RIGGING GUIDE





t. Live it. L Sail i

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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 Vision 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 Vision 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 Vision, 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 Vision.

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 For details on your local RS dealer, please visit www.rssailing.com

2. RS VISION TECHNICAL DATA

Length Overall (LOA):	4.6 m	15'0"
Beam:	1.75 m	5' 8"
Hull Weight:	130 kg	275 lb
Reefing Mainsail:	9 m²	95 ft ²
3 Batten Mainsail:	9 m²	95 ft ²
Jib:	3.2 m ²	33 ft ²
Gennnaker:	12.6 m ²	130 ft ²

3. COMMISSIONING

3.1 Preparation

Your RS Vision comes complete with all the components necessary to take the boat sailing. In order to commission it, you will need the following tools:

- Pliers or a shackle key
- Small, flat-bladed screw driver
- Small Pozidrive screwdriver
- 10mm Spanner
- PVC electrician's tape

DO NOT use a knife or other sharp object to cut through packaging containing parts – you may damage the contents!

Whilst your RS Vision 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 also important to check such items prior to sailing regularly.

3.2 Unpacking

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

- 1 x RS Vision hull
- 1 x mast

- 1 x boom
- 1 x gnav bar
- 1 x rudder
- 1 x rudder stock, with tiller extension
- 1 x main sail
- 1 x jib
- 1 x gennaker
- 1 x rope pack consisting of:
 - o 1 x mainsheet
 - o 1 x jib sheet
 - o 1 x gennaker sheet
 - o 1 x rudder downhaul



Picture 3.1 Vision Equipment



Picture 3.2 Vision Rope Pack

3.3 Rigging the Mast

To complete this section you will require:

- The mast
- A flat-bladed screw driver, pozidrive screwdriver and a 10mm spanner

Fitting the Spreaders

It is worth taking time to ensure that this section is completed correctly. Improperly fitted spreaders will result in strange sailing characteristics, and may even result in failure of the mast.

- 1. Carefully unpack the spreaders from the top of the mast, being sure not to damage any of the securing split rings.
- 2. Unwind the shrouds and forestay from around the mast, and unwrap from the packaging.
- 3. To fit the spreaders, refer to table 3.1. To fit the pins, refer to Vernier Adjust Spreader instructions on the following page.
- 4. Finally, tape up all the securing pins and rings to prevent them from being damaged, or from damaging the gennaker.



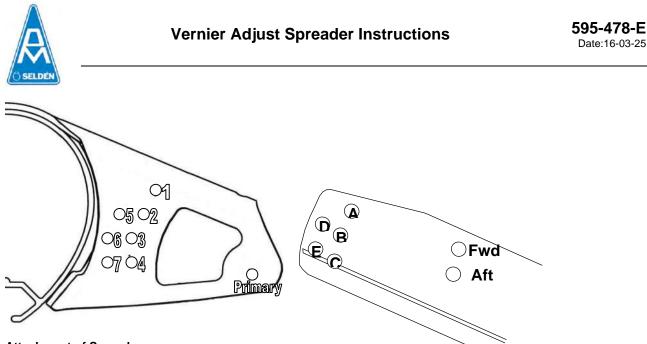
Class	Bracket Connection Pin		Outer End		
	Primary	Adjuster	End cap pos'n	Wire Dia.	Visible Holes
RS Vision	Aft	1A	FWD	3.0mm	1

Table 3.1 Spreader Pin Positions

Now the mast is ready to be put up in the boat, or stepped.

REMEMBER

Check that both ends of the main halyard, jib halyard, and gennaker halyard are tied off at the bottom end of the mast so that they are within easy reach when the mast is stepped.

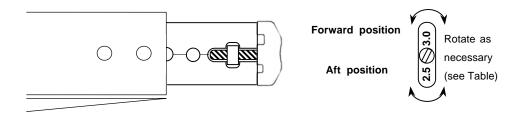


Attachment of Spreader.

Primary Pin: Fit down through the bracket's primary hole and the Fwd or Aft spreader hole as required.

Adjuster Pin: Fit down through a hole 1 to 4, and through A to C or through a hole 5 to 7, and through D to E.

Please see the table on the previous page for the specific positions.



Spreader Ends

Spreader End Cap:

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

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

To attach the shroud, slacken the end screw, rotate the end clamp if necessary, then insert the shroud. Ensure that the shroud is tensioned between T-Terminal and spreader tip, then tighten the screw firmly. This method "locks in" the dihedral angle.

Length Adjustment:

The position is described by the number of adjustment holes visible (e.g. In the diagram above there are 1 $\frac{1}{2}$ holes visible). Please see the table above for your class specific positions.

Security

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

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

3.4 Stepping the Mast

Before stepping the mast, familiarise yourself with how the "foot" (bottom end) of the mast will fit into the "step" (fitted to the boat).

The mast foot has two rectangular blocks on the bottom, separated by a groove. Both of these blocks will fit between the block at the front of the mast step, and the bolt at the back (see pictures 3.3 and 3.4).



Picture 3.3 The Mast Step and Foot



Picture 3.4 The Mast Foot Correctly Located

While it is easier to step the mast with two people, it can also be done singlehanded.

WARNING

Before stepping the mast, check that you are not in the vicinity of overhead power cables.

WARNING

Do not tow your boat behind a car with the mast up

WARNING

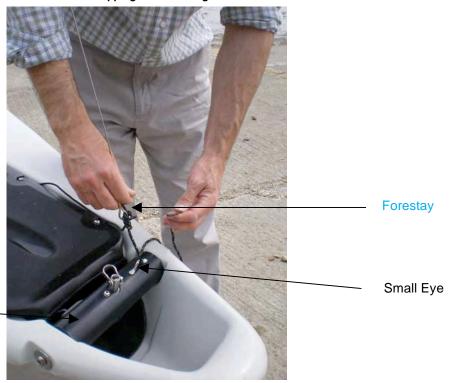
The Vision **must not** be sailed with tension on the forestay. Rig tension **must** be taken on the jib **before** the hoisting the main sail as the forestay is only designed to support the mast when the boat is in the dinghy park.

Stepping the Mast Single Handed

- 1. Ensure that the mast step area is free from any blocks or rope, and that all the halyards have been untied.
- 2. Ensure that the tack line for the gennaker pole stays on the starboard side of the mast.
- Stand the mast upright, wedging the base of it against something to stop the mast sliding as you lift it.
- 4. Carry the upright mast to the side of the boat.
- 5. Pick up the mast, lift it over the gunwhale of the boat, and lower it onto the mast step (see picture 3.5). Take great care not to hit the plastic of the mast well with the mast foot.
- Rock the mast forward into the mast gate. Now that the mast is in the mast gate, it is prevented from falling side to side and forwards. All you have to do is stop it falling back.
- 7. Untangle the forestay and pull it forwards to the tack bar. Tie the forestay onto the small eye on the port side (see picture 3.6).
- 8. Attach the shrouds to the middle of the shroud adjustor plate with the clevis pin and split ring provided. Wrap PVC electrician's tape around the split rings for security, and to avoid snagging. The fourth hole down on the shroud adjustor plate is a good place to start.



Picture 3.5 Stepping the Mast Single Handed



Tack Bar

Picture 3.6 Tying the Forestay

REMEMBER

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

Stepping the Mast Double Handed

This is a much easier way of stepping the mast, especially if it is windy.

- 1. Ensure that the mast step area is free from any blocks or rope.
- 2. Ensure that the tack line for the gennaker pole stays on the starboard side of the mast.
- 3. Lay the mast along the boat with the mast foot over the mast step.
- The stronger of the two people should climb into the front cockpit, being careful not to go any further back than the trolley wheels as the boat will tip up.
- 5. The second person should walk round to the back of the boat and lift the top of the mast as high as possible.
- 6. As the top of the mast is lifted, the first person needs to guide the mast foot down into the mast step area (see picture 3.7) taking great care not to hit the plastic with the foot of the mast, only let it bear against the metal.
- 7. The first person takes over from the second person, and lifts the mast upright, making sure that it is pushed down into the mast step as it is lifted (see picture 3.8).
- 8. At the front of the boat, the second person ties the forestay onto the small eye of the port side of the tack bar (see picture 3.6).
- 9. Attach the shrouds to the middle of the shroud adjustor plate with the clevis pin and split ring provided. Wrap PVC electrician's tape around the split rings for security, and to avoid snagging. The fourth hole down is a good place to start.



Picture 3.7 Raising the Mast



Picture 3.8 Stepping the Mast 3.4 Rigging the Gennaker Halyard

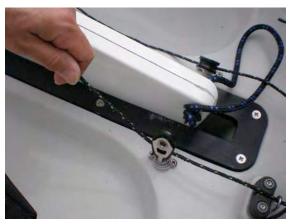
The gennaker halyard pulls the bowsprit out at the same time as it hoists the gennaker. The bowsprit outhaul block runs under the gennaker chute, and will become accessible if you pull the bowsprit out. The outhaul block is on a "carousel" arrangement so will automatically be pulled into view as the bowsprit is pulled out.

- 1. Pull the bowsprit out to view the bowsprit outhaul block.
- 2. Take the loose end of the gennaker halyard from the block at the base of the mast, and lead it forward through the bowsprit outhaul block and then back to the gennaker halyard cleat (see picture 3.10). Note that when the mast is delivered there is a knot where the halyard exits the mast: this is just to keep it tidy during delivery and must be untied before the halyard is threaded.
- 3. Thread the end of the gennaker halyard through the small wire fairlead in front of the cleat, through the cleat, and through the hoist block (see picture 3.11).

 Lead the gennaker halyard over the top of the centreboard and through the gennaker drop block on the other side of the centreboard case. Thread the gennaker halyard through from back to front, so that the tail will go up the gennaker chute (see picture 3.12).



Picture 3.10 Threading the Gennaker Halyard



Picture 3.11 The Gennaker Halyard Cleat



Picture 3.12 The Gennaker Downhaul

3.6 Rigging the Boom

To complete this section, you will need:

- The boom
- The gnav bar
- Connect the gnav bar to the slider at the front end of the boom (see picture 3.13). Sliders often differ in appearance, but all work in the same way.
- 2. Connect the front of the boom to the gooseneck on the mast.
- 3. Connect the upper end of the gnav bar to the bracket on the mast above the gooseneck (see picture 3.14).
- 4. Feed the gnav control line down through the swivel block and through the cleat below the boom. Tie a stopper knot in the end of the rope (see picture 3.15).



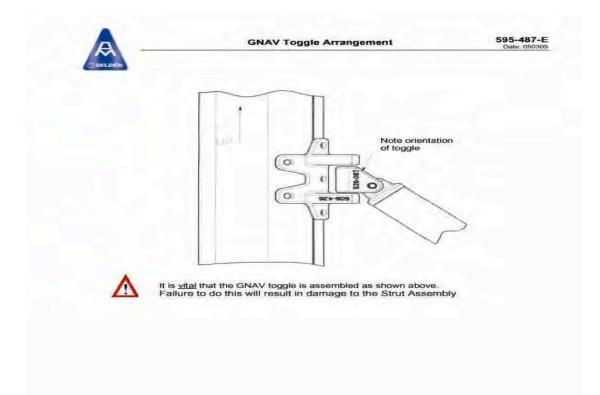
Picture 3.13 Connecting the Gnav to the Boom

Picture 3.14 Connecting the Gnav to the Mast



Picture 3.15 The Gnav Control Line

Picture 3.16 The Fully-Rigged Gnav



Hoisting the Jib

To complete this section, you will require:

- The jib
- The jib sheets
- The top furling unit and shackle
- 1. Ensure that the furling unit is fully charged. Unroll the jib and connect the tack of the sail to the shackle attached to the lower furling unit on the tack bar (see picture 3.17).
- 2. The top furling unit is attached to the wire end of the jib halyard, using a shackle (see picture 3.18).
- 3. Attach the head of the jib to the top furling unit (see picture 3.19) and attach the wire spacer to the forestay.

- 4. Pull the halyard at the base of the mast to hoist the jib. When the jib halyard is pulled all the way up, a wire loop will emerge from the mast.
- 5. Hook the rig tension to this wire loop (see picture 3.20), then pull the rig tension on, ensuring that it is in the cleat properly. You should pull enough tension into the rig so that the shrouds feel firm to the touch.



Picture 3.17 The Jib Tack

Picture 3.18 The Top Furling Unit





Picture 3.19 The Head of the Jib Attached

Picture 3.20 Connecting the Rig Tension

- Find the middle of the jib sheet and tie a single overhand knot just to one side.
- Pass one end through a hole in the plate on the jib clew and pull the jib sheet through until the knot is at the jib clew.
- Tie a single overhand knot on the other side of the jib sheet (see picture 3.21).
- 9. Lead one end of the jib sheet along the side of the boat to the jib cleat. Thread it through the fairlead and through the jib cleat. Repeat with the other end of the jib sheet. You can either tie a figure-of-eight knot in each sheet, or tie the two ends together.



Picture 3.21 Jib Sheets

3.8 The Rudder

To complete this section, you will require:

- The rudder
- The rudder stock
- The rudder downhaul and block
- 1. Undo the plastic wing nut on the rudder stock and remove the bolt.
- Slide the rudder into the stock, making sure to feed the rope & rudder down haul block over the small roller fitted in the stock, and out under the tiller.
- 3. Line up the hole in the rudder with the hole in the rudder stock.
- 4. Push the bolt through the stock and the rudder. Make sure that the head of the bolt lines up with the recess in the plastic washer, and that the little lugs on the plastic washer line up with the holes in the stock. *It may need a little tap to get it through!*
- 5. Refit the plastic wing nut and tighten. The nut should be tight enough to stop the rudder slopping about in the stock, but not so tight that it is hard to rotate the rudder.
- 6. Take the rudder downhaul rope and, using a bowline, tie one end to the cleat at the front end of the tiller.
- 7. Thread the other end through the rudder downhaul block and then back through the cleat (see picture 3.23).
- 8. Tie a figure-of-eight knot in the end.



Picture 3.22 The Rudder Fitted in the Stock



Rudder Downhaul

Picture 3.23 The Rudder Downhaul

3.9 Hoisting the Mainsail

To complete this section, you will need:

- The mainsail
- The mainsheet

To rig the mainsheet:

- 1. Tie one end of the mainsheet through the middle of the forward block in the middle of the boat using a bowline (see picture 3.24).
- 2. Lead the other end up to the forward block on the boom, passing it through from back to front (see picture 3.25).

- 3. Lead the mainsheet back down to the forward block in the middle of the boat, and pass it through the block from front to back.
- 4. Take the mainsheet up to the aft block on the boom, passing it through from front to back.
- 5. Finally, thread the mainsheet through the aft block in the middle of the boat and through the mainsheet cleat. Tie a figure-of-eight knot in the end (see picture 3.26).



Picture 3.26

To hoist the mainsail:

- 1. Unroll the mainsail.
- 2. Take the end of the main halyard that emerges from the top of the mast, and tie it to the head of the mainsail, using a knot-on-knot (see picture 3.27).



Picture 3.27 Tying the Main Halyard

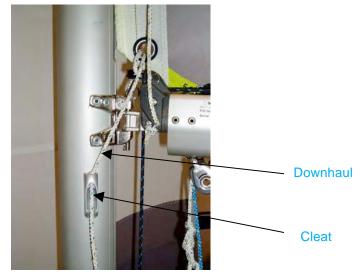
- 3. Put the top of the main sail into the opening in the mast track, just above the gooseneck mast collar.
- Holding the main sail in line with the mast, pull on the end of the main halyard that emerges from the bottom of the mast.
- 5. Pull the main sail up to the top of the mast. You will need to keep the sail in line with the mast to make pulling it up easier, especially when passing the batten pockets.
- 6. When the main sail is almost at the top of the mast, slide the mainsail clew slug into the track on the top of the boom (see picture 3.28).
- 7. Pass the end of the outhaul rope through the clew of the main sail and clip it on the end of the boom (see picture 3.29)
- 8. Ensure that the main halyard rope is in the cleat and pull the main sail to the top. Pull on the main sail at the bottom corner near the mast to check that it is properly cleated.
- 9. Tidy the main halyard and stow it in the halyard bag next to the mast.



Picture 3.28 The Mainsail Clew Slug

Picture 3.29 The Outhaul

10. The downhaul is already attached to the mast. Pass the end of the downhaul through the hole in the gooseneck (this should be already done) up to the eyelet in the tack of the main sail and then pass it through the cleat on the side of the mast (see picture 3.30).



Picture 3.30 The Downhaul

3.10 Rigging the Gennaker

To complete this section, you will need:

- 1 x RS Vision gennaker
- 1 x gennaker sheet
- 1. Unpack the gennaker.
- Tie the tack of the gennaker to the tack line that emerges from the end of the bowsprit (see picture 3.31). The knot that is already in the tack line needs to be left in place as it determines how far the bowsprit comes out.
- 3. Tie the end of the gennaker halyard to the head of the gennaker (see picture 3.32).
- 4. Take the gennaker downhaul line (the other end of the halyard), which is rigged up the chute and with the gennaker on the starboard (right)

side of the boat pass the end through the ring on the sail from bottom of sail to top of sail direction (see picture 3.33).

5. Run the downhaul line up the sail and tie it off on the upper patch (onto the cross of webbing) (see picture 3.34).



Picture 3.31 The Gennaker Tack

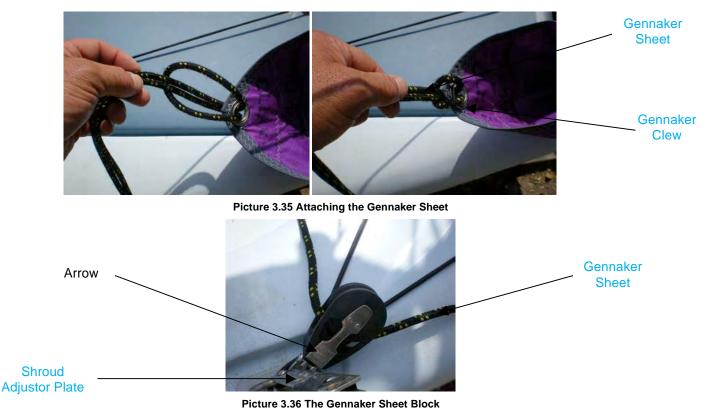




Picture 3.33 Lower Downhaul Patch

Picture 3.34 Upper Downhaul Patch

- Find the middle of the gennaker sheet and double it over to form a loop.
- 7. Pass this loop through the eyelet at the clew of the gennaker.
- Pass the rest of the sheet through the loop and pull it tight (see picture 3.35).
- With the gennaker on the starboard side, thread one end of the gennaker sheet through the block by the starboard shroud adjustor plate, in the direction of the arrow on the block (see picture 3.36).
- 10. Lead the other gennaker sheet around the forestay and through the block on the port side. Tie the two ends of the gennaker sheet together.



- 11. Pull the gennaker from one side to the other, as if you were gybing, to see if anything is twisted.
- 12. Using the gennaker downhaul, pull the gennaker down into the chute.

3.11 Completion

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

- Fit the rudder to the back of the boat
- Tidy the halyards away
- To fit the rudder, simply line up the pins 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, but all it will need is a simple waggle from side to side whilst pushing down.
- 2. To remove the rudder, simply push the retaining clip in and pull up on the rudder stock.
- Coil the main sail and jib halyards neatly and stow them in the halyard bag on the starboard side.

Now you are ready to go sailing in your RS Vision!

4. SAILING HINTS

4.1 Introduction

The RS Vision 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 Vision. See www.rya.org.uk for more information, or follow the link from 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. 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 centreboard down, 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 centreboard as depth allows. As soon as the water is deep enough, the centreboard should be fully lowered and the retaining elastic clipped to the rope handle to ensure the board cannot retract into the hull during a capsize or inversion.

The singlehanded sailor may choose to ask someone to help them to launch. If launching alone, stand in the water alongside the gunwhale, holding the boat head to wind. Lower part of the centreboard 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 Vision XL 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. Singlehanded 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.

4.6 Using the Gennaker

If you are inexperienced in using a gennaker, choose a fairly quiet day for you first excursion. A gennaker nearly doubles your sail area, and should be treated with a healthy degree of respect!

For your first hoist you should be sailing downwind on a broad reach, with the wind coming over the helm's left shoulder. The crew should sit in the centre of the boat, astride the centreboard case, and hoist the gennaker by pulling the gennaker halyard from the right-hand halyard block (see picture 4.1).



Picture 4.1 Hoisting the Gennaker

The gennaker halyard pulls the bowsprit out at the same time – when the gennaker is hoisted, you are ready to go. The crew, or the helm if sailing singlehanded, should now pull gently on the leeward gennaker sheet until the gennaker has filled.

Gennakers may be effectively used from a close reach to a broad reach so, to get downwind, one should become adept at gybing. It is not possible to tack with the gennaker hoisted. For the best effect, the gennaker sheet should always be eased as far as possible, so that the luff is just on the point of curling.

Gybing with the gennaker is fairly straightforward. Like the jib, it should be pulled across at the same time as the mainsail comes across. As soon as it has been pulled in and filled with wind, it should again be immediately eased for maximum efficiency and speed. If sailing singlehanded, the mainsail should be cleated, and the helm should hold the gennaker sheet at all times.

To drop the gennaker, reverse the procedure used to hoist. The boat should be sailing on a broad reach, and the slack in the gennaker downhaul is pulled in from the left hand halyard block (see picture 4.2). As the gennaker downhaul goes tight, the gennaker halyard should be popped out of the cleat. Then, pull the remainder of the gennaker downhaul through until the gennaker is pulled sharply into the chute. Dropping the gennaker on tighter reaches is harder, and requires more effort on the gennaker downhaul. If possible, this should be avoided when sailing singlehanded.



Picture 4.2 Dropping the Gennaker

TOP TIP

Tie a rope bobble onto the gennaker halyard, about 10 cm from the bowline that is attached to the head of the gennaker. This will make dropping the gennaker easier.

HINT

The gennaker can "bunch up" when entering the chute. This can be minimised by keeping some tension on the gennaker sheet, preventing the clew from being sucked into the chute with the main body of the gennaker.

When the gennaker is fully lowered, tidy the sheets and the halyard to keep the cockpit area clear.

4.7 Reefing

Reefing enables the less-experienced or younger sailor to continue sailing in stronger winds.

RS Visions built after September 2005 are fitted with a single-line reefing system. The reefing line is white or red and is located at the aft end of the boom, next to the outhaul line. Both the outhaul and the reefing line use the same cleat at the end of the boom. It is not necessary to cleat both of the ropes at the same time. Please follow the instructions for reefing, ensuring that the reefing line is threaded the correct way through the mainsail. One person may reef the mainsail while sailing on a gentle close reach, sails eased, on a starboard tack.

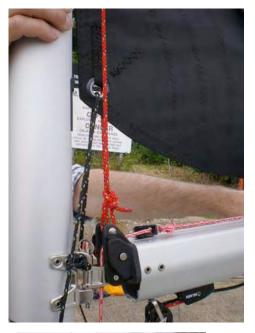
TOP TIP

Make sure that you are in plenty of clear water when reefing.

1. Lead the clew line up the starboard side of the mainsail leech, pass it through the top reefing eye. Lace the reefing line through the remaining reefing eyes, tie a knot in the end and slot this into the track on the boom.



2. Lead the tack line up the starboard side of the mainsail, through the reefing eye, and back down the port side of the mainsail. Tie bowline around the pin on the inner end of the boom



3. Fully ease the kicker whilst steadily pulling the reefing line from the boom.

4. When the clew has fully tightened, ease the main halyard whilst continuing to pull the reefing line. The luff will fold down. Re-

cleat the main halyard.





5. Roll the excess mainsail and tie it to the boom using sail ties through the reefing eyes. Make sure that there is enough tension in the luff by pulling on the main halyard, and re-tension the kicker.



HINT

The jib is a very effective strong wind sail area because it is low down and maintains a balanced helm. So slab reef before you lose the jib – it's more fun for the crew!

Strong wind sailing can be the best fun of all, so become familiar with the reefing systems and get back out there!

5. MAINTENANCE

5.1 Boat Care

The RS Vision 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 Sailing or send us a picture for assessment.
- 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
 close 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 Vision 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 Vision Rudder blades 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. Lower mouldings are sealed, however over time there may be some water ingress. If this occurs the blade should be inverted to allow water removal through the drain holes in the top of the moulding. Rudder blades 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.

The centreboard is made from Epoxy. They are very strong and hard wearing, but they will get damaged if run aground hard. Due to the nature of its construction, a damaged foil can still be used.

If you run aground hard with the <u>centreboard</u> down, you should check that the hull has not been punctured at the front or the trailing edge of the <u>centreboard</u> case.

If you are going to trail your boat frequently, you may wish to invest in an RS Sailing padded rudder bag. This will protect your RS Vision from any damage caused by the foil.

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 upon discovery of a 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.

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8. GLOSSARY

Α

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

В

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 of the side of
	the boat. 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 wind strength, from Force 1 to Force
	12
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 sail
Boom Pad	The pad that fits onto the boom
Bow	The front of the boat
Bow Lifting Handle	The handle at the front of the boat, used for lifting
Bowline	A useful and reliable knot, with a loop in it

Bow Snubber	The part of the trolley that the bow rests on	
Builder's Plate	Plate that contains build information	
Bung	A stopper for the drain hole	
Buoy	Floating object attached to the bottom of 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	

С

Capsize	To overturn
Capsize Recovery	To right, or recover, the boat after a capsize
Catamaran	A boat with two hulls
Centreboard	The foil that sits below the hull to counteract the
	sideways push of the wind, and to create forward
	motion
Centreboard Case	The casing in the hull in which the centreboard sits
Centreline	An imaginary line that runs through the centre of
	the hull, from the bow to the stern
Chart datum	Depths shown on a chart, at the lowest possible
	tide
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' to avoid collisions

Compass Rose	The compass shown on a chart to aid navigation
Crew	Helps the helmsman to sail the boat, and usually
	handles the jib sheets
Cutter	A boat with two headsails or jibs

D

Dacron	A brand of polyester sailcloth that is wrinkle-
	resistant and strong
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

Ε

Ease

To 'ease sheets' means to let the sail out gently

F

Fairlead	A pulley block used to guide a rope to avoid
	chafing
Foils	The daggerboard and the rudder
Foot	The bottom edge of a sail
Fore	Towards the front of the boat
Forestay	The wire line that runs from the front of the mast to
	the bow of the hull, holding the mast in position
Furl	To gather a sail into a compact roll and bind it
	against the mast or forestay

G

Gennaker A large sail that is hoisted when sailing downwind

Gennaker Chute	Webbing pocket in which the gennaker is stowed when not hoisted
Gennaker Pole	The sprit that protrudes from the front of the hull, to
	which the tack of the gennaker is attached
Gnav Bar	Bar that sits between the mast and the boom,
	performing the same function as a kicking strap
Gnav Control Line	Line that applies and releases tension to the gnav
Gooseneck	The 'jaws' of the boom that clip onto the mast
Gunwhale	The top edge of the hull, that you sit on when
	leaning out to balance the boat
Gybe	To change tack by turning the stern of the boat
	through the wind.

Η

Halyard	The rope used to hoist sails
Halyard Bag	Bag attached to the hull, in which the halyards can
	be stowed
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
'Heave to'	To stop the boat by easing the main sheet 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 Block	Block behind which the gennaker halyard is pulled
	when hoisting the gennaker
Hull	The hollow, lower-most part of the boat, floating
	partially submerged and supporting the rest of the
	boat

'Into the Wind'	To point the bow in the direction that the wind is
	blowing from, causing the sails to flap
Inversion	A capsize 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

Κ

Kicking strap	The rope system that is attached to the base of the
	mast and the boom, helping to hold the boom
	down
Knot	A measurement of speed, based on one minute of
	latitude

L

Launching	To leave the slipway
Latitude	Imaginary lines running parallel round the globe
	from east to west. They help you measure position
	and distance on a chart.
Leech	The back edge of the sail
Leeward	The part of the boat furthest away from the
	direction in which the wind is blowing
Leeway	The amount of sideways drift caused by the wind
Leverage	The result of using crew weight as a 'lever' to
	counvisionct 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
Longitude	Imaginary lines running round the globe from north
	to south, like segments of an orange. Used with
	lines of latitude to measure position and distance
Lower Furling Unit	The fitting at the bottom of the forestay that
	enables the jib to be furled
Luff	The front edge of the sail

Μ

Mainsail	The largest sail on a boat
Mainsail Clew Slug	The fitting that sits in the track on the boom, to
Ŭ	which the clew of the mainsail is attached
Mainsheet	The rope used to control the mainsail
Mainsheet Bridle	The rope runs across the transom of the boat, to
	which the mainsheet is attached
Mainsheet Centre Bloc	k The main block, usually fixed to the cockpit floor,
	through which the mainsheet passes
Man Overboard Recov	ery The act of recovering a 'man overboard' from
	the water
Mast	The spar that the sails are hoisted up
Mast Foot	The bottom of the mast
Mast Gate	Fitting which closes across the front of the mast at
	deck level, holding the mast in place
Mast Lower Section	The bottom section of a two-piece mast
Mast Step	The fitting on the deck that the mast fits into
Mast Top Section	The top section of a two-piece mast
Meteorology	The study of weather forecasting
Moor	To tie the boat to a fixed object
Mylar	A brand of strong, thin, polyester film used to make
	racing sails

Ν

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
Neap Tide	Tides with the smallest tidal change

0

'Off the Wind'	To sail in the direction that the wind is blowing
Outboard Bracket Kit	Bracket which enables an outboard engine to be
	attached to the transom
Outboard Engine	Small portable engine that attaches to the transom
Outhaul	The control line that applies tension to the foot of
	the sail, by pulling the sail along the boom
Outhaul Hook	The fitting on the boom that hooks the eye at the
	back of the sail, and to which the outhaul is
	attached

Ρ

Painter	The rope at the bow used to tie the boat to the
	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
Reef	To make the sails smaller in strong winds
Retaining Pin	On a trolley, to hold the launching trolley to the
	road base

Road Base	A trolley that you place your boat and launching
	trolley upon to trail behind a vehicle
Rowlocks	U shaped fittings that fix onto the gunwale and
	holds your oars in position while rowing
Rowlock Holes	The holes in the gunwhale into which the rowlocks
	fit
Rudder	The foil that, when attached to the stern, controls
	the direction of the boat
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.
Shackle Key	Small key used to undo tight shackles
Sheet	A rope that controls a sail

Shroud	The wires that are attached to the mast and the
	hull, holding the mast up
Side Safety Line	The line that runs along the side of the hull
Single Handed	To sail a boat alone
Single-Line Reefing Sy	stem An efficient method of reefing with one line
Slider	Sliding fitting on the boom to which the gnav bar is
	attached
Soundings	The numbers on a chart showing depth
Spars	The poles, usually carbon or aluminium, to which
	the sail is attached
Spreaders	Metal fittings attached to the mast which hold the
	shrouds out
Spring Tide	The tides with the biggest range and strongest
	currents
Starboard.	The right-hand side of the boat, when facing
	forwards
Stern	The back of the boat
Stern Lifting Handles	The handles at the stern, used for lifting the boat
Stopper Knot	A form of knot used to prevent a rope from sliding
	through a fitting, such as a pulley or a cleat

Т

Tack	a) To change direction by turning the bow of the
	boat through the wind
	b) The bottom front corner of a sail
Tack Bar	The bar at the bow of the hull, to which the tack of
	the jib is attached
Tack Line	The rope that emerges from the front of the
	gennaker pole, to which the tack of the gennaker is
	attached
Tender	A small vessel, usually used to transport crew to a
	larger vessel
Tidal height	The depth of water above chart datum

Tidal range	The difference between the depth of water at low and high tide
Tidal stream	The direction in which the tide is flowing
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.
Top Furling Unit	Fitting at the top of the forestay which enables the jib to be furled
Towing Line	A rope attached to the boat, used to connect to a towing vessel
Transit	An imaginary line between two fixed objects, used to ensure that you are staying on course
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 the boat
	around on land
Trolley Supports	The part of the trolley in direct contact with the hull

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

W

Wetsuit	Neoprene sailing suit designed to keep you warm
	when wet

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

8. APPENDIX

8.1 Useful Websites & Recommended Reading

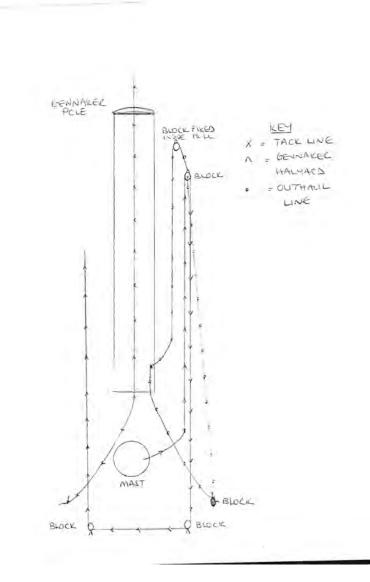
RYA Go Sailing: Activity book for Young Sailors. ISBN 1-905104-36-7 RYA Go Sailing: A Practical Handbook For Young People. ISBN 9-781905-10-7 RYA Advanced Sailing Handbook. ISBN 1-905104-05-07 RYA National Sailing Scheme Syllabus and Logbook ISBN 0-901501-45 RYA Start Sailing Beginner's Handbook ISBN 0-901501-82-4

> Royal Yachting Association <u>www.rya.org.uk</u> RNLI – for help and advice about safety at sea – <u>www.rnli.org.uk</u> RS Class Association and Manufacturers: <u>www.rs-association.com</u>

> > www.rssailing.com www.ldcsailing.com

8.2 RS Vision Gennaker Pole System

Your RS Vision will arrive with the Gennaker Pole System in place, and this does not need to be de-rigged. In the event that you need to re-rig the gennaker pole, please refer to the following diagram.



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



8.4 How to Rig a Mast-Head Float

Inflate the mast-head float
 Place the webbing straps of the mast-head float either side of the metal eye in the head of the mainsail, and feed the main halyard through.

3. Tie the main halyard off using a knot-on-knot.

4. Fold the mast-head float loosely around the luff of the mainsail.

5. Gently feed the mainsail and the mast-head float into the mast track.

6. Pull on the main halyard to hoist the mainsail, ensuring that the masthead float is clear of the gnav.





7. When the mainsail is at the top of the mast, cleat the main halyard, coil the excess halyard, and stow it in the halyard bag.



8.5 RS Vision Trapeze Kit



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