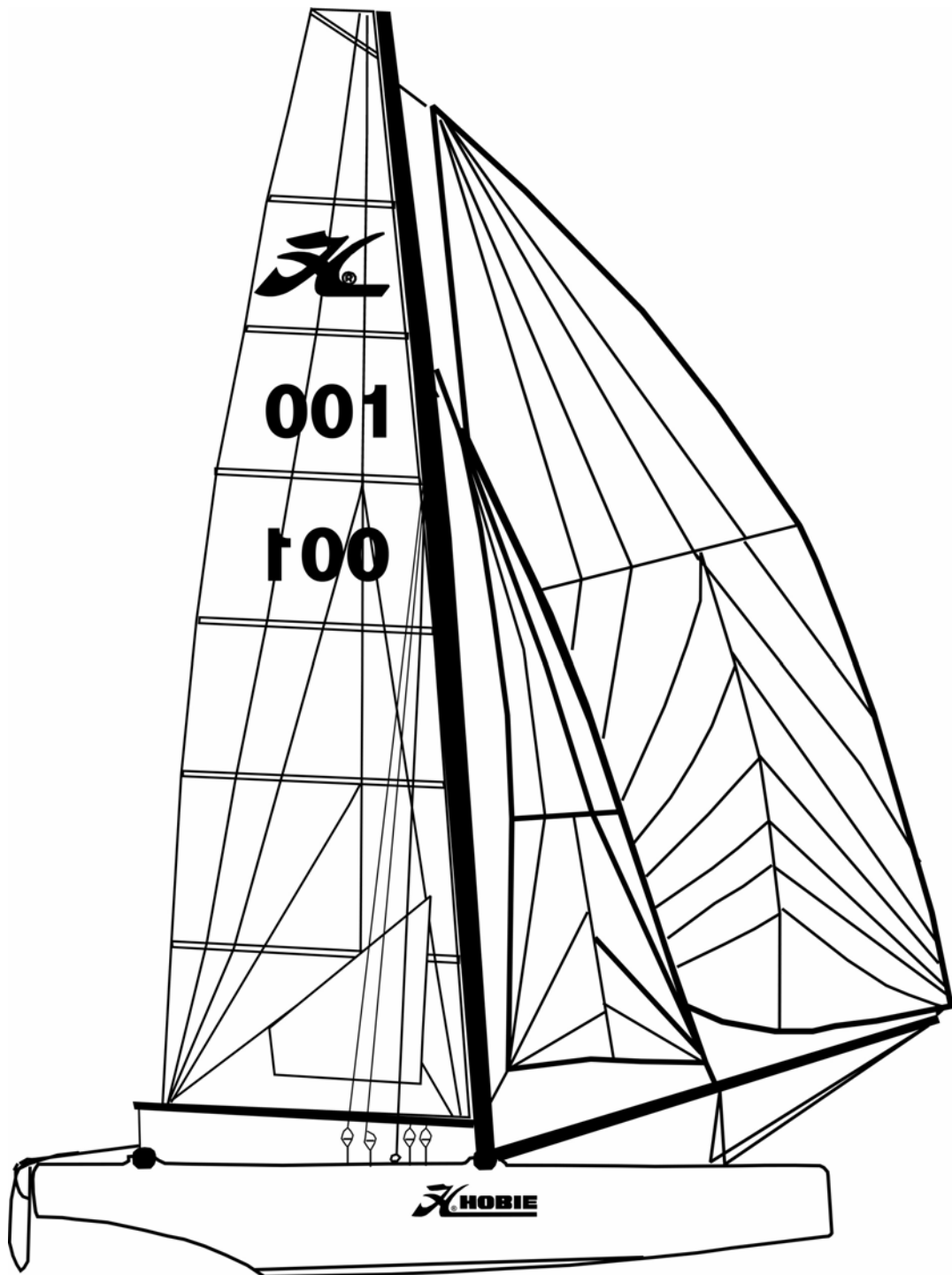


# ASSEMBLY MANUAL



Last up-date : January 2005

# HOBIE MAX RACE

**Necessary tools**

- ⇒ 2 spanners nr 17
- ⇒ 1 pair of niversal pliers

*It is advisable to be at least two people to assemble the Hobie Max*

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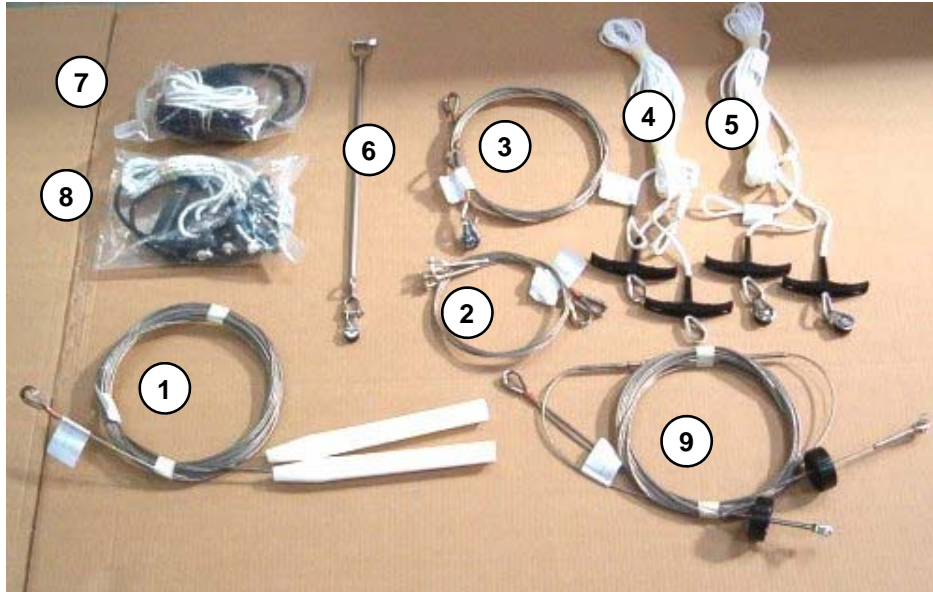
**LIST OF THE PARTS**

- ⇒ 2 hulls
- ⇒ 1 front crossbar with self-tacking jib track
- ⇒ 1 rear crossbar (trampoline lacing posts)
- ⇒ 1 Mast
- ⇒ 1 Boom
- ⇒ 1 one-piece trampoline with vectra line + fibreglas rod
- ⇒ 1 part bag (wires)
- ⇒ 1 rigging bag
- ⇒ 1 ropes bag
- ⇒ 2 Rudder assemblies
- ⇒ 1 Tiller crossbar
- ⇒ 1 Tiller extension
- ⇒ 1 mainsail + battens (7)
- ⇒ 1 jib
- ⇒ 1 trumpet spi kit (composed of one asymmetrical spinnaker, one polyester trumpet, one spi bag, one rigging kit + ropes)



**CAUTION - DANGER  
ALUMINIUM MAST - STAY AWAY  
OF ELECTRICAL WIRES**

# List of the parts



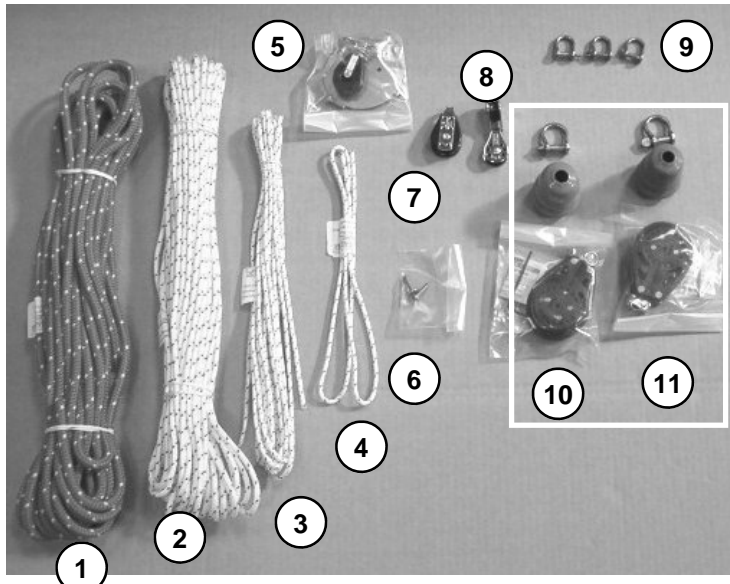
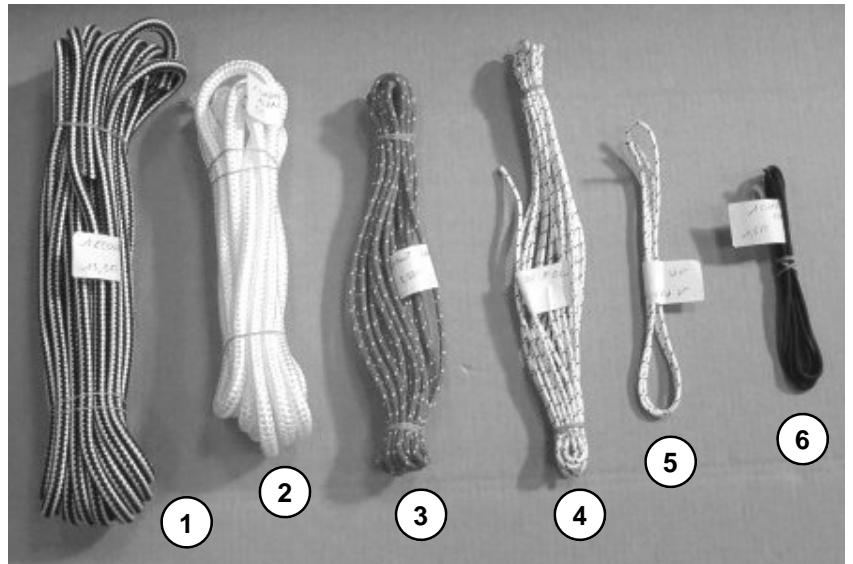
## WIRES :

1. Shrouds
2. Bridles
3. Forestay + pigtail
4. Trapeze cable crew
5. Trapeze cable skipper
6. Rigid forestay
7. Kit trapeze handles skipper
8. Kit trapeze handles crew
9. Spreader wires

## ROPES :

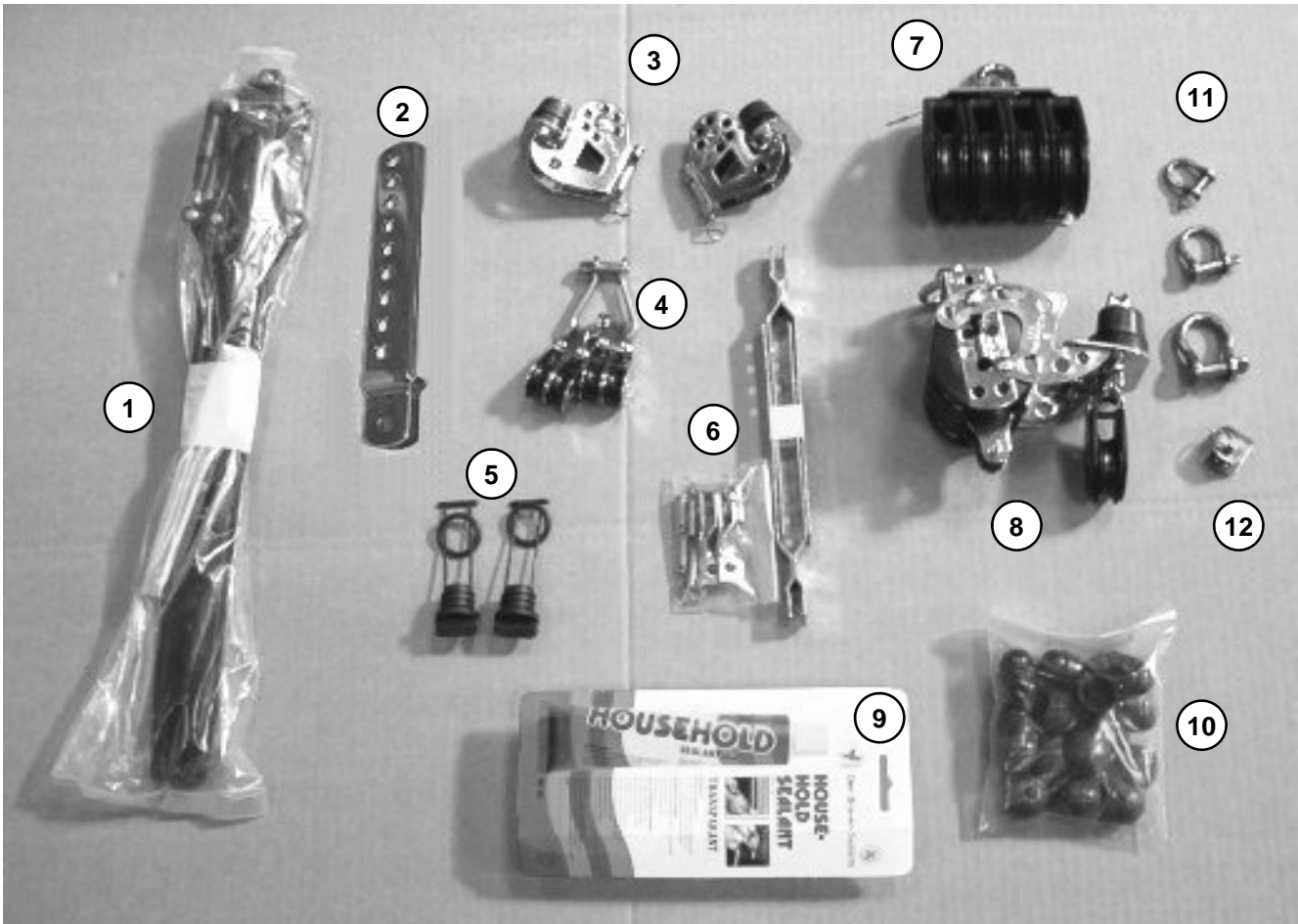
All ropes are labelled with ref. number and name. Please check carefully before using.

1. Mainsheet
2. Righting line
3. Cunningham line (red)
4. Jib halyard
5. Jib line
6. Rotation line



## Trumpet spi kit

1. Spinnaker sheet
2. Spinnaker halyard
3. Tack line
4. Pole fixation line
5. Trampoline rig
6. Trumpet screw
7. Single block for spi head
8. Sister block
9. Shackle 4 mm
10. & 11 2 pole blocks + 2 plastic springs + 2 shackles 6 mm.



**Rigging bag**

All pieces are labelled with name and reference number. Please carefully check the labels.

1. Spreader bars
2. Stay adjuster
3. Cunningham cam cleat (at tge mast base)
4. Heart block
5. Hull plugs
6. Shroud anchor bars and stay adjusters
7. Mainsheet fourfold block
8. Mainsheet threefold block
9. Silicone
10. Stop balls and hull screw caps
11. Shackles
12. Gooseneck vertex with pin and split ring

# Hull Assembly



1

Position the hulls in parallel with the inner sides facing the ground. Lift the right hull. One person straddles the hull to hold it in place. The other person applies the silicone sealant (for waterproofing) around the screw holes.



2

Take the front crossbar (with dolphin striker). Place it in its support so that the trampoline track faces there of the boat. Insert the two bolts. Pass your hand through the inspection port to position the nuts and washers onto the screws (see photo).



3


Fasten loosely.

Apply silicone sealant around the screw holes at the back of the hulls. Place the rear crossbar on the right side. Insert the bolts, washers and nuts as shown for the front crossbar. Do the same thing for the left side. Once the frame has been mounted, tighten all the bolts fully and then install the lock nuts.



4

Fix the pole to the middle of the front crossbar

and place the ground.  other end on the ground.

**It is advisable to check the fastening of the**



Do not forget to put the plugs before sailing. On land take the plugs off to drain the water.

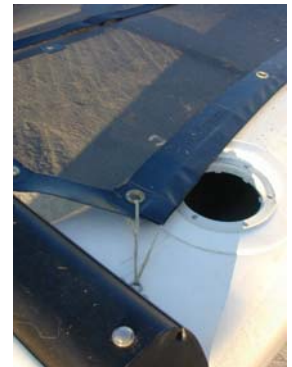
5



**1** Unfold the trampoline. Note that the trampoline has side tension lines that are already pre-threaded. Insert the front edge of the trampoline into the track at the left, rear side of the front crossbar. Continue feeding the trampoline into the track and position it in the center. Line up the grommet in the center of the trampoline with the dolphin striker post to ensure it is centered.

**2**

Take one of the side tensioning lines and pass the line through the pad-eye that is fixed to the front crossbar. Then tie with a bowline knot the line onto the grommet of the trampoline near where the rope exits the trampoline. Repeat this step at the opposite side front corner.

**3**

Move to the rear of the trampoline. Very closely to where the side tensioning line exits the rear of the trampoline tie a loop. Ensure you pull the side tensioning line firmly as to tie the loop as closely to the trampoline where the rope exits as possible. Tie a bowline or a similar loop in the line which will be used for a 4:1 purchase of the side tensioning lines. Repeat this step for the opposite side rear corner.

**4**

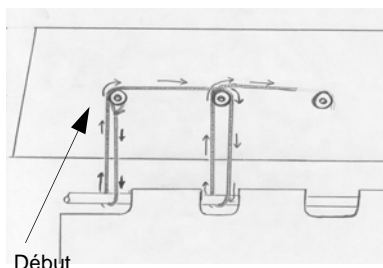
Now take the tail of the side tensioning line and pass the rope through the pad-eye mounted on the rear cross beam closest to where the line exits the trampoline. Then pass the line back through the loop tied in step 3. Again go through the pad-eye on the beam and back through the loop. This will provide a 4:1 purchase. Pull the line slightly as to take some tension for the sides but do not completely tension at this stage. Repeat this step for the opposite side rear corner. Ensure that the trampoline is still centered.





5

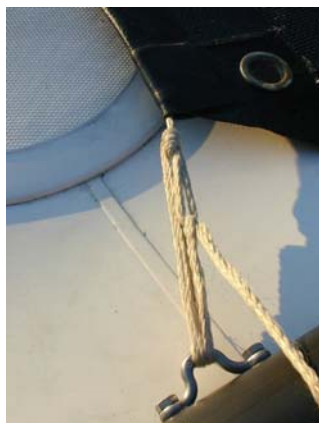
Find the trampoline rod and insert it into the rear of the trampoline.



Début

6

Commence lacing the rear of the trampoline. The lacing line starts at the left, rear lacing button on the rear crossbar. Lace the rear of the trampoline as tightly as possible as per the photographs and diagrams supplied. Continue across the rear crossbar and tie off securely when



7

Again, take the side tensioning line and very firmly pull the line. Once as tight as possible tie off the line with an adequate knot. Repeat this for the opposite side rear corner.



8

Now, once the side tension line has been tied off, using the long tail, pass it back through the grommet at the rear corner of the trampoline near where the side tensioning line exits the trampoline. Then pass the line through the pad-eye on the rear crossbar. Again pass the tail through the grommet on the trampoline and pull the line firmly. Once the sides of the trampoline have been further tightened, tie off the line and hide the tail under the trampoline. Repeat this step for the opposite side rear corner.



**NB :** It is important that the trampoline be strongly tightened. Check the tension on a regular basis.

## 1 RUDDER

Identify the right rudder from the left rudder (green sticker = right ; red sticker = left) As shown on the picture, align the holes of the rudder castings onto the gudgeons.



## 2

Insert the pin that is linked to the lower gudgeon in order to ensure the rudders. This pin will avoid the rudders to jump out of the gudgeons in case of capsizing.



## 3 TILLER BAR

Take the tiller crossbar and insert the right side into the right rudder arm and the left side into the left rudder arm.

## 4 TILLER EXTENSION

*Take the yoke connection of the tiller extension and fix it into the middle of the tiller crossbar .*



## 5

Then fix the tiller head into the yoke connection as shown on the picture.

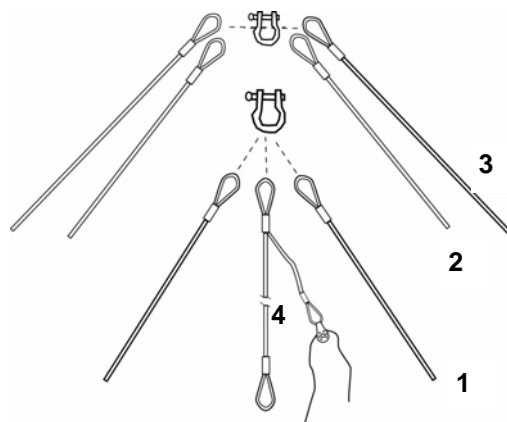


# Mast set-up

1

Place the mast onto two supports (eg: two pieces of polystyrene).

Unroll all the cables and fix them using a shackle to the lower hole on the mast tang as shown on the drawing.



2

**NOTA** : The spectra wires of the crew trapeze are knotted on the shroud wires and the spectra wires of the skipper' trapeze are inserted directly in the shackle pin.

- 1- Shrouds
- 2 - Crew trapeze
- 3 - Skipper trapeze
- 4 - Forestay and pigtail

3

Link the big stay adjuster to the forestay.



4

**IMPORTANT** : Do not forget to attach the jib halyard rope to the small single block at the end of the pigtail. Tie off the two ends of the jib halyard near the base of the mast.

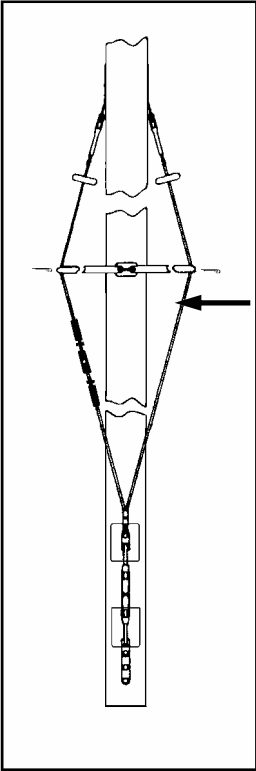
**Spinnaker kit :**

5

Attach the halyard block to the shackle on the upper part of the mast. Insert the spi halyard in the block sheave as shown on the picture.



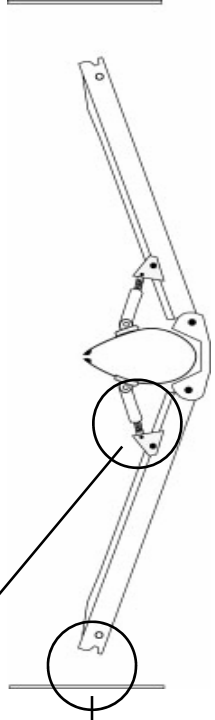
1



Unroll the diamond wires. Attach the joint end of the diamond wires onto the turnbuckle adjuster near the base of the mast (level with the security sticker) using the pin and split ring.

Take the loose ends of the diamond wires and hold tight to adjust to the same length, using the turnbuckle adjuster which is located on the lower section of one of the wires. Once they are the same length, attach the two wires to the shield plaes situated on each side of the mast under the mast tang.

2



Assemble the spreaders on the centre of the mast. The spreader root attaches to the front of the mast section onto the one-piece stainless steel strap. The spreader rake adjuster barrel attaches on each side to the individual fittings on both sides of the mast nearer the sail track. To adjust the spreader rake, adjust the length of the barrel (by winding in or out) and measure from the wire positions at the tips of each spreader.



**Caution :** do not try to adjust spreader rake while diamond wires are tensioned. Only adjust under no diamond wire tension and screwing the barrel by hand.



3

Slide the diamond Wires into the corresponding slots at the end of the spreaders. Ensure the black plastic roller is above the spreader arm. It may be necessary to release tension from the diamond wire turnbuckle adjuster near the base of the mast. Secure the diamond wire with the thin wire supplied. Pass the wire through the small hole near the spreader tip, bend the wire and on one side of the spreader turn the wire around the thicker diamond wires two or three times. Do the same for the other side of the spreader. Cut off the excess thin wire ensuring it is bent neatly onto the diamond wires as to prevent the wire from tearing the sails. Once secured, tape over the spreader tips to further ensure there are no sharp edges.



# Mast preparation

1

Lay the mast on top of the boat with the sail track to the bottom and the mast base toward the bows. Place padding under the mast to prevent scratching.



2

Lay the shroud wires and trapeze wires down each side of the mast. Secure the trapeze wires temporarily near the base of the mast.



3

Ensure that the shroud anchor pins are sealed, tight and pointing at 90° to the centreline of the hull. Attach the twist toggles and the spi halyard blocks to the anchor pins using the 6-mm bow shackles provided in the spi kit. Attach the stay adjusters to the twist toggles with the clevis pins and rings. Attach both shrouds into the top hole of the respective stay adjusters. This is only a temporary position for raising the mast.

4

Attach the bridle wires to the bow tangs.



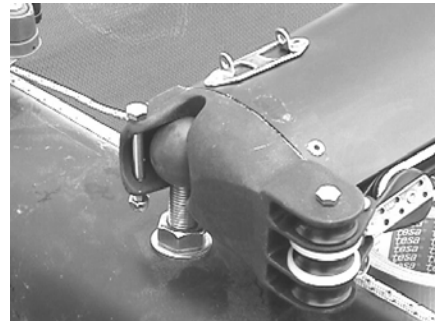


**CAUTION - DANGER - ALUMINIUM MAST - STAY AWAY OF ELECTRICAL WIRES**



**1**

Place the mast foot on the mast base and place the pin in it. This prevents the mast from leaving its base when lifted. Check that the wires are not tangled.



**2**

Then, with one person on the trampoline, the second person lifts the mast by the top and moves down the mast until the person on the trampoline can take the mast on their shoulder. Then this person pushes his feet against the rear crossbar and pushes the mast forward with the weight of his body.



**3**

The second person goes in front of the boat and right the mast in pulling on the trapeze wires. Once the mast is upright, link the rigid forestay and the two bridles to the stay adjuster that is at the end of the forestay as shown on the picture.



**4**

Link the bottom of the rigid forestay to the spi pole. Fix the spectra bridles as shown on

**5**

the picture above.



Once the mast is secured, remove the pin from the base of the mast which can

**6**

now turn freely.



Fix the cunningham

blocks on each side of the base of the mast.



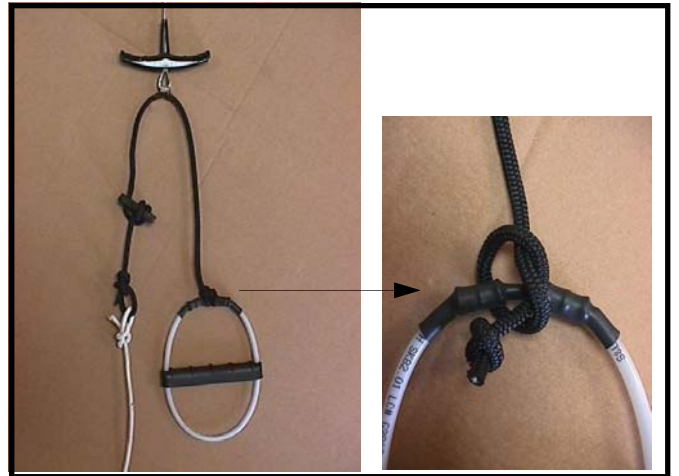
The first time you raise the mast, it is advisable to have

**1** Release the trapeze wires from the base of the mast. The crew's trapeze has the clamcleat swaged to the wire. Ensure that the crew's trapeze wire is positioned in front of the shroud.

### CREW / EQUIPIER



### SKIPPER



### Rope lock assembly



1



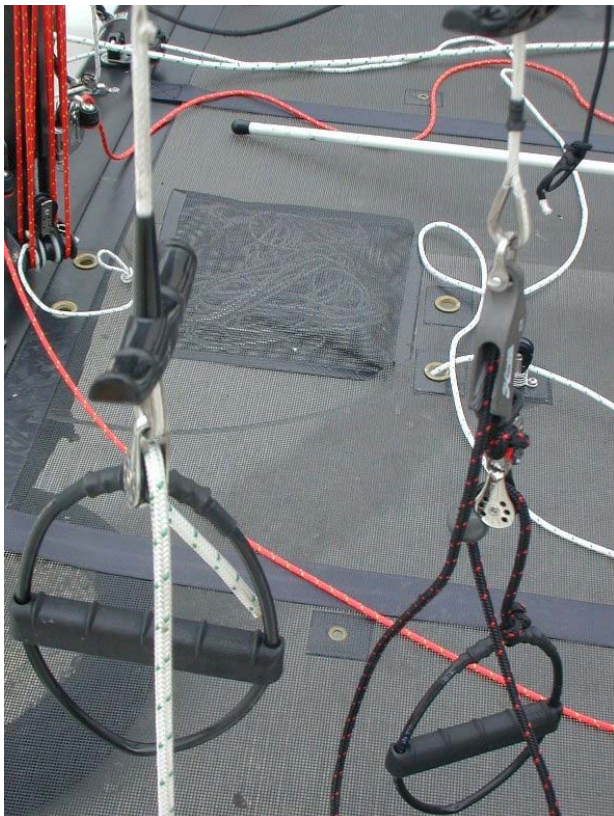
2



3



4



**2** Attach the trapeze handles and kits to the trapeze wires.

Pass the trapeze shock cords underneath the trampoline and up through the grommets at the side of the trampoline. Attach to the trapeze system as shown in the photographs.

**1**

Slide the outboard end of the boom through the webbing loop attached to the clew of the mainsail. Connect the shackle on the boom outhaul line to the grommet in the clew of the mainsail.

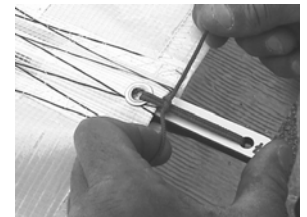
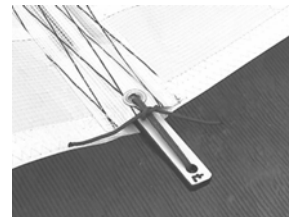
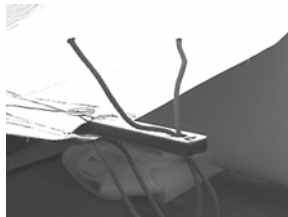
**2**

Connect the boom to the mast using the hinge vertex, clevis pin and split ring.

**3**

Tie one end of the rotation line to the front of the clamcleat on top of the boom. Pass the other end of the line through the end of the rotation arm on the mast. Take the line back through the clamcleat and fit a plastic ball stopper at the end.



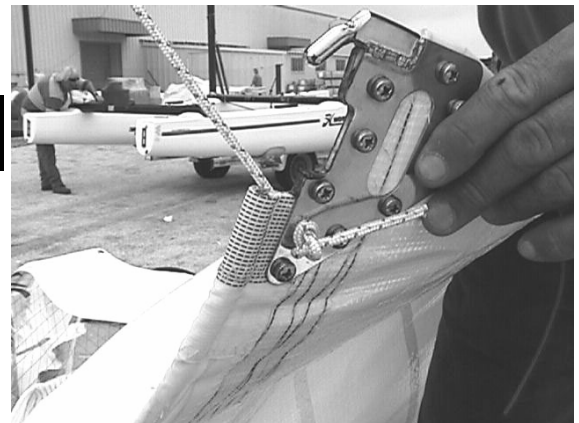


1

Always point your Hobie directly into the wind before you raise the mainsail. Unfold the mainsail onto the trampoline and insert each batten into its respective pocket. The battens are numbered (from 1 to 7) the smallest (N° 1) goes at the top of the sail and the longest (N° 7) at the bottom of the sail. Attach the batten end caps with the batten lines as shown on the photos.

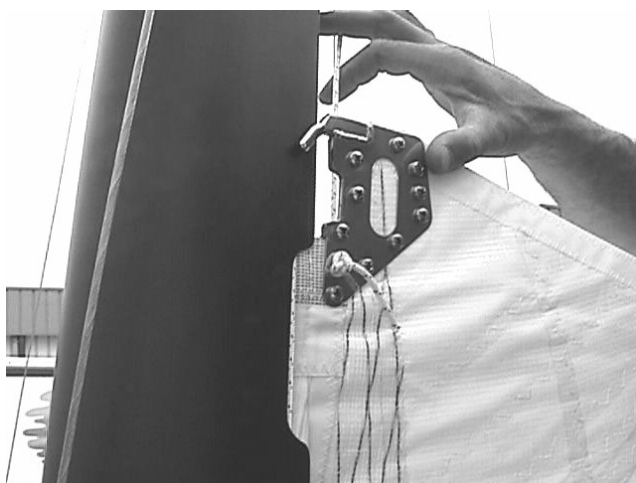
2

Undo the main halyard rope which is rolled around the mast. Pass one end through the hole in the mainsail head plate and stop with a 8 figure knot.



3

Go onto the trampoline. Feed the luff of the mainsail into the opening of the mast track ensuring that the hook is on one side of the mast and the halyard rope on the other side. Raise the mainsail by pulling the halyard and feeding the sail until it reaches the top. When the sail is all the way up, turn the mast slightly to the left in order to hook on the mainsail. Insert the bottom end of the luff into the base of the mast track. Roll up the halyard rope and place it into the pocket on the trampoline at the foot of the mast.



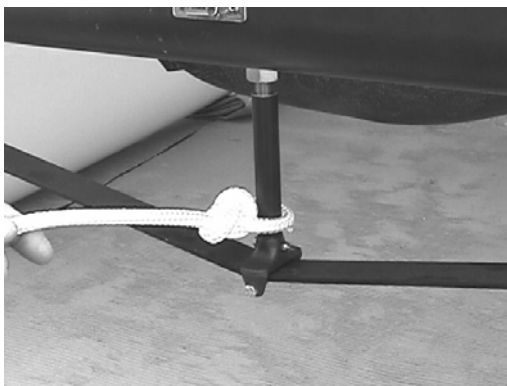


1

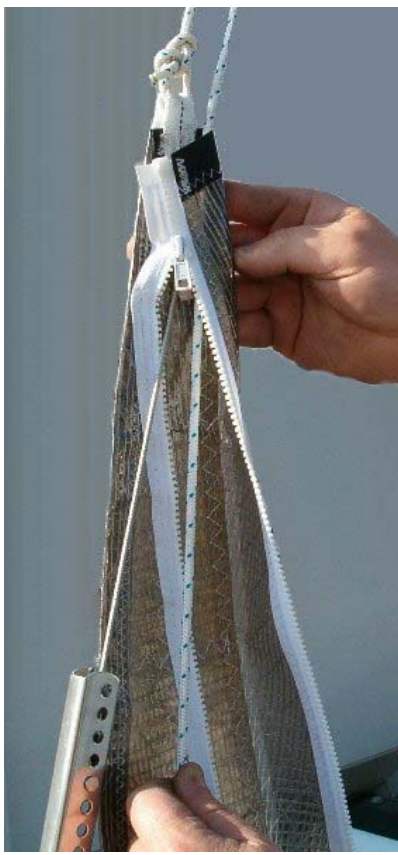
Attach the cunningham blocks (with the hooks) into the grommet of the mainsail tack. Take the cunningham line and feed as follows : (NB : the line must go through the inside of the rotation arm).

- Start from the cunningham block on the left side of the mast. Feed the rope into the cleat around the sheave
- push the cord up through the first sheave of the left block from back to front
- take the rope back down, thread it through the left sheave at the base of the mast from front to back
- take it up through the second sheave of the left block from back to front
- take it back down and through the single block,
- take it back up into the first sheave of the right hand block from front to back
- take it back down through the sheave at the right of the mast base from back to front
- take it up through the second sheave in the right block from front to back
- finally thread the line through the cunningham block and in the cleat.

2



Take the righting line from the rope bag. Attach it to the dolphin striker post under the front crossbar (photo). Pass it under the trampoline through the grommet at the base of the mast. Fold up the end of the line and stow it in the trampoline pocket at the base of the mast.



1

Unroll the jib and open the zipper on the luff. Shackle the jib head to the jib halyard. Then position the jib and the halyard line against the forestay. Close the zipper as the sail is raised, ensuring that the halyard line remains inside the zipper.



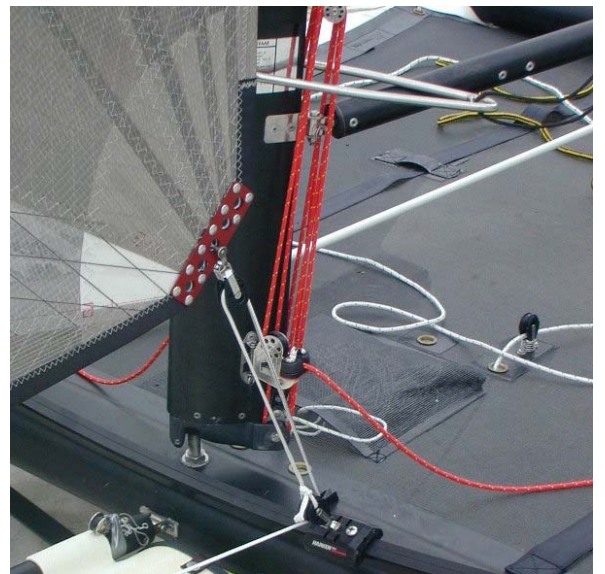
2

Using the supplied bow shackle connect the tack to the bottom of the rigid forestay



3

Cleat the halyard as shown above.



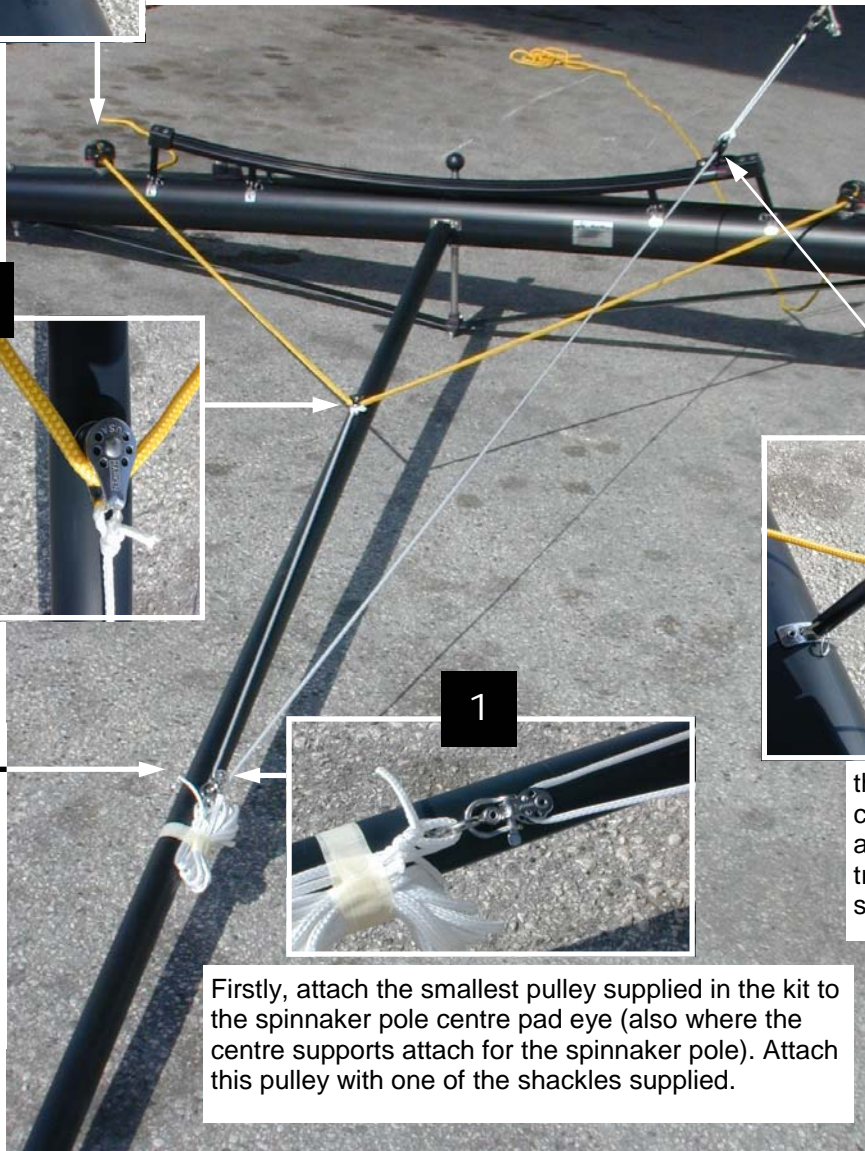
4

Attach the jib block to the tack point of the sail. See following page to assemble the self-tacking jib system.

**6** Now take the yellow thicker sheet rope and starting from one swivel cam cleat on the front crossbar pass the rope under the thinner white spectra rope through the middle size pulley (2) and back to the other side swivelling cam cleat (also on the front crossbar). Once the jib is hoisted, attach the carbo block (5) with shackle to the jib clew and use the yellow sheet rope to trim.



**5** This spectra then passes through the other carbo block (also supplied in kit which attaches with shackle to the jib clew) and then ties off to the carbo block mounted on the traveller car. Tie a bowline knot through the hole in the middle of



**2** Take the white spectra rope and to one end tie on to the top of the middle size block.



**3** Lead the other end of this rope through the smaller pulley that was shackled to the spinnaker pole in step 1.



**1** Firstly, attach the smallest pulley supplied in the kit to the spinnaker pole centre pad eye (also where the centre supports attach for the spinnaker pole). Attach this pulley with one of the shackles supplied.

**4** then back to the carbo pulley attached to the traveller car on the self-tacking track.



### Further Suggestions

- ⇒ To furl the jib you will need to untie the knot on the traveller car for the jib and tie the sheet off to the jib clew block. Otherwise the jib will not furl completely.
- ⇒ As the track is mounted on the front section of the beam you may find that the hole you use on the jib clew board may now have to become one of the lower, more forward holes. Also it may be necessary to tack the jib at a lower position on the forestay adjuster.
- ⇒ The spinnaker halyard system still works exactly the same as the standard Hobie Tiger original system however it has moved to a more outboard position on the beam.

# Self-Tacker traveller car control

**1**

Take the 3mm piece of line and tie it onto the center of the jib traveller car.



**2**

The line then passes through the plastic pad-eye that is fixed to the spinnaker pole near the base. This line passes from the front to back through the pad-eye.



**3**

The line then passes under the front cross beam and through an eyelet just to the left of the center of the trampoline.



**4**

Situated directly above the eye-let is a small black cleat. The rope also passes through the black cleat and once through tie a figure eight knot at the end. This prevents the rope from falling through the cleat.



**5**

To adjust the limit of the jib traveller car simply pull or release the thin line and replace in the cleat once set. It is recommended the car be situated over or slightly inside the traveller post as shown in the photographs for 'round the buoy' type racing.

1

Your mainsheet system has been pre-assembled for you by your Hobie dealer. If not, see the following page for assembly instructions.



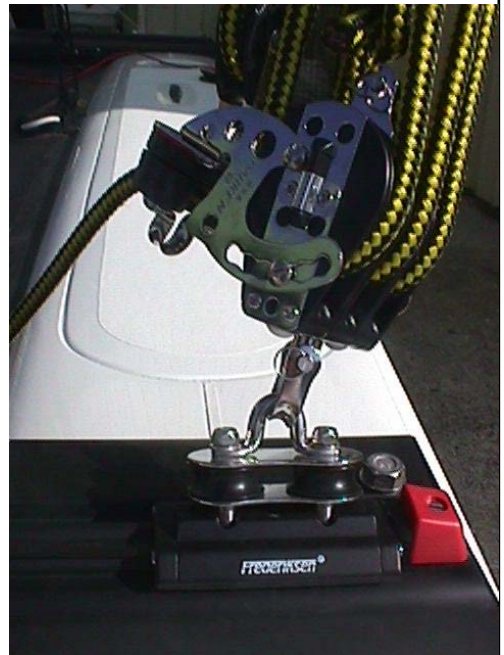
2

Shackle the boom block to the boom block hanger.



3

Shackle the mainsheet ratchet block to the top of the main traveller car.

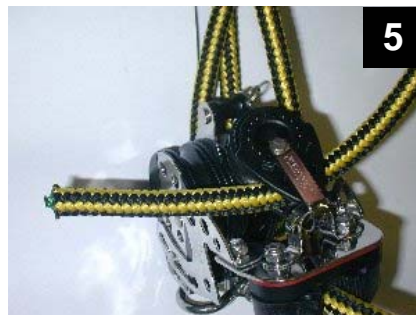


4

Thread the tail of the main sheet through the swivel cleat assy on the rear beam, through the sheaves on the traveller car, down through the eyestraps on the rear of the beam and tie a figure «8» knot in the end.

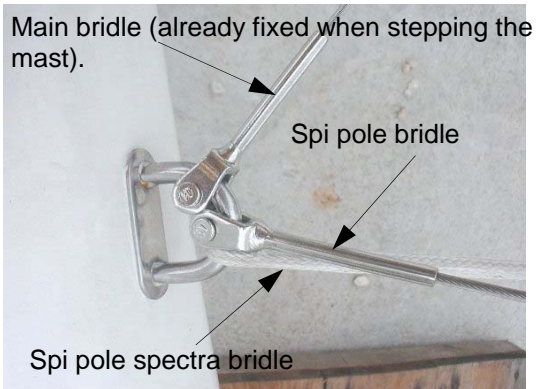


# Mainsheet system



# Trumpet Spinnaker Kit

**1** Attach the bridle at the end of the spi pole and fix the two parts of the bridle to the bow tang on each hull (as shown hereunder). Spectra bridles must also be connected to the bow tang of each hull.



**2** Position the trumpet on the pole at 43 cm from the pad-eye. Drill through the hole in the trumpet and fix with the supplied screws.



**3** Position the spi bag around the trumpet and attach with the line.



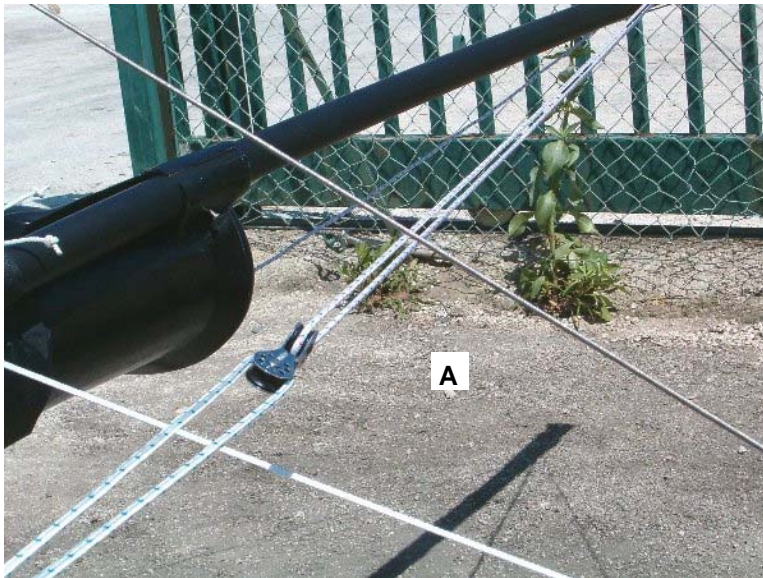
**4** Fix the velcro stripes onto the spi pole.



**5** Fix the end of the spi bag to the pad-eye on the front crossbar.

**6 Attaching the tack line**

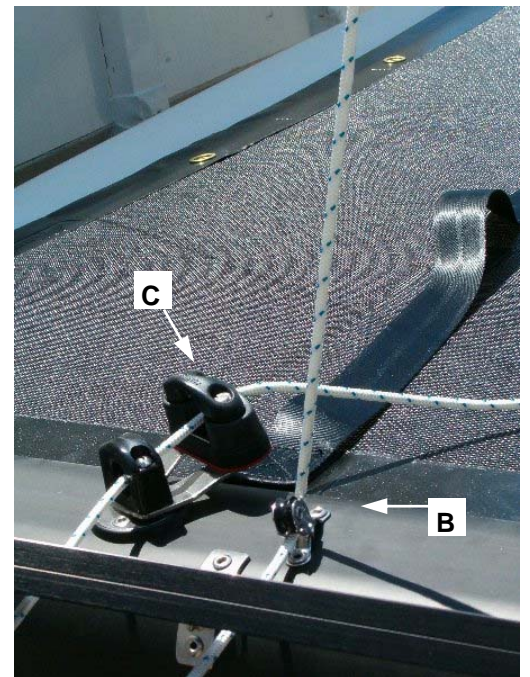
One end of the tack line must be fixed on the pad-eye at the front of the spi pole. Then feed the line through one of the block (A), back through the pulley at the front of the spi pole and fix it to the spi tack point.

**7 Spinnaker halyard**

Take the spi halyard end at the bottom of the mast. Take the length that goes through the diamond and feed it into the single block (B) on the front crossbar (near the mast). Then feed it through the 2nd block (A) and back through the cleat (C) on the front crossbar.



The tack line, the sister pulleys and this end of the Spi halyard must be under all other cables.

**8 Attach the other end of the spi halyard to the spi head.**

Fix the pulley on the trampoline as shown on the above photo.

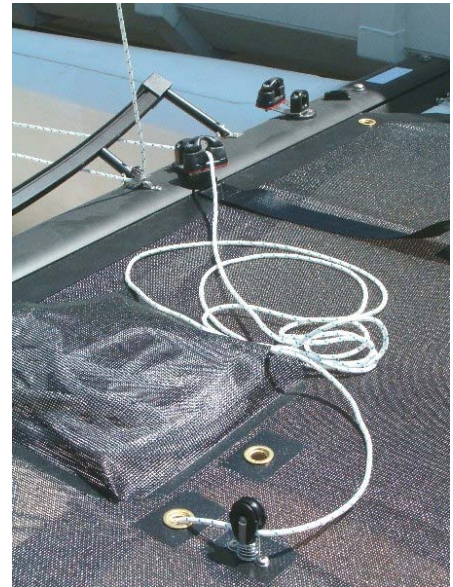
**9**

# Trumpet Spinnaker Kit



10

Take the halyard end (out of the cleat on the front crossbar) and feed it through the pulley on the trampoline (from the rear to the front). Lead it into the hole near the pulley, under the trampoline and the crossbar, through the spi bag, and the trumpet.



11

The line passes all one side of the spinnaker through the rings until the top patch where it passes through and ties with a figure eight knot.

12

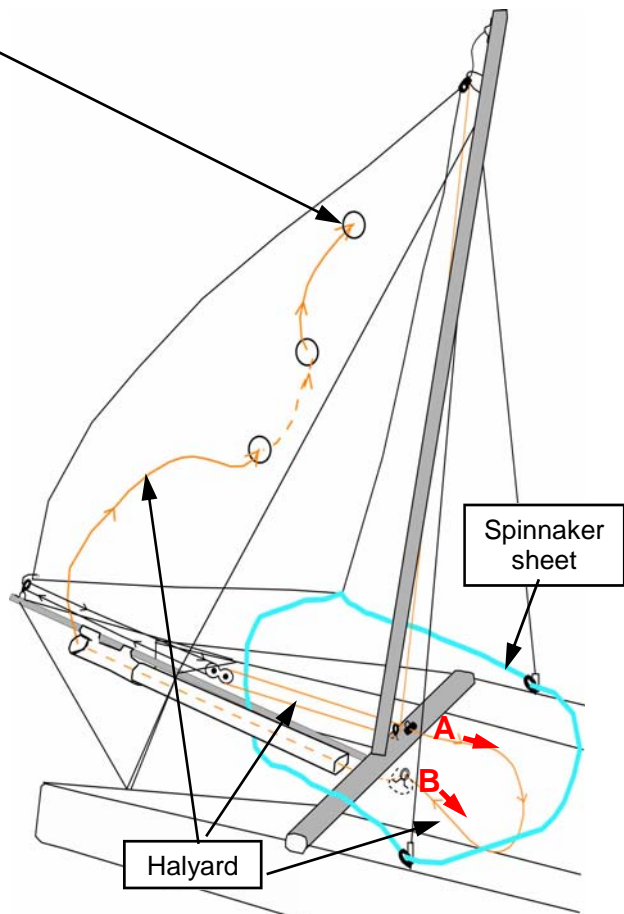
Attach the spinnaker sheet line as shown on the drawing.

13

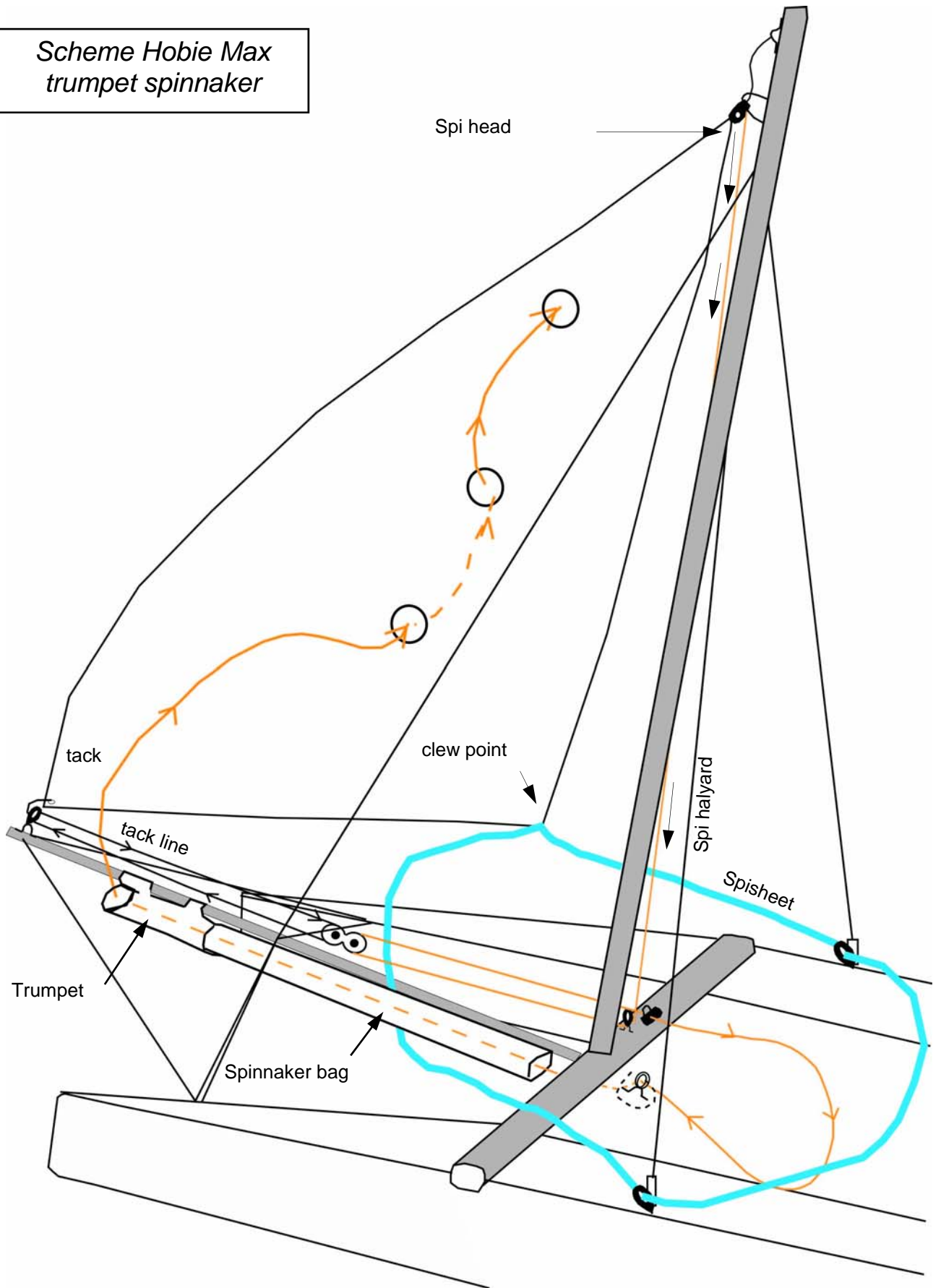
**Hoist** the spi by pulling the halyard at **POINT A** and make sure that all lines are well threaded and secured. Retrieve the spinnaker into the spi bag by pulling the line from **POINT B**. For the first time pull slowly and check that all is well lubricated and running smoothly. The spinnaker will retrieve into the spi bag completely.



Further ensure that the all the sharp edges, rings and anything that can get caught on the spinnaker is **taped very well** and nothing can catch or tear the spinnaker.



Scheme Hobie Max trumpet spinnaker



## TO READ CAREFULLY BEFORE SAILING

- ◆ Whether on land or on the water, **watch for overhead power lines** . Contact with power
- ◆ lines can cause serious injury or death.
- ◆ **DO NOT** sail while under the influence of alcohol and/or drugs
- ◆ Only sail in conditions in which you feel comfortable and where you feel confident that you can safely sail the boat. **Never go out in conditions beyond your ability.**
- ◆ Everyone on board should **wear a life jacket at all times.**
- ◆ If you are in the water, remain in contact with the boat, even if it is capsized. A sailboat can drift away faster than a person can swim.
- ◆ Never sail without a righting line.
- ◆ **Wear appropriate clothes** . Wear a wet suit or dry suit in cold weather or cold water conditions.
- ◆ Learn the **right of way rules** and when in doubt, give way to others.
- ◆ When not sailing, always **keep the boat pointed into the wind** whether in the water or on the beach.
- ◆ Read the instruction manual carefully.
- ◆ **Make sure everyone on the boat reads and understands these safety instructions**
- ◆ ALWAYS check that the **drain plugs** are screwed in before launching your catamaran.