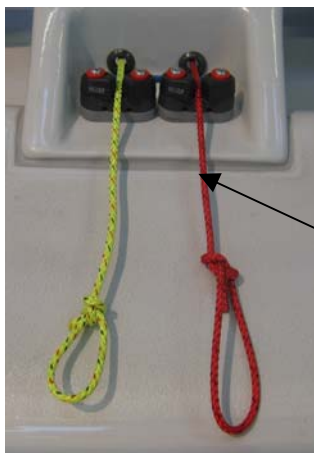


Aft Block

5. Tie the mainsheet through the block on the mainsheet bridle using a half hitch stopper knot as shown.

6. Feed the mainsheet through the blocks and to the mainsheet swivel cleat as shown.

Tip - double check the mainsheet passes through the auto ratchet in the correct direction shown by the arrow embossed on the side of the auto ratchet block.



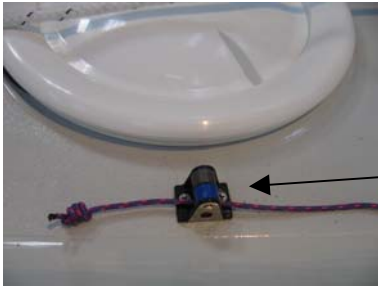
7. Vang tension is controlled using the aft rope and fairlead/cleats on top of the thwart.

Tip - Best practise is to tie the loose end of the mainsheet to one of the rear toe straps to prevent tangling and the sheet falling overboard.



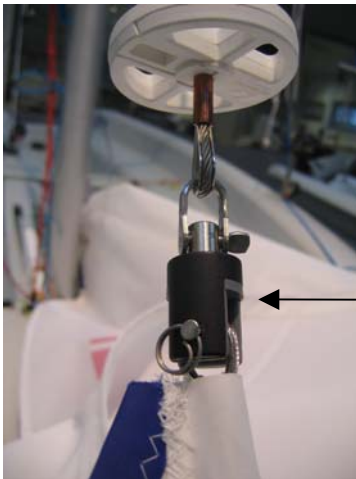
## Sails

### Jib



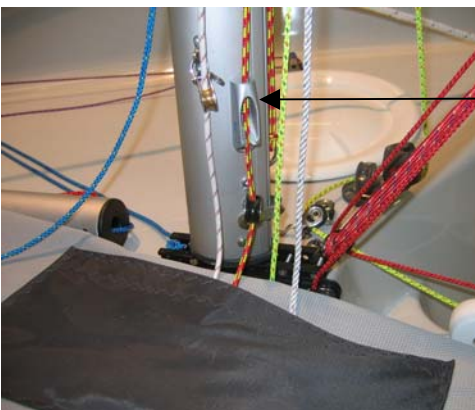
1. Ensure furling drum line is completely wound onto furling drum before you attach the jib.
2. The furling line/cleat can be found on the starboard side of the foredeck just in front of the jib sheet track/cleat)

3. Unroll the jib and attach the jib tack to the furling drum using the large shackle provided. (Tape up the shackle and pin to prevent snagging or damage to other sails and lines during sailing)



4. Fasten the head of the jib to the swivel using the clevis pin and split ring. (Tape up the shackle, pins and split ring to prevent snagging or damage to other sails and lines during sailing)

5. Hoist jib by pulling the white halyard out of aft face of the mast then hook the jib halyard purchase system onto jib Halyard wire. (Ensure hook is facing aft to prevent it engaging in mast track groove)



6. Tension the jib halyard purchase system until the jib luff wire is taught.

7. Cleat and tidy away both rope ends in the halyard pocket positioned on the top of the gennaker sock.

**Note:** If a loose gauge is used to measure the rig tension do NOT exceed 24 units or 150Kg - measured on the shroud 0.75 metres above the vernier adjuster.



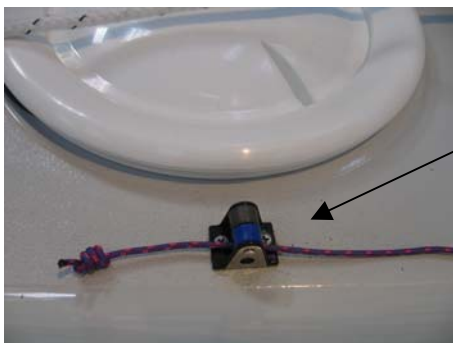
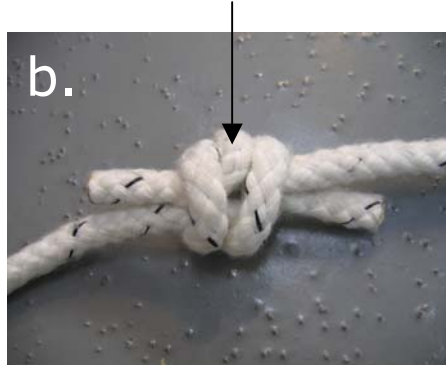
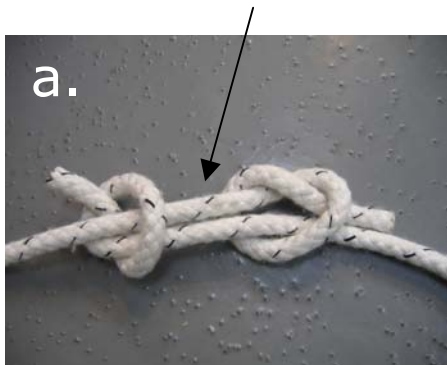
8. Find the centre of the jib sheet and pass it through the clew of the jib, then pull the two trailing ends of the sheet through the loop you have created to lock them in place as shown.



9. Pass one jib sheet either side of the mast before threading them through their respective port and starboard jib fairleads/cleats.



10. Tip – Best practise is to tie the sheet ends together in the middle of the boat to prevent tangling and inhibit sheets falling overboard.

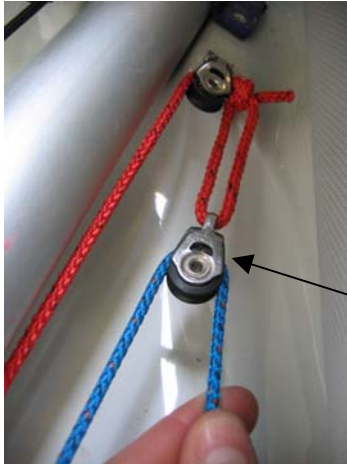


11. Furl the jib by pulling the furling line. The furling line/cleat can be found on the starboard side of the foredeck just in front of the jib sheet track/cleat)

12. **If the trapeze option is fitted:** Now the rig tension has been applied, the lower shrouds can be tuned, they should be adjusted until both wires are equal, **JUST** in tension, but not pulling the mast aft, then tied off.

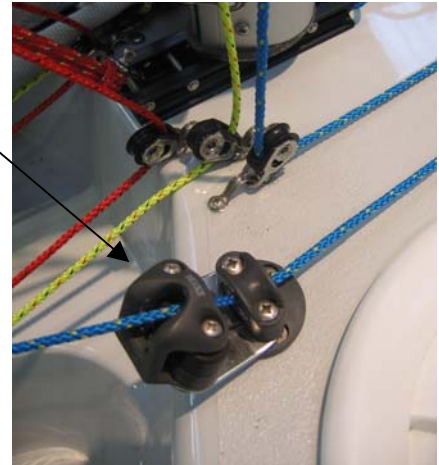


## Gennaker



1. Ensure the end of the gennaker halyard taken from the base of the mast is free of knots and tangles.
2. Take the gennaker halyard from the base of the mast and pass forward, under the gennaker sock and round the gennaker pole outhaul block. (The gennaker pole outhaul block is attached to the rope led from the pole as shown in the picture)

3. Thread the halyard aft and through the gennaker halyard cleat/fairlead at the aft edge of the foredeck on the starboard side.



4. Pass the halyard across the boat and through the pulley block at the aft end of the gennaker sock.



5. Tie the end of the halyard to something such as a batten or tiller extension and carefully pass the end of the halyard up the sock until you can grasp it from the front end of the gennaker sock opening.



6. This is known as the downhaul end of the gennaker halyard and should be temporarily tied around the jib tack bar while the batten/extension is removed from the gennaker sock.
7. Note: The up-haul end of the gennaker halyard is tied at the base of the forestay from a previous rigging exercise.

8. Unfold the gennaker, identify the tack patch (written on the sail) and securely fasten the tack line to the tack patch using a bow-line. (The tack line comes out of the front of the gennaker pole.)

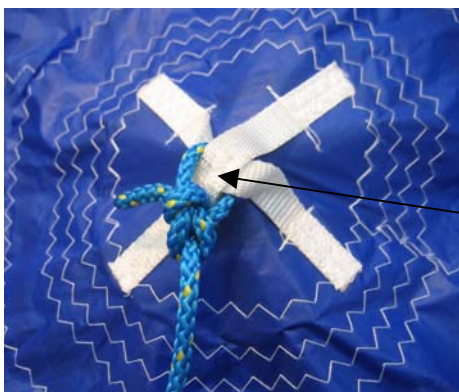
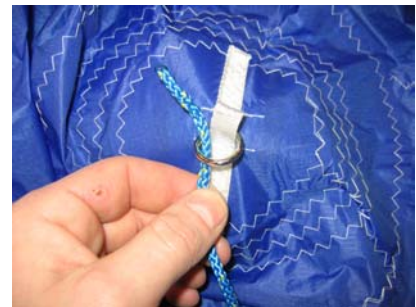
**Note:** Please check there is also a double half hitch stopper knot in the tack-line and gennaker halyard approximately 100mm prior to the bowline you have tied.



9. Identify the head patch, (written on the sail) untie the gennaker halyard (up-haul) from the base of the forestay and tie it to the head patch using a bowline.

10. Untie the gennaker halyard (down-haul) from the jib tack bar:

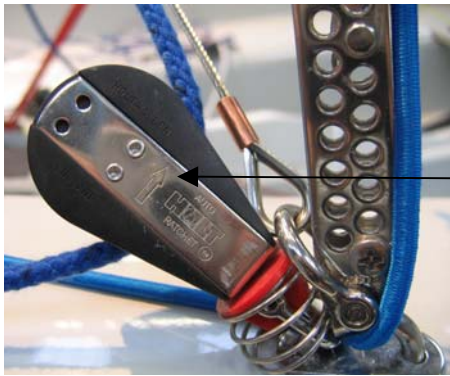
a. Pass through the lower downhaul patch ring on the port side of the sail.



b. Secure to the upper downhaul patch using a bowline.

11. Identify the clew patch, (written on the sail) attach the centre of the gennaker sheet to the clew of the gennaker. (As per jib sheet to jib clew previously covered in section Sails - Jib)





12. Pass the free ends of the gennaker sheets aft (One sheet either side of the jib luff) and through the gennaker sheet ratchet blocks attached to the shroud anchor points. There are arrows on the ratchet block to indicate which way the rope should pass. When under load, the ratchet will engage.

(Note – The sheets must pass forward of the shrouds at all times.)

13. Tie the free ends of the gennaker sheet together.
14. Ensure the boat is pointing directly into the wind and hoist the gennaker. Take great care to ensure that the gennaker does not get snagged around the trolley; a second person should help with this to ensure it does not snag anywhere. Check the gennaker is not twisted and the Sheets are not tangled with the halyard.



15. **ALWAYS TAKE GREAT CARE TO PULL UP THE GENNAKER SLOWLY AND DO NOT KEEP PULLING IF IT BECOMES TANGLED OR TIGHT.**

16. Un-cleat the halyard and gently pull the gennaker into the sock by pulling the halyard through the block at the aft end of the sock. A second person should help with this and be positioned at the front of the boat to ensure the gennaker does not get snagged anywhere.

## **Mainsail**

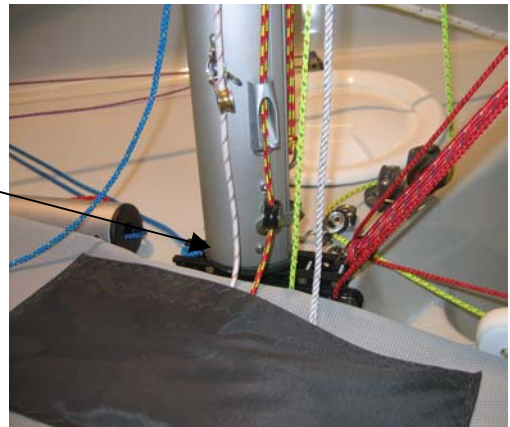
1. Remove the mainsail from its the bag and unroll.
2. Ensure all battens are tight in their pockets and the Velcro locking mechanisms are positively engaged.
3. Position the boat so it is head to wind (bow facing directly in to the wind).
4. Place the mainsail in the cockpit of the hull with the luff closest the bow (front) and the leach closest the stern (back).
5. Take the main halyard:
  - a. Ensure there are no twists in the halyard and it is clear of the spreaders.
  - b. Tie the halyard to the head of the sail using a bowline.
  - c. Locate the head of the mainsail into the mast track.





6. Hoist the mainsail using the main halyard block/cleat assembly on the lower port side of the mast.
7. **Note:** Hoisting the mainsail is a two person operation as assistance will be required to feed the mainsail in to the mast track while the other hoists using the halyard (This will prevent the sail pulling out of the track and jamming which could cause luff rope damage.)

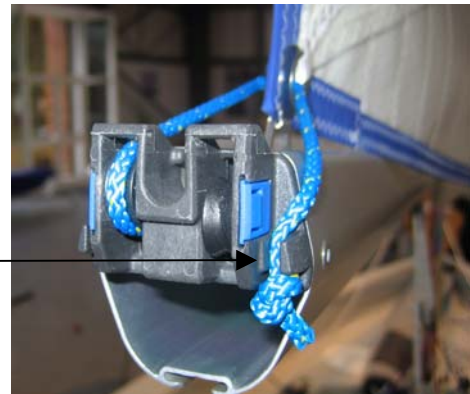
8. When the mainsail is fully hoisted, cleat and tidy away the halyard rope end in the halyard pocket positioned on the top of the gennaker sock.



## **Outhaul**



1. Feed the plastic slug slide on the clew outhaul into the cut out on the top of the boom.



2. The outhaul line is then passed through the lowest eye in the sail (From port/left to starboard/right side) and anchored on the starboard/right side with a simple knot located in the slot formed in the boom end casting.

3. Outhaul tension is controlled using the forward rope, cleat and fairlead at the forward end of the boom.

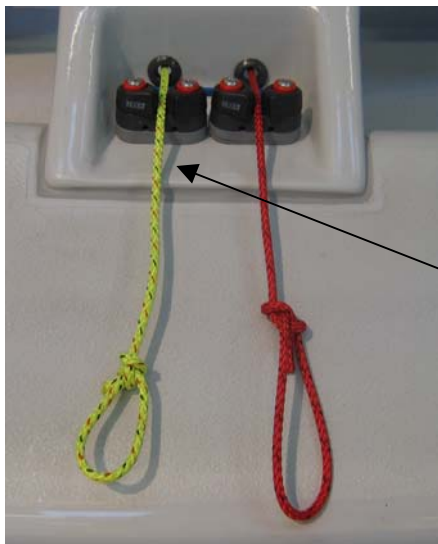
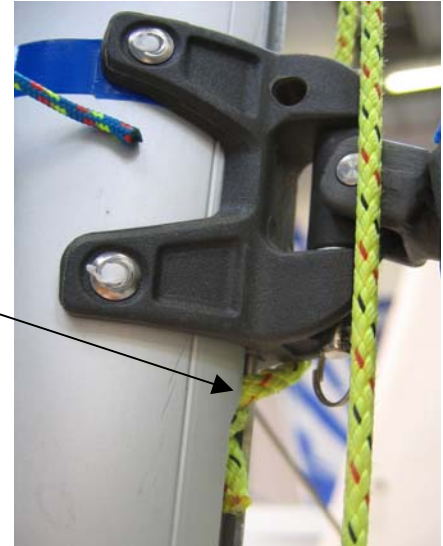


## Cunningham



1. Pass the rope at the end of the Cunningham purchase system through the eye at the bottom of the mainsail luff (from port/left hand to starboard/right hand side).

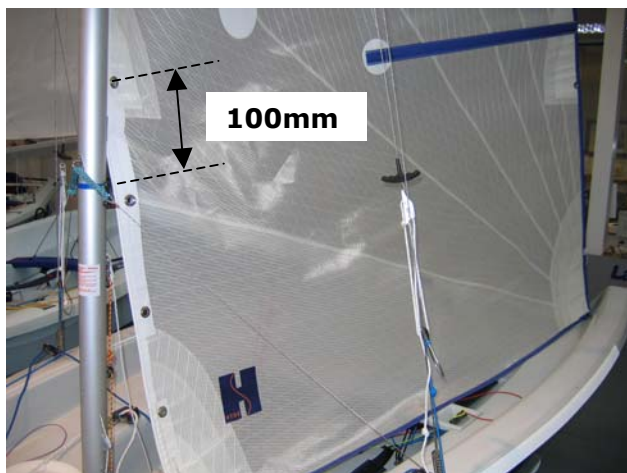
2. Anchor the end of the Cunningham purchase system by sliding a half hitch knot in to mast track just below the gooseneck.



3. Cunningham tension is controlled using the forward rope and fairlead/cleat on top of the cockpit centre console.

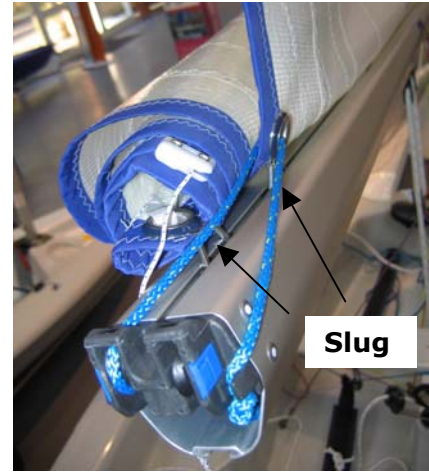
## Reefing The Mainsail

If it is windy and you feel you will be overpowered in the Laser 2000 it is wise to reef the mainsail:



1. Remove the Cunningham from the tack eyelet.
2. Remove the outhaul from the clew eyelet.
3. Slide the clew outhaul slug slide out of the boom track.
4. Un-cleat the mainsail halyard and lower the mainsail until the upper reefing tack eyelet is around 100mm above the gooseneck and the foot of the mainsail is just beginning to touch the thwart/sub deck as shown.

5. Roll the sail as tight as possible from the foot on to the port side of the sail keeping the eyelets on the luff and the slug slides on the leech parallel and in line.
6. Feed the original, lower clew outhaul slug slide in to the boom cut out first, followed by the higher reefing slug slide second.
7. Re-attach the outhaul control line through the eye attached to the reefing slug slide as shown.



8. Thread the Cunningham line through the three eyelets in the luff of the mainsail and re-fasten in the slot under the gooseneck.
9. Re-tension the mainsail halyard if required.



## **Rudder**

1. Attach the rudder assembly to the transom:
  - a. Fit the secondary rudder retaining split ring to the top rudder pintle.
  - b. Ensure the primary rudder-retaining clip is adjusted and has engaged correctly



## **Your Laser 2000 Is Now Ready For Launching.**



### **Launching And Basic Safety On The Water**

#### **Before You Go Sailing:**

- Check you are wearing suitable clothing and safety equipment for the conditions and time of year.
- Always wear a buoyancy aid or life jacket
- Make sure a third party knows where you are sailing and how many there are of you.
- Check the weather forecast
- Check the time of high and low tides if applicable.
- Seek advise of local conditions if sailing in anew area.
- Always check the condition of your craft before setting off.



**CAUTION**



**CONTACT WITH OVERHEAD ELECTRICAL WIRES COULD BE FATAL, EXERCISE EXTREME CAUTION WHEN RAISING THE MAST, LAUNCHING & SAILING.**

#### **Launching**

- Raise the mainsail with the boat facing into the wind.
- Launch the boat using the appropriate launching trolley.
- Take the boat into the water with the bow facing into the wind.
- Ensure that there is enough water to float the boat off the trolley.



- One person should hold the boat whilst the other gets in and prepares to set off.



- When there is enough water below you, lower the centreboard and rudder fully.
- Cleat the rudder downhaul in the cleat on the tiller and ensure that the wing nut on the side of the rudderstock is tight.

**The Rudder And Centreboard Should Be In The Fully Down Position At All Times When Sailing And Isometric Boat Like The Laser 2000.**

### **On The Water**

- Conform to the sailing rules of the road.
- Look out for changing weather conditions.
- Never sail beyond your ability or that of your crew.
- Understand and be competent in the sailing skills and righting techniques.



**Enjoy Your Laser 2000 Sailing!**

## **Laser 2000 Capsize Technique**

When sailing your Laser 2000 in breezy or blustery conditions, it is highly probable that from time to time you will capsize. A capsize is nothing to be unduly concerned about. In the event of a capsize we advise you follow the procedure documented below:

### **Righting the Boat**

1. Ensure all members of the crew are accounted for and safe.
2. If the gennaker is deployed, drop the sail back in to the sock.
3. Release the main/jib sheets and vang from respective cleats and ensure the sheets are fully extended to avoid the boat sailing immediately after righting.
4. If the boat inverts, first recover the boat on to its side.
5. In adverse conditions and with more than two crew it is recommended that the largest crew member swim to the bow and hold the bow during righting and until all other crew members have re-boarded after righting. (This ensures the boat swings in to the safe head in to wind position upon righting)
6. It is recommended to use the "scoop" recovery system for crewmembers not involved in the righting procedure. When the boat is on its side, the crew members to be scooped should move to the inner lower side of the boat as close to the center of the boat as possible. As the boat is righted, these crew members will be "scooped" onboard the boat ready to help other re-board. "Scooping" should only be attempted with practice and should only be commenced after the boat is stabilized on its side by a crewmember who is securely located on the centerboard and holding the capsize righting line under the gunwale. This is to prevent the boat from inverting and potentially trapping the crew.
7. Righting is effected by a crewmember standing on the centerboard moving out towards the end of the board whilst leaning out holding on to the righting line. The boat will recover to the upright position quickly. It should normally only require one average size person to effect righting on the centerboard.
8. Immediately after righting the tiller should be pushed fully towards the mainsail to stop the boat sailing until all crew have re-boarded.
9. Re-boarding can be undertaken over the windward side of the boat using the righting line as a step or over the transom. A grab rail is positioned on the inner face of the sub deck to assist with pulling yourself back in to the boat.
10. If the person in charge of the boat or the crew are inexperienced in capsizing and righting procedures it is advised to practice drills under skilled supervision and in any event, close to assistance prior to the drill being used in earnest.
11. All crewmembers should wear an approved buoyancy aid at all times whilst on the water.