

# RIGGING GUIDE

# RS *Quiba*



*Sail it. Live it. Love it.*

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All terms highlighted in **blue** throughout the Manual can be found in the Glossary of Terms.

**Warnings, Top Tips, and Important Information are displayed in a yellow box.**

# 1. INTRODUCTION

Congratulations on the purchase of your new RS QUBA and thank you for choosing an RS product. We are confident that you will have many hours of great sailing and racing in this truly excellent design.

The RS QUBA is an exciting boat to sail and offers fantastic performance. This manual has been compiled to help you to gain the maximum enjoyment from your RS QUBA, in a safe manner. It contains details of the craft, the equipment supplied or fitted, its systems, and information on its safe operation and maintenance. Please read this manual carefully and be sure that you understand its contents before using your RS QUBA.

This manual will not instruct you in boating safety or seamanship. If this is your first boat, or if you are changing to a type of craft that you are not familiar with, for your own safety and comfort, please ensure that you have adequate experience before assuming command of the craft. If you are unsure, RS, your [RS dealer](#), or your [national sailing federation](#) – for example, the Royal Yachting Association – will be able to advise you of a local sailing school, or a competent instructor.

**Please keep this manual in a secure place and hand it over to the new owner if you sell the boat.**

**For further information, spares, and accessories, please contact:**

RS Sailing  
Premier Way  
Abbey Park  
Romsey  
Hants SO51 9DQ  
Tel.: +44(0)1794 526760  
Fax: +44(0)1794 278418  
E-mail: [www.info@rssailing.com](mailto:www.info@rssailing.com)

**For details on your local RS dealer, please visit [www.rssailing.com](http://www.rssailing.com)**

## 2. RS QUBA TECHNICAL DATA

Length Overall (LOA):	3.53 m	11'5"
Beam:	1.42 m	4' 6"
Hull Weight:	58 kg	128 lb
Sport Reefing Mainsail:	5.7 m <sup>2</sup>	60 ft <sup>2</sup>
Pro fully-battened Mainsail:	7.1 m <sup>2</sup>	75 ft <sup>2</sup>
Jib:	1.2 m <sup>2</sup>	13 ft <sup>2</sup>

## 3. COMMISSIONING

### 3.1 Preparation

Your RS QUBA comes complete with all the components necessary to take the boat sailing.

**Take care when using a knife or other sharp object to cut through packaging containing parts – you may damage the contents!**

Whilst your RS QUBA has been carefully prepared, it is important that new owners should check that [shackles](#) and knots are tight. This is especially important when the boat is new, as travelling can loosen seemingly tight fittings and knots. It is important to check such items prior to sailing regularly.

### 3.2 Unpacking

Having unpacked your RS QUBA, you should check that you have all of the items listed below before throwing away any of the packaging, as there may be some small items still wrapped.

- 1 x RS RS QUBA [hull](#)
- 1 x [mast](#) style as ordered - Sleeved sail (Club) or bolt rope sails (Sport & Pro)
- 1 x [boom](#)
- 1 x Foil pack consisting
  - 1 x [rudder](#), [rudder stock](#), and [tiller extension](#)
  - 1 x [daggerboard](#)
- 1 x [mainsail](#) Style as ordered
- 1 x rope pack – consisting of:
  - 1 x [mainsheet](#)
  - 1 x [daggerboard](#) Retaining elastic
  - 1 x Plastic clip for above
  - 1 x [downhaul](#)
  - 1 x Standard [kicking strap cascade](#)
  - 1 x Shackle for above

- Optional Sport Pack – consisting of:
  - 1 x Upgraded Sport Kicker 16:1
  - 1 x Mainsheet Ratchet
  - 2 x Side toestraps and necessary fittings
  - 1 x Upgraded Downhaul block with hook
  
- Optional Jib Pack – consisting of:
  - 1 x RS RS QUBA jib
  - 1 x jib sheet
  - 1 x jib halyard
  - 1 x jib tack hook
  - 1 x Pack of cleats and fairleads with necessary fittings.

## 3.3 Rigging the Mast

If you have the [Jib Pack](#), please refer to Section 3.9 Rigging the Jib before stepping the [mast](#) in the boat.

There are currently 2 options for the mast:

Standard two piece round mast (Club) and optional two piece tracked mast (Sport and Pro).

To complete this section, you will need:

- The [mast top section](#)
- The [mast lower section](#)
- Alternatively: One Piece [Mast](#)
- The [main halyard](#) (tracked mast only)
- The [downhaul line](#)
- The [downhaul block](#)

**To assemble the Standard round mast – RS Quba Club:**

1. Join the [mast](#) by inserting the [mast lower section](#) into the [mast top section](#).
2. Push the [mast lower section](#) in until it butts up against the [mast top section](#).



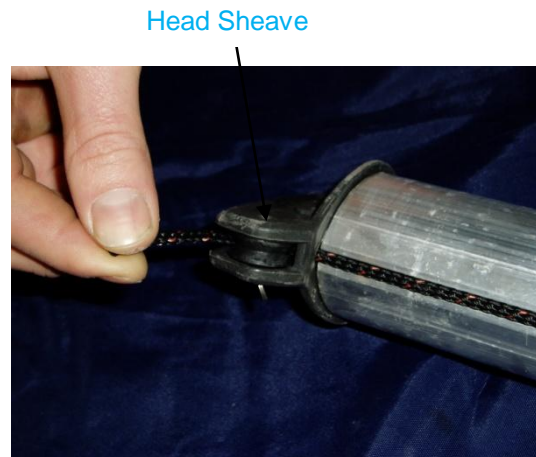
3. The sail should then be sleeved onto the mast, ensuring that the eye for the jib halyard is visible in the cut out. If you have the optional jib pack, thread the halyard through the eye at this stage. (See section 3.9: Rigging the Jib).





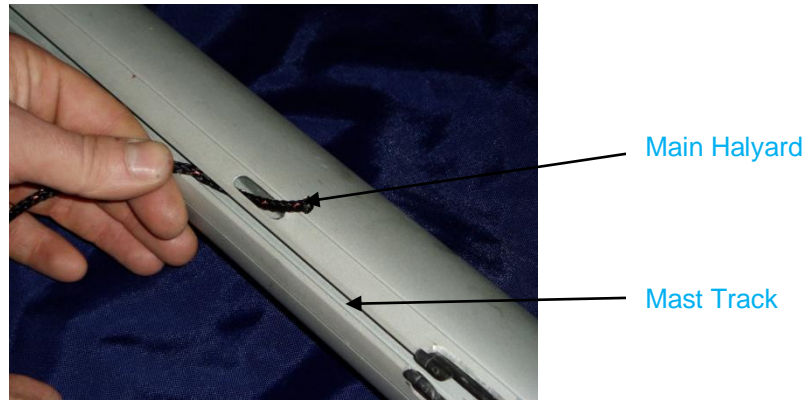
**To assemble the Tracked mast – RS Quba Sport & Pro:**

1. Join the **mast** by inserting the **mast lower section** into the **mast top section**.
2. Push the **mast lower section** in until it butts up against the **mast top section**.
3. Lead the end of the **main halyard** through the back of the head sheave at the top of the **mast**, from bottom to top.

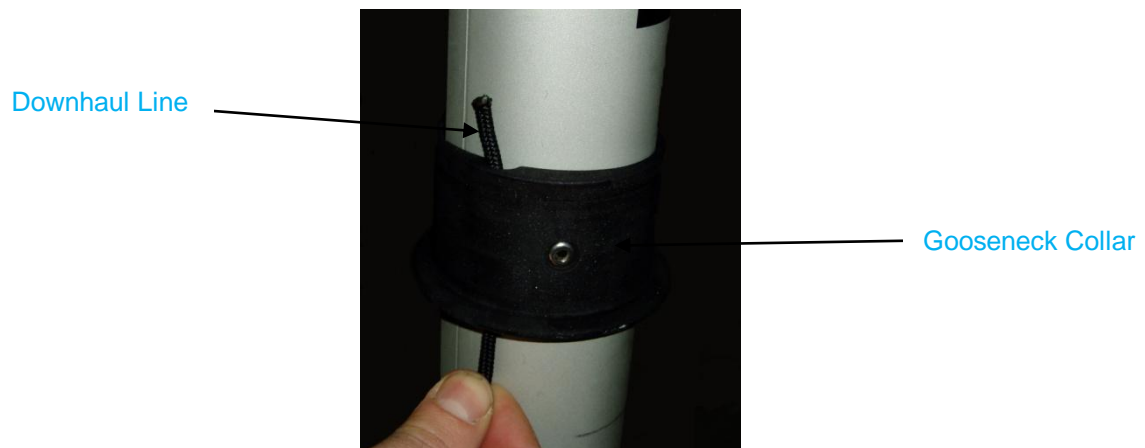


5. Pull the **main halyard** through so that both ends are at the bottom of the **mast**, by the **gooseneck**.
6. Take the end of the **main halyard** that is up against the **mast track**, and thread it back into the **sail track** and out through the oblong hole in the **mast**, just above the **main halyard cleat**.

Note: The RS Quba does not use the sheave on the front of the mast head. It is redundant on this class.



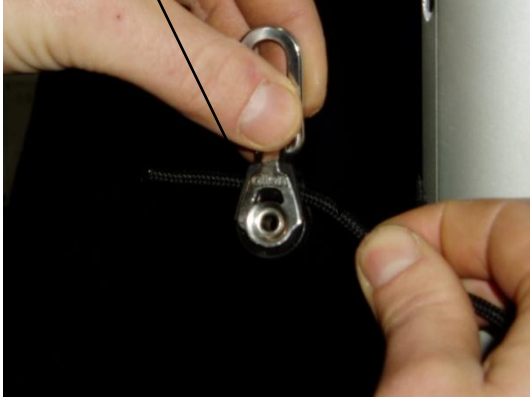
7. Pull both ends of the **main halyard** tight, so that one half goes into the **mast track**.
8. Tie a **figure-of-eight** knot in both ends of the **main halyard**.
9. Once you have threaded the **main halyard**, it can remain in place when you separate the two **mast** sections in future.
10. Take the **downhaul line** from the rope pack.
11. Tie a **figure-of-eight** knot in one end of the **downhaul line**.
12. Lead the other end of the **downhaul line** through the hole on the right-hand side of the **gooseneck collar**, from the bottom to the top.



13. Take the **downhaul block** from the sport upgrade pack, thread the **downhaul line** through it, and lead the end through the hole on the left-hand side of the **gooseneck collar**, from top to bottom.

Downhaul Block

Downhaul Line



Jib Halyard Cleat

Main Halyard Cleat



14. Lead the end of the [downhaul line](#) through the hole in the [downhaul cleat](#), from top to bottom, and tie a [figure-of-eight](#) knot in the end.

Downhaul Line



Downhaul Cleat

Now the [mast](#) is ready to be put in the boat, or 'stepped'.

### REMEMBER

If you are rigging the Jib Pack, you need to read Section 3.9 before stepping the mast.

## 3.4 Stepping the Mast

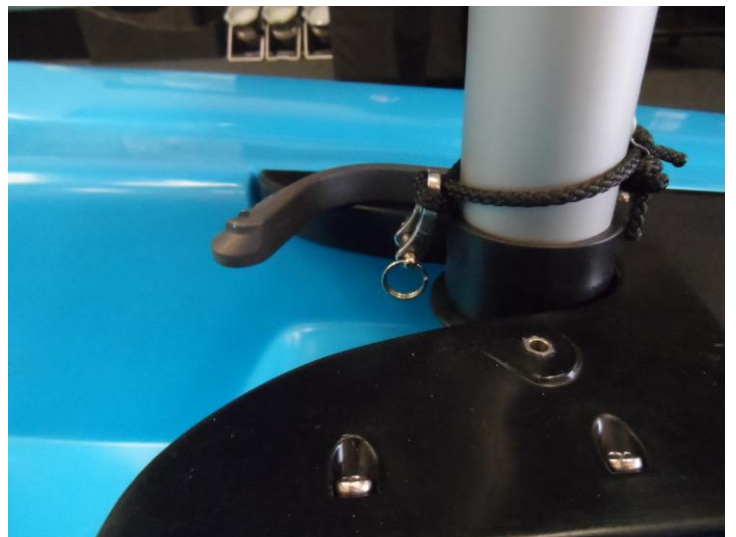
### The Mast-Gate Pin

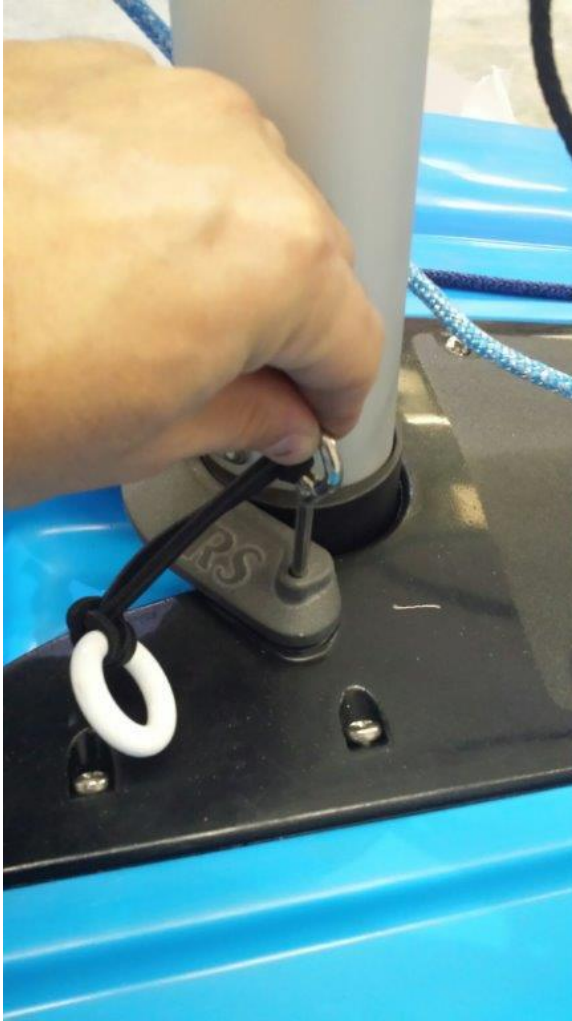
The [mast-gate pin](#) is already fitted to your RS QUBA. The pin has a plastic ring on a short piece of elastic. When the pin is fitted to the boat the plastic ring is placed over the end of the pin protruding under the foredeck. This holds the pin in place.



### Stepping the Mast

1. Remove the [mast-gate pin](#), and ensure that the [mast gate](#) is open.
2. Lift the [mast](#), and with the kicker attachment at 90° to the open mast gate, place the base into the [mast well](#), ensuring that the dimple in the bottom of the [mast](#) locates on the raised section in the [mast well](#).
3. Rock the [mast](#) forward against the [foredeck](#) making sure the lip on the collar is under the foredeck and rotate the mast 90° so that the kicker attachment points toward the back of the boat, then close the [mast gate](#).





4. Secure the **mast gate** using the **mast-gate pin**. Once the pin is inserted pull the plastic ring over the end of the pin protruding under the foredeck. This locks the pin in place.

#### **Top Tip**

If the wind is blowing, there will be a lot of pressure on the top of the mast making it wave around. Consider finding somebody to help if you feel that you will struggle!

#### **WARNING**

**When lifting the mast, make sure that there are no overhead power lines.**

If you have the round section mast with a sleeved sail the sail is now Hoisted and flapping around. Quickly proceed to fitting the boom to reduce wear and tear on the sail.

## **3.5 Rigging the Boom**

To rig the **boom**, you will need:

- The **boom**
- The **downhaul**
- The **kicker cascade** Standard Club or upgraded Sport / Pro
- A flat-headed screwdriver
- The **mainsheet**

1. The outhaul line is already rigged on the boom.
2. Using a flat bladed screwdriver, undo the shackle for the top of the kicker cascade and use it to attach the kicker cascade to the metal eye near the front of the boom. Once attached you will not need to remove it, although it is a good idea to occasionally check the shackle is tight.



3. Lift the boom and push the gooseneck onto the gooseneck collar on the mast. Rest the other end of the boom on the transom.

4. Attach the mainsheet block with the Inglefield clip to the block on the bridle at the transom.



5. Take the mainsheet from the rope pack. Lead one end of the mainsheet through the mainsheet block on the deck of the boat. Lead the end of the mainsheet through the block near the kicker cascade on the bottom of the boom, from front to back.

6. Lead the end of the mainsheet through the webbing strap on the boom, and through the block at the end of the boom.
7. Thread the end of the mainsheet through the block on the mainsheet bridle, and back up to the block at the end of the boom.
8. Thread the end of the mainsheet through the beckett on the block at the end of the boom, and secure it using a knot-on-knot.



Please note, the mainsheet block will be supplied in the forward position: if you plan to sail with a crew you may wish to move the block to the aft position to give the crew more room, to do this, simply unshackle it from the forward loop.

Remove the screws from the black plastic dagger board case capping and the black plastic square in front of the

toestraps. Remove the rope loop from its original location and move it to the aft loop position in the toestraps square..

When refitting the mainsheet block It may be easier to compress the spring using a pair of small cable ties until the shackle is done up, then cut the ties to release it.



## Sleeved Sail (RS Quba Club) – Mainsail Completion

Downhaul - attach the downhaul line to the eye on the front of the sail and take it through the cleat below.



Outhaul - Attach the clew of the sail to the hook at the back end of the boom

Kicker – Attach the V cleat assembly to the mast with the quick release shackle.





## 3.6 Hoisting the Mainsail- RS Quba Sport and Pro Tracked Mast

To complete this section, you will need:

- The **mainsail** (either the RS QUBA Sport reefing mainsail, or the RS QUBA Pro battened mainsail)

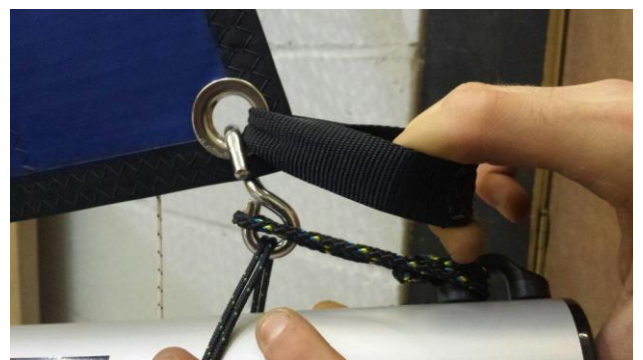
1. Unroll the **mainsail**.
2. Take the end of the **main halyard** that is free from the **mast track**, and tie it to the **head** of the **mainsail** using a **knot on knot**.
3. Put the top of the **mainsail** into the opening at the bottom of the **mast track**, just above the **gooseneck mast collar**.
4. Holding the **mainsail** in line with the **mast**, pull on the end of the **main halyard** that comes out of the **mast**.



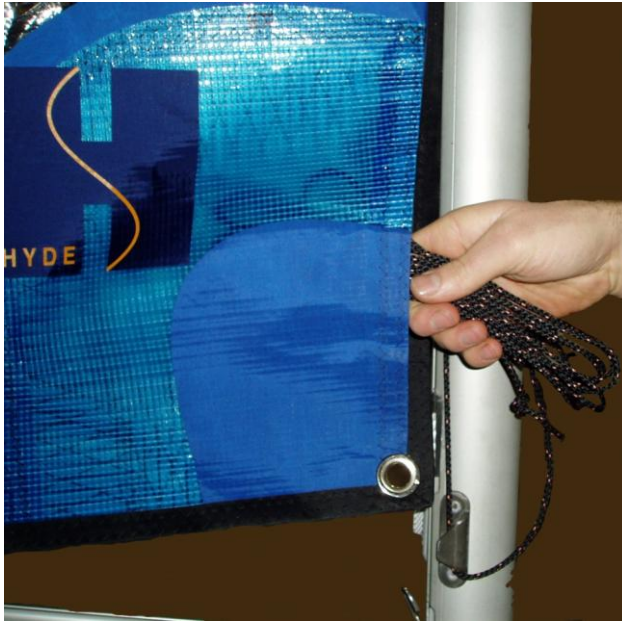
5. Pull the **mainsail** up to the top of the **mast**. To make hoisting the **mainsail** easier, keep it in line with the **mast**, especially when passing the **batten pockets**.

6. When the **mainsail** is at the top of the **mast**, secure the **main halyard** in the **main halyard cleat** on the **mast**.

7. Take the hook at the outer end of the **boom** and, using the webbing strap in the **clew** of the **mainsail** to pull the sail into position and attach the hook onto the metal eyelet in the **clew** of the **sail**.



8. Pull tension into the **outhaul line**, and secure it in the **outhaul cleat** on the **boom**.

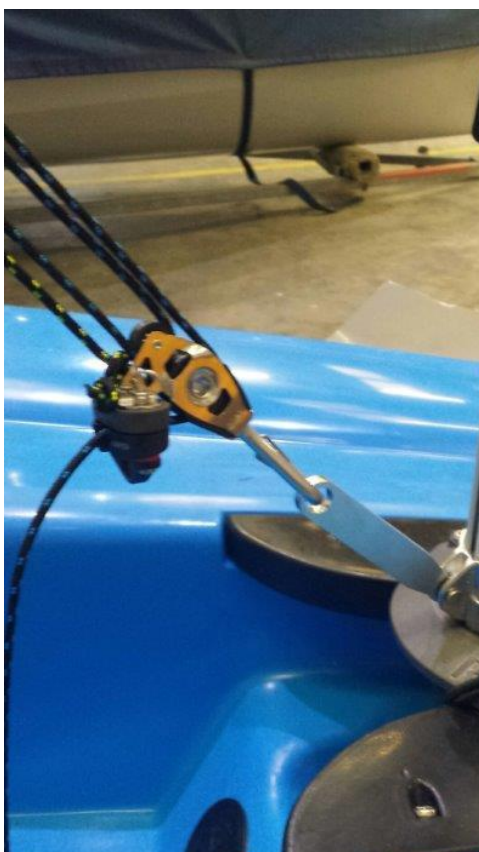


9. Coil up the end of the **main halyard**, and stow it in the pocket on the **tack** of the **mainsail**.



10. Attach the **downhaul hook** onto the metal eyelet in the **tack** of the **mainsail**.

11. Take hold of the **downhaul line** below the **downhaul cleat**, pull tension into the **downhaul** and secure it in the **downhaul cleat**.



12. Attach the hook at the end of the **kicker cascade** to the shackle on the mast.

**If you are not fitting the jib, move straight on to Section 3.10 Completion**

## 3.7 Rigging the Jib

For this section, you will need:

- The RS QUBA [jib](#)
- The [jib halyard](#)
- The [jib sheet](#)

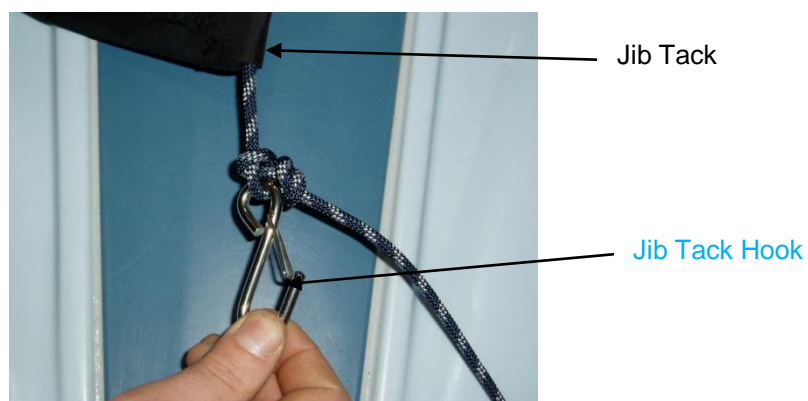
### Before stepping the mast you will need to:

1. Take the [jib halyard](#) from the jib pack.
2. Thread one end of the [jib halyard](#) through the metal ring half way up the front of the [mast](#).
3. Pull the [jib halyard](#) so that you have two equal tails by the [gooseneck](#). Secure the [jib halyard](#) tails.

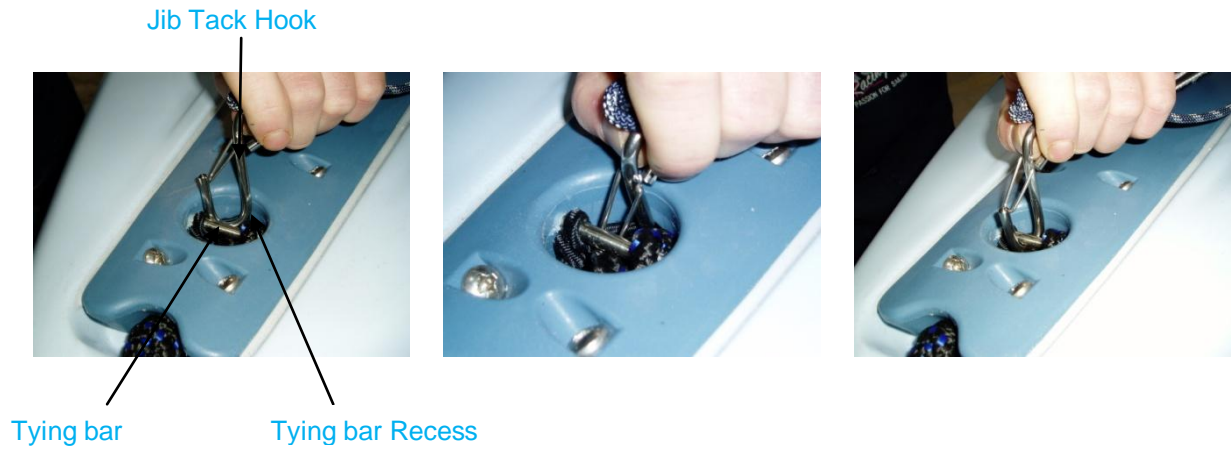
**Now step the mast, following the instructions in Section 3.4 – Stepping the Mast.**

### To rig the jib:

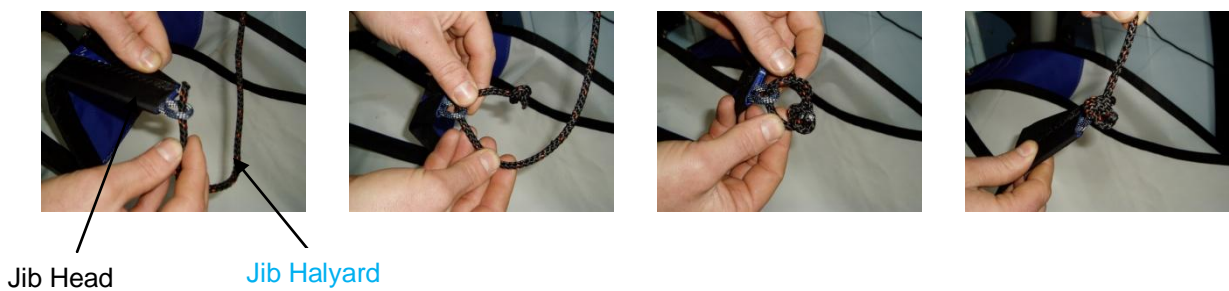
1. Unroll the [jib](#).
2. Take the [jib tack hook](#) from the jib pack and tie it to the rope sewn into the [tack](#) of the [jib](#), using a [knot on knot](#).



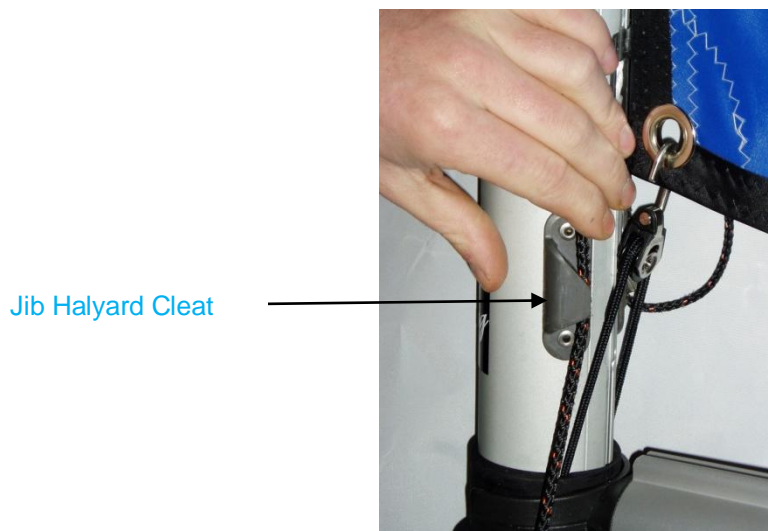
3. Insert the [jib tack hook](#) aft of the [tying bar](#) and push it down into the [tying bar recess](#). Rotate the [jib tack hook](#) 90° and pull up, ensuring that the hook clips onto the [tying bar](#).



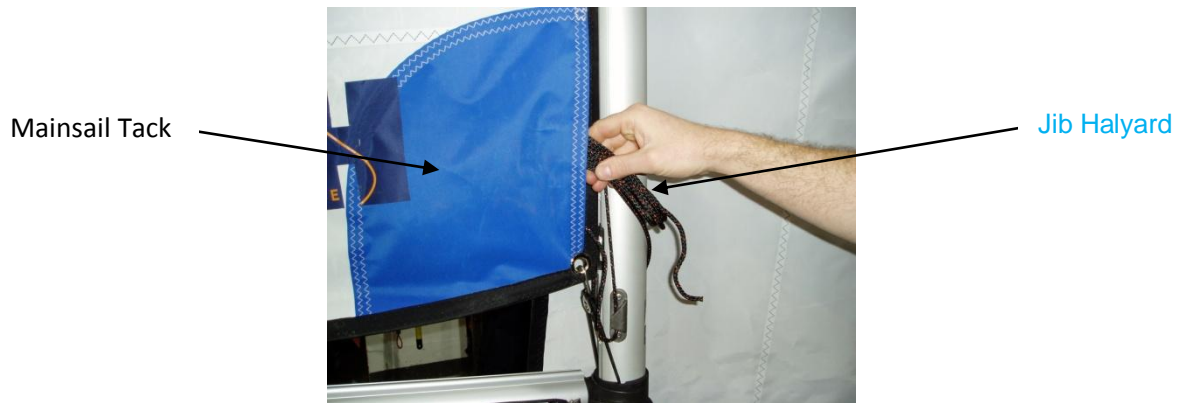
4. Tie one end of the **jib halyard** onto the loop of rope sewn into the **head** of the **jib**, using a **knot-on-knot**.



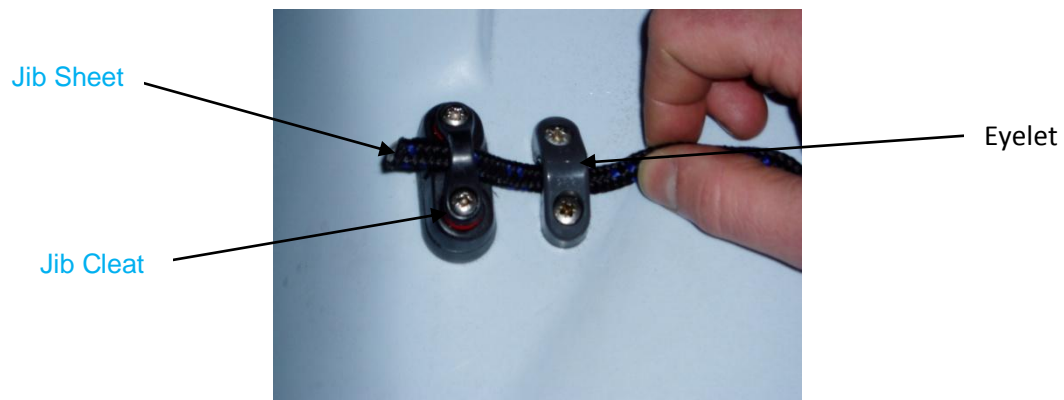
5. Pull the **jib** up and secure the **jib halyard** in the **cleat** on the left-hand side of the **mast**, above the **gooseneck**. Only apply enough halyard tension to prevent the front of the **jib** from sagging whilst sailing.



6. Coil up the **jib halyard** and stow it in the pocket on the **tack** of the **mainsail**.



7. Take the **jib sheet** from the jib pack.
8. Thread one end of the **jib sheet** through the metal eyelet in the **clew** of the **jib**, and tie a **figure-of-eight** knot in the end.
9. Take the other end of the **jib sheet**, lead it through the eyelet on the **starboard** side of the boat, and through the **jib cleat**.
10. Lead the end of the **jib sheet** across the boat and through the **jib cleat** and eyelet on the **port** side of the boat.



11. Lead the end of the **jib sheet** through the metal eyelet in the **clew** of the **jib**, in the opposite direction to the original end.
12. Tie a **figure-of-eight** knot in the end of the **jib sheet**.

## 3.8 The Daggerboard

To complete this section, you will need:

- The [daggerboard](#)
- [Daggerboard](#) retaining elastic
- [Daggerboard](#) retaining clip

- 1) Tie a [figure-of-eight knot](#) in the end of the [daggerboard](#) elastic and thread it through the hole in the handle.
- 2) Tie the other end to the plastic clip using a knot on a knot.



The Daggerboard Handle

**Please note comments in section 5.2 regarding water ingress in foils.**

## 3.9 The Rudder

To complete this section, you will require:

- The [rudder](#)
- The [rudder stock](#)
- The [Tiller](#)
- The [Tiller](#) retaining screw
- The [Tiller](#) extension

- 1) Remove the rudder assembly from the foil pack and locate the components- the

self-tapping screw is in a small bag, in with the tiller arm.

2) Slide the **Tiller** into the **stock** and fix it with the self-tapping screw.



The Rudder Fitted in the Stock

Tie the **rudder downhaul block** onto the rope from the Rudder blade.

4) Attach the **Tiller extension** to the **Tiller**.

**Please note comments in section 5.2 regarding water ingress in foils.**

## 3.10 Upgrades

As part of your Sport upgrade you are supplied with side toestraps and a Ratchet Mainsheet Block. To fit them follow the following instructions.

### Side Toestraps

For this task you will need:

- 2 x side toestraps from the Sport / Pro packs
  - 4 x plastic plates
  - 8 x M6 x 20 Machine Screws
  - A medium flat tip screwdriver
  - A #3 Pozzi or large Philips screwdriver
1. Remove the plastic plugs from the brass inserts on the side tanks
  2. Assemble the plastic plates toestraps and screws
  3. Align the screws with the brass inserts and gently tighten them in a few turns. Do this for both screws on each plate before fully tightening.

4. If aligning both screws is a problem re drill the toestrap holes with a 7mm drill bit. This will allow more

## Mainsheet ratchet

For this you will need:

- The Ratchet supplied in the Sport Upgrade pack
  - Pair of pliers
  - Knife or pair of scissors
1. Using the pliers undo the shackle securing the original mainsheet block in place.
  2. Remove the block and spring.
  3. By reusing the spring refit the new ratchet block. This can be made easier by compressing the spring with cable ties and cutting them then everything is in place.

## 3.11 Completion

Now you are almost ready to go QUBA sailing. All that is left to do is:

- Fit the **rudder** to the back of the boat
  - Check that all the knots and **shackles** are tied securely.
  - Check that the **bung** is securely in the back of the boat.
1. To fit the **rudder**, simply line up the pins on the **rudder stock** with the fitting on the back of the boat and push down until the retaining clip 'clicks' into place. The **rudder** may be difficult to get on at first – all it will need is a simple wiggle from side to side whilst pushing down.
  2. To remove the **rudder**, simply push the retaining clip in and pull the **rudder stock** up.



## TIME TO GO SAILING!

After **launching**, the **rudder** is lowered by pulling the **rudder downhaul line** and cleating it. The **daggerboard** can be inserted in the **daggerboard case** when the water is deep enough, make sure the retaining elastic is clipped to the mast! It is normally best to leave the **kicking strap** loose while launching, pulling it on as appropriate once you are sailing.

### TOP TIP

**Make sure that you un-cleat the rudder and raise the daggerboard before coming ashore.**

## 4. SAILING HINTS

### 4.1 Introduction

The RS QUBA is a very rewarding boat to sail – to fully appreciate its handling, you should be comfortable with the basic techniques of sailing small boats. If you lack confidence or feel that a refresher is in order, there are many approved sailing schools which use the RS QUBA. See [www.rya.org.uk](http://www.rya.org.uk) for more information, or follow the link from [www.rssailing.com](http://www.rssailing.com) to find your local RS Academy.

While we offer you a few hints to aid your enjoyment of your new boat, they should not be considered as a substitute for an approved course in dinghy sailing. In order to build your confidence and familiarise yourself with your new boat, we recommend that you choose a fairly quiet day with a steady wind for your first outing.

### 4.2 Launching

With the sails fully hoisted, attach the **rudder** to the **transom**. Lead the **daggerboard** retaining elastic around the **mast** and clip it back on itself. Leave this in place while sailing. The boat should be wheeled into the water, keeping it **head to wind** as far as possible.

If you have a crew, s/he can hold the boat **head to wind** whilst the trolley is stowed ashore.

#### TOP TIP

**If the tide is coming in as you launch, make sure that you leave the trolley far enough up the beach that it will not be swept away.**

## 4.3 Leaving the Beach

The easiest way to get going is for the **helm** to hop aboard while the **crew** holds the boat. The helm should put a little **daggerboard** down, with the shockcord with the plastic-tubing cover pulled forward, then move back to his normal position, and pull gently on the **rudder downhaul** to lower some of the **rudder blade**. Then, s/he may instruct the crew to push the **bow off the wind** and climb in. The crew will then lower the **daggerboard** as depth allows. The shockcord acts as a friction device and a retainer when the board is fully down. Thus, as soon as the is deep enough, the **daggerboard** should be fully lowered, and the shockcord pulled back over the top of the board, so that it is secure in the event of a fully-inverted **capsize**.

### Top Tip

**Make sure the daggerboard is secured to the boat using the elastic retainer.**

The **singlehanded** sailor may choose to ask someone to help them to launch. If launching alone, stand in the water alongside the **gunwale**, holding the boat **head to wind**. Lower part of the **daggerboard** and **rudder**, and then push the **bow off the wind** while hopping in.

### Top Tip

If you are using the **jib**, pulling this **sail** in as you leave the beach will ensure that the **bow** continues to swing away from the direction that the wind is blowing from.

As soon the water is deep enough, make sure that you lower the **rudder blade** fully by pulling hard on the **rudder downhaul**. You will know it is fully down if you feel a gentle “thud” as the front face of the blade hits the front face of the **stock**. Cleat the downhaul and tidy it by winding it around the **tiller**. Pull the sail in and you are away!

For the best performance, you should ensure that you and your crew position yourselves so that the boat is sailing through the water as flat as possible.

Watch the **trim** (**fore** and **aft**) and the **heel**. The boat should always be sailed as upright as possible.

#### Top Tip

As a general rule, sit further forward in lighter winds and further aft in stronger breezes.

## 4.4 Sailing Close-Hauled and Tacking

When sailing **close-hauled**, or as close as possible to the wind, it is important to get the **boom** as near as possible to the **centreline**, especially when sailing the RS QUBA with the **mainsail** and **jib**. The **kicking strap** should be firmly tensioned for **upwind** work. To pull it on, quickly put the boat **head to wind**. You should hold the **tiller extension** across your body, with a knuckles-up grip, enabling you to use one or two fingers as a temporary **cleat** when adjusting the **mainsheet**.

The **jib sheet** should be pulled in fairly hard when sailing **upwind** – tighter in stronger winds and less so in lighter winds. Sail to the **jib tell-tails**, keeping the one on the back of the sail streaming and the one closest to you either streaming or lifting upwards slightly.

To **tack**, push the **tiller extension** away from you and, as the boat starts to turn, step across the **cockpit** facing forwards. Once the boat has completed the turn, bring the **tiller** back into the centre before sitting down on the new side, with the **tiller extension** behind your back. When you are settled, swap the **mainsheet** and the **tiller extension** into the new hands.

#### HINT

When sailing **single-handed**, sit with a leg either side of the **thwart** area when sailing **close-hauled** or **reaching**. If there is a **lull** in the wind, simply slide your backside down off the **gunwhale** and onto the **thwart**.

If the boat slows right down and feels lifeless when [close-hauled](#), you could be sailing too close to the wind. Ease the [mainsheet](#) and 'bear off' away from the wind for a while to get the boat going again.

## 4.5 Sailing Downwind and Gybing

When sailing [downwind](#), both sails should be let out as far as possible. [Single-handed](#) sailors should adopt a relaxing, reclined pose astride the [thwart](#) area, leaning back against the side deck. To [gybe](#), pull the [tiller](#) towards you and, as the boat starts to turn, step across the [cockpit](#) facing forward. Once the boat has completed the turn, bring the [tiller](#) back into the centre before sitting down on the new side, with the [tiller extension](#) behind your back. Often, the [boom](#) will not want to come across until you have nearly completed the [gybe](#), so it often pays to give the [mainsheet](#) a tweak to encourage the [boom](#) over at the moment that you want it to come! Once you are settled, swap the [mainsheet](#) and the [tiller extension](#) into the new hands.

### Top Tip

**Be aware that the boom can come across with some force during a gybe (intentional or not!) so mind your head and watch for unintentional gybes.**

## 4.6 Reefing

Reefing reduces the sail area, and is an effective and essential way to continue sailing in winds that would otherwise keep less experienced or younger sailors ashore. There are two ways to reef a RS QUBA Sport mainsail:

### Round-Mast Furling – RS Quba Club

This method of reefing is applicable to the RS QUBA Club mainsail, when sailed without a jib.

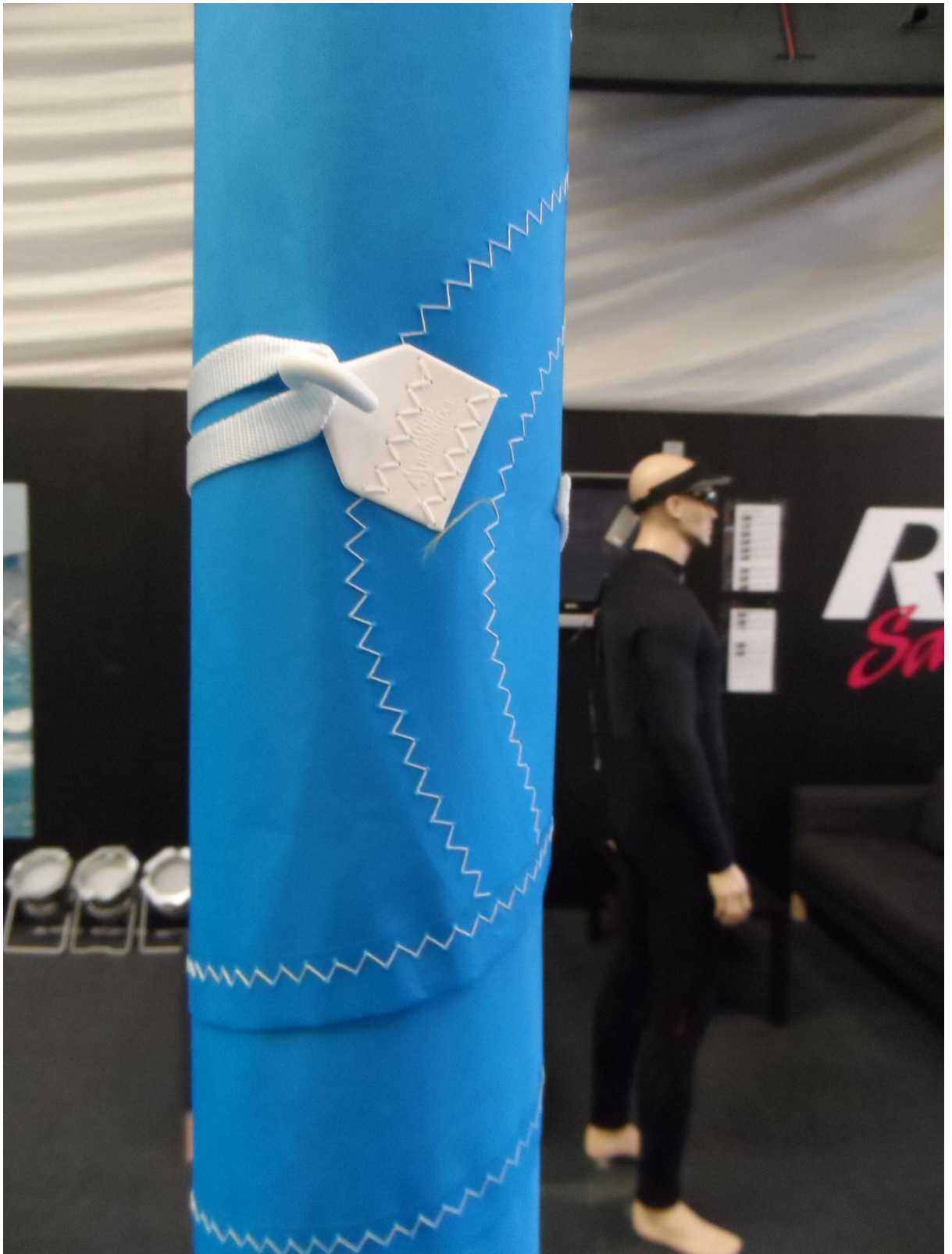
1. Release the clew from the hook.
2. Simply wrap the sail around the mast until you reach the desired size.



3. Release the outhaul, re-attach the clew, and pull on the desired outhaul tension.



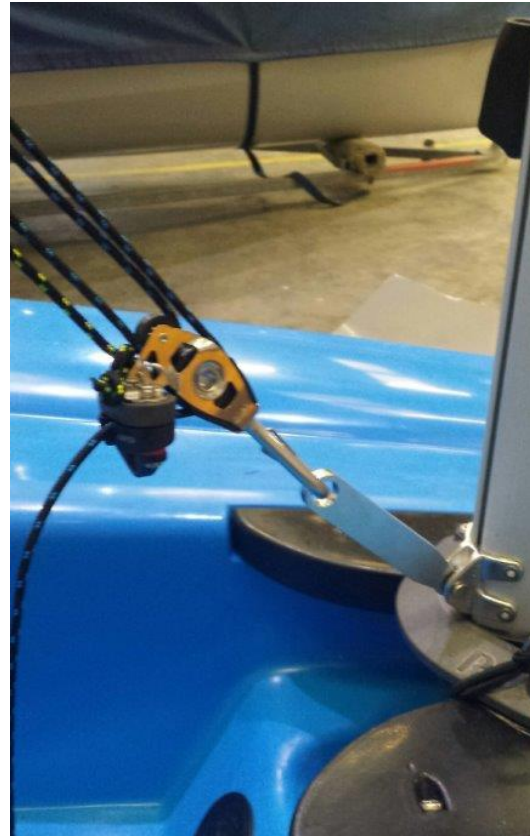
The sleeve and tracked (RS Quba Club and Sport) have a strap and hook at the clew so the sail can be furled around the mast should you wish to stow it during breaks in sailing.



## Tracked Mast Furling – RS Quba Sport

This method of reefing is applicable to the RS QUBA Sport mainsail, when sailed without a jib. It uses a similar technique as mentioned for the Club mast. However can be performed on the water.

1. Unhook the Sport kicker from the reefing handle on the mast.
2. Uncleat the outhaul on the boom
3. Using the Kicker / reefing handle rotate the mast 360 degrees once or twice depending on how many reefs you require.
4. Pull the out haul tight and recleat on the boom.



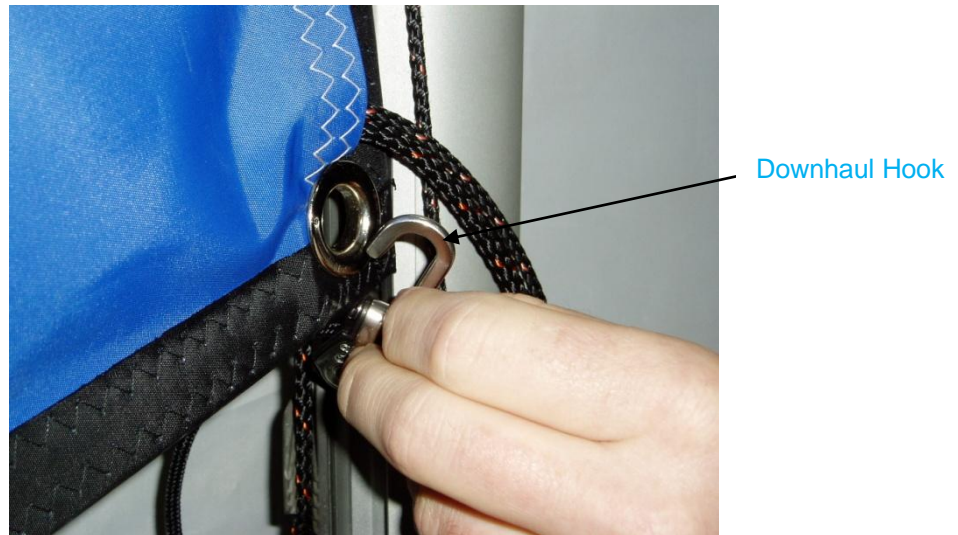
5. Reconnect the kicker hook onto the reefing handle and pull tight.
6. Continue sailing.



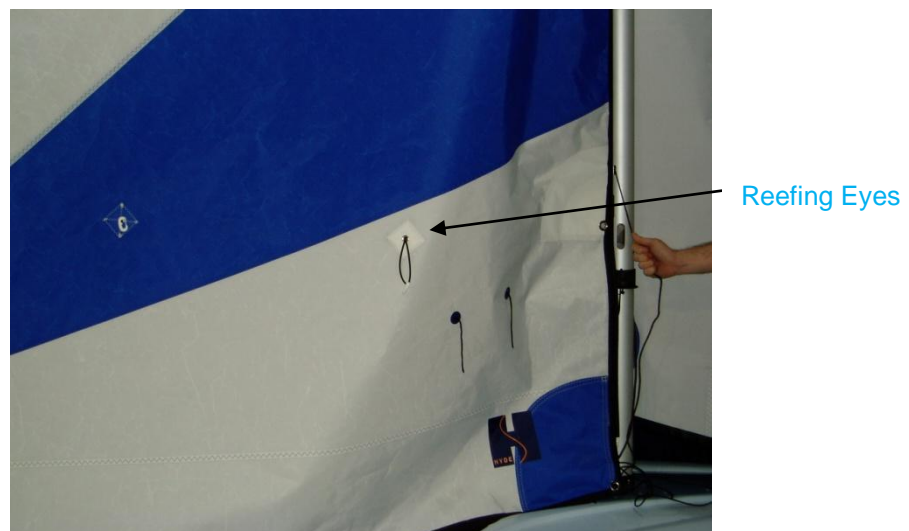
## Slab Reefing

This method of reefing is applicable to the RS QUBA Sport mainsail, when sailing with the jib.

1. Release the **mainsail downhaul line** out of the cleat, and unhook the **downhaul hook** from the metal eyelet in the **tack** of the **mainsail**.



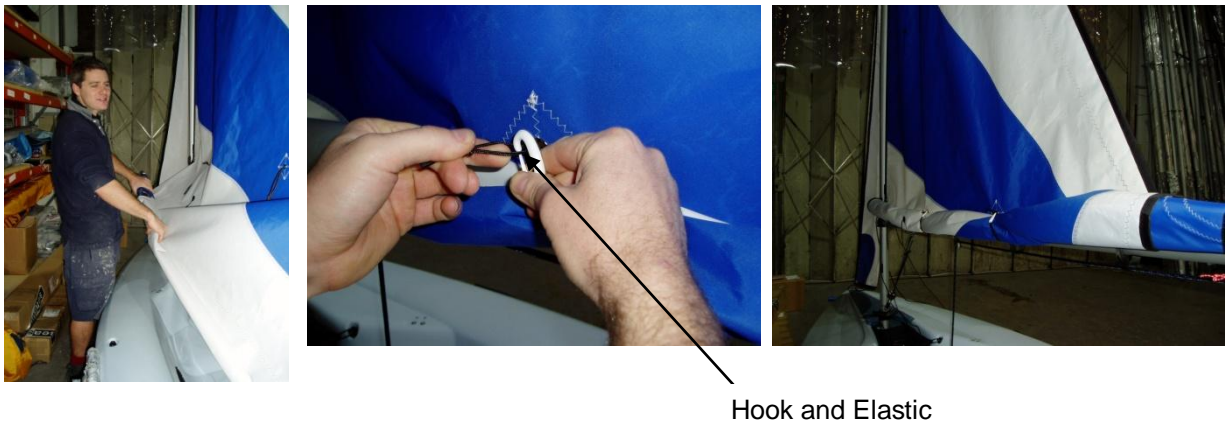
2. Ease the **kicker cascade**.
3. Ease the **main halyard**.
4. Ease the **outhaul** and unhook the **sail slider hook** from the metal eyelet in the **clew** of the **mainsail**.
5. Pull the **mainsail** down until the line of **reefing eyes** in the **mainsail** is level with the **boom**.



6. Clip the **sail hook** onto the new metal eyelet in the **leech** of the **mainsail**.



7. Roll up the excess **mainsail** and tie it to the **boom**. We recommend using a loop of elastic attached to a plastic hook.

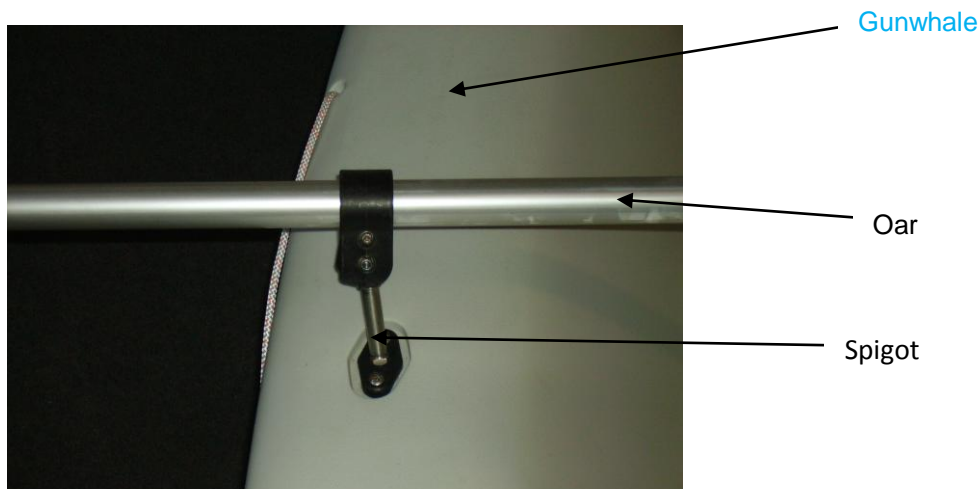


8. Re-apply tension to the **kicker cascade**.
9. Hook the **downhaul line** onto the metal eyelet in the new **tack** of the **mainsail**, and apply tension as required.

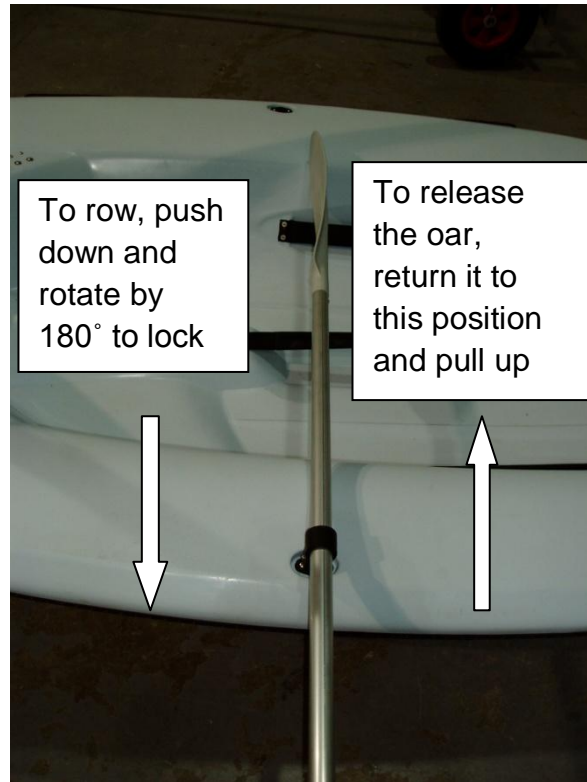
Sailing in strong winds can be great fun, so become familiar with the reefing systems and get back out there!

## 4.7 Using Oars and the Rowing Kit

The RS QUBA Rowing Kit may be purchased from LDC Racing Sailboats or from your local RS Dealer, enabling you to use your sailing boat as a [tender](#) or small rowing vessel. The oars simply locate in the [rowlock holes](#) in the [gunwhale](#).



To locate and lock the oars in position, push the spigot in the [rowlock hole](#) and rotate the complete oar, so that the paddle is over the [cockpit](#) and the handle is over the side of the boat. As you turn the oar into the correct position, with the paddle over the side and the handle over the [cockpit](#), you will feel the oar lock into place. The oar will not pull out. To release the oar, reverse the procedure.



Here, the oar is in the correct position and ready to be used.



## 4.8 Using the Top Cover

The top cover is a very simple water-proof cover that can keep the [spars](#) and sails dry and out of sight when the boat is not in use. It is best to attach the top cover from the [bow](#) and work backwards, pulling the elastic drop cloth into place.

## 5. MAINTENANCE

### 5.1 Boat Care

The RS QUBA is made using Comptec PE3, a three-layer polyethylene construction. This is stiff and light, but will dent if subjected to point loading. The boat should be supported ashore on an approved RS [trolley](#), as the [hull](#) may distort if not supported properly. For long-term storage, it is better to support the boat on a rack, in slings, or another type of support that spreads the weight and avoids point loads. The [hull](#) can also be stored on the [transom](#), but never store the boat for long periods on its side. When dealing with a marine environment, equipment gets wet; this in itself is not a problem. The problem starts when moisture is trapped for any length of time. Therefore, it is very important to store the boat properly ashore.

#### **Keep your dinghy drained and well ventilated**

Ensure that the boat is stored with the [bow](#) raised to allow water to drain away.

#### **Wash with fresh water**

Fresh water evaporates far more quickly than salt water so, if your dinghy has been sailed in salt water, rinse it thoroughly. The fittings will also work better if regularly washed.

Any stubborn marks on the [hull](#) can be removed with a light detergent, such as washing up liquid. Always test cleaning products on a small, inconspicuous part of the deck before applying to the whole boat.

Hull damage falls into three categories:

- **SERIOUS** – large hole, split, crack, or worse. Don't be too distressed! Get the remnants back to RS Racing for assessment, or send us a picture if you are a long way from us.

- **MEDIUM** – small hole or split. If this occurs during an event, sailing can often be continued as long as leaking can be prevented by drying the area and applying strong adhesive tape. CAUTION – if the damage is near to a heavily loaded point, then the surrounding area should be closely examined to ensure that it will accept the loads. Get the damage professionally repaired as soon as possible.
- **SMALL** – dents, scratching. This type of damage is not boat threatening.

Comptec PE3 cannot be repaired in the same way as fibre glass. Some scratching can be removed by RS Sailing staff, but dents cannot. Therefore we suggest you treat your boat with as much care as you would if it were fibre glass. More serious repairs can be carried out by RS Sailing staff; however, the repair will never be invisible, due to the nature of the material.

The joy of owning an RS QUBA is that it is very hard wearing, and any dents and scratches it receives will not affect the structural integrity of the hull.

## 5.2 Foil Care

RS Sailing foils are manufactured from anodised Aluminium extrusions with injection moulded glass reinforced Nylon ends. Lower mouldings are bonded in with polyurethane adhesive sealant. Upper mouldings are riveted or screwed in. The upper daggerboard moulding shows the type of boat.

Lower mouldings are sealed, however over time there may be some water ingress. If this occurs foils should be inverted to allow water removal through the drain holes in the top of the moulding.

Foils contain closed cell foam to ensure buoyancy and limit potential water ingress.

### Maintenance

- Foils should be rinsed with fresh water after use.

- Anodising will prevent surface corrosion, however if surface damage does occur the aluminium should be polished with wax polish e.g. car polish.
- Nylon mouldings are maintenance free but can be replaced if damaged.

If you run aground hard with the [daggerboard](#) down, you should check that the [hull](#) has not been punctured at the front or the trailing edge of the [daggerboard case](#). Special 'shock absorbing' pads have been fitted at these points to reduce the risk of damage, and these can be replaced if damaged.

If you are going to trail your boat frequently, you may wish to invest in some RS Racing padded rudder bags. These will protect your RS QUBA from any damage caused by the foils.

## 5.3 Spar Care

The [mast](#) and [boom](#) are aluminium. Wash with fresh water as often as possible, both inside and out. Check all of the riveted fittings on a regular basis for any signs of corrosion or wear.

## 5.4 Sail Care

The [mainsail](#) should be rolled and stored dry, out of direct sunlight. When using a new sail for the first time, try to avoid extreme conditions as high loads on new sailcloth can diminish the racing life of the sail.

If your sail is stained in any way, try to remove it using a light detergent and warm water. **DO NOT** attempt to launder the sail yourself.

A sail can be temporarily repaired using a self-adhesive cloth tape, such as [Dacron](#) or [Mylar](#). The sail should be returned to a sail maker for a professional repair. Check for wear and tear, especially around the [batten pockets](#), on a regular basis.



## **5.5 Fixtures and Fittings**

All of the fixtures and fittings have been designed for a specific purpose in the boat. These items may break when placed under any unnecessary load, or when used for a different function to their intended purpose. To ensure optimum performance, wash the fixtures and fittings with fresh water regularly, checking shackles, bolts, etc. for tightness.

## **6. WARRANTY**

- 1.** This warranty is given in addition to all rights given by statute or otherwise.
- 2.** RS Sailing warrants all boats and component parts manufactured by it to be free from defects in materials and workmanship under normal use and circumstances, and the exercise of prudent seamanship, for a period of twelve (12) months from the date of commissioning by the original owner. The owner must exercise routine maintenance and care.
- 3.** This warranty does not apply to defects in surface coatings caused by weathering or normal use and wear.
- 4.** This warranty does not apply if the boat has been altered, modified, or repaired without prior written approval of RS Sailing. Any changes to the hull structure, deck structure, rig, or foils without the written approval of RS Sailing will void this warranty.
- 5.** Warranty claims for materials or equipment not manufactured by RS Sailing can be made directly to the relevant manufacturer. RS Sailing warrants that these parts were installed correctly and according to the instructions provided by the manufacturer.
- 6.** Warranty claims shall be made to RS Sailing as soon as practicable and, in any event, within 28 days of discovery of the defect. No repairs under warranty are to be undertaken without written approval of RS Sailing.
- 7.** Upon approval of a warranty claim, RS Sailing may, at its expense, repair or replace the component. In all cases, the replacement will be equal in value to the original component.
- 8.** Due to the continuing evolution of the marine market, RS Sailing reserves the right to change the design, material, or construction of its products without incurring any obligation to incorporate such changes in products already built or in use.

## 7. GLOSSARY

### A

Aft	At the back
Anchor Line	Rope that attaches the anchor to the boat
Astern	Behind the boat
Assymetric	Spinnaker flown from a retractable pole at the bow

### B

Back	To 'back the sail'; allowing the wind to fill the back of the sail
Bailer	A bucket or other container used for bailing water
Batten	A thin strip of wood/plastic inserted in the sail to keep it flat
Batten Key	A key used to adjust the batten
Batten Pocket	A pocket on the sail that holds the batten
Beam	Width of the boat at the widest point at the side. The phrase 'wind on the beam' means that the wind is coming from the side
Bear Away	To turn downwind
Beat	To sail a zig-zag course to make progress upwind
Beaufort Scale	A measure of the wind strength, from Force 1 to Force 12
Beckett	A metal loop attached to the bottom of a block
Bilge Rail	The moulded line that marks the transition from the side to the bottom of the hull
Block	A pulley used for sail control lines
Boom	The spar at the bottom edge of the sail
Bow	The front of the boat
Bowline	A useful and reliable knot with a loop in it. See Appendix 9.3 Three Essential Knots
Bow Snubber	The part of the trolley that the bow rests on
Bowsprit	The pole that protrudes from the front of the hull, to which the gennaker is attached
Builder's Plate	Plate that contains build information
Bung	A stopper for the drain hole
Buoy	Floating object attached to the bottom of the sea; used variously for navigation, mooring, and to mark out a race course
Buoyancy Aid	Helps you to stay afloat if you fall in the water
Buoyancy Compartment	Water-tight compartment in the hull that maintains buoyancy
Burgee	Small flag at the top of the mast to show wind direction

### C

Capsize	To overturn
Capsize Recovery	To right, or recover, the boat after a capsize

Catamaran	A boat with two hulls
Centreline	An imaginary line that runs through the centre of the hull, from the bow to the stern
Chart Datum	Depths shown on a navigation chart, at the lowest possible state of the tide
Chute	The tube under the foredeck, in which the genneker is stored
Cleat	A device to grip ropes and hold them in place; some grip automatically, while others need the rope tying around them
Clew	Lower corner of the sail, closest to the stern
Close Hauled	Sailing as close to the wind as you can; point of sailing to sail upwind
Cockpit	The open area in the boat providing space for the helm and the crew
Collision Regulations	The 'rules of the road' employed to avoid collisions
Compass Rose	The compass shown on a chart to aid navigation
Crew	Helps the helmsman to sail the boat; usually handles the jib sheets

## D

Dacron	A brand of polyester sailcloth that is wrinkle-resistant and strong
Daggerboard	The foil that sits below the hull to counteract the sideways push of the wind, and to create forward motion
Daggerboard Case	The casing in the hull through which the daggerboard is pushed into place
Deck	A floor-like surface occupying part of the hull
Deck Moulding	A moulded deck
Downhaul	Applies downwards tension to a sail
Downwind	To sail in the direction that the wind is blowing
Drain Hole	A hole in the hull from which trapped water can be drained
Draught	The depth of the vessel below the surface

## E

Ease	To 'ease sheets' means to let the sail out gently
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## F

Figure-of-Eight Knot	A stopper knot. See Appendix 9.3 Three Essential Knots
Foils	The daggerboard and the rudder
Foot	The bottom edge of a sail
Fore	Towards the front of the boat
Furling Handle	A handle attached to the bottom of the mast, used for furling the mainsail

## **G**

Gennaker	A sail that is a cross between a genoa and a spinnaker, hoisted when sailing downwind
Gennaker Downhaul	The rope used to pull the gennaker down
Gennaker Halyard	The rope used to pull the gennaker up
Gooseneck	The 'jaws' of the boom that clip onto the mast
Gooseneck Mast Collar	A collar on the mast, on which the gooseneck sits
Gunwhale	The top edge of the hull, that you sit on when leaning out to balance the boat
Gybe	To change direction by turning the stern of the boat through the wind

## **H**

Halyard	A rope used to hoist sails
Head	The top corner of a sail
'Head to Wind'	To point the bow in the direction that the wind is blowing from, causing the sails to flap
Head Sheave	A fitting that sits on the top of the mast, through which the main halyard is threaded
'Heave To'	To stop the boat by easing the mainsheet and backing the jib
Heel	A boat 'heels' when it leans over due to the sideways force of the wind
Helm/Helmsman	The person who steers the boat, or another name for the tiller
Hoist	To pull a sail up
Horn Cleat	A type of cleat on which a rope is made fast by wrapping around the 'horn'
Hull	The hollow, lower-most part of the boat, floating partially submerged and supporting the rest of the boat

## **I**

Inglefield Clip	A hook-shaped clip which attaches to an identical hook-shaped clip
'Into the Wind'	To point the bow in the direction that the wind is blowing from, causing the sails to flap
Inversion	A capsizing where the boat turns upside down, or 'turtles'

## **J**

Jammer	Another word for a cleat
Jib	The small sail in front of the mast
Jib Sheet	The rope used to control the jib

## **K**

Kicking Cascade	The rope system that is attached to the base of the mast and to the boom, helping to hold the boom down
-----------------	---

Knot	A measurement of speed, based on one minute of latitude
Knot on Knot	A knot used to tie an end of rope to a sail or a fitting. See Appendix 9.3 Three Essential Knots

## L

Launching	To leave the slipway
Latitude	Imaginary lines running parallel round the globe from east to west. They are used in the measurement of position and distance on a navigation chart
Leech	The back edge of a sail
Leeward	The part of the boat that is furthest away from the direction in which the wind is blowing
Leverage	The result of using crew weight as a 'lever' to counteract heel caused by the wind
Lie To	A way of stopping the boat temporarily by easing sheets on a close reach
Lifejacket	Unlike a buoyancy aid, a lifejacket will keep a person fully afloat with their head clear of the water
Lifting Handle	Handles located at the back of the boat, used when lifting
Longitude	Imaginary lines running round the globe from north to south, used with lines of latitude to measure position and distance
Luff	The front edge of a sail
Lull	When the wind briefly stops blowing as hard, there is a 'lull' in the wind

## M

Mainsail	The largest sail on a boat
Mainsail Clew Hook	The fitting that is attached to the sail slider on the boom, which holds the sail in place
Mainsheet	The rope used to control the mainsail
Mainsheet Bridle	The rope that runs across the transom of the boat, to which the mainsheet is attached
Mast Foot	The bottom of the mast
Mast Gate	The fitting that, when shut, holds the mast in place
Mast-Gate Pin	The pin that holds the mast gate shut
Mast Track	The groove that runs up the back of the mast into which the luff of the mainsail is fed
Mast Well	The 'well' in the hull in which the mast sits, sometimes referred to as the mast cup
Mainsheet Centre Block	The main block, usually fixed to the cockpit floor, through which the mainsheet passes
Man Overboard Recovery	The act of recovering a 'man overboard' from the water
Mast	The spar that sails are hoisted up
Mast Lower Section	The bottom section of a two-piece mast
Mast Top Section	The top section of a two-piece mast

Meteorology The study of weather forecasting  
Moor To tie a boat to a fixed object  
Mylar A brand of strong, thin, polyester film used to make racing sails

## N

National Sailing Federation Body that governs sailing in a nation. In the UK, this is the Royal Yachting Association  
Navigation To find a way from one point to the other

## O

'Off the Wind' To sail in the direction that the wind is blowing  
Outhaul The control line that applies tension to the foot of the sail, by pulling the sail along the boom

## P

Painter The rope at the bow used to tie the boat to a fixed object  
Pontoon A floating jetty to moor your boat to  
Port The left-hand side of the boat, when facing forwards

## R

RS Dealer A third-party who sells the RS Range  
Reach Sailing with the wind on the side of the boat:  
Beam Reach: Point of sailing in which the wind is blowing towards the sail at 90°  
Broad Reach: Point of sailing between a beam reach and a run (sailing downwind)  
Close Reach: Point of sailing between a beam reach and a beat (sailing upwind). Sometimes referred to as a 'tight' reach

Reef To make the sails smaller in strong winds  
Reefing Eyes Metal eyelets in the mainsail that enable it to be reefed

Road Base A trolley that you place your boat and launching trolley upon to trail behind a vehicle

Rudder The foil that, when attached to the stern, controls the direction that the boat moves in

Rudder Blade The large, rigid, thin part of the rudder  
Rudder Downhaul The control line that enables you to pull the rudder into place

Rudder Pintle The fitting on the transom onto which the rudder stock fits

Rudder Stock The top part of the rudder, usually including the tiller, into which the rudder blade fits, and which then attaches to the rudder pintle

Run To 'run with the wind', or to sail in the direction that the wind is blowing

## S

Safety-Boat Cover	Support boats, usually RIBs, in case of emergency
Sail	An area of material attached to the boat that uses the wind to create forward motion
Sailmaker	A manufacturer of sails
Sail Number	The unique number allocated to a boat, displayed on the sail when racing
Sail Pressure	A sail has 'pressure' when it is working with the wind to create motion
Sailing Regatta	An event that usually comprises of a number of sailing races
Shackle	A metal fitting for attaching ropes to blocks, etc.
Sheet	A rope that controls a sail
Side Safety Line	The line that runs along the side of the hull
Single Handed	To sail a boat alone
Spars	The poles, usually carbon or aluminium, to which the sail is attached
Spinnaker	A large sail, usually triangular, that is hoisted when sailing downwind
Starboard	The right-hand side of the boat, when facing forwards
Step	When mast has been installed in a boat, it has been 'stepped', or placed on the mast step
Stern	The back of the boat
Stern Lifting Handles	The handles at the stern, used for lifting the boat

## T

Tack	<ol style="list-style-type: none"><li>1. To change direction by turning the bow of the boat through the wind</li><li>2. The bottom front corner of the sail</li></ol>
Tying bar	The metal bar situated at the front of the boat, onto which the tack of the jib is attached
Tying bar Recess	Recess in the foredeck in which the tying bar is fitted
Tender	A small vessel, usually used to transport crew to a larger vessel
Tiller	The stick attached to the rudder, used to steer the boat
Tiller Extension	A pole attached to the tiller to extend its reach, usually used when hiking
Toe Straps	The straps to tuck your feet under when you lean out to balance the boat
Towing Line	A rope attached to the boat, used to connect to a towing vessel
Transom	The vertical surface at the back of the boat
Trim	Keeping the boat level fore and aft
Trimaran	A boat with three hulls
Trolley	A wheeled structure, used to move a boat around on land



## **U**

'Under Weigh'

A term derived from the act of 'weighing' anchor, meaning to be in motion

Upwind

To sail against the direction in which the wind is blowing, sometimes called a 'beat' or 'beating against the wind'

## **W**

Wetsuit

Neoprene sailing suit designed to keep you warm when wet

Windward

The part of the boat closest to the direction in which the wind is blowing

## **8. APPENDIX**

### **8.1 Useful Websites & Recommended Reading**

RYA Go Sailing: Activity book for Young Sailors. ISBN 1-905104-36-7

RYA Go Sailing: A Practical Handbook For Young People. ISBN 9-781905-10-7

RYA Advanced Sailing Handbook. ISBN 1-905104-05-07

RYA National Sailing Scheme Syllabus and Logbook ISBN 0-901501-45

RYA Start Sailing Beginner's Handbook ISBN 0-901501-82-4

Royal Yachting Association [www.rya.org.uk](http://www.rya.org.uk)

RNLI – for help and advice about safety at sea – [www.rnli.org.uk](http://www.rnli.org.uk)

RS Class Association and Manufacturers:

[www.rs-association.com](http://www.rs-association.com)

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

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

## 8.2 RS QUBA Life Cycle

### Did you know that you can recycle your RS QUBA?

The polyethylene hull is manufactured using a process called rotomoulding, which involves placing high-quality polymer powder into a metal mould. The mould is simultaneously rotated and heated so that the powder adheres to the inner surface of the mould, melting to form the hull.



When your QUBA has reached the end of its life, it can be sent back to the manufacturers where it is 'chipped' into small pieces. These pieces are used in place of the polymer powder in the rotomoulding process to manufacture products that do not require a high grade of polyethylene. Your RS QUBA could become a polyethylene junction box housing underground cables!



Visit the following sites for more information about the rotomoulding process and its environmental impact:

[www.rototek.co.uk](http://www.rototek.co.uk)

[www.ids-access.co.uk](http://www.ids-access.co.uk)

<http://www.ecop.org.uk/docs/ecop10.pdf>

## 8.3 Three Essential Knots

### Bowline

The bowline is a reliable knot used for tying a loop in rope. It is extremely strong when under load, and unties easily once free of load. Some people use the rhyme “the rabbit comes out of the hole, round the tree, and back down the hole” as a way of remembering how to tie a bowline.

Take the end of the piece of rope and assess how big a loop you require



Make a small loop in the rope



Take the tail and lead it up through the loop



Pass the tail around the standing rope



Thread the tail back through the loop, and tighten



## **Knot-on-Knot**

A 'knot-on-knot' is useful for tying the end of a rope to a sail or a fitting, and is particularly reliable due to the manner in which the rope binds upon itself.

Tie a single overhand knot in the end of the rope. Feed the rope through the sail or the fitting, and tie another overhand knot in the rope.



Pull the rope tight so that the rope binds on the original overhand knot.



## Figure-of-Eight

The 'figure-of-eight' knot is used as a stopper knot, preventing ropes from slipping through fittings. Like the bowline, the 'figure-of-eight' knot unties easily once free of load.

Make a loop in the end of the rope



Lead the tail underneath the standing end of the rope



Lead the tail of the rope back through the loop, and tighten







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