RIGGING GUIDE

RS 800

Sail it. Live it. Love it.

INDEX

1. INTRODUCTION

Congratulations on the purchase of your new **RS 800** 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 RS800 is an exciting boat to sail and offers fantastic performance. It is a lightweight-racing dinghy and should be treated with care. This manual has been compiled to help you operate your RS 800 with safety and pleasure. It contains details of the craft; the equipment supplied or fitted, its systems and information on its safe operation and maintenance. Please read it carefully and be sure that you understand its contents before using your RS 800.

If this is your first craft, or you are changing to a type of craft 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, your dealer or national sailing federation will be able to advise you of a local sailing school, or competent instructor.

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

For further information, spares and accessories, please contact your local dealer or:

LDC Racing Sailboats
Premier Way
Abbey Park
Romsey
Hampshire
SO51 9DQ
Tel. 01794 526760
Fax. 01794 278418
Email. rs@ldcracingsailboats.co.uk

2 COMMISSIONING

2.1 Preparation.

Your RS 800 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 (electricians) tape.
- Dry lubricant spray (McLube or similar).
- Rig tension gauge.

You may require other tools later, should you wish to make any settings or tuning adjustments to the boat and rig.

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

Whilst your RS 800 has been carefully prepared, it is important that new owners should check shackles, knots and mast step bolts 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 regularly check such items prior to sailing.

2.2 Wing Width.

The width of the wings is determined by a combination of your weight and height. The position of your wings can be calculated using table 4.1 for RS 800s or table 4.2 and 4.3 for twin trapeze.

To adjust the wing width:

- Slide the wings out to the correct hole setting.

- Put the wing pins through the holes in the transverse wing bars and loop the elastic retainer over the end of the pins.

RS800 single wire rack setting and weight tables

										Crew weight (kg's)									
	weight	55	57.1	59.1	61.1	63.1	65.1	67.1	69.1	71.1	73.1	75.1	77.1	79.1	81.1	83.1	85.1	87.1	89.1
	range	57	59	61	63	65	67	69	71	73	75	77	79	81	83	85	87	89	91
	55.0	9	9	9	9	9	9	8	8	7	7	6	6	5	5	4	4	3	3
	57.0	5	5	5	5	5	5	5	5	4	4	4	3	3	3	2	2	2	1
	57.1	9	9	9	9	9	9	8	7	7	6	6	5	5	4	4	3	3	2
	59.0	5	5	5	5	5	5	5	4	4	4	3	3	3	2	2	2	1	1
	59.1	9	9	9	9	9	8	8	7	7	6	6	5	5	4	4	3	3	2
H	61.0	5	5	5	5	5	5	4	4	4	3	3	3	2	2	2	1	1	1
e	61.1	9	9	9	9	8	8	7	7	6	6	5	5	4	4	3	3	2	2
l	63.0	5	5	5	5	5	4	4	4	3	3	3	2	2	2	1	1	1	0
m	63.1	9	9	9	9	8	8	7	6	6	5	5	4	4	4	3	3	2	2
	65.0	5	5	5	5	4	4	4	3	3	3	2	2	2	1	1	1	0	0
w	65.1	9	9	9	8	8	7	7	6	6	5	5	4	4	3	3	2	2	2
e	67.0	5	5	5	4	4	4	3	3	3	2	2	2	1	1	1	0	0	0
l	67.1	9	9	8	8	7	7	6	6	5	5	4	4	3	3	3	2	2	2
g	69.0	5	5	4	4	4	3	3	3	2	2	2	1	1	1	0	0	0	0
h	69.1	9	9	8	8	7	6	6	5	5	5	4	4	3	3	2	2	2	2
t	71.0	5	4	4	4	3	3	3	2	2	2	1	1	1	0	0	0	0	0
	71.1	9	8	8	7	7	6	6	5	5	4	4	3	3	2	2	2	2	2
k	73.0	4	4	4	3	3	3	2	2	2	1	1	1	0	0	0	0	0	0
g	73.1	8	8	7	7	6	6	5	5	4	4	4	3	3	2	2	2	2	2
	75.0	4	4	3	3	3	2	2	2	1	1	1	0	0	0	0	0	0	0
	75.1	8	8	7	7	6	6	5	5	4	4	3	3	2	2	2	2	2	2
	77.0	4	3	3	3	2	2	2	1	1	1	0	0	0	0	0	0	0	0
	77.1	8	7	7	6	6	5	5	4	4	3	3	3	2	2	2	2	2	2
	79.0	3	3	3	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0
	79.1	7	7	6	6	5	5	4	4	4	3	3	2	2	2	2	2	2	2
	81.0	3	3	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0
	81.1	7	7	6	6	5	5	4	4	3	3	3	2	2	2	2	2	2	2
	83.0	3	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0
	83.1	7	6	6	5	5	4	4	4	3	3	2	2	2	2	2	2	2	2
	85.0	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	85.1	6	6	5	5	5	4	4	3	3	2	2	2	2	2	2	2	2	2
	87.0	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	87.1	6	6	5	5	4	4	3	3	3	2	2	2	2	2	2	2	2	2
	89.0	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	89.1	6	5	5	4	4	4	3	3	2	2	2	2	2	2	2	2	2	2
	91.0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 4.1

RS800 Leverage Equalisation tables

		CRM																												
		106	108	110	112	114	116	118	120	122	124	126	128	130	132	134	136	138	140	142	144	146	148	150	152	154	156	158	160	162
	116	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	5	5	5	5	4	4	4	4	3
	118	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	5	5	5	5	5	4	4	4	4	3	3
	120	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	5	5	5	5	5	4	4	4	4	3	3	3
	122	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	5	5	5	5	4	4	4	4	4	3	3	3	3
	124	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	5	5	5	5	4	4	4	4	4	3	3	3	3	2
	126	7	7	7	7	7	7	7	7	7	6	6	6	6	6	5	5	5	5	4	4	4	4	4	3	3	3	3	2	2
	128	7	7	7	7	7	7	7	7	6	6	6	6	5	5	5	5	5	4	4	4	4	3	3	3	3	3	2	2	2
	130	7	7	7	7	7	7	7	6	6	6	6	5	5	5	5	5	4	4	4	4	3	3	3	3	3	3	2	2	2
	132	7	7	7	7	7	6	6	6	6	6	5	5	5	5	5	4	4	4	4	3	3	3	3	3	2	2	2	2	2
	134	7	7	7	7	6	6	6	6	6	5	5	5	5	5	4	4	4	4	3	3	3	3	3	2	2	2	2	2	1
C	136	7	7	7	6	6	6	6	6	5	5	5	5	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	1	1
C	138	7	6	6	6	6	6	5	5	5	5	5	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	1	1	1
W	140	6	6	6	6	6	5	5	5	5	5	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	1	1	1	1
	142	6	6	6	6	5	5	5	5	5	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	1	1	1	1	1
	144	6	6	6	5	5	5	5	5	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	1	1	1	1	1	1
	146	6	5	5	5	5	5	5	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	1	1	1	1	1	1	1
	148	5	5	5	5	5	5	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	1	1	1	1	1	1	1	1
	150	5	5	5	5	4	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	1	1	1	1	1	1	1	1	1
	152	5	5	5	4	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1
	154	5	5	4	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1
	156	5	4	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1
	158	4	4	4	4	4	3	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1
	160	4	4	4	4	3	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1
	162	4	4	4	3	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	164	4	4	3	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	166	4	3	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	168	3	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	170	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 4.2

To calculate CRM - lie on plank and read off weight - multiply by 2 and add helm and crew together.

Helms and crews are to be weighed dry - shorts/jeans and t-shirt. Wallets, belts, shoes etc removed.

CCW and CRM are to be rounded up or down to nearest even no. for rack position or nearest whole no. for lead requirement.

CRM = Combined Righting Moments

CCW = Combined Crew Weights

RS800 single wire rack setting and weight tables

										Crew weight (kg's)									
	weight	55	57.1	59.1	61.1	63.1	65.1	67.1	69.1	71.1	73.1	75.1	77.1	79.1	81.1	83.1	85.1	87.1	89.1
	range	57	59	61	63	65	67	69	71	73	75	77	79	81	83	85	87	89	91
	55.0	9	9	9	9	9	9	8	8	7	7	6	6	5	5	4	4	3	3
	57.0	5	5	5	5	5	5	5	5	4	4	4	3	3	3	2	2	2	1
	57.1	9	9	9	9	9	9	8	7	7	6	6	5	5	4	4	3	3	2
	59.0	5	5	5	5	5	5	5	4	4	4	3	3	3	2	2	2	1	1
	59.1	9	9	9	9	9	8	8	7	7	6	6	5	5	4	4	3	3	2
H	61.0	5	5	5	5	5	5	4	4	4	3	3	3	2	2	2	1	1	1
e	61.1	9	9	9	9	8	8	7	7	6	6	5	5	4	4	3	3	2	2
l	63.0	5	5	5	5	5	4	4	4	3	3	3	2	2	2	1	1	1	0
m	63.1	9	9	9	9	8	8	7	6	6	5	5	4	4	4	3	3	2	2
	65.0	5	5	5	5	4	4	4	3	3	3	2	2	2	1	1	1	0	0
w	65.1	9	9	9	8	8	7	7	6	6	5	5	4	4	3	3	2	2	2
e	67.0	5	5	5	4	4	4	3	3	3	2	2	2	1	1	1	0	0	0
l	67.1	9	9	8	8	7	7	6	6	5	5	4	4	3	3	3	2	2	2
g	69.0	5	5	4	4	4	3	3	3	2	2	2	1	1	1	0	0	0	0
h	69.1	9	9	8	8	7	6	6	5	5	5	4	4	3	3	2	2	2	2
t	71.0	5	4	4	4	3	3	3	2	2	2	1	1	1	0	0	0	0	0
	71.1	9	8	8	7	7	6	6	5	5	4	4	3	3	2	2	2	2	2
k	73.0	4	4	4	3	3	3	2	2	2	1	1	1	0	0	0	0	0	0
g	73.1	8	8	7	7	6	6	5	5	4	4	4	3	3	2	2	2	2	2
	75.0	4	4	3	3	3	2	2	2	1	1	1	0	0	0	0	0	0	0
	75.1	8	8	7	7	6	6	5	5	4	4	3	3	2	2	2	2	2	2
	77.0	4	3	3	3	2	2	2	1	1	1	0	0	0	0	0	0	0	0
	77.1	8	7	7	6	6	5	5	4	4	3	3	3	2	2	2	2	2	2
	79.0	3	3	3	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0
	79.1	7	7	6	6	5	5	4	4	4	3	3	2	2	2	2	2	2	2
	81.0	3	3	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0
	81.1	7	7	6	6	5	5	4	4	3	3	3	2	2	2	2	2	2	2
	83.0	3	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0
	83.1	7	6	6	5	5	4	4	4	3	3	2	2	2	2	2	2	2	2
	85.0	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	85.1	6	6	5	5	5	4	4	3	3	2	2	2	2	2	2	2	2	2
	87.0	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	87.1	6	6	5	5	4	4	3	3	3	2	2	2	2	2	2	2	2	2
	89.0	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	89.1	6	5	5	4	4	4	3	3	2	2	2	2	2	2	2	2	2	2
	91.0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 4.1

RS800 Leverage Equalisation tables

		CRM																													
		106	108	110	112	114	116	118	120	122	124	126	128	130	132	134	136	138	140	142	144	146	148	150	152	154	156	158	160	162
	116	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	5	5	5	5	4	4	4	4	3
	118	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	5	5	5	5	5	4	4	4	4	3	3
	120	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	5	5	5	5	5	4	4	4	4	3	3	3
	122	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	5	5	5	5	4	4	4	4	4	3	3	3	3
	124	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	5	5	5	5	4	4	4	4	4	3	3	3	3	2
	126	7	7	7	7	7	7	7	7	7	6	6	6	6	6	5	5	5	5	4	4	4	4	4	3	3	3	3	2	2
	128	7	7	7	7	7	7	7	7	6	6	6	6	5	5	5	5	5	4	4	4	4	3	3	3	3	3	2	2	2
	130	7	7	7	7	7	7	7	6	6	6	6	5	5	5	5	5	4	4	4	4	3	3	3	3	3	2	2	2	2
	132	7	7	7	7	7	6	6	6	6	6	5	5	5	5	5	4	4	4	4	3	3	3	3	3	2	2	2	2	2
	134	7	7	7	7	6	6	6	6	6	5	5	5	5	5	4	4	4	4	3	3	3	3	3	2	2	2	2	2	1
C	136	7	7	7	6	6	6	6	6	5	5	5	5	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	1	1
C	138	7	6	6	6	6	6	5	5	5	5	5	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	1	1	1
W	140	6	6	6	6	6	5	5	5	5	5	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	1	1	1	1
	142	6	6	6	6	5	5	5	5	5	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	1	1	1	1	1
	144	6	6	6	5	5	5	5	5	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	1	1	1	1	1	1
	146	6	5	5	5	5	5	5	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	1	1	1	1	1	1	1
	148	5	5	5	5	5	5	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	1	1	1	1	1	1	1	1
	150	5	5	5	5	4	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	1	1	1	1	1	1	1	1	1
	152	5	5	5	4	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1
	154	5	5	4	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1
	156	5	4	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1
	158	4	4	4	4	4	3	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1
	160	4	4	4	4	3	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1
	162	4	4	4	3	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	164	4	4	3	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	166	4	3	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	168	3	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	170	3	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table 4.2

To calculate CRM - lie on plank and read off weight - multiply by 2 and add helm and crew together.

Helms and crews are to be weighed dry - shorts/jeans and t-shirt. Wallets, belts, shoes etc removed.

CCW and CRM are to be rounded up or down to nearest even no. for rack position or nearest whole no. for lead requirement.

CRM = Combined Righting Moments

CCW = Combined Crew Weights

Weight divisions	(Combined body weight)	
>= 151kg	no lead	
145-150kg	3kg	1 lump
139-144kg	6kg	2 lumps
133-138kg	9kg	3 lumps
127-132kg	12kg	4 lumps
<= 126kg	15kg	5 lumps

Table 4.3

RS 800s Trampolines.

If you intend to sail the RS800s you will need to fit the trampolines and toestraps. As this is a single trapeze option you will either need to remove the helms trapeze adjusters from the ends of the trapeze wires and tape the wires to the mast.

- Ensure you have the correct trampoline for the side you are fitting. The small cut-out for the control lines is at the front.
- Place the outboard side of the trampoline over the top of the wing bar and secure by zipping the panels together. The zip is on the underside.
- Shackle the small loop of webbing around the control lines and cover with the Velcro patch to secure it in place.
- Using the 4mm rope supplied, tie the inboard side of the trampoline down to the offset clips on the side tank of the cockpit. Reasonable tension is required to prevent the trampoline form sagging while the helm is sitting on it.
- Tie the aft toestraps to the eyelet at the back of the boat (between the wing bars) and forward to the eyelets on the kick blocks. Adjust the length of these to find a comfortable hiking position.
- Finally, tie the elastic through the forward eyelet on the trampoline, under both toestraps, and tie off on the opposite side. Tie the second piece of elastic to the aft ends of the toe straps and loop it over the rudder gudgeon.

2.3 Mast.

Rigging the mast.

Your RS 800 mast will come almost ready to step with:

- The main halyard threaded.
- The spreader deflection set.
- Shrouds, forestay and trapeze wires all fitted.

Therefore, all that is required is to check that the crews trapeze wire is lead down the mast between the main shrouds and cap shrouds above the lower spreaders. The helms trapeze wire should be lead down the mast aft of all the shrouds.

As with all boats, it is a good idea to tape up the spreader bolts and split rings along with any other sharp objects that could rip the asymmetric spinnaker.

HINT

A generous application of dry lubricant sprayed up the sail track will make hoisting and lowering the main easier.

Stepping the mast.

Before you step the mast, check that the main, jib and asymmetric spinnaker halyard ends are at the base of the mast, to enable the sails to be hoisted.

The RS 800 mast requires two people to step it.

- Fit the ‘boat breaker’ to the tack bar at the bow of the boat by passing the loop of webbing around the tack bar and then passing the rest of the ‘boat breaker’ through the loop.

IMPORTANT

The boat breaker applies enormous tension in the rig and the hull. Tension should **NOT** be applied to the boat breaker when the strap is connected to any other part of the boat, ie bowsprit or trolley handle. Application of rig tension using the bowsprit or trolley **WILL CAUSE EXCESSIVE DAMAGE** to the hull.

- Stand up the mast and lift it into the boat, ensuring that the bar across the mast step is located into the heel plug in the mast.
- Attach the main shrouds to the aft chainplates, approximately four holes from the top.
- Shackle the jib halyard onto the top block of the ‘boat breaker’ cascade and cleat it so that the mast is supported by the main shrouds and jib halyard.

Now the mast will stand up by itself.

- Fit the lower shrouds by inserting the T-terminals on to the top end through the bracket above the gooseneck and attach the lower ends to approximately the forth hole down on the forward chainplates.
- Tension the rig using the purchase on the ‘boat breaker’ so that you can pin the forestay through approximately the third hole down on the chainplate fitted to the tack bar.
- Release the tension on the ‘boat breaker’.

You will now need to check the bend on the mast as the shrouds can vary slightly in length and the hole settings above are a guideline only. The measurements below give a good starting point for experimenting with rig tuning as your experience of sailing the boat increases.

NOTE

The spreaders are supplied in a “safe” mid range setting. Alterations are made at the owners risk – more extreme settings may result in rig failure.

- The tension on the main shrouds should be between **375lb** and **450lb**.
- The lower shrouds should hold the mast so that the lower portion below the bottom spreaders is nearly straight, but with a small amount of bend (certainly not inverted or bending backwards).

- The upper shrouds should induce about **150mm** of pre-bend into the mast (gauge this by holding the main halyard tight from the top of the mast to the bottom and look how far it lays from the mast half way up). If the upper shrouds need to be tensioned to increase the pre-bend, this can be done by standing behind the transom holding on to the main halyard and pulling it downwards. Meanwhile another person tightens the bottle screw at the bottom of the upper shrouds.
- A medium mast rake setting is **7350mm** measured from the top of the mast to the top of the transom.

Once the rig is set up, remove the ‘boat breaker’.

- Attach the helms trapeze wires to the elastic that runs through the mainsheet strop deck eyes.
- Attach the crews trapeze wires to the elastic that emerges through a bullseye near the shroud base.

N.B. The first time you apply rig tension, it is not irregular to hear some settlement noise from the rig and hull (creaks, cracks, bangs, etc.!) so long as you stay within the parameters described previously. This noise is not problematic and will not continue in the long term.

2.4 Boom and Vang.

Firstly, shackle the vang cascade to the rope strop on the forward most eye on the boom.

Feed the mainsheet through the centre-jamming cleat and through the ratchet block, ensuring it is threaded the correct way round. Pass the main sheet through the aft block on the boom, down through the block on the cockpit centre strops, up through the forward block on the boom and ties off through the middle of the block on the centre strop.

The boom fits onto the gooseneck pin on the mast. Simply align the pin with the hole in the end of the boom and push in. At first it may seem a little tight, but this will become easier with time.

2.5 Hoisting Sails.

Rigging the asymmetric spinnaker.

- Tie the tack of the sail to the tack line that emerges from the forward end of the bowsprit.
- Tie the halyard to the head of the sail.
- Find the middle of the spinnaker sheets. Pass a small loop through the clew of the spinnaker and then pass both ends through the loop. Pull tight. Thread each one of the sheets outside the forestay and shroud, inside of the trapeze elastics and through the ratchet blocks on the side decks (ensure they are threaded the correct way). Tie the ends of the sheets together behind the mainsheet system.
- Pass the downhaul outside of the sheets, through the lower patch ring on the spinnaker and tie off on the upper spinnaker patch.
- Pull the spinnaker into the sock using the pump system in the cockpit.
- Look around the boat and up the mast to check that no lines are twisted and everything looks ok.

Depending on the prevailing conditions, it would be worth hoisting the spinnaker and gibing it from side to check that it is rigged correctly. It will be very difficult to rectify mistakes on the water.

Hoisting the jib.

Only hoist the jib when you are ready to go afloat, this will prevent any unnecessary flogging and prolong the life of your jib.

- Pin the tack to the forestay chainplate on the tack bar, approximately three holes form the bottom.
- Clip the jib luff to the forestay using the webbing hanks and clips.

- Shackle the jib halyard to the head of the sail, which is now ready to hoist. Apply sufficient tension to the jib halyard in order that the jib luff will not sag between the hanks whilst sailing.

Hoisting the mainsail.

Only hoist the mainsail when you are ready to go afloat, this will prolong the life of your sail and prevent any possible damage occurring while you are not there.

- Unroll the mainsail in the boat and slide the clew strap over the end of the boom. Feed the outhaul through the clew eye of the sail and hook the knot under the cutout at the end of the boom.
- Tie the main halyard to the head of the sail.
- Thread the cunningham line through the lower clew cringle and tie the end around the gooseneck fitting.
- Hoist the sail when you are ready to launch and fit the tack strap around the mast.

2.6 Completion.

Rudder and daggerboard.

The rudderstock simply drops on to the pintle and gudgeon on the transom. Ensure the rudder-retaining clip has located properly; it will ‘click’ in place. Check the rudder is fitted correctly by simply lifting the rudder to see if it lifts off. Hold the rudder in the up position and tighten the rudder bolt to hold the rudder in position.

The rudder may be stiff at first; this will ease up with use but still maintaining a positive, non-sloppy feel.

When you have launched the boat, loosen the rudder bolt and pull the rudder down a fraction use the downhaul line. Sail off into deeper water. You will not

be able to sail the boat hard as this will damage the rudder. When you are in deep enough water, pull hard on the rudder downhaul line and cleat it. Tighten the rudder bolt to take any play out. As things start to wear in, you will not have to ease off the rudder bolt.

The daggerboard simply drops into the case. Take care with the first bit, so as not to damage the tip by hitting the bottom of the case. When the daggerboard has been lowered fully in deep water, lift the daggerboard retaining elastic over the top so it rests in the recess at the top of the board to prevent its loss during capsize or inversion.

3. SAILING HINTS

3.1 Introduction.

The RS 800 is a performance skiff – it will feel different to sail compared to many other boats.

It will be a challenge to learn to sail the boat to its full potential, let alone handling the asymmetric spinnaker. Therefore, you will find it a lot more enjoyable if your first few sails are in a moderate breeze to enable you to concentrate on sailing the boat and not just trying to survive.

Most importantly, it will take you time to get used to the boat, as with any new boat. So, take your time and just enjoy your exciting new boat!

Here are a few little tips to help you on your way (apologies to the more versed high performance sailors):

3.2 Trapezing.

A good general height for the trapeze ring allows you to slip easily on to your harness hook when sitting on the wing. It can be useful to the adjusting rope at this point. The lowest setting should just allow you to sit well aft on the wing when hooked on (for those wild broad reaches and runs).

The crew should trapeze slightly lower than the helm, enabling the helm to see over the top of him.

3.3 Tacking.

- The helm must make sure the boat is level and going as fast as possible when initiating the tack.

- Move into the boat and disconnect the trapeze hook, this best done by luffing slightly or easing the main to depower.
- The tiller extension should be passed around the back of the boat.
- Stand up and face forwards, place the tiller extension down on the new windward deck, sit down on the new side and then change hands.

Facing forwards all the time enables you to stay in control of where you are going.

- Be prepared to ease the mainsheet enough as the boat comes on to the new tack so that the boat does not heel or be blown back into irons.
- Reattach the trapeze hook on the new tack.

HINT

As you come through the tack on the new side, try and get your weight forward of the mainsheet strop, this will power you out of the tack better, giving you less chance of going in to irons.

The crew can stay out for longer on the wire as he/she is able to react quicker.

- Come in and unhook as the helm starts to turn the boat into the tack.
- Cross the boat facing forwards, taking the jib sheet with you.
- After crossing the boat, you need to get out as far as possible to maximise the speed out of the tack.
- Hook on to the trapeze and get out as soon as possible.

Easing the jib sheet a few inches as you go in to the tack and pulling it on out the tack will help you power away after tacking.

3.4 Gybing.

The helmsman.

Always gybe with the boat travelling as fast as possible, this reduces the load on the mainsail during and after the gybe.

- Bear off and come back in to sit on the wing or sidedeck, easing the mainsheet as you do.
- Initiate the gybe, crossing the boat as you do.

- Settle down on the new side, hook on to the trapeze, head up and go out.

The Crew.

- As the helm bears off, come back in to sit on the wing or sidedeck, easing the spinnaker as you go.
- Unhook from the trapeze, pull in the slack from the windward sheet ensuring that you take it from close to the block.
- As the helm initiates the gybe, cross the boat, facing forwards, pulling on the new spinnaker sheet as you go.
- Hook on and go out!

As with any manoeuvre, it will take practice to get both the helm and crew movements synchronised, but when you do both tacking and gybing will be simple and smooth.

3.5 Hoisting the spinnaker.

Don't be too hasty to get the spinnaker up – it makes sense to have familiarised yourself with the boat, especially downwind on the angles of sailing that you would be hoisting or dropping the spinnaker. For the first trial the wind should be no more than 10 –12 knots.

- Prior to leaving the shore you should ensure that the assymetric spinnaker is rigged properly, as any problems will be difficult to sort out on the water.

So when the moment comes, the helm should bear off onto a broad reach/training run with plenty of room to leeward.

- The helm should settle, sitting/kneeling on the wing or sidedeck, with the mainsheet eased so the boom is just off the shroud and the kicker is eased.
- The crew should come into the middle of the boat, standing with one foot either side of the daggerboard case facing forwards.

- The crew should hoist the spinnaker as quickly as possible, using a hand over hand motion for the majority of the time, only changing to pulling for the last metre or so. As you will notice the bowsprit is automatically launched when the spinnaker is hoisted.
- As the spinnaker reaches the top of the hoist, the helm will need to bear off a little more.

HINT

A mark on the spinnaker halyard, just aft of the cleat, is sometimes easier to see than the top of the spinnaker.

- Fill the spinnaker and head up slightly to gain speed.
- Both clip on to the trapeze hooks and go out (wind dependant of course).

For those of you familiar with asymmetric sailing, you will remember how important it is to ease the spinnaker as far as possible, so the luff is on the verge of curling. An over-sheeted spinnaker is such a killer to speed. Conversely nothing will make you capsize faster than a collapsing spinnaker – so forget the mainsail and stay sharp, focusing on the luff of the spinnaker!

3.6 Dropping the Spinnaker.

Bear off again and ease the mainsheet exactly as you would for a gybe.

- The crew should come in from the trapeze, with the helm bearing away and easing the main.
- The crew should stand in the middle of the boat as for a hoist.
- Pull all the slack out of the downhaul line. The release the halyard from the cleat and pull the spinnaker into the sock.

The friction will increase to the end, so the quickest drops will always be affected by keeping the momentum up. It is import not to stop pulling until the patches have gone into the sock as the spinnaker may get blown into the water causing you to slow quickly and possibly damage the spinnaker.

- Tidy the sheets and prepare to luff up as normal.

HINT

Ensure the spinnaker halyard block at the masthead is free to rotate, allowing any twists in the halyard to come out and not jamming in the block. Also, cheek that the sheeve rotates freely on a regular basis, you will be surprised how fast they turn on a hoist.

3.7 Very Light Winds.

As with all skiffs, in sub planing conditions it pays to keep your weight well forward in the boat, with the crew sat forward of the jib track, and keep your movements to a minimum.

4 TUNING GUIDE

4.1 Rig Tension.

In section 4.3 under rigging the mast, you are giving a starting piont as to rig tension and tuning. The figures given are meant as an initial guide to get you on the water. As different conditions and crew weights effect the rig, many more settings and tensions are required if you are to be at the top of the fleet.

The RS 800 fleet often arrange training weekends, where you are shown how to get the best out of your 800, but also owners trade there settings with other owners, thus producing a great resource of settings.

4.2 Cunningham.

Increasing the cunningham tension progressively bends the mast, flattens the sail and opens the leech. In lighter airs, keep it fairly slack and progressively increase the tension up the wind range. Extreme tension should blade the upper leech out flat in very strong winds.

4.3 Vang.

The more wind there is, the more vang you will need. It powers up the leech, helping pointing upwind and maintaining power on the reaches. In very gusty conditions, easing it will make the rig more forgiving. Ease the vang substantially down wind.

HINT

Applying some vang tension in light airs will put a bit of shape in the sail, making you faster.

4.4 Outhaul.

Keep the outhaul tight at all times, except in light airs, when easing it a centimetre or two will help you power through the waves.

4.5 Foils.

The rake of the rudder blade is set for the optimum feel in the helm. Therefore, the rudder should be kept down at all times, except at times of launching and landing. You could damage the rudder and/or the stock sailing with the rudder partially raised.

The daggerboard should be kept lowered on all points of sail. When sailing with the rig raked, use the daggerboard raked by attaching the front shock cord retainer. In heavy winds it will pay to raise the board by a few inches as well.

5. MAINTENANCE

5.1 Boat Care.

The RS 800 is made using an epoxy FRP and foam sandwich laminate. This is stiff and light, but will dent if subjected to point loading. The boat should be supported ashore on a recognised RS trolley and care must be taken with the trapeze harness hooks when capsized.

Obviously in dealing with a marine environment, equipment gets wet, which in itself is not a problem. The problem starts when moisture is trapped for any length of time. The key, therefore, is to store the boat properly ashore. Water absorption could cause blistering and raised fibre pattern.

Keep your dinghy drained and well ventilated.

- Ensure the boat is stored with bow raised to allow water to drain away.
- If leaving the under cover on the boat, ensure that the transom is open for drainage and that there is a hole below the daggerboard slot to allow water to drain.

Wash with fresh water.

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

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, gel crazing. 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 a close examination should be made to ensure joints and laminate are fit for the prevailing conditions. Get the damage professionally repaired as soon as possible.

- **SMALL –** chips, scratching. This type of damage is not boat threatening, particularly as the boat is built using epoxy, and therefore allows virtually no water absorption into the laminate. The owner, using the correct RS gel coat, can repair this type of damage.

As with any high performance racing dinghy, the loads on blocks and ropes can be emense. As part of your rigging and de-rigging each day you should check over every part of the boat for worn blocks and rope, twisted or bent shackle pins and any other highly loaded parts.

5.2 Foil Care.

The foils are FRP with a foam core. Look after them as you do the hull. Wash with fresh water regularly. Repair any chips as soon as possible.

If you intend to travel a lot with the boat, then an RS padded rudder bag would be a worthwhile investment.

5.4 Spar Care.

The mast, boom and bowsprit are carbon composite structures. Wash with fresh water as often as possible, both inside and out. Check all the riveted fittings and the masthead sheave on a regular basis for any signs of corrosion or wear.

The mast is finished with a two pack polyurethane varnish. This protects the laminate against UV degradation caused by exposure to sunlight. It is advisable to apply a new coat of varnish once a year. Contact RS Racing for more information.

5.4 Sail Care.

The main should be rolled and stored dry, out of direct sunlight. Dry the spinnaker, fold it and store it in its bag.

When using a new sail for the first time, try to avoid extreme conditions because 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 normal detergent and warm water. **DO NOT** attempt to launder the sail yourself.

Repairs should be temporarily made using self-adhesive Dacron, Mylar or spinnaker repair tape (depending on sail type). The sail should be returned to a sail maker for a professional repair. Check for wear and tear, especially around the batten pockets and boltrope, on a regular basis.

6 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 form 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. The use of the boat for commercial purposes shall void this warranty.
6. 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.
7. 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.
8. 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.
9. 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.

Examination Report

We hereby confirm that the

RS 800

built by

RS Sailing
Romsey
Hampshire, U.K.

Boat type:	**Sailing Dinghy**	
Design category:	**C**	**D**
Length of hull:	**4.80 m**	**4.80 m**
Beam of hull:	**1.88 m**	**1.88 m**
Unladen weight:	**118 kg**	**118 kg**
Maximum number of persons:	**2**	**3**
Maximum load:	**220 kg**	**250 kg**
Including: Persons at 75kg each		
Carry on load		

has been assessed to conform with the requirements of

The U.K. Statutory Instrument 1996 No.1353 and 2004 No. 1464
CONSUMER PROTECTION
The Recreational Craft Regulations 1996 and 2004
Schedule 6 - Module Aa & Schedule 1 - Parts of Sections 3.2 & 3.3

The EU Recreational Craft Directive 94/25/EC and 2003/44/EC
Annex VI - Module Aa & Annex I - Parts of Sections 3.2 & 3.3

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19 OCT 12

Ken Kershaw
Royal Yachting Association
EU RCD Notified Body

This Certificate remains valid only so long as no changes are made to the design of the model that would affect its RCD compliance.

RYA TECHNICAL SERVICES

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