ASSEMBLY MANUAL

HOBIE ADVANCE

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ASSEMBLY MANUAL

TOOLS required

2 x #13 spanner
1 x pair of pliers

Two persons are recommended to assemble the boat.

TABLE OF CONTENT

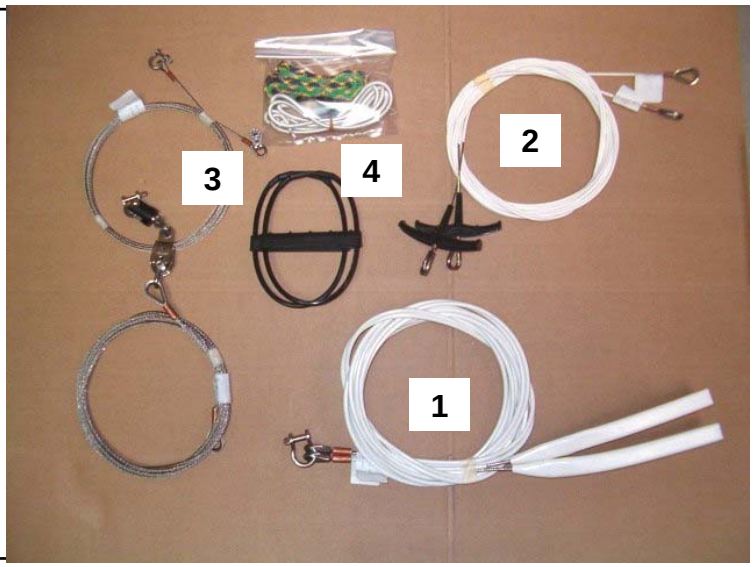
SPARE PART LIST

- ⇒ Hulls (2)
- ⇒ Front crossbar
- ⇒ Rear Crossbar
- ⇒ Mast
- ⇒ 1 piece trampoline
- ⇒ Rudder assemblies (2)
- ⇒ Tiller crossbar
- ⇒ Tiller extension
- ⇒ Main sail
- ⇒ Jib sail
- ⇒ Batten set (6)
- ⇒ Part bag
- ⇒ Rope bag
- ⇒ Wire bag

CAUTION - DANGER
ALUMINIUM MAST
STAY CLEAR OF OVERHEAD
ELECTRIC WIRES

Wires

1. Shrouds with adjuster cover
2. Trapeze wires
3. Forestay, jib halyard assembly
4. Trapeze handles, rope lock and shock cord + line + shackle



Ropes

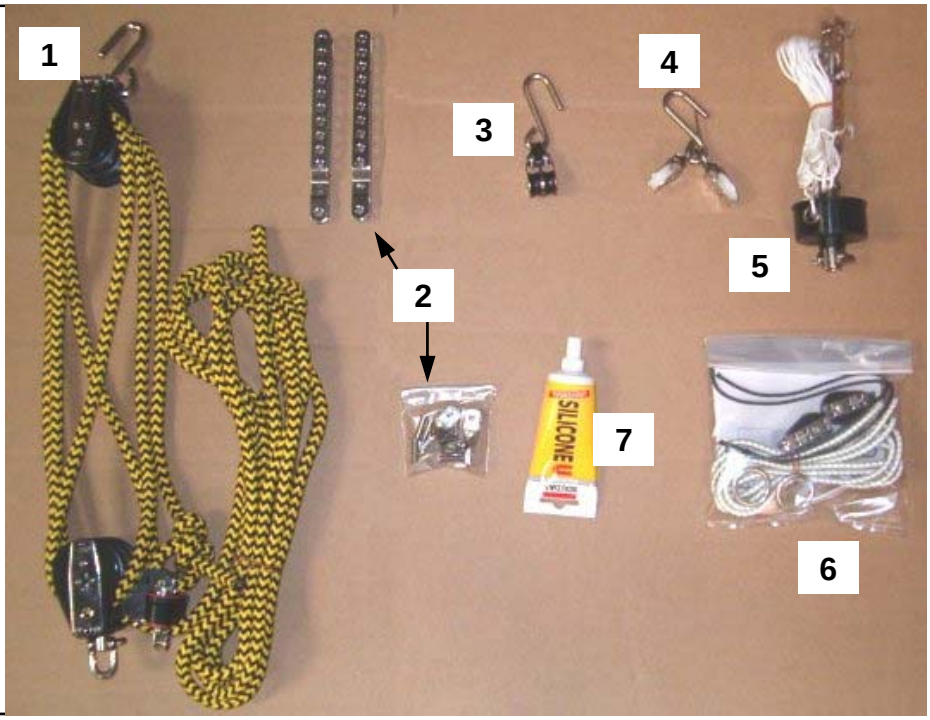
1. Righting line
2. Jib sheet
3. Main halyard
4. Jib luff tensioner line
5. Trampoline line (rear)
6. Jib halyard
7. Cunningham

Part bag :

1. Full mounted mainsheet assembly with hook
2. Stay adjusters, clevis pins and split rings
3. Cunningham
4. Jib clew blocks
5. Jib furler assembly
6. hawaian righting system
7. Silicone

<u>Other pieces not shown above :</u>

⇒ 2 drain plugs (on the hulls)
⇒ Screws for bar fixing (on the crossbars)
⇒ Main halyard wire (on the mast).



See drawing hereunder to position the screws

1 Position the hulls parallel on the ground approximately 2 meters apart. Prepare the front crossbar. Unscrew the nuts off of the two 2 external head bolts. Unscrew the nuts also off of the two internal headless bolts.

2 Lift the right hull into an upright position. One person straddles the hull to hold in position. The other one applies the silicone sealant (for waterproofing) around the bolt holes and on rivets.

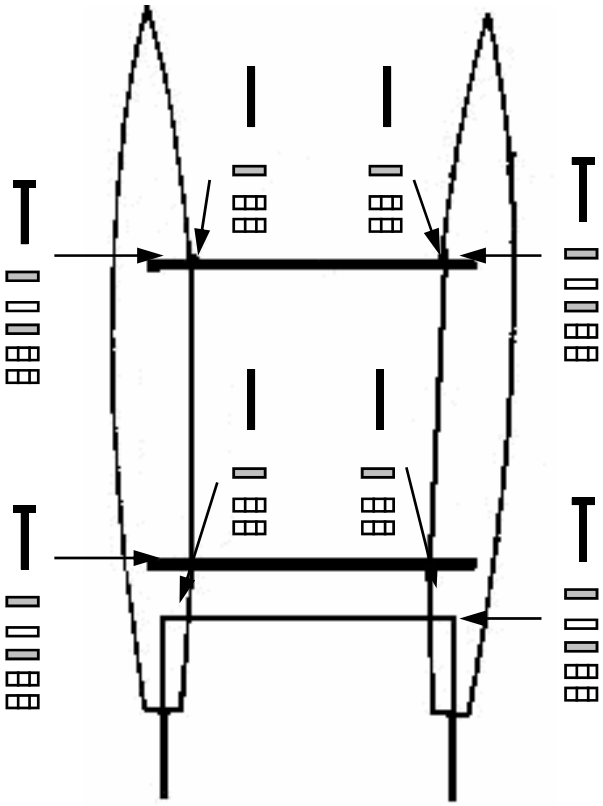
3 Taking the front crossbar, position it on the crossbar moulding in the deck making sure that the eye strap on the bar is facing to the rear of the boat and the remaining headless bolt on the cross bar fits in the hole on the deck. Insert the long external screw.

4 Pass your hand through the inspection port to position the nuts and washers onto the long bolt and the headless bolt.

5 Repeat the same operation for the other hull. Repeat step 1 and 2 for the rear crossbar.

6 All go round the boat and tighten all eight bolts and 16 nuts.

NB : Periodically check the tightness of all 8 bolts.



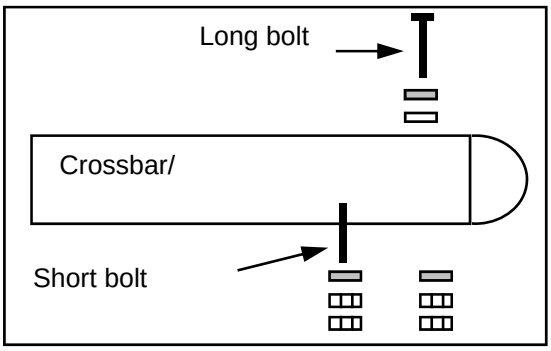
Long Bolt

Short Bolt

Inox washer

Plastic washer

Stainless steel nut



Forward spreader bar assembly

It is highly recommended to install the forward spreader bar if the loaded weight is more than 75 kg and wind force more than 3. Failure to respect this recommendation may cause structural damages on the hulls that will not be covered by warranty.

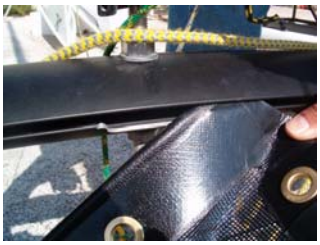
Identify the right side from the left side of the bar (look for the stickers) and position it the right way between the two hulls and attach the bar with the supplied shackles as shown on the photo.

VERY IMPORTANT / TRES IMPORTANT

Never use the forward spreader bar to carry the boat. **Use the 4 handles** (2 at the front, 2 at the rear of the boat) **to carry the boat**.

Trampoline fittings

1 Unfold the trampoline. Note that the side tension lines are prethreaded. Insert the front sealed bolt rope edge into the trampoline track of the front crossbar. Continue feeding the trampoline into the trampoline track and position it in the centre. Line up the grommet in the centre of the front edge of the trampoline with the dolphin striker post. This will position the



2 trampoline in the centre. Pull the trampoline to the back of the boat and insert the fibreflass rod into the rear flap of the trampoline. Leave an equal amount protruding from each side.

3

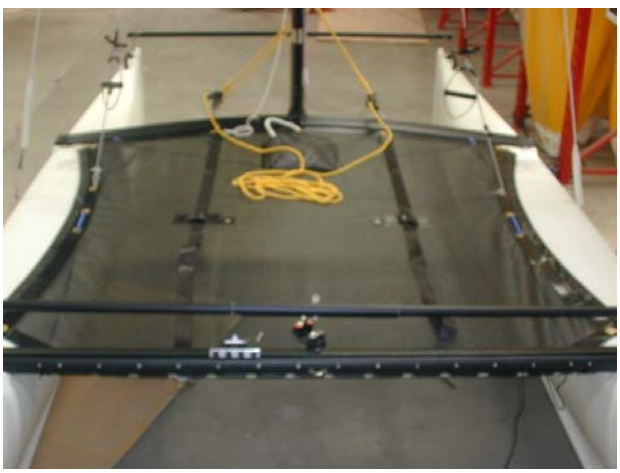
Commence lacing the rear of the trampoline. The lacing line ties off on the lacing post at the left rear of the rear beam. Pass the line around the rod and back around the first lacing post. Lead the line around the second lacing post and pass it around the rod on the first trampoline cut out. Now, come back around the second lacing post and continue towards the third. Continue all the way across the beam in the same fashion and tie off loosely.

4 Tensioning the sides : starting at the right rear corner, take the line that emerges from the trampoline. Lead it through the eye strap on the rear beam and then through the grommet/eyelet. Tie it off with a bowline knot or similar.

5 Move to the front right corner of the trampoline. Pull on the line as firmly as possible and tie a bowline knot or loop in the line as close to the trampoline edge as possible. This will enable a 4:1 purchase to be used for tensioning. Tie off once tensioned to

6 secure. Now lead the end of the line through the eyestrap on the rear of the front beam and back through the loop. Lead the end back through the eyestrap and apply as much tension as possible. Maintaining the tension, lead the line through the grommet and back to the eyestrap. Next, lead the line through the grommet in the front

7 edge of the trampoline and tie off securely. Repeat procedure for port side.
Retighten rear lacing from left to right. Tie the rear lacing off securely at the eyelet posts on the right hand end of the rear beam.
NB : It is important that the trampoline lacing is kept very



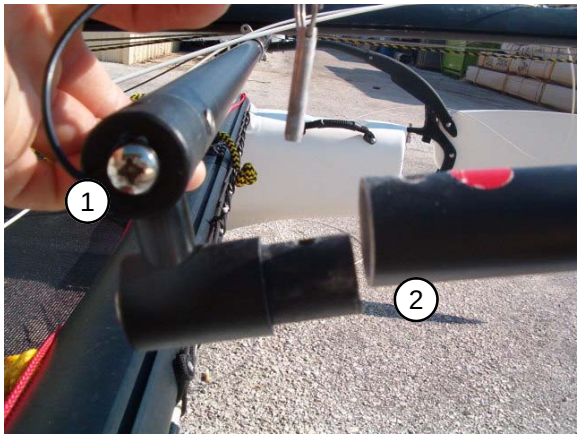
RUDDER ASSEMBLY AND TILLER EXTENSION

Rudder assembly

1 Identify the right rudder from the left rudder (look for the stickers on the rudder arms). As shown, line up the rudder pintles (metal pegs on the hulls) with the rudder castings . Push the rudder castings down onto the pintles.

2 Insert the retainer clip attached to the lower pintle to lock the rudders in place. The clip will prevent the rudders from falling off the boat in the event of capsize.

Tiller crossbar and extension



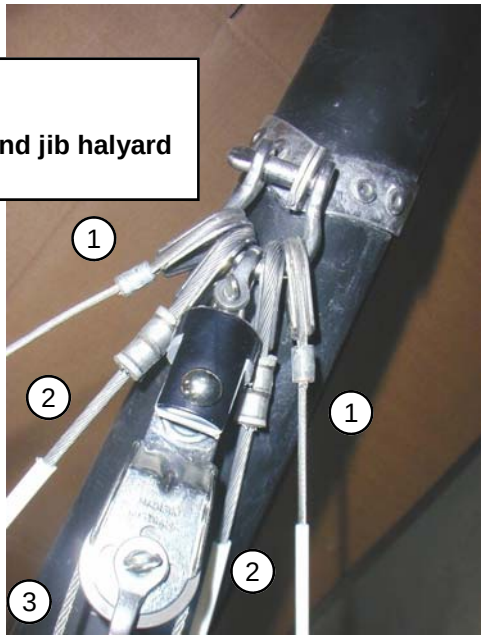
4 Locate the tiller crossbar and identify the left and right hand ends. NB: the tiller crossbar (1) locates on top of the tiller/rudder arms (2).

5 Locate the tiller extension and secure it to the tiller crossbar using the clevis pin and ring clip provided.

Mast & rigging

1 Remove the main and jib halyard lines from the ropes bags. Unroll the main halyard wire that is secured at the head of the mast. Using a bowline knot, secure the main halyard line to the thimble at the end of the halyard wire. Now, secure both ends at the base of the mast.

1. **Trapezes**
2. **Shrouds**
3. **Pigtail, forestay and jib halyard**



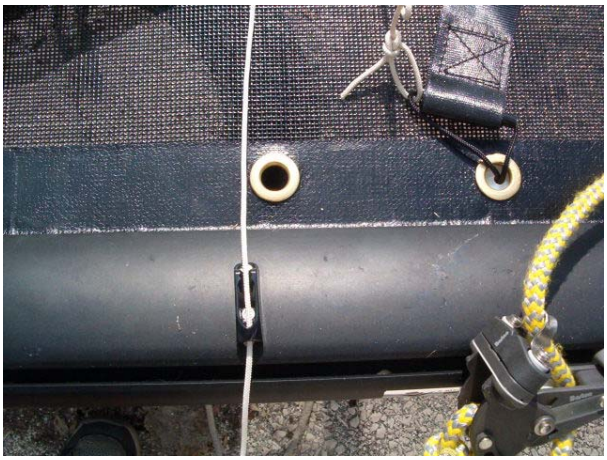
2

Remove all the wires from the wires bag and unroll them. They are all already mounted on the 8 mm shackle. Ensure that all twists are removed.
Tighten the shackle securely on the mast tang.

Jib furler

3 Using a bowline knot secure the jib halyard line to the small block on the end of the jib halyard wire. Now secure both ends at the base of the mast.

4 Locate the Jib furler and shackle it to the bridles using the 6 mm shackle provided. Ensure that the exit hole in the furler is pointing at the furler cleat on the front crossbar. Check that the screw on the underside of the furler is tight. This prevents the outer cover from rotating.



5

Wind the furler up in a clockwise direction. Leave enough furler line to reach the furler cleat.

CAUTION ALUMINIUM MAST -
WATCH FOR OVERHEAD POWER LINES.
Contact with power lines can cause serious injury or death.

6 With the base of the mast facing towards the front of the boat, lay the mast on top of the boat. (place some pading under the mast to prevent scratching).

7

Next, fasten the shrouds into the stay adjusters. To begin with, fasten the shroud about half way up the adjuster. This position can be adjusted later. The position influences mast rake. Now fasten the stay adjusters on each side of the boat. You can pull the cover partially over the stay adjusters at this time. The assembly of the trapeze wires can wait until after you have raised the mast.

8

Now, ensure that the forestay wire is not twisted around any other wires and you are ready for raising the mast. For safety, two people should raise the mast. One person now takes the head of the mast while the other person positions the base on the mast step ball, which is in the center of the front cross beam. Remove the nut and bolt from the mast base for the mast to sit on the ball. Once fitted replace the bolt and nut. This will ensure the mast does not 'pop off' of the mast step ball.

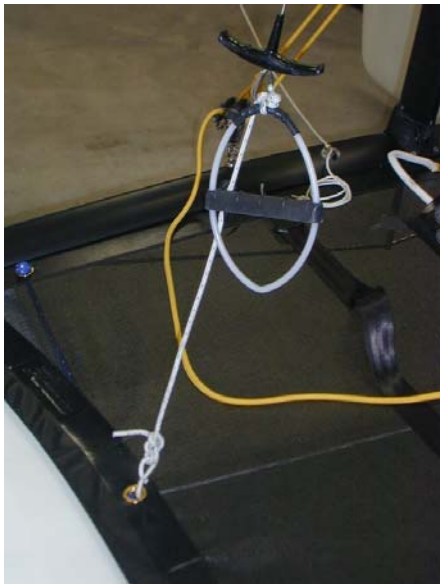
9

With the person on the trampoline supporting the mast, the other person takes the forestay and connects it to the stay adjuster fixed to the jib furler. Pin the forestay towards the top of the adjuster. Now, provided all the clevis pins have the split rings fitted, the mast is supported by the shrouds and forestay.

10

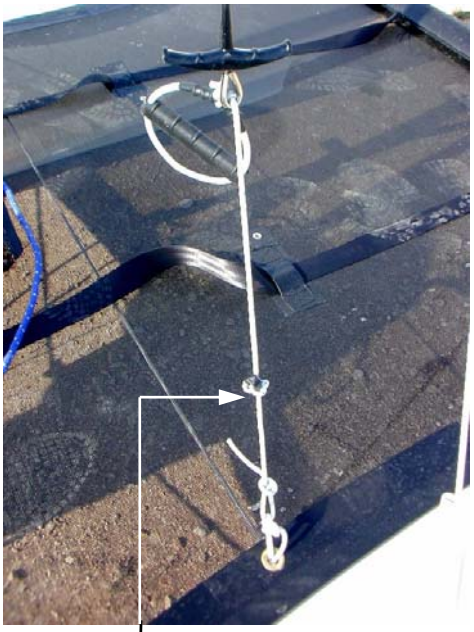
Once the mast is standing and the wires all attached remove the nut and bolt from the mast base. This is only necessary for raising and lowering the mast.

Fitting of trapezes



11

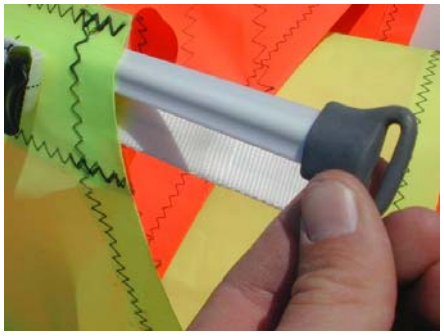
With the mast now secure, the trapeze wires can be fitted with the handles, rope locks and ajuster lines as shown in the photograph. Use a bowline knot to secure the line to the trapeze shock cord.



The height of trapezing can be adjusted by changing the position of the rope lock.

12

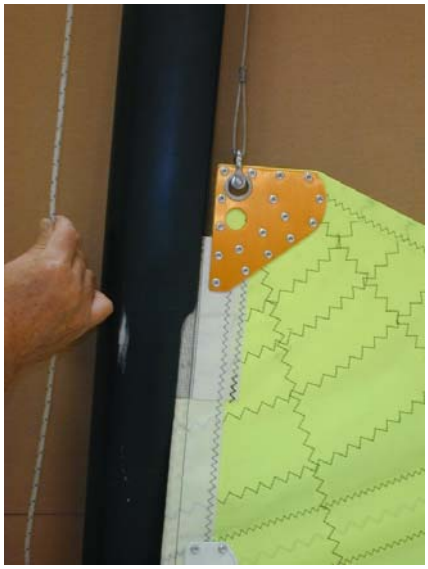
Now the rig can be tensioned. One person can pull down on a trapeze handle whilst the other person re positions the clevis pin in the stay adjuster. Ensure that the two shrouds are pinned at the same height in both adjusters. If too much tension is applied it may become difficult for the mast to rotate freely. Check this before proceeding with raising the sail.



1 Unfold the mainsail and lay on a flat clean surface. Undo the set of battens and identify which batten goes in which batten pocket. Insert the battens into the pockets.
NOTE : the second batten pocket from the bottom takes the longest batten.

2 Using the straps and clips on the leech of the mainsail, secure each batten into it's respective pocket (as per photograph). Push the battens in reasonably hard - sufficient to remove any wrinkles from the pocket.
NOTE : it is important to relieve the tension on the battens after each day's sailing. This will prolong the life of the sail.

BEFORE RAISING THE MAINSAIL, MAKE SURE THAT THE BOAT IS POINTING INTO THE WIND.



3 **IF THE WIND CHANGES DIRECTION, MOVE THE BOAT.**
Place the sail on the trampoline, the battens clips towards the back. Undo the main halyard wire from the mast and shackle it to the head board of the mainsail. Now, feed the

4 bolt rope at the head of the sail into the cut out in the sail track on the mast.

5

Now, pull on the main halyard line whilst feeding the sail into the track cut out.
When the sail is all the way up,

6 position the stopper on the wire halyard so that it engages in the halyard lock.
Lead the halyard behind the shroud and trapeze wire and secure at the halyard cleat on the side of the mast. Do not pull too hard as you may disengage the halyard lock. Tuck the

1 Unfold the jib and shackle the head onto the jib halyard with the shackle provided. Fasten the clip at the top of the jib to the forestay wire. Pull on the halyard and raise the sail, fastening each clip to the forestay in the process. When the sail is raised, shackle the tack of the jib to the adjuster on top of the furler. Fasten as low as possible.

2

Use the jib luff tensioner line to replace the jib halyard. The tensioner line can be fastened to the tack shackle, fed up through the small block and then cleated off at the cleat on the sail. Ensure that the line is tight and cleated securely. Enough tension should be applied to remove the wrinkles from the luff of the sail. The jib halyard line can be stored in the trampoline pocket.

3

Attach the jib clew blocks to the clew of the jib using the snap hook provided.

4

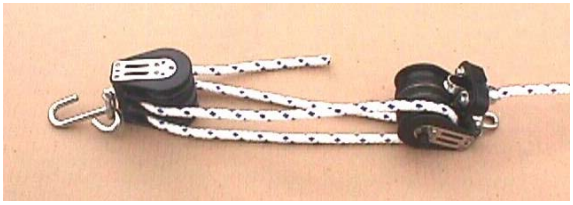
Thread the jib sheet line through the jib sheet blocks. Fasten the sheet to the top of the blocks using a bowline knot. Ensure that there are no twists in the sheet and that the sheet is led behind the mast.

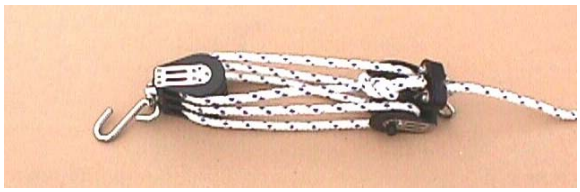
5

The jib can now be furled by pulling on the furler line and cleating it off in the jam cleat. The jib will not furl fully if the jib sheet is cleated on.

The mainsheet system is already mounted when delivered with the boat.
For information, hereunder is how it is mounted.

Position the triple ratchet block and the triple top block as indicated in the photograph.
Carefully follow the threading sequence shown in the photographs and you should have no problems. There should be no crossovers or twists in a properly threaded 6:1 system.





2

Fasten the mainsheet ratchet block onto the top of the main traveller with the clevis pin and split ring supplied. The mainsheet system is now ready to be headed to the clew of the mainsail. NB : It is best to leave the top block unhooked until the boat is in the water.

3

Thread the tail of the mainsheet line through the cleat and fairlead on the crossbar, through the traveller car and then secure with a figure 8 knot at the eyesstrap on the aft edge of the rear crossbar.

1 Cunningham

⇒ **Locate the cunningham line and the cunningham double block with hook**

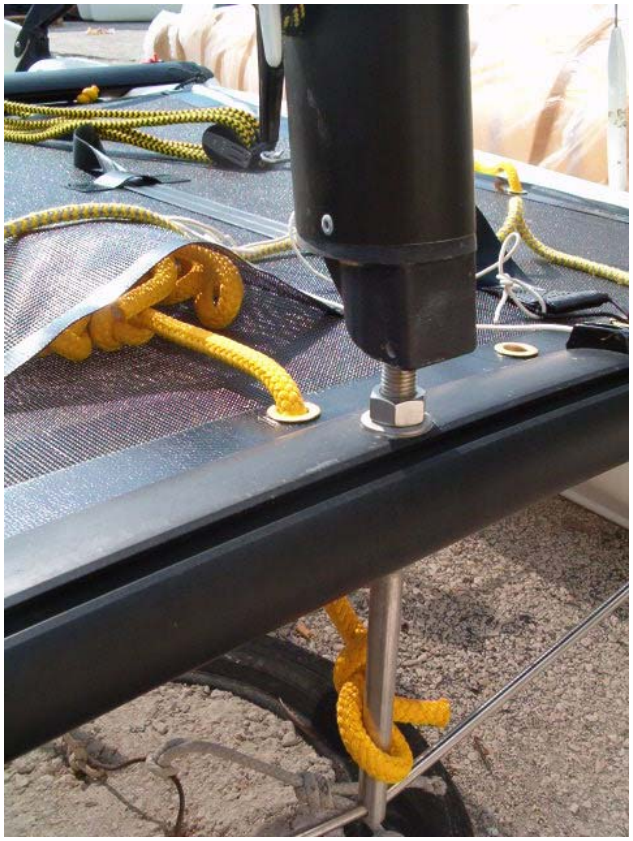
⇒ **Attach the hook to the tack of the mainsail.**

⇒ **Fasten one end of the cunningham line to the cleat mounted at the bottom of the sail track on the mast.**

⇒ **Pass the other end through one of the sheaves on the block and then back down around the cleat.**

⇒ **Thread the line through the remaining sheave and then pull down on the line to remove the wrinkles from the front of the mainsail. Tie the line off on the cleat.**

⇒ **The stronger the wind, the more cunningham tension is required.**



2 Righting Line / Bout de redressement

Tie a knot about 35 cm from the end of the line and pass the short end down through the grommet at the contre front of the trampoline.

Then pass the line through the eyestrap mounted underneath the mast step and tie a figure 8 knot in the end.

Now, stow the rest of the righting line in the trampoline pocket.

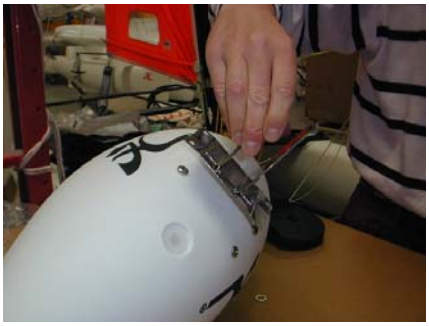
A knot in the righting line just above the grommet will prevent the righting line from slipping down and dragging in the water.

Mast float device (OPTION)

This device prevents the mast from sinking in case of capsize thus allows easy righting.

As serial or optional equipment, the mast float devise is already mounted. You just need to fit it on your mast head (see step 3). If it is not mounted, follow steps 1 to 3 below.

1- Unscrew the four screws that are on the device.



2- Adjust the alu plate so that the holes fit the four holes on the device and fix it with the screws.

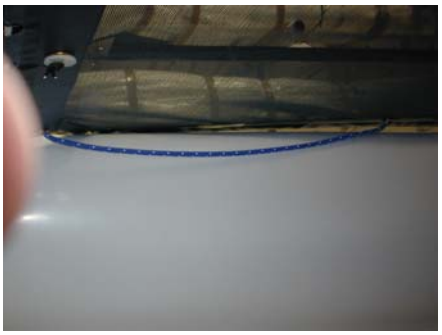
3- Fix the device on the mast head using the bolt and the two washers as shown on the photo.

Safety cords

While sailing, the safety cord on the trampoline (blue line on the photo, that may be of a different colour) prevents the crew from falling off of the cat, and allows easy righting in case of capsizing.

The red cord on the rear crossbar permit to tow the boat on the water.

on the trampoline



Under the trampoline

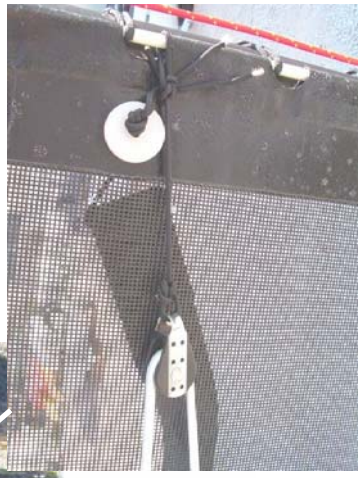
Towing cord

Named after the Hawaiian's who are generally pretty relaxed people the Hawaiian righting system combines safety, speed and comfort when righting your capsized catamaran.

1

step 1.

Tie the 2 small black pieces of rope onto the trampoline lacing at each end of the rear cross beam. To the other end



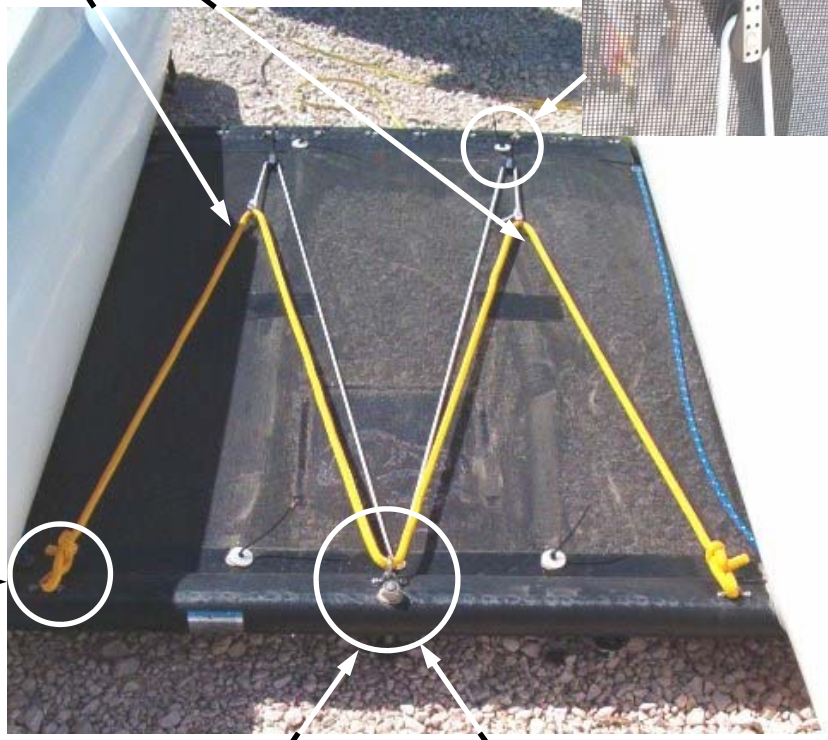
2

of each rope tie the small pulley supplied in the kit.

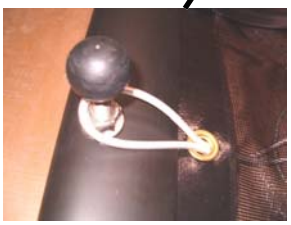
Take the shock cord supplied in the kit. Tie it with a tight knot onto the first ring supplied in the kit. Pass the shock cord through the first pulley used in step 1, The shock cord passes then through the eyelet at the center of the trampoline directly behind the mast step ball and back into the eyelet of the trampoline. Then pass the shock cord through the second pulley used in step 1 and

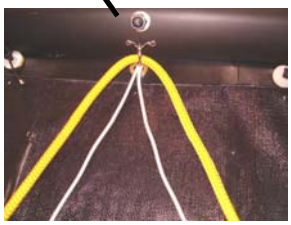
3

Take the righting rope (12 mm yellow rope in the rope bag) and pass it through one of the pad-eyes mounted under the front cross beam. Tie a knot in the rope so the end of the rope cannot pass through the pad-eye. The knot should be on the front end of the boat.



From above





From below

4

Pass the rope through the first ring, then through the ring in the center of the front cross beam, then through the second ring. Fix then this rope to the pad-eye on the opposite side and secure the rope as per

CAUTION / SAFETY TIPS
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 understnads these safety instructions**.

ALWAYS check that the **drain plugs** are screwed in before launching your catamaran.