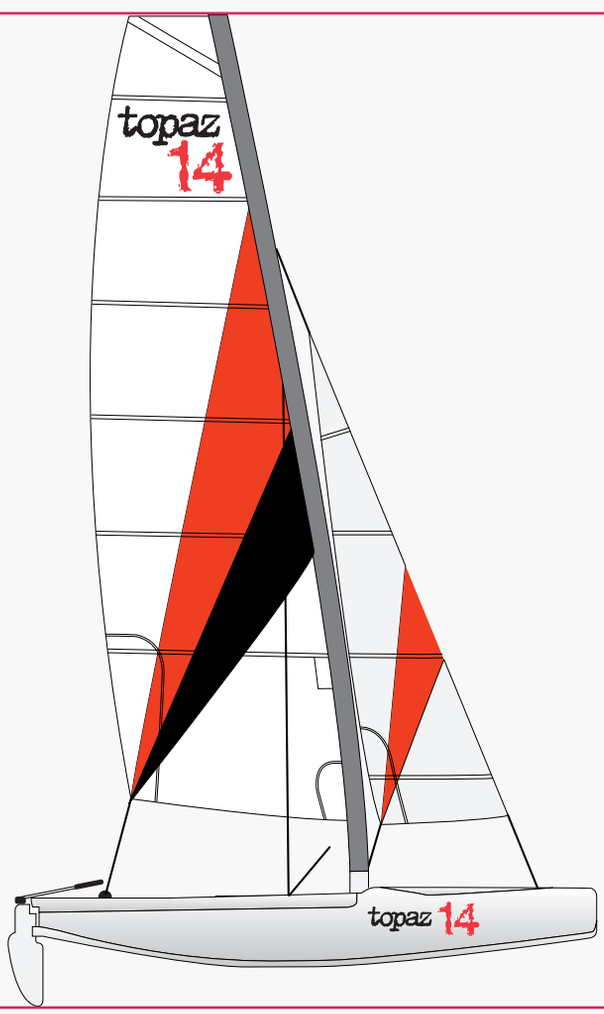
topaz 14

» Rigging Instructions



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introduction

These RIGGING INSTRUCTIONS have been compiled to help you to rig your Topaz 14C/CX Catamaran. Please also ensure that you refer to your TOPAZ OWNERS MANUAL.

The OWNERS MANUAL has been compiled to help you to operate your craft with safety and enjoyment. It contains details of the craft, the equipment supplied or fitted, it's systems and information on its operation and maintenance. Please read it carefully and familiarise yourself with the craft before using it.

If this is your first craft, or you are changing to a type of craft you are not familiar with, for your own comfort and safety, please ensure that you obtain handling and operating experience before assuming command of the craft. Your dealer or national sailing federation or yacht club will be pleased to advise you of local sea schools, or competent instructors.

PLEASE KEEP THE RIGGING INSTRUCTIONS AND THE OWNERS MANUAL IN A SECURE PLACE AND HAND THEM OVER TO THE NEW OWNER WHEN YOU SELL THE CRAFT.

For further information, spares and accessories, please contact the manufacturer:

TOPPER INTERNATIONAL LTD,
Kingsnorth Technology Park,
Wotton Road, Ashford, Kent TN23 6LN
Telephone +44 (0) 1233 629186
email info@toppersailboats.com

maintenance

The Topaz 14 is designed to require very little maintenance, but there are some simple ways to keep your boat in the best condition.

Rudder

Never launch your boat without checking that the retaining clip has clicked into place beneath the upper transom fitting, as this will prevent the rudder from falling off.

Sails

After you have finished sailing, roll the mainsail loosely, this will extend its life better than folding. Never let the sails flap unduly, this can be done by furling the jib as soon as possible after hoisting. Although the battens protect the mainsail to a certain extent, do not leave the mainsail hoisted for extended periods of time.

Raise and drop the spinnaker as smoothly as possible, as this will extend the life of the sail. Avoid trawling the spinnaker through the water, this can damage the sail and get the spinnaker stuck around the bow of the boat.

Remove the spinnaker from the chute after sailing; if the sail is left it can attract mice that damage the sail.

Always dry the sail before folding and packing it away.
Always rinse the sails and the boat after sailing in salt water.
ALWAYS RELEASE JIB TENSION WHEN NOT SAILING

Foils

Any nicks or deep scratches in the rudder can be repaired using gelcoat filler, as the smallest damage will affect the performance of the boat. Make sure that the rudder blade remains tight between the stock when down. Any movement between the blade and the stock, or the stock and the hull may cause steering problems.

Hull and fittings

Small dents can be repaired by gently warming the hull with a hot air blower (take care not to melt the hull). For any more substantial repairs refer to Topper Sailboats.

Check the attachment of all fittings regularly. This is particularly important for the fittings that are screwed onto fixings that are set in the hull. Keep all blocks, cleats and ropes clean and rinse them after salt water exposure.

Always remove the bung to empty any water after sailing, and when not sailing leave the bung out to prevent the buildup of pressure within the hull as the temperature fluctuates.

Ropes

Always replace any ropes that are showing any signs of wear immediately.

glossary / useful terminology

hull

Nose:	Front of the hull
Painter:	Rope from the nose of the hull used for towing or tying the board to a jetty, buoy or trolley
Transom:	Back of the hull
Fore:	Forward
Aft:	Rearward
Mast Step:	Integral tube where the mast heel/foot of the mast locates
Rail:	Upper/outermost edge of a hull
Port:	Left side of the hull when looking forward
Starboard:	Right side of the hull when looking forward
Leeward:	Direction away from the wind
Windward:	Direction from which the wind is coming
Gudgeon:	Fitting on the transom used to hang the rudder

spars

Mast:	Main vertical spar supporting the rig/sail
Mast Heel:	Lower edge/foot of the mast
Boom:	Spar at the bottom of the mainsail
Outhaul:	Purchase system on the boom for tightening the lower edge/foot of the sail
Vang:	Purchase system for tightening the rear/aft edge (leech) of the sail
Cunningham:	Purchase system for tightening the forward edge/luff of the sail
Sheet:	Rope for controlling the inward/outward position of the mainsail

foils

Daggerboard	Blade found in the middle of the hull used to counteract leeward slippage
Rudder:	Blade found at the transom used for steering
Pintle:	The male part (pin) of the rudder hanging system

glossary / useful terminology (...)

sails

Mainsail:	Sail aft/rearward of the mast (Larger of the two)
Jib:	Sail forward of the mast (Smaller of the two)
Tack:	Forward lower corner of a sail
Clew:	Rear lower corner of a sail
Head:	Upper corner of sail
Leach:	Rear edge of the sail
Luff:	Forward edge of the sail
Foot:	Bottom edge of the sail
Batten:	A thin stiffening strip in the sail to support the leach

rigging instructions

setting up the hull

1

Fit the cross bar in the beam socket of each hull and align them with the predrilled holes. Clean and grease the bolts, the inner bolt for the rear beam are used with the big plastic washers and the outer bolt with the smaller one.

Hand tighten the bolts while insuring that the tubes are inserted in the bolts inside the beam.

Then tighten with 2 x 17mm spanners but not too much. Retightening on a regular basis is necessary.

2

Once the hulls have been bolted together refit the hatch covers.

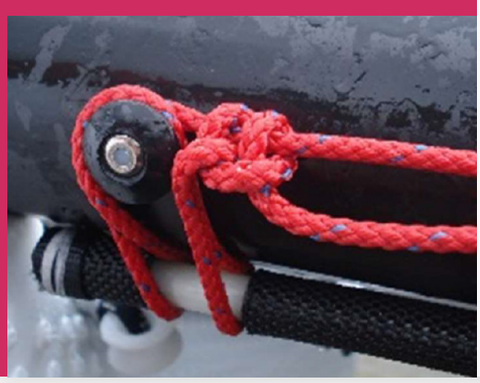
Now, fit the hull with the trampoline. Remove the end cap and slide the trampoline into the rail of the front beam until it is central, this best done by 2 people to avoid snagging the trampoline on the beam.

setting up the hull (...)

3

When the trampoline is central it can be laced to the rear beam.

Attach the tensioning line to one end of the rod in the trampoline with a bowline.



4

The rope is lead around the buttons on the rear beam, up and down to the cut outs on the trampoline passing around the bar, carry on across the whole trampoline you will need to go back and tighten the line to pull the trampoline tight.

At the last button take an extra loop around the button and tie the line off using a couple of half hitches.

5

The excess line can the taken across the back and secured to the line.

6

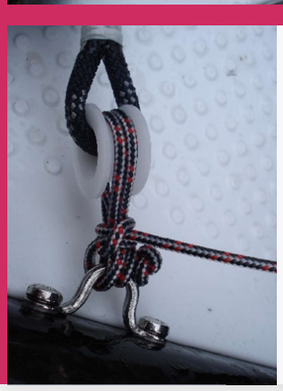
The side tensioning lines can now be attached, first attach the loop to the metal eye on the rear cross beam and take a couple of turns through the plastic ring on the trampoline side rope, then tie off loosely.

setting up the hull (...)

7

The side rope can now be tied off to the metal loop on the front beam, using a round turn and 2 half hitches.

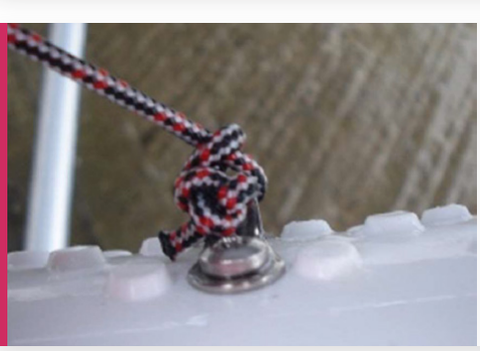
Pull the line up so the plastic ring at the back is just pulled in to the side of the trampoline.



8

The side lines can now be pulled tight at the rear beam to tension then. When tight secure the line to the metal loop (using 2 round turns and a half hitch).

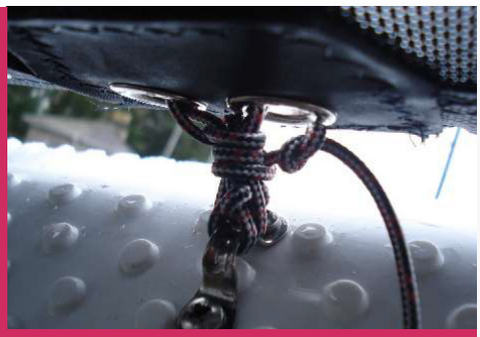
Leave a long tail as this is used to tension the trampoline at the back by feeding through the metal ring on the trampoline.

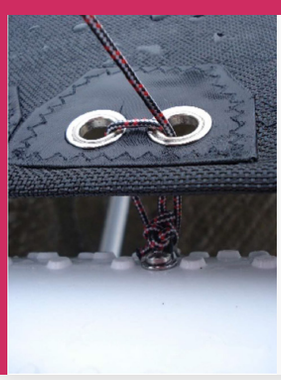


9

The central tie can now be fitted to the small metal loop on the hull midway between the beams.

setting up the hull (...)





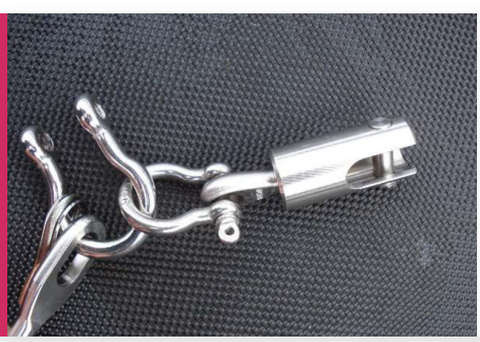
10

The line is fed through the eyes on the trampoline several times and then tied off tightly to hold the trampoline down to the hull.

> *TIP: extra side line can be tided away by feeding it down the side of the trampoline.*

You will need to re tension the Trampoline as it stretches', the trampoline should be kept as tight as possible as this makes it easier to move on.

rigging the mast

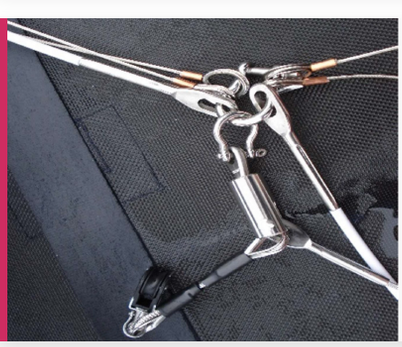


1

Lay the mast along the centre line of the boat, so you can attach the rigging to the mast fitting.

In order to fit the furler to the forestay remove, a trapeze wire, shroud and forestay from the large Bow shackle.

The furler swivel is attached to the large Bow shackle with a smaller bow shackle.



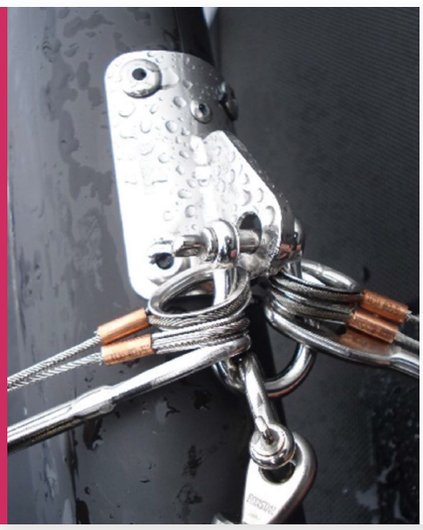
2

The forestay and the jib halyard pulley loop then fixes into the furler.

This is a good time to add the extra trapeze wires if you are fitting the spinnaker system.

Also don't forget to feed the 2 part jib halyard through the block.

rigging the mast (...)



3

The rigging can then be attached to the mast.

NB: please ensure all shackles are securely tightened.

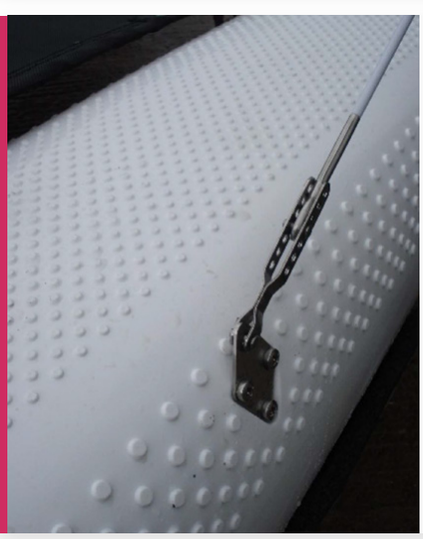
Remember to separate the rigging to the correct sides of the boat.

4

Also if you have the trapeze kit you can now fit the mast head halyard pulley.

This is tied off to the metal eye near the top of the mast with a round turn and 2 half hitches. The pulley sits just below the line around the mast.

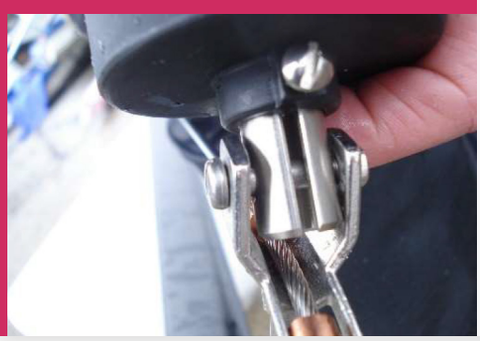
Also don't forget to thread the halyard through the pulley.



5

Attach the shroud adjusters to the plates on the hulls and the shrouds approximately the 4th hole down.

rigging the mast (...)



6

In preparation to raise the mast you will need to attach the striker bar to the bow of the hull.

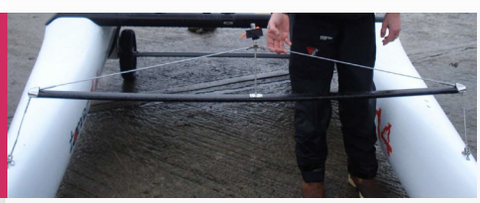
The furler drum is attached the screw fitting at the centre of the striker bar.

7

The cleat for furler line is fitted to the port side of the front crossbeam, you will need to per drill 2 x 3.7mm holes in the beam to screw the cleat on to.

NB: ensure the securing screw for the drum is tightly done up.

The striker bar can now be attached to the deck eyes on the bow. The split pin must be fully bent back to secure the pin. You may prefer to replace the split pins with rings for ease of use.



8

When the striker bar is fitted correctly the wider rounded side will face forward.

9

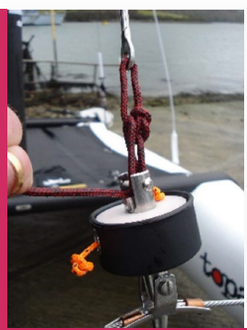
The mast can now be lifted back do the mast foot can be fitted to the ball on the crossbeam (the securing pin can be inserted).

rigging the mast (...)

10

In order to raise the mast you will need assistance, one person will need to lift the mast from the back of the boat.

They walk forward while the other person pulls up on the forestay or trapeze wires.



11

Once the mast is fully upright the forestay is loosely tied off to the furler drum. This allows the mast pin to be removed so the mast can rotate.

12

Once the pin has been removed the rig tension can be pulled on using the forestay, the rope is tied off leaving a long tail to tie the jib on with.

rigging the mast (...)

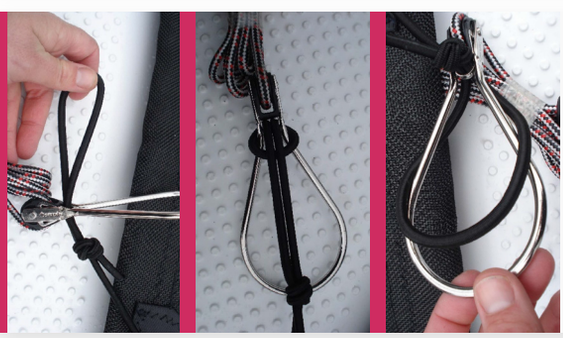
With the mast up the Trapeze wires can be secured to the elastic.

Tie a loop (approximately 15cm in length in one end of the elastic).

13

Feed the end of the elastic without the loop down the metal eye on the trampoline under the trampoline and up through the eye on the other side. Tie a loop in this end as well.

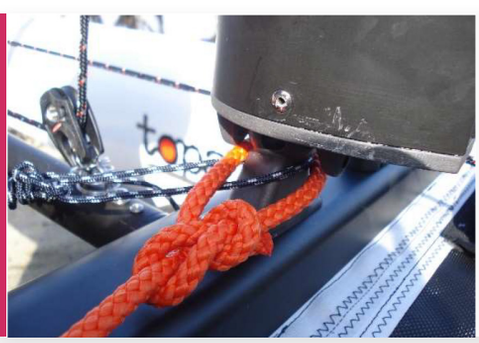
14



To attach the elastic to the trapeze ring, push the elastic loop through eye on the ring just below the pulley, then pull the elastic loop over the metal ring and pull tight.

15

capsize line



The capsize (orange) line is used to help right the boat in the event of a capsize.

The line is tied around the base of the mast with a bowline knot.

1

capsize line (...)

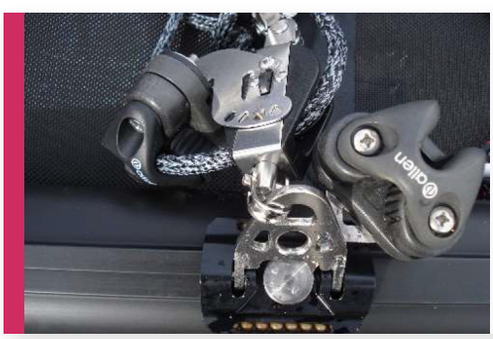
A series of figure of 8 knots are then tied along the line to stop your hands slipping if you are righting the boat from capsize.

2

When not needed the line is stored in the marked pocket on the trampoline.

3

attaching the main sheet



The mainsheet rope also controls the traveller car movement.

The mainsheet blocks are already threaded, all that is needed is to attach them and set the figure of 8 knots to limit the travel.

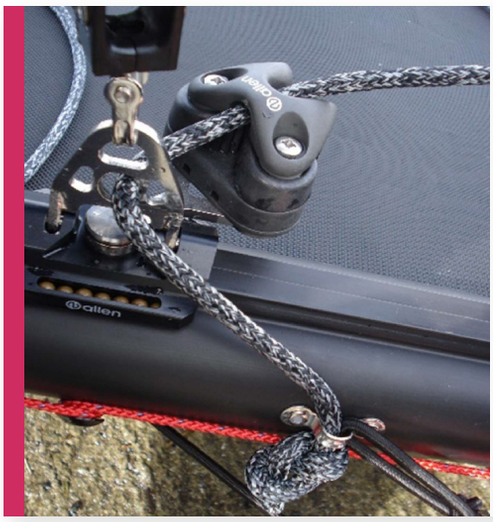
Shackle the pulley system to the traveller car on the crossbeam.

1

Tie 2 figure of 8 knots in the mainsheet (approximately 1m and 0.75m in from the end of the mainsheet, these may need to be adjusted latter), 1 is to limit the amount you can sheet out and the other is to limit the travel of the car so it does not hit the end stop on the crossbeam.

2

attaching the main sheet (...)



3

Feed the main sheet through the cleat (from the front to back of the boat) on the traveller car and through the round hole on the plate the main sheet is attached to.

The end of the mainsheet is then secured with a stopper knot having been fed through the deck eye on the back of the rear cross beam.

4

Slide the car along the track till the figure of 8 knot reaches the cleat, this should stop between 5 and 10 cm short of the end stop. If the car is hitting the end stop, move the position of the knot to prevent this.

rigging the jib

1

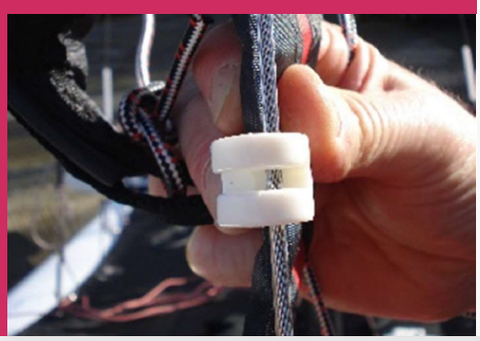
The Topaz 14 uses a 2 part jib halyard system that runs up and down the front of the jib and secures in the cleat fitted on the jib.

Attach the jib to the furler drum using the long tail of the forestay (as close as possible to the drum) again leave a long tail.

2

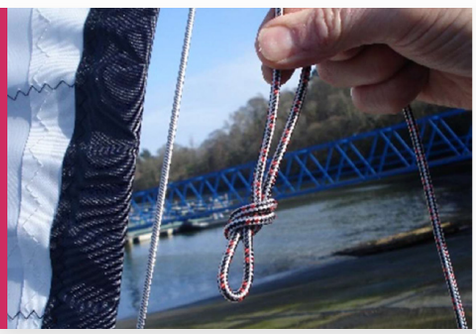
Attach the jib halyard to the webbing loop on the top (head) of the jib sail with a bowline knot.

rigging the jib (...)



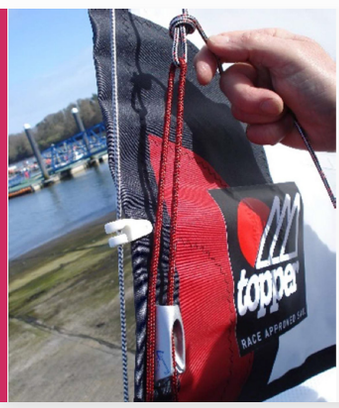
3

The jib can now be slowly pulled up attaching the plastic hanks to the wire forestay as you go.



4

When the jib is fully hoisted untie the two parts of the halyard. Tie an overhand knot loop in the end of the section attached to the top of the jib (you will only need to do this the first time you rig). The rope you have untied is stored in the pocket on the trampoline until you need it to drop the jib after sailing.



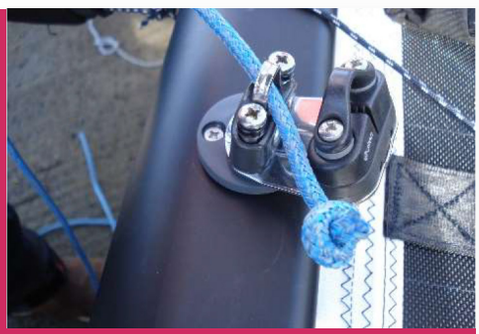
5

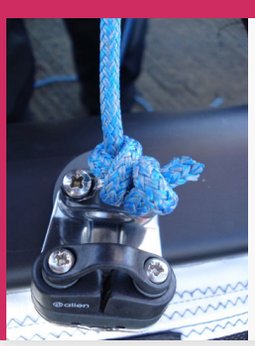
Take the tail from the forestay/jib tie down through the loop in the halyard and down through the cleat on the jib.

rigging the jib (...)

6

Jib tension can now be pulled on, and spare line neatly wrapped and tied off between the base of the jib and the furler (you may want to cut excess halyard off when you are happy with the position of the loop on the end).



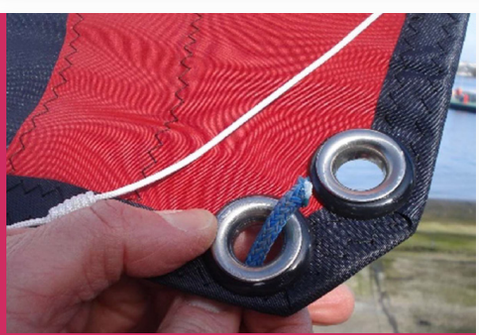


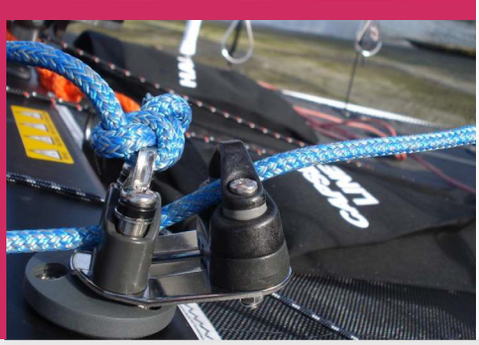
7

Attaching the jib sheets, the Topaz 14 uses a 2:1 purchase jib sheet system running through 2 eyes in the sail.

Feed the jib sheet through the bridge on the top of the cleat on the forward cross beam, and tie a stopper knot in the end.

Then tie another knot around the bridge with the stopper knot hard against it.

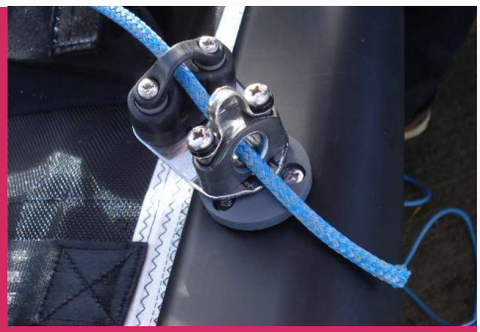


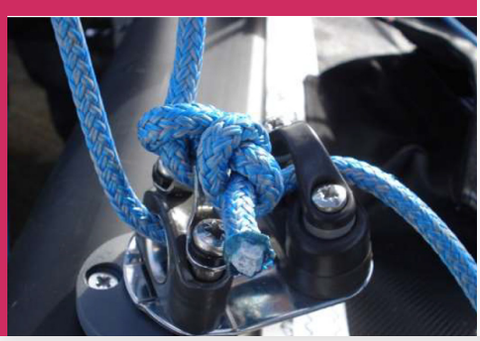


8

Feed the jib sheet through one eye on the sail and then back down and through the cleat.

rigging the jib (...)



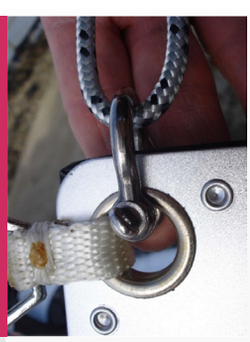


9

Pass the jib sheet across the trampoline and through the other jib cleat, through the other eye on the jib sail and then tie the end to the bridge on the cleat.

The jib can now be furled to stop it flapping in the wind.

raising the mainsail



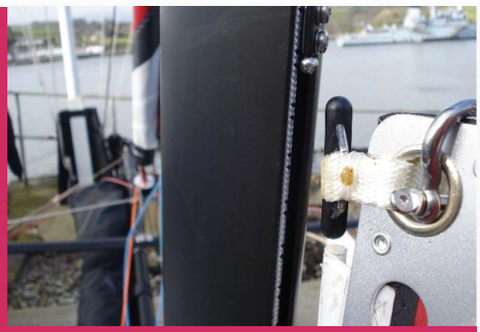
1

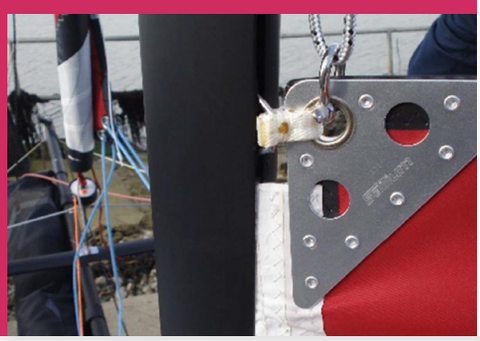
Ensure the boat is facing into the wind before you start to hoist the main sail.

Always ensure that all the sail battens are securely in place in the batten pockets with the front end seated in the plastic end fitting.

Shackle the main halyard to the top of the sail, ensure the pin of the shackle is through the sail and the rope is running over the body of the shackle.

raising the mainsail (...)





2

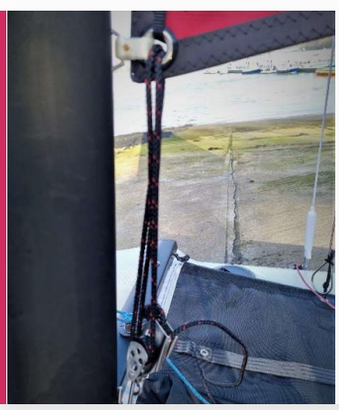
Feed the sail in to the track locating the guide slug first in the cut out on the mast, it is helpful to have a second person to feed the sail in as the halyard is pulled (you may need to rotate the mast slightly if the batten pockets grip the mast).

As you are hoisting the sail ensure the battens are all rotated in the same direction.

3

When the sail is fully hoisted, the halyard is secured in the cleat on the side of the mast and the tail of the halyard stored in the pocket on the trampoline.

The bottom of the sail can then be fed into the mast track below the cut out.

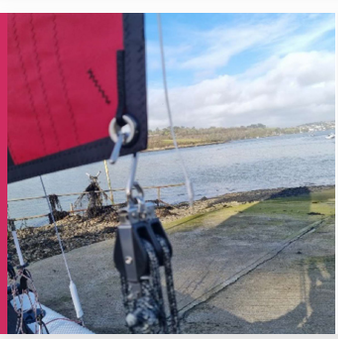


4

The Downhaul will need to be treaded the first time you rig the Topaz 14 it can then be left attached to the sail and hooked back on to the mast each time.

The downhaul line comes up from the cross bar on the fitting through the sail eye, down around the pulley on the side, back up through the sail eye again, down to the larger pulley and then up through the V cleat.

Do not pull the downhaul on till you are on the water sailing as this powers the rig up.



5

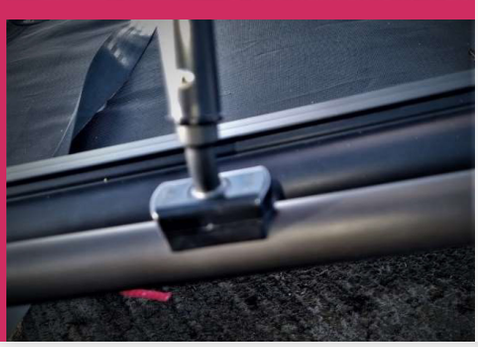
The mainsheet is simply hooked in to the eye at the back of the main sail.

This should only be attached as you are going on to the water.

attaching the rudders

1

The rudders attach to the fittings on the transom, the tiller arms are angled inward with a connector plate for the cross bar on the inside face of the arm. When the rudders are in place ensure they are seated correctly so the retaining clip springs out.



2

The connector cross bar and tiller extension are connected together using the UJ, the cover plates need to be clipped in place to ensure the joint cannot come apart.

When on the water the rudder blades are pushed down and secured in place by putting the bungee loops over the stainless steel arm.

rigging the spinnaker kit

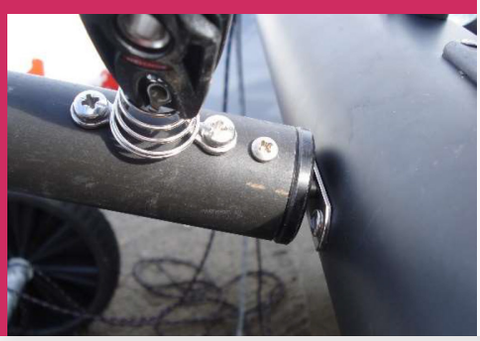
1

The Topaz 14 used a single line asymmetric spinnaker system, with a shoot system for launch and retrieval of the sail.

The spinnaker sock will need to be fitted to the shoot mouth on the pole, the rope edge of the opening is fed around the slot on the back of the hoop.

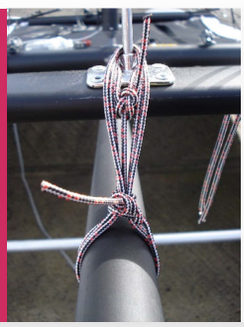
When fitted correctly the Velcro tabs will wrap around the pole to hold it in place.

rigging the spinnaker kit (...)



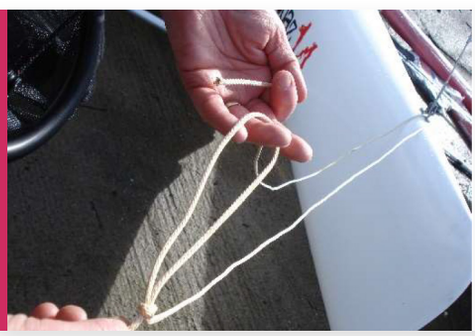
2

To attach the pole to the boat insert the spike on the end of the pole into the hole on the front cross beam just below the mast ball fitting, ensuring it is fully pushed in.



3

The pole is suspended by a line tied to central strut of the striker bar, approximately 5cm below the bar (this distance can be varied to adjust the tension in the luff of the spinnaker if needed).



4

The dynema lines attached to the front of the pole are to stop the pole being pulled up when sailing. In order to tension these correctly the help of a second person is needed.

5

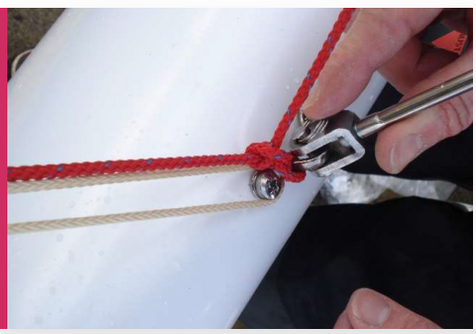
Tie a loop approximately 2/3rds of the way down each line, take the tail end of the line through the fixing eye at the bow of each hull and back through the loop on each side.

With one person pushing the pole down slightly tension can be put on the lines and then they can be tied off. Please note the pole should be kept centred between the hulls.

rigging the spinnaker kit (...)

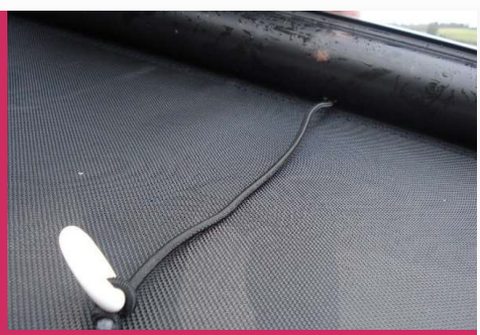
6

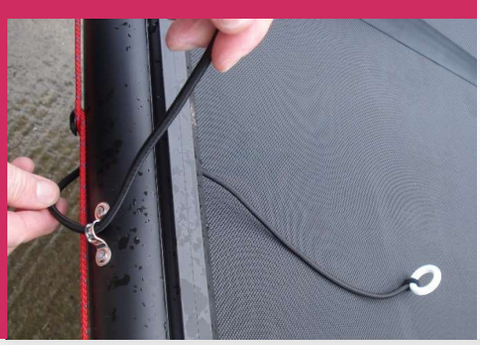
The line attached to the shoot mouth is tied off to the bow fitting on the port side as well, this line is to hold the shoot mouth up and make it easier to launch and retrieve the spinnaker.



7

Before the halyard for the spinnaker can be treaded up the halyard turning ring at the rear of the trampoline needs to be fitted and the sheet blocks.

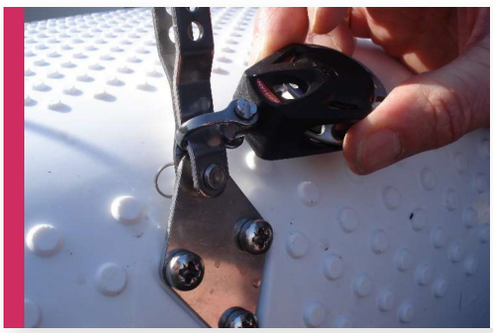




8

The ring attached to a length of bungee is fed between the trampoline and the rear beam and tied off to the loop where the end of the mainsheet attaches.

rigging the spinnaker kit (...)



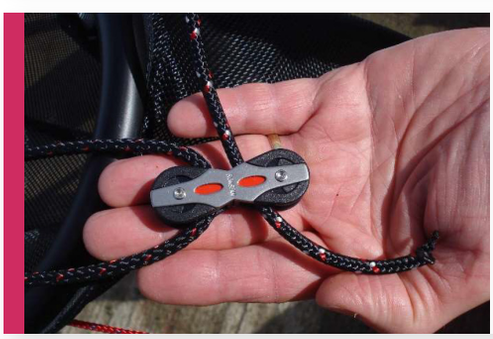
9

The spinnaker sheet ratchet blocks are simply attached to the lower part of the shroud plates.

10

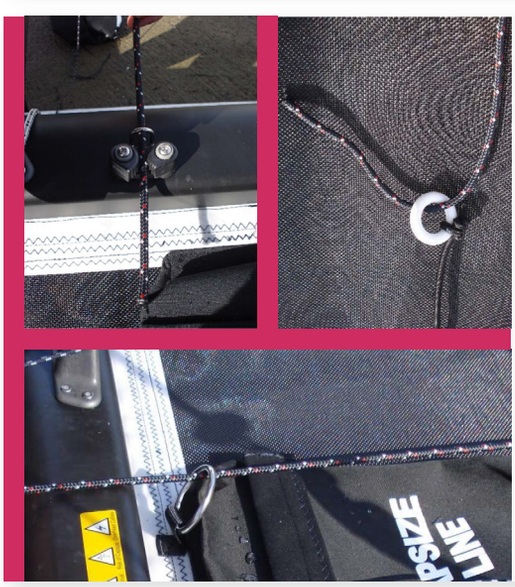
To thread the spinnaker halyard, first secure one end to the end of the pole so you do not lose it up the mast.

The free end is threaded through the pulley at the back of the pole (from back to front).



11

The line then threads through the double block attached to the tack line (this pulls the sail to the end of the pole).



12

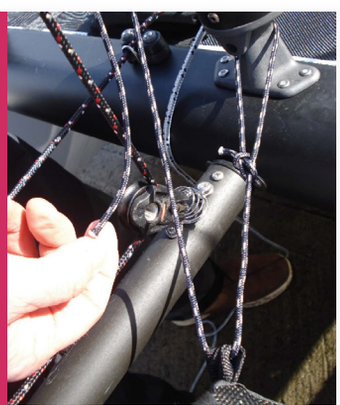
The halyard is then lead back through the cleat on the cross beam, to the ring by the rear beam and forward to the metal ring at the front of capsize line pocket (remember to feed the line under the jib sheets).

rigging the spinnaker kit (...)

13

The halyard can now be fed through the spinnaker sock (it is easier to reach down the sock if it is not attached to the pole of the boat).

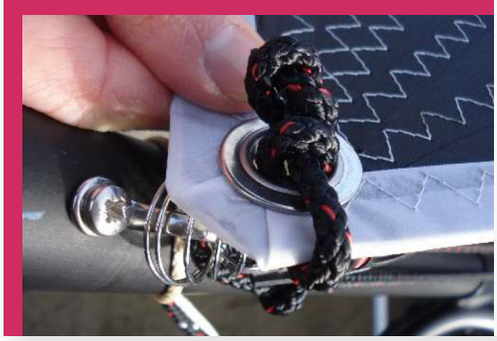
When you have pulled the halyard our of the bag mouth tie it off temporarily so it does not go back down the sock.



14

The rear of the sock can now be secured by with the lines attached to the loops, one side ties around the mast foot and the other ties around the beam passing through the eyelet on the trampoline. These do not need to be pulled tight as they are only there to support the sock. Also the sock will move while sailing so you need to allow for that to take place.

packing the spinnaker

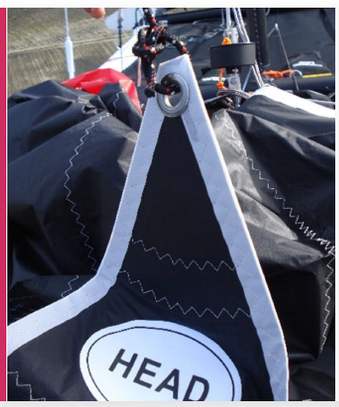


1

The spinnaker sheet ratchet blocks are simply attached to the lower part of the shroud plates.

Start at the front corner labelled, Tack of the sail (also the sailmakers label is there). Push a loop of the tack line from the pole end through the sail eye, the pass the knot on the end of the tack line through the loop and pull it tight to secure it.

Tip: It is worth practicing packing the spinnaker on a still day for the first time.



2

Work along the front edge of the sail to the top of the spinnaker (the head).

Attach the head to the end of the halyard from the top of the mast with a bowline knot.

3

Now work down the back edge of the sail to the Clew to attach the sheets. To attach the sheets to the sail find the middle of the rope and push a look through the eye in the sail.

4

Pull the ends of the sheets through the loop and pull tight.

packing the spinnaker (...)

5

Take one end of the sheet to each side of the boat and thread it through the ratchet block on the shroud (make sure you thread it in the direction of the arrow on the block).

6

The ends of the sheets can now be tied together in the middle of the boat to form a continuous, simply tie an overhand knot around each sheet with the other and pull the knots together.

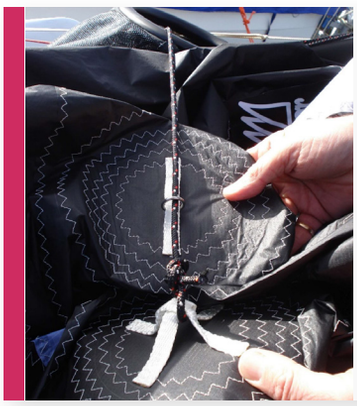
This is sometimes called a fisherman's or love knot.

7

The downhaul line can now be attached, take the end of the halyard from the shoot mouth.

The end of the line is fed through the metal ring attached to the lower patch and then tied to the cross tapes on the top patch with a bowline knot.

packing the spinnaker (...)



8

The gennaker can now be pulled back in to the sock, you may want a second person to guide it in so it does not snag on anything when pulling it in in land.

topaz 14

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