OWNER'S MANUAL

Version 2

CONTENTS

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 Feva 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 Feva 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 Feva, 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 Feva.

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:

LDC Racing Sailboats
Trafalgar Close
Chandlers Ford
Eastleigh
Hants SO53 4BW
Tel.: 023 8027 4500
Fax: 023 8027 4800
E-mail: www.info@rssailing.com
For details on your local RS dealer, please visit www.rssailing.com

2. EC CONFORMITY AND IDENTIFICATION

The RS Feva complies with the EU Directive for Recreational Craft (RCD) which sets safety requirements for recreational boats sold in Europe. Each RS Feva carries the CE mark to indicate this compliance. The CE Mark is on the Builder's Plate in the cockpit. The Builder's Plate also includes important safety information which is described in detail elsewhere in this manual.

Compliance with the EU Directive for Recreational Craft (RCD) is also demonstrated by the EC Declaration of Conformity in this manual (see page 6).

A RS Feva dinghy can be identified by the Craft Identification Number, which is a unique serial number on the starboard side of the transom, and is shown on the EC Declaration of Conformity in this manual.

Each RS Feva is also assigned a unique sail number, which is marked on the bottom of the CE Declaration form, or can be obtained from RS Racing or your RS dealer. Normally, it is a requirement that your sail numbers are displayed at sailing regattas. Sail numbers can be purchased from RS, your RS dealer, or from a sailmaker.

EC DECLARATION OF CONFORMITY TO DIRECTIVE 2003/44/CE

I declare that the craft described as:

RS Feva

Bearing the Hull Identification Number:

G	B	L	D	C	F								

Sail No:

Conforms to EU Recreational Craft Directive 2003/44/EC

Annex 1 – sections 3.2 & 3.3 and Annex 6 – Module A

Module A – Internal production control – self-assessment

ISO Standards	BS EN ISO 10087, 12217, 12215, 10240, 14945, 8666		
Trade Marque	RS Racing		
Type	RS Feva		
Design Category	C		
Maximum Crew	3		
Maximum Load	225kg		
Overall Length	3.64m	**Overall Beam**	1.42m
Builders Name	LDC Racing Sailboats,		

Trafalgar Close, Chandlers Ford, Hampshire, England.

Date __ / __ / __ (The date does not indicate the date of manufacture)

Signed: 

Alex Newton-Southon

RS FEVA TECHNICAL DATA

Length Overall (LOA):	3.64 m	12’0”
Beam:	1.42 m	4’ 8”
Hull Weight:	68 kg	136 lb
Reefing Mainsail:	5.5 m²	57sq ft
3 Batten Mainsail:	6.5 m²	68sq ft
Jib:	2.1 m²	22sq ft
Gennaker:	7.0 m²	73sq ft

3. SAFETY INFORMATION

- Before attempting to operate the boat, ensure that you have the appropriate experience to handle the boat safely in the anticipated sea and wind conditions

- Ensure that all the crew have sufficient boating experience and are familiar with emergency procedures, capsize recovery, and towing.

- Always check the weather forecast before leaving shore, and ensure that the predicted weather and sea conditions are suitable for the boat (see 3.1).

- Clothing should be suitable for the anticipated weather conditions and footwear appropriate for boating.

- Before going afloat, all persons should be wearing a suitable buoyancy aid (e.g. a life jacket or a personal floatation device), which should be worn at all time when on the water. Note that in some countries it is a legal requirement to wear a buoyancy aid that complies with their national regulations at all times.

- It is recommended that you carry a whistle or a horn to attract attention in case further assistance is required.

- The owner/helmsman is responsible for the safe operation of the boat.

- The owner/helmsman's responsibilities include the proper preparation and maintenance of the boat and safety equipment, knowledge of the boat operation, safety training of the crew, following the navigation rules (including knowledge of the Collision Regulations and local navigation rules), care of the environment, insurance and, where necessary, registration.

3.1 Design Category

The RS Feva is a Design Category C boat. A Design Category C boat may be sailed in:

- Design Category: C – ‘inshore’
- Description of Use: Designed for voyages in coastal waters, large bays, estuaries, lakes, and rivers.
- Wind Force: Up to and including Beaufort Force 6.
- Significant Wave Height: Up to and including 2 metres.

The RS Feva complies with this design category, subject to:

- The crew having suitable skill and experience.
- Satisfactory maintenance of the boat and its equipment.

Users of this boat are advised that:

- All crew should receive suitable training.
- The boat should not carry more than the maximum load of 100kg.
- The amount of water within the hull (i.e. inside the buoyancy compartment) should be kept to a minimum.
- Any weight added to the mast will reduce the stability of the boat.

3.2 Loading

Do not use with more than three persons on board.

Ensure that the combined weight of all persons on board, plus any added items, does not exceed 225 kg.

The RS Feva is designed to be sailed by no more than three people. However, it is recommended that you do not exceed the maximum loading of 225 kg, including any equipment added to the basic rigged boat, e.g. an anchor. To enable the boat to be righted safely, the minimum recommended crew weight is 40 kg.

All the crew and equipment should be evenly distributed to ensure that the boat is upright and approximately level. Heavy items, such as an anchor, should be securely fixed to avoid movement when under weigh.

3.3 Safety Equipment

It is your responsibility to ensure that all of the necessary safety equipment is obtained for the type of sailing that you are participating in, and that it is readily accessible on board at all times.

Top Tip

We recommend that you sail in a location where there is adequate safety-boat cover, should you get into any difficulty, especially whilst learning to sail your new boat.

3.4 Capsize Recovery

Please note that the following information is a suggested response to a capsize situation, and is not a substitute for an approved training course. For more information, please see www.rya.org.uk

Remember – Keep hold of the boat when you are in the water

Like all small sailing dinghies, the RS Feva may capsize when sailing. A 'capsize warning' symbol (the upside-down boat) is shown on the Builder's Plate to warn of this possibility. The RS Feva is designed to recover quickly from a capsize, or inversion, and continue to sail without the need for bailing. The recommended technique for capsize recovery is described below. It is recommended to first practice capsize recovery on a calm day, with safety-boat cover.

Capsize Recovery

The RS Feva mast is sealed to provide buoyancy so, if you are in the water, the boat will normally float on its side for a while after a capsize. As the boat capsizes, you should endeavour to fall cleanly into the water, trying to avoid catching sheets or toestraps as you fall. You should initially ensure that:

1. If you were using the gennaker when you capsized, ensure that it is fully recovered in the chute before attempting to right the boat.
2. Make sure that the main sheet and the jib sheet are not in the cleat.

Swim round to the daggerboard, grab hold of its tip, and pull down. The boat should start to right itself slowly at first, and then quite quickly. As soon as it is the right way up, climb back into the cockpit, trying to keep the boat as upright as possible at all times, to avoid a further capsize. When climbing in, you can pull the gunwhale

closer to the water using the side safety line, and then grab the toe strap to pull yourself in. It is best to do this over the windward side of the boat, to avoid another capsize. Alternatively, if the boat is pointing into the wind, you can go around to the transom and climb in there. Once you are back on board, check that the ropes are not caught on anything and then you can continue sailing.

Dry Capsize

If you know that you are about to capsize, you can climb over the gunwhale and onto the daggerboard as the boat heels. As the boat starts to right itself, climb back into the centre of the cockpit This can be quick and you remain dry, but if you stay on the capsized hull and are not quick to move out, your weight may cause the boat to invert.

Capsize Recovery From Inversion

If the boat does invert, you will probably end up in the water outside the boat. In this case, reach up to the bilge rail on the bottom of the boat and, using this as a finger

hold for one hand, stretch out with the other hand and grab the daggerboard. When you have a firm grip on the daggerboard, pull yourself onto the hull, and kneel or

stand as close to the edge as possible without slipping off. Keeping hold of the daggerboard, lean back and the boat will slowly return to floating on its side. From here, you will be able to carry out a standard capsize recovery. When righting the boat from inversion, more leverage can be gained by standing up on the inverted gunwhale, and pulling the tip of the daggerboard.

If you come up under the boat just after it has inverted, you will find plenty of air and head space in the cockpit. However, this situation can be a worry for the safety-boat crew as they cannot see where you are, so quickly duck under the cockpit side to the outside of the boat to show that you are OK. If you are tired or cold and need assistance, stay next to the inverted boat by holding the side safety lines and try to attract the attention of a rescue boat.

WARNING

If the boat has capsized "on top" of you, or "to windward" as it is known, there is more chance of the boat inverting. You should ensure that you and your crew are well clear of the hull as the boat fully inverts. Remember to keep hold of a rope that is attached to the boat, i.e. the jib sheet or main sheet

WARNING

If the mast is lying into the wind during a capsize recovery, the boat will flip up quickly and may capsize again. In this situation, be prepared to climb in and balance the boat quickly.

3.5 Air Tank

The RS Feva is equipped with a sealed buoyancy compartment, in case of capsize or swamping. The buoyancy compartment is formed by the hull and deck mouldings and consequently the following points should be noted:

- ! **Do not puncture the buoyancy compartment.**
- ! **Should the buoyancy compartment become punctured, do not use the boat until the compartment is properly repaired. If in any doubt, contact RS Racing for repair details.**
- ! **It is against class rules to add any fittings, although you may have to replace fittings from time to time. Ensure that all fastenings are resealed properly using an appropriate sealant. If in any doubt, contact RS Racing for details.**

Occasionally, a small amount of water will get into the buoyancy compartment, and this can be removed through the drain hole in the transom. Always remember to check that there is no water in the hull and that the bung is secure in the drain hole before launching.

3.6 Man Overboard Prevention and Recovery

Working Deck

The working deck of the RS Feva, which is intended to be occupied when the boat is afloat, is the area covered with a non-slip coating. This area includes:

- The entire cockpit floor, including the kick-blocks and the daggerboard case, from the aft end up to the mast foot.
- The top surface and outside edge of the side deck, from the aft end to the recess for the shroud points.
- The central thwart can also be used as a place to sit. It is not recommended that this is used as somewhere to stand, as it does not have a non-slip texture and may be slippery.

Crew Overboard Recovery

The RS Feva is designed to be sailed by up to three people. However, it can be sailed single-handed. If sailing alone, it is recommended that you ensure adequate safety cover is in attendance before launching.

To minimise the risk of falling overboard, never stand up in the boat or sit on the decks, other than the side deck to balance the boat, when it is under weigh. Should you fall overboard while sailing alone, the boat will soon capsize allowing you to swim to it and follow the capsize recovery procedures described in 3.4.

If a crew member falls overboard while there are two people sailing, the person on board can assist recovery by manoeuvring the boat back to the person in the water, stopping the boat (turning into the wind if sailing), and helping to balance the boat as the other person climbs back in.
To recover a crew member from the water:

- The helm should stop the boat just downwind of the person in the water.
- The helm should balance the boat, using a combination of body weight movement and sail pressure.

- With the help of the person on board, the crew should board the boat via the windward gunwhale, or over the transom using the toe strap to help to pull themselves in.

Top Tip

If you attend an approved sailing instruction course, you will learn how to recover a man overboard quickly and effectively. Please see www.rya.org.uk for a list of recommended institutions.

3.7 Use of an Outboard Engine

The RS Feva is not designed, equipped, or capable of modification for use with an outboard engine.

3.8 Towing, Anchoring, Mooring, and Trailing

Towing on the Water

We recommend the following procedure for towing your RS Feva:

Feva S

- Secure the towing line around the mast, as low down to the mast gate as possible. If the mast has failed, then the towing line can be tied to the lifting handle at the front of the boat.
- Lower and stow the mainsail.
- Fully raise or remove the daggerboard.
- Stay at the tiller. In the event of rudder loss, sit well aft.

Feva XL

- Secure the towing line around the tack bar.
- Lower and stow all sails
- Fully raise or remove the daggerboard.
- Stay at the tiller. In the event of rudder loss, sit well aft.

Anchoring

The RS Feva can be anchored for short periods of time. The anchor line should be secured around the base of the mast (Feva S), or around the tack bar (Feva XL). The sails should be lowered or securely stowed, and the rudder and the daggerboard should be raised completely.

REMEMBER

An anchor is a heavy piece of equipment. You must ensure that you are not overloading your RS Feva, and that the anchor is securely stowed when not in use to prevent damage to the boat or the crew!

Mooring

The RS Feva can be moored on a buoy or on a pontoon for short periods. When mooring on a buoy, ensure that the mooring line is securely fastened to the forward lifting handle (Feva S), or around the tack bar (Feva XL).

When mooring along side a pontoon, a mooring line can be attached to either the forward lifting handle (Feva S) or round the tack bar (Feva XL), and around the aft end of the rear toestraps. Always remember to use some padding between your RS Feva and the object that you are mooring against!

Trailing and Transporting Your RS Feva

The RS Feva can be trailed behind the majority of cars. When trailing your RS Feva, you should only use an approved trolley and road base. Care must be taken when tying the boat to its trailer because too much or too little tension could result in damage. We recommend the following procedure for safe trailing:

- Ensure that the boat is located correctly on the trolley, with the bow securely in the bow snubber of the trolley.
- Ensure that the trolley is properly located on the road base, and that the retaining pin is fitted.
- Tie the boat down to the road base, at the bow, and across the middle. You only need to apply sufficient tension to hold the boat in contact with the trolley supports. Use padding material where any straps touch the deck.

The RS Feva is designed to be transported easily on the roof of most cars. If you are planning to transport your RS Feva on the roof of your car, we recommend the use of the RS Feva Folding Launching Trolley, as the combination of the hull and the RS Feva Standard Launching Trolley may exceed the manufacturer's weight limit for the car.

Always ensure that the roof rack is firmly fixed to the car, in accordance with the roof-rack manufacturers fitting instructions, and check that the maximum roof load limit for the car is greater than the combined weight of the roof rack, RS Feva hull, spars, sail, and anything else carried on the roof. Allow 70kg for the RS Feva hull, spars and sail.

Top Tip

Remember to tie the boat down when it is left in the dinghy compound, to prevent damage in the event of strong winds.

4. COMMISSIONING

4.1 Preparation

Your RS Feva 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
- PVC Electrician's Tape

You may require other tools later, should you wish to make any setting or tuning adjustments to the boat or the rig. You will also need to tie some particular knots, such as a bowline and a figure of eight. If you are unfamiliar with the knot, please see Appendix 9.5 Three Essential Knots.

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

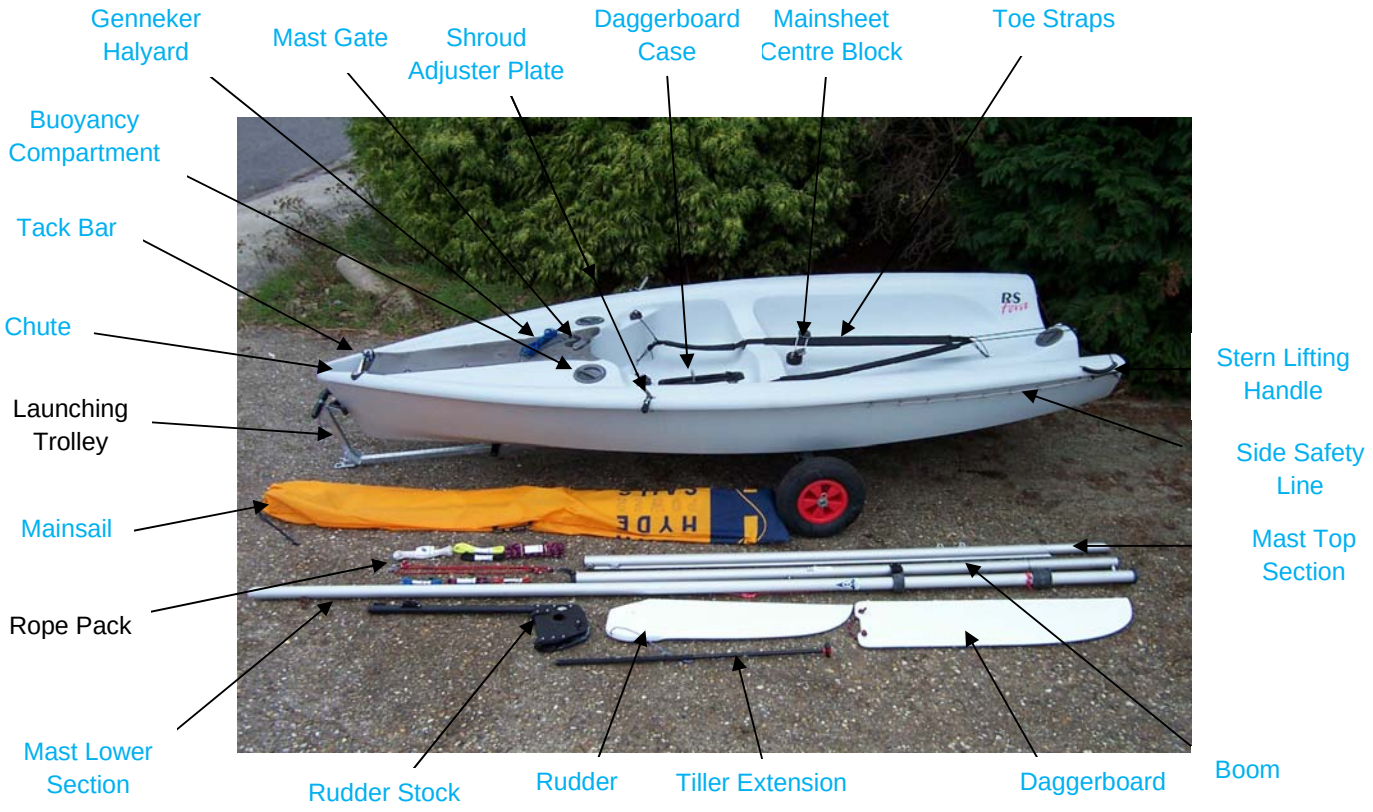
Whilst your RS Feva has been carefully prepared, it is important that new owners should check that shackles and knots are tight. This is especially important when the boat is new, as travelling can loosen seemingly tight fittings and knots. It is also important to check such items regularly prior to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

4.2 Unpacking

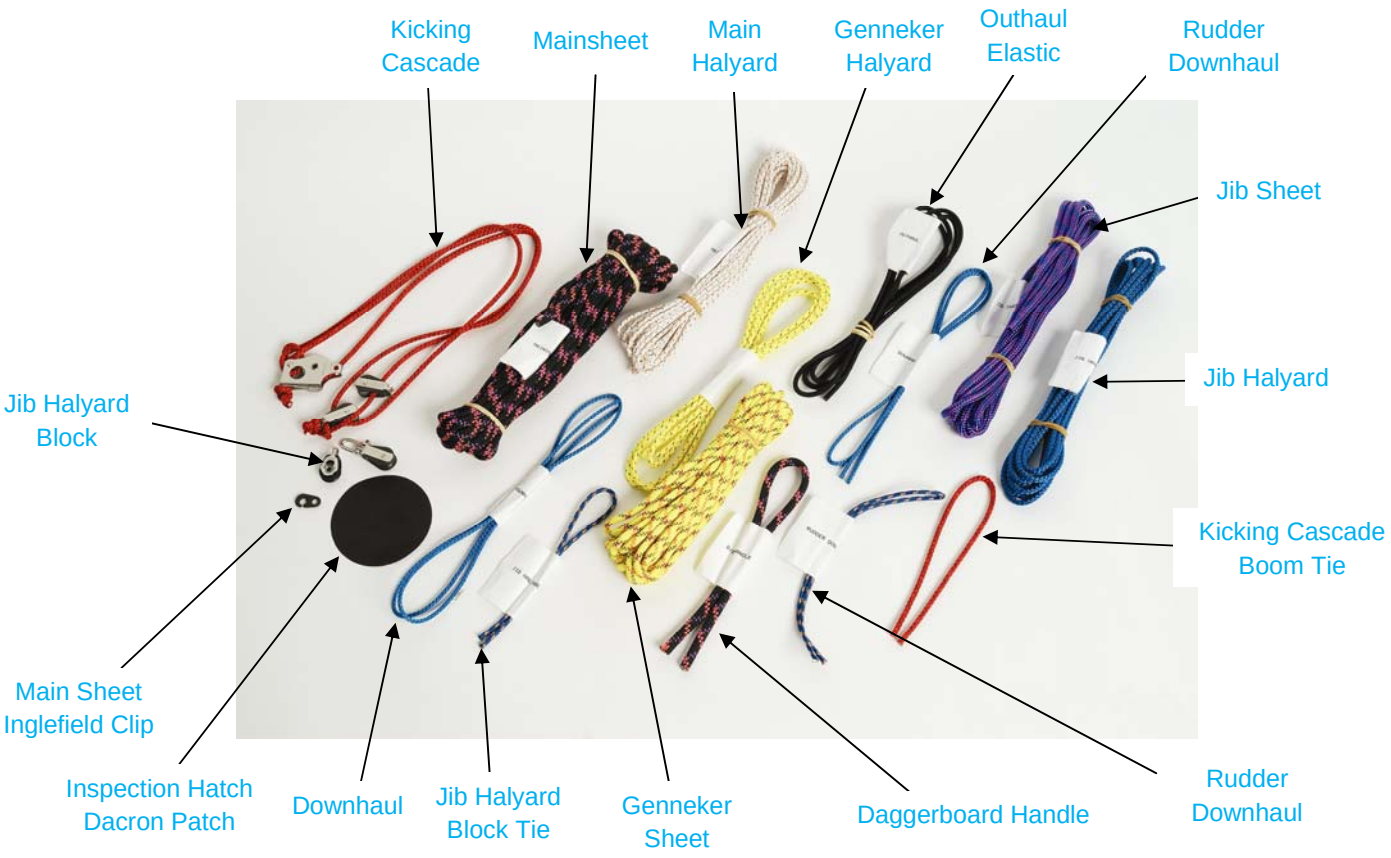
Having unpacked your RS Feva, you should check that you have all of the items listed below before throwing away any of the packing, as there may be some small items still wrapped:

- 1 x RS Feva hull
- 1 x mast top section
- 1 x mast lower section

- 1 x boom
- 1 x rudder
- 1 x rudder stock
- 1 x tiller extension
- 1 x daggerboard
- 1 x main sail (S reefing mainsail or XL 3-batten mainsail)
- 1 x rope pack – consisting of:
  - 1 x mainsheet
  - 1 x outhaul
  - 1 x outhaul elastic shockcord
  - 1 x main halyard and Inglefield clip
  - 1 x kicking cascade
  - 1 x rudder downhaul and block
  - 1 x daggerboard handle
  - 1 x kicker boom tie



Picture 4.1 RS Feva Equipment



Picture 4.2 RS Feva Rope Pack

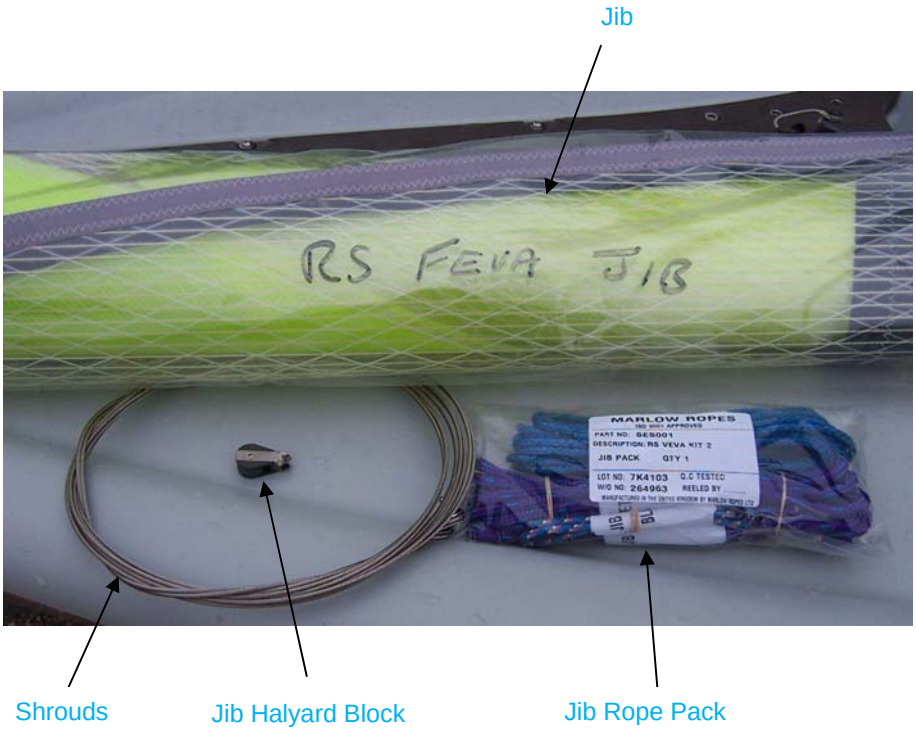
Jib Pack

The Jib Pack is provided as standard with the RS Feva XL, and is an additional option with the RS Feva S.

The pack contains:

- 1 x Feva Jib
- 2 x Feva shrouds
- 1 x shroud shackle
- 1 x jib halyard block
- 1 x stainless steel flat shackle
- 1 x jib rope pack – containing:

- o 1 x jib halyard
- o 1 x jib sheet
- o 1 x jib halyard block tie



Picture 4.3 RS Feva Jib Pack

Genneker Pack

The Gennaker Pack is provided as standard with the RS Feva XL, and is an additional option with the RS Feva S.

The pack contains:

- 1 x RS Feva gennaker
- 1 x gennaker halyard block with shackle
- 1 x gennaker sheet

Picture 4.4 RS Feva Gennaker Pack

4.3 Rigging the Mast

If you have the Jib and/or Genneker Pack, please refer to Section 4.9 Rigging the Jib, and Section 4.10 Rigging the Gennaker before stepping the mast in the boat.

To complete this section, you will need:

- The mast top section
- The mast lower section
- The main halyard

1) Place the mast top section and mast lower section on the ground, in line with each other.
2) Slide the inner sleeve of the mast top section into the end of the mast lower

section (see picture 4.5).

3) Push the two mast sections together (see picture 4.6). The angle of the join should ensure that the mast track on the two sections aligns.

Picture 4.5 Joining the Mast

Picture 4.6 A Joined Mast

4) Uncoil the main halyard

5) Thread one end through the bullseye at the top of the mast (see picture 4.7).

6) Run both ends of the main halyard to the bottom of the mast and tie in place (this prevents them from disappearing back up the mast!).

Picture 4.7 Threading the Main Halyard

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

REMEMBER

If you are rigging the Jib and Genneker Packs, you need to read Sections 4.9 and 4.10 before stepping the mast

4.4 Stepping the Mast

The Mast-Gate Pin

The mast-gate pin is already fitted to your Feva. The pin has a small locking mechanism on the bottom to prevent it from falling out.

To close the mechanism (see picture 4.8):

1) Push the small tang round 90º to the pin
2) Push the tang across until it clicks into place

Pin Open 90° Pin Closed

Picture 4.8 The Mast-Gate Pin

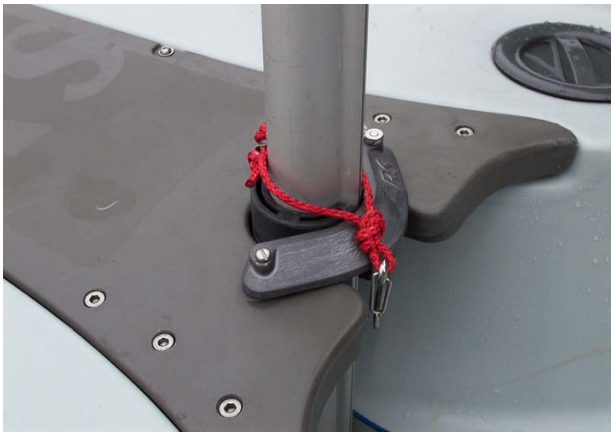
To open the mast-gate pin, reverse the closing procedure. The mast-gate pin must be in the open position to be able to remove it from the hole.

Stepping the Mast

1) Remove the mast gate pin from the hole and open the mast gate (see picture 4.9).
2) Lay the mast along the boat with the mast foot in the mast well (see picture 4.10).
3) Stand the mast up. The mast foot should slide down the mast well and sit comfortably in the mast cup. The lip on the lower mast collar should be under the foredeck, to enable you to close the mast gate.
4) Close the mast gate, ensuring that you have not trapped any ropes in it (see picture 4.11).
5) Push the mast-gate pin back into the hole and close the mechanism (see picture 4.8).

Picture 4.9 The Open Mast Gate

Picture 4.10 The Mast Foot in the Mast Well



Picture 4.11 The Mast Up With the Mast Gate Closed

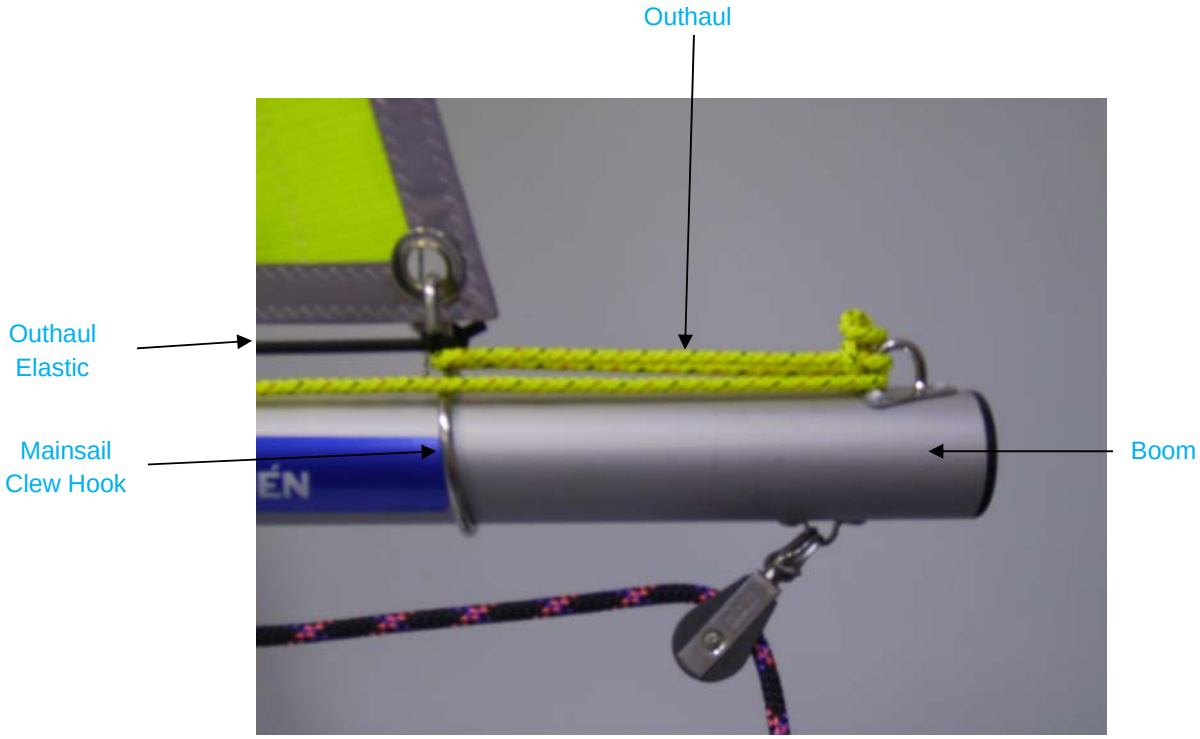
4.5 Rigging the Boom

To rig the boom, you will need:

- The boom
- The outhaul
- The outhaul elastic
- The kicking cascade

- The kicker boom strop

1) Take one end of the outhaul and tie it to the metal eye at the end of the boom, using a knot on knot (see picture 4.12).
2) Lead the outhaul around the mainsail clew hook and back through the metal eye, making sure that the tail comes out on the left-hand side of the boom (also see picture 4.12).
3) Lead the outhaul along the left-hand side of the boom, through the webbing strap, and through the cleat mounted on the top of the boom.
4) Tie the end of the outhaul to the end of the outhaul elastic, using a sheet bend (see picture 4.13).
5) Take the other end of the outhaul elastic and thread it through the plastic bullseye at the front end of the boom (see picture 4.13).
6) Lead the outhaul elastic along the top of the boom and through the webbing strap.
7) Tie the end of the outhaul elastic to the mainsail clew hook, using a knot on knot (see picture 4.12).



Picture 4.12 The Aft End of the Boom

Picture 4.13 The Front End of the Boom and the Gooseneck

7) Take the kicker boom strop and tie a figure-of-eight knot in one end.

8) Thread the other end through the small metal eyelet on the top of the boom, about 50 cm from the front end.

9) Thread the end through the metal loop on the top block of the kicking cascade.

10) Finally, thread the end back through the eyelet on the boom, in the opposite direction to the other end, and tie a figure-of-eight knot in the end (see picture 4.14).

Picture 4.14 The Kicking Cascade Attached

4.6 The Daggerboard

To complete this section, you will need:

- The daggerboard
- The daggerboard handle

1) Tie a figure-of-eight knot in one end of the daggerboard handle.
2) Thread the other end through one of the holes in the top of the daggerboard.
3) Thread the end through the other hole in the top of the daggerboard, making sure to thread it through in the same direction as the original hole (see picture 4.15).
4) Tie a figure-of-eight knot in the end of the daggerboard handle. There should be a knot on either side of the daggerboard (see picture 4.15).

Picture 4.15 The Daggerboard Handle

4.7 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.
2) Slide the rudder into the stock, making sure that you feed the rope over the

small roller fitted in the stock, and out under the tiller (see picture 4.16)

Picture 4.16 Rigging the Rudder

3) Line up the hole in the top of the rudder with the hole in the rudder stock.

4) Push the bolt through the stock and the rudder. Make sure that you line up the head of the bolt 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!*

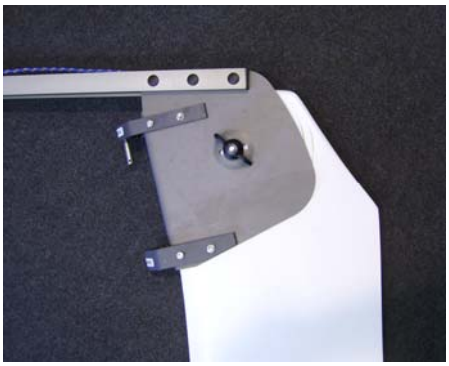
5) Refit the plastic wing nut and tighten. The nut should be tight enough to stop the rudder slopping about in the stock, but not tight enough to make it hard to rotate the rudder.

6) Tie the rudder downhaul block onto the rope that you have threaded into the stock.

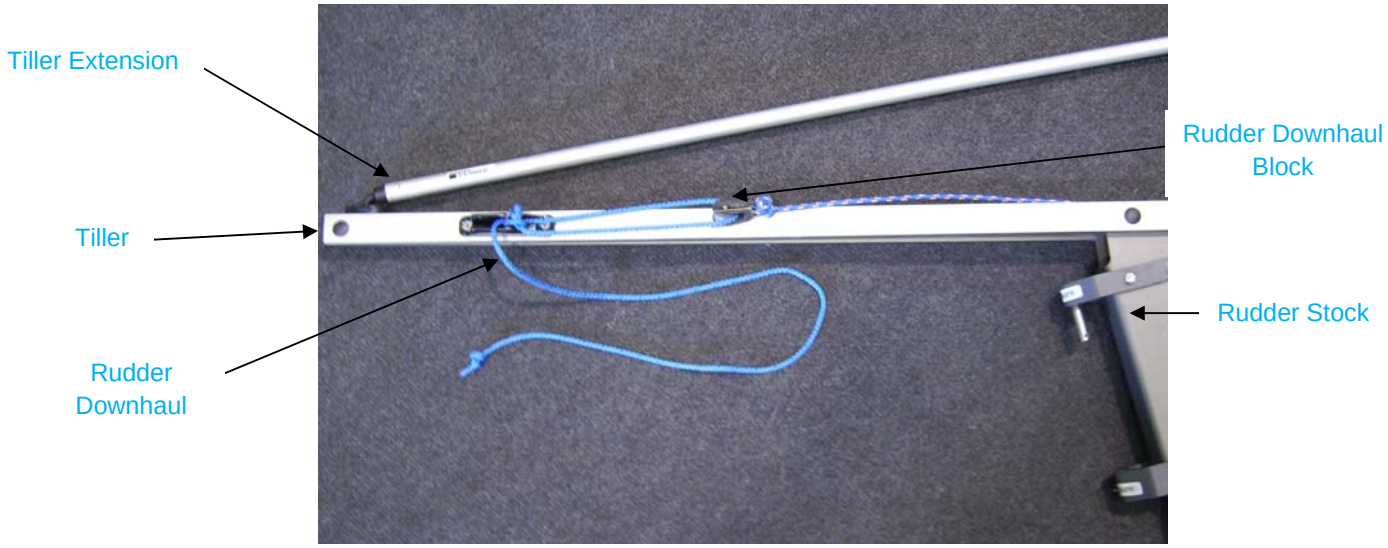
7) Take the rudder downhaul rope and tie one end onto the bridge of the cleat at the front end of the tiller.

8) Thread the other end of the rudder downhaul rope through the rudder downhaul block, and then back through the cleat on the top of the tiller (see picture 4.18).

9) Tie a figure-of-eight knot in the end.



Picture 4.17 The Rudder Fitted in the Stock



Picture 4.18 The Rudder Downhaul

4.8 Hoisting the Mainsail

To complete this section, you will need:

- The mainsail (either the Feva S reefing mainsail, or the Feva XL 3-batten mainsail)
- The Inglefield clip
- The mainsheet

1) Take the mainsheet and thread one end through the large block in the centre of the boat.
2) Next, thread the mainsheet through the block in the middle of the boom, leading it

towards the back of the boat.

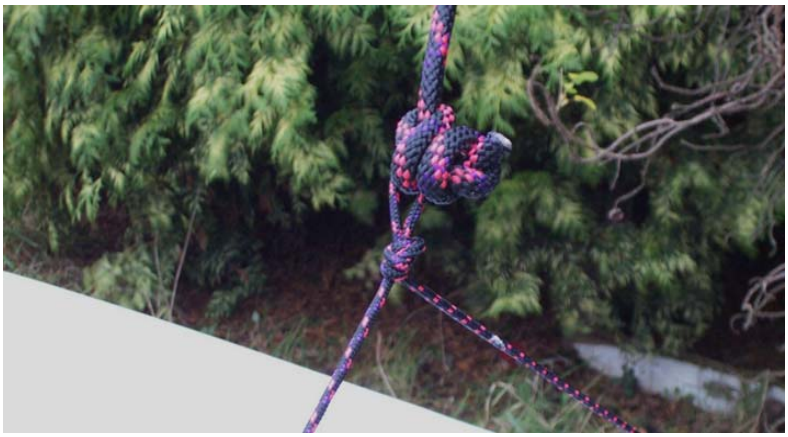
3) Thread the mainsheet through the webbing strap (with the outhaul), and through the block at the back end of the boom.

4) For a standard 1:1 mainsheet:

- Tie the mainsheet to the loop in the middle of the mainsheet bridle at the back of the boat, using a knot on knot (see picture 4.19).

For an optional racing 2:1 mainsheet:

- Remove the mainsheet bridle by undoing the stopper knots under the gunwhale.
- Take the D12 bridle from the Race Pack, and install it by reversing the previous step.
- Take the block that is attached to the bridle and, pulling it forwards, line it up with the centreline of the boat. Adjust the bridle as necessary.



Picture 4.19 RS Feva 1:1 Mainsheet

5) Unroll the mainsail.

6) Take the end of the main halyard that comes down the mast from the bullseye (not from the cleat), and tie it to the top of the mainsail using a knot on knot.

7) Put the top of the mainsail into the opening at the bottom of the mast track, just above the gooseneck mast collar.

8) Holding the sail in line with the mast, pull on the other end of the main halyard.

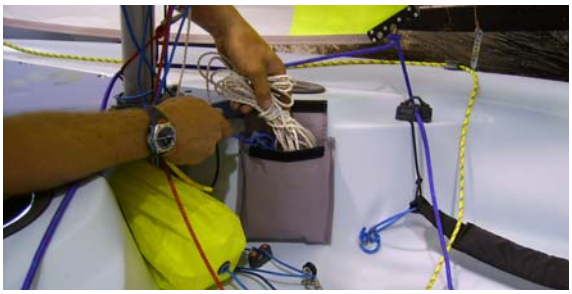
9) Pull the mainsail up to the top of the mast. To make hoisting the mainsail easier, keep it in line with the mast, especially when passing the batten pockets.

10) When the mainsail is at the top of the mast, lead the halyard tail that you have been pulling around the outside of the shroud, and pull it forward.

11) Pull the halyard towards the back of the boat, until it locks in the cleat at the top of the mast.
12) Once the halyard is cleated, bring it back around the shroud.
13) Take the Inglefield Clip and thread the end of the halyard through the hole.
14) Clip the Inglefield Clip on to the one attached to the elastic by the mast gate.
15) Pull the halyard through the Inglefield Clip until all the slack has been taken up. Tie a figure-of-eight knot here to keep the clip in place.

The Inglefield Clips stop the halyard flopping around when the mainsail is hoisted. To lower the mainsail, unclip the two clips, pull the halyard out of the cleat at the top of the mast, and pull the mainsail down.

16) Finally, coil up the halyard and stow it in the halyard bag.



Picture 4.20 RS Feva Halyard Bag

17) Push the gooseneck onto the gooseneck mast collar.
18) Hook the clew of the sail onto the hook at the end of the boom (see picture 4.21). You may like to use the black webbing strop on the clew as a handle to pull the sail into position, making it easier to hook the mainsail clew hook onto the sail.

Picture 4.21 The Mainsail Clew Hook

19) Take the downhaul rope and tie a large figure-of-eight knot in one end.

20) Thread the other end of the downhaul **up** through the gooseneck mast collar, on the port-hand side of the mast.

21) Pass the end of the downhaul through the bottom eyelet in the tack of the mainsail (the Cunningham), and through the cleat on the starboard side of the mast (see picture 4.22).

Picture 4.22 The Downhaul

22) Now connect the cleat on the kicking cascade to the hook on the mast (see picture 4.23).

Picture 4.23 The Kicking Cascade

If you are not fitting the jib or the gennaker, move straight on to Section 4.11 – Completion.

4.9 Rigging the Jib

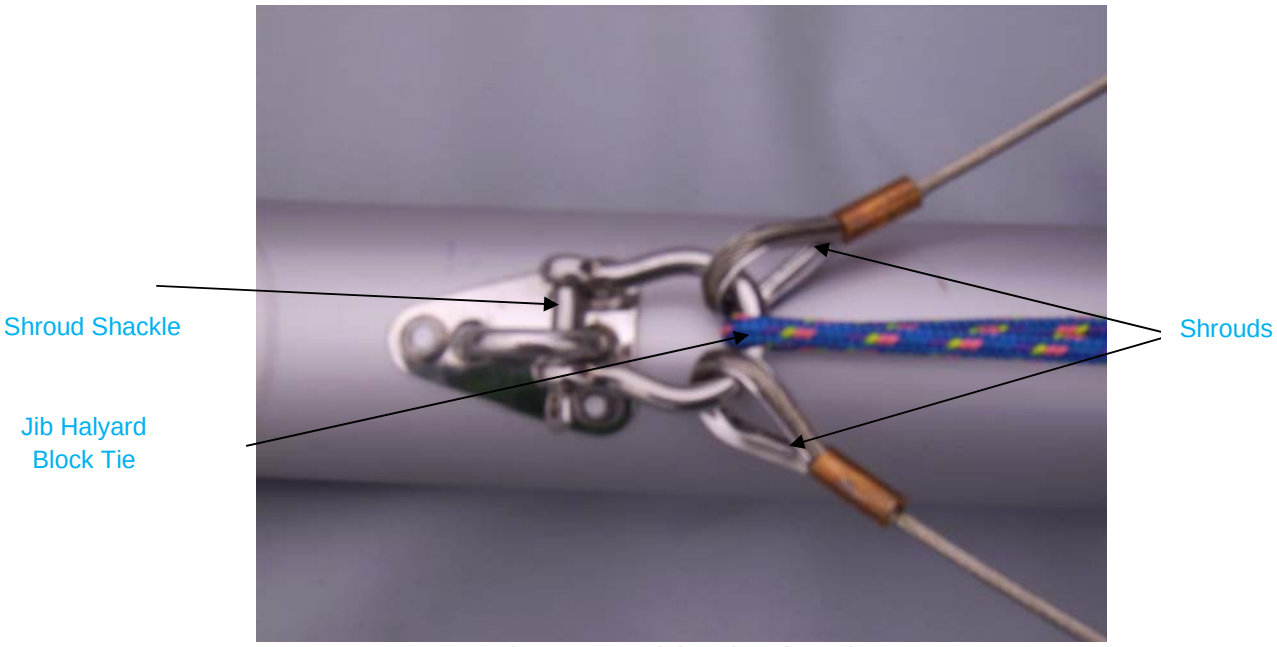
To complete this section, you will need:

- 1 x Feva jib
- 2 x Feva shrouds
- 1 x shroud shackle
- 1 x jib halyard block
- 1 x jib rope pack – containing:
  - 1 x jib halyard

- 1 x jib sheet
- 1 x jib halyard block tie

Before stepping the mast you will need to:

1) Hook the eyelets at the end of the shrouds onto the shroud shackle.
2) Attach the shroud shackle to the lower of the two metal rings on the front face of the mast (see picture 4.24).
3) Tie a figure-of-eight knot in one end of the jib halyard block tie.
4) Thread the other end of the jib halyard block tie through the metal loop at the top of the jib halyard block, pulling the excess through until the block is next to the knot.
5) Thread the free end of the jib halyard block tie through the shroud shackle, in between the shrouds.
6) Thread the end of the jib halyard block tie back through the metal loop at the top of the jib halyard block, passing through in the opposite direction to step 4.
7) Tie a figure-of-eight knot in the end of the jib halyard block tie. The jib halyard block will now hang just below the lower of the two metal rings on the front face of the mast (see picture 4.25).
8) Thread the jib halyard through the jib halyard block, and make sure that both ends of the jib halyard are secure at the bottom of the mast.



Picture 4.24 Fixing the Shrouds

Picture 4.25 Rigging the Jib Halyard Block

Now step the mast, following the instructions in Section 4.4 – Stepping the Mast.

Once the mast is stepped in the boat, you can attach the shrouds to the shroud adjuster plates. A good setting to start with is with the pins in the third hole down on

the shroud adjuster plate.

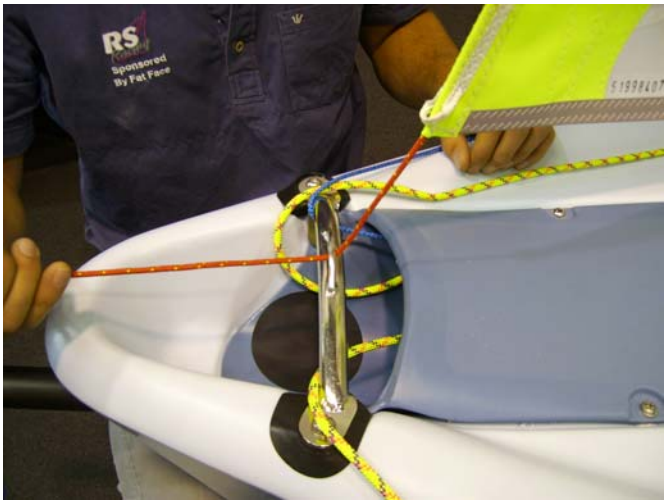
HINT

The mast on the RS Feva is supported at deck level by the mast gate and the foredeck. The shrouds are fitted to stop the mast from bending when tension is applied to the jib halyard, hence making the jib work better. Therefore, changing the shroud adjuster hole position will affect the amount that the mast bends when tension is applied to the jib halyard.

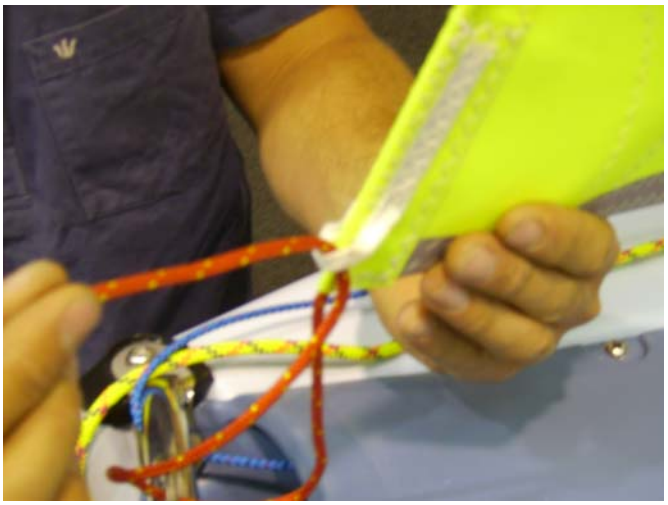
To rig the jib:

1) Unroll the jib.

2) Take the tail of rope sewn into the tack of the jib, and pass it through the metal loop on the tack bar.



3) Pass the tail through the webbing loop sewn onto the tack of the jib.



4) Pull the rope taut, and tie it off using two or three half hitches.

5) Tie one end of the jib halyard onto the loop of rope sewn into the head of the jib, using a knot on knot.

   Note: Instead of a rope loop, the RS Feva Race Jib has a metal eye at the head. Tie the jib halyard to this in the same way.

6) Pull the jib up and tie the halyard off around the horn cleat on the side of the mast (see picture 4.26). Only apply enough halyard tension to prevent the front of the jib from sagging whilst sailing.

7) To attach the jib sheet, either:

- Thread the jib sheet through the middle of the three holes on the clew plate.
- Pull the sheet through until there is an equal amount either side of the sail.
- Tie a figure-of-eight knot in the jib sheet on either side of the clew plate (see picture 4.27).

OR

- Find the centre of the jib sheet by folding it in half.
- Take the flat stainless-steel shackle from the Jib Pack, and attach the jib sheet to it.
- Attach the shackle to the jib clew plate.

8) Take one of the jib sheet ends and pass it through the bullseye and jib cleat, mounted just inboard of the shrouds (see picture 4.28). Do the same with the other side, and then tie the two ends together.

Picture 4.26 The Jib Halyard Cleat

Picture 4.27 The Jib Clew

Picture 4.28 The Jib Bullseye and Cleat

4.10 Rigging the Gennaker

To complete this section, you will need:

- 1 x RS Feva gennaker
- 1 x gennaker halyard block and shackle
- 1 x gennaker sheet

HINT

Your RS Feva will arrive with the gennaker halyard and bowsprit already rigged. There is no need to unthread the halyard from under the foredeck when you are rigging the gennaker. Should the halyard be accidentally pulled through, please refer to Appendix 9.3 RS Feva Gennaker Pole System to re-rig.

Before stepping the mast, you will need to:

1) Shackle the gennaker halyard block to the uppermost metal ring on the front face of the top mast (see picture 4.29).
2) Uncoil the gennaker halyard (that is emerging through a hole in the foredeck).
3) Take the end of the gennaker halyard and, with the mast lying beside the boat, thread it through the gennaker halyard block.
4) Secure the end of the gennaker halyard at the base of the mast.

Picture 4.29 The Gennaker Halyard Block

Now step the mast, following the instructions in Section 4.4 – Stepping the Mast

TOP TIP

Make sure that the gennaker halyard and the downhaul line are on opposite sides of the mast.

To rig the gennaker:

1) Unroll the gennaker.
2) Take the tack line that emerges from the end of the bowsprit and tie it to the tack of the gennaker, using a bowline (see picture 4.30). The knot that is already in the tack line needs to be left in place, as it determines how far the bowsprit comes out when the gennaker is hoisted.
3) Tie the end of the gennaker halyard to the head of the gennaker, using a bowline.

TOP TIP

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

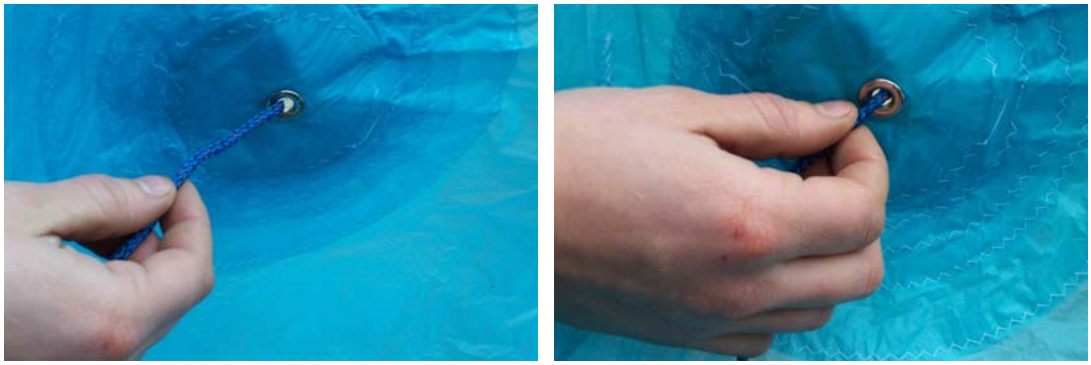
4) The gennaker downhaul line (the other end of the gennaker halyard) is already rigged. It is running through the gennaker chute, and is tied to the tack bar.

Untie the gennaker downhaul line, taking care not to let go of it, as it will disappear up the gennaker chute!

5) With the gennaker on the port-hand side of the boat, pass the end of the gennaker downhaul through the small eyelet in the centre of the gennaker, from the inside to outside (see picture 4.31).

6) Run the gennaker downhaul line up the outside of the gennaker, and tie it onto the upper patch (cross of webbing) using a bowline (see picture 4.32).

Picture 4.30 The Tack of the Gennaker



Picture 4.31 Threading the Gennaker Downhaul Line

Picture 4.32 The Gennaker Downhaul Line

7) Find the middle of the gennaker sheet and double it over to form a loop.
8) Pass this loop through the eyelet at the clew of the gennaker.
9) Pass the tails of the gennaker sheet through the loop and pull it tight (see picture 4.33).
10) With the gennaker on the port side of the boat, thread one end of the gennaker sheet through the block by the port-side shroud adjuster plate (see picture 4.34).
11) Take the other end of the gennaker sheet, pass it around the front of the jib, and into the block on the other side. Tie the two ends of the gennaker sheet together.

Picture 4.33 Tying the Gennaker Sheets

Picture 4.34 The Gennaker Sheet Block

12) Pull the gennaker from one side to the other, as if you were gybing, to see if anything is twisted.
13) Finally, pull the gennaker down into the gennaker chute.

4.11 Completion

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

- Fit the rudder to the back of the boat
- Tidy the halyards away
- Check that all knots and shackles are tied securely

1) 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 – 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 stock up.
3) Coil the main and jib halyards neatly and stow them in the halyard bag (see picture 4.20).

TIME TO GO SAILING!

5. SAILING HINTS

5.1 Introduction

The RS Feva 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 Feva. 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.

5.2 Launching

With the sails fully hoisted and the rudder attached 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.

5.3 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.

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 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.

5.4 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 Feva 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.

5.5 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.

5.6 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 daggerboard case, and hoist the gennaker by pulling the gennaker halyard from the right-hand halyard block (see picture 5.1).

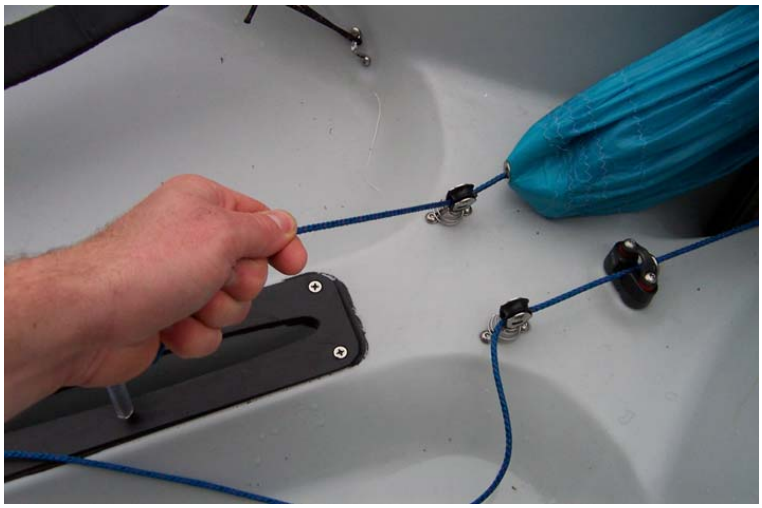
Picture 5.1 Hoisting the Gennaker

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 5.2). 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 5.2 Dropping the Gennaker

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.

5.7 Reefing

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

HINT

The jib is very effective in strong winds because the majority of its area is low down so it helps with balance. Try slab reefing first – it’s more fun for the crew!

Round-Mast Furling

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

- Detach the clew of the sail from the clew hook.
- Detach the kicking cascade from the mast.
- Using a firm two-handed grip, rotate the mast through three complete turns. This is normally enough to provide a significant reduction in sail area.
- Re-attach the clew of the mainsail to the clew outhaul hook, and re-tension the outhaul.
- Re-attach the kicking cascade and tension to suit. The number of turns of the mast will determine the degree to which you reduce the power in the rig.

Slab Reefing

This method of reefing is applicable to the RS Feva S mainsail, when sailed with the jib.

- Release the mainsail downhaul line out of the cleat.
- Ease the kicking cascade.
- Ease the main halyard about 7 centimetres.
- Pull the mainsail down until the line of reefing eyes in the sail is level with the boom.
- Roll up the excess mainsail and tie it to the boom. We recommend using a loop of elastic attached to a plastic hook.
- Re-apply tension to the main halyard, as required.
- Re-apply tension to the kicking cascade.
- Re-thread the mainsail downhaul line, and cleat it on the mast.

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

6. MAINTENANCE

6.1 Boat Care

The RS Feva 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 – most problems can be repaired.
- **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 be RS Racing 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 Racing staff; however, the repair will never be invisible, due to the nature of the material.

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

6.2 Foil Care

The foils are made from injection-moulded plastic. 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 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 Feva from any damage caused by the foils.

6.3 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.

6.4 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.

6.5 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.

7. WARRANTY

1. This warranty is given in addition to all rights given by statute or otherwise.
2. LDC Racing Sailboats 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 LDC Racing Sailboats. Any changes to the hull structure, deck structure, rig or foils without the written approval of LDC Racing Sailboats will void this warranty.
5. Warranty claims for materials or equipment not manufactured by LDC Racing Sailboats can be made directly to the relevant manufacturer. LDC Racing Sailboats warrants that these parts were installed correctly and according to the instructions provided by the manufacturer.
6. Warranty claims shall be made to LDC Racing Sailboats 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 LDC Racing Sailboats.
7. Upon approval of a warranty claim, LDC Racing Sailboats 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, LDC Racing Sailboats 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.

8. GLOSSARY

A

Aft	At the back
Anchor Line	Rope that attaches the anchor to the boat
Astern	Behind the boat
Asymmetric	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 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
Bow	The front of the boat
Bowline	A useful and reliable knot, with a loop in it. See Appendix 9.5 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 chart, at the lowest possible tide
Chute	The tube under the foredeck, in which the gennaker 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, and 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

F

Figure-of-eight knot	A stopper knot. See Appendix 9.5 Three Essential Knots
Foils	The daggerboard and the rudder
Folding Launching Trolley	A launching trolley that can be folded for easy stowage
Foot	The bottom edge of a sail
Fore	Towards the front of the boat

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	The 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
‘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	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 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 Clew-Plate	Plastic plate on the clew of the jib with holes to which the jib sheets are attached
Jib Sheet	The rope used to control the jib
Jib Tell-Tails	Light threads on the sail which show if the wind is flowing efficiently

K

Kicker Boom Strop	The rope used to tie the kicking cascade onto the boom
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 9.5 Three Essential Knots

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
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, like segments of an orange. Used with lines of latitude to measure position and distance
Lower Mast Collar	Collar near the base of the mast that sits under the mast gate when the mast is stepped
Luff	The front edge of the 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 loosely attached to the boom, allowing it to slide back and forth, which hooks onto the clew of the mainsail and holds the sail in place
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
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 raised plastic 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 the sails are hoisted up
Mast Lower Section	The bottom section of a two-piece mast
Mast Plate	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

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
Neap Tide	Tides with the smallest tidal change

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 sails at 90 degrees Close Reach: Point of sailing between a beam reach and a beat (sailing upwind). Sometimes referred to as a 'tight' reach Broad Reach: Point of sailing between a beam reach and a run (sailing downwind)
Reef	To make the sails smaller in strong winds
Reefing Eyes	Metal eyelets in the mainsail that enable it to be reefed
Retaining Pin	The pin used to secure 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
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
Sheet Bend	A knot used to tie two ropes of a similar thickness together
Shroud	The wires that are attached to the mast and the hull, holding the mast up
Shroud Adjustor Plate	The stainless-steel fitting that attaches the shroud to the hull, and offers the option of a number of holes
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
Spring Tide	The tides with the biggest range and strongest currents
Starboard	The right-hand side of the boat, when facing forwards
Step	When a 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	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 metal bar that is situated at the front of the boat, onto which the tack of the jib is attached
Tack Line	The rope that runs through the end of the bowsprit and attaches to the tack of the gennaker
Tender	A small vessel, usually used to transport crew to a larger vessel
Thwart	The beam in the moulding that runs across the centre of the cockpit, which is often used as a seat
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
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, 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

9. APPENDIX

9.1 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

RNLI – for help and advice about safety at sea – www.rnli.org.uk

RS Class Association and Manufacturers:

www.rs-association.com

www.rssailing.com

www.ldcracingsailboats.co.uk

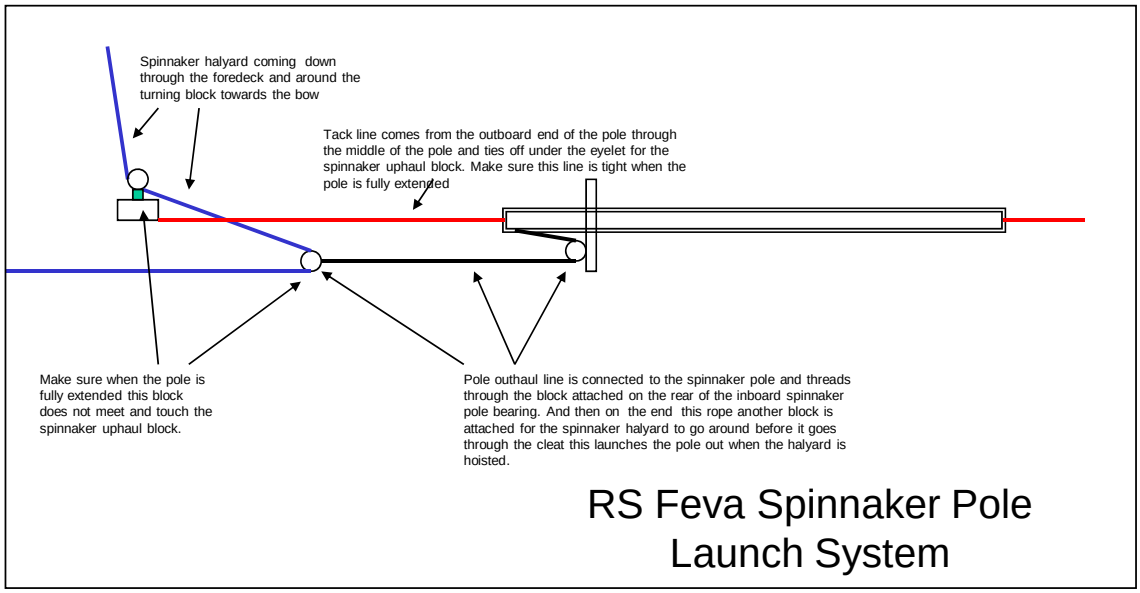
9.2 Basic RS Feva Tuning Guide

The RS Feva has been designed to provide optimum performance with minimum ‘tweaking’. Follow this basic tuning guide to ensure that you are getting the best from your boat. If you would like a more indepth tuning guide, or to chat to fellow Feva sailors, follow the links to the RS Feva Owner’s Club from the RS Class Association website – www.rs-association.com

	LIGHT WIND	**MEDIUM WIND**	**STRONG WIND**
Shrouds	3 holes down	3 holes down	5 holes down
Jib Halyard	Loosen off slightly	Tight	Very Tight
Mainsheet Bridle	Lengthen so boom can be centrelined	Shorten	Shorter Still
Kicking Cascade	Off	Tighten so that the mainsail tell-tails still fly	Tight
Outhaul	Medium Tight	Medium	Really Tight
Mainsheet	1:1	1:1	2:1
Downhaul / Cunningham	Loose enough to have a few horizontal creases in the mainsail	Tighten so that there are only a few horizontal creases in the mainsail	Progressively tighten – but don’t overdo it!
Miscellaneous	Don’t pull the jib sheets in too tight		Hike hard!!

9.3 RS Feva Gennaker Pole System

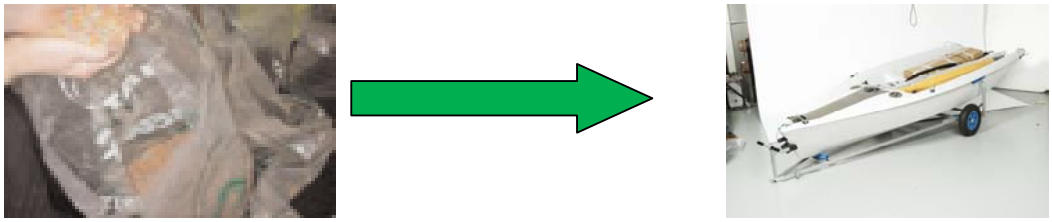
Your RS Feva will arrive with the Gennaker Pole System in place, and this does not need to be de-rigged. In the event that you need to re-rig the gennaker pole, please refer to the following diagram.



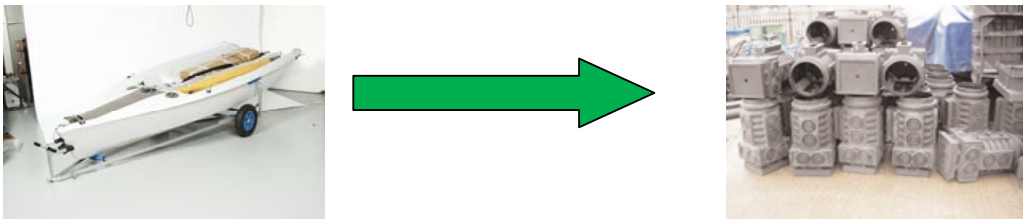
9.4 RS Feva Life Cycle

Did you know that you can recycle your RS Feva?

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 Feva 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 Feva 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

www.ids-access.co.uk

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

9.5 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

9.6 RS Feva Logbook

Date	Helm Experience (Hours)	Crew Experience (Hours)	Sailing Activity	Max. Wind Speed	Location
21/7/07	*3*	*3*	*Club Racing*	*F3*	*Bexhill SC*

Date	Helm Experience (Hours)	Crew Experience (Hours)	Sailing Activity	Max. Wind Speed	Location

Date	Helm Experience (Hours)	Crew Experience (Hours)	Sailing Activity	Max. Wind Speed	Location

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RS Racing by LDC Racing Sailboats
Trafalgar Close, Chandlers Ford, Eastleigh, Hants SO53 4BW
Telephone: 044 (0)23 8027 4500 Fax: 044 (0)23 8027 4800
E-mail: info@RSsailing.com Web: www,RSsailing.com