

1. PERMITTED REPLACEMENTS, ADDITIONS, ALTERATIONS & REPAIRS

- 1.1 The following parts or equipment may be replaced providing that the replacement is of a similar type and performs the same function. The replacement parts or equipment may be obtained from any supplier: -
 - 1.1.1 Blocks
 - 1.1.2 Cam cleats
 - 1.1.3 Rudder hangings and retaining device
 - 1.1.4 Shroud adjusters
 - 1.1.5 Sail batten
 - 1.1.6 Control lines

- 1.2 The following parts or equipment may be replaced providing that the replacement performs a similar function. The replacement parts or equipment may be obtained from any supplier: -
 - 1.2.1 Fastenings
 - 1.2.2 Shackles, swivels and pins
 - 1.2.3 Toe straps, lashings and tensioning elastics
 - 1.2.4 Running rigging, ropes and lashings
 - 1.2.5 Main Halyard and halyard securing device, maximum velocity ratio 2:1
 - 1.2.6 Tiller extension
 - 1.2.7 Batten tensioning devices
 - 1.2.8 Bungs (including self-bailer if fitted)
 - 1.2.9 Centre-board slot gasket
 - 1.2.10 Wire rigging, kicking strap and rig tension purchases with the following restrictions on construction and sizes:-
 - 1.2.10.1 Upper shrouds – 1 x 19 construction stainless steel wire of not less than 2.5mm dia.
 - 1.2.10.2 Main shrouds - stainless steel wire comprising at least 7 strands which may be rounded or preformed and not less than 3mm dia
 - 1.2.10.3 Lower shrouds - 1 x 19 construction stainless steel wire of not less than 2.5mm dia.
 - 1.2.10.4 Forestay – stainless steel wire comprising at least 7 strands which may be rounded or preformed and not less than 3mm dia. When fitted to the mast in the normal way, and laid along the forward face of the mast, the lower bearing surface of the forestay shall extend a minimum of 250mm beyond the bearing surface of the mast heel fitting.
 - 1.2.10.5 Kicking strap and rig tension purchases – flexible stainless steel wire not less than 2.5mm dia or synthetic fibre rope not less than 2.5mm dia
 - 1.2.11 Spinnaker ratchet blocks
 - 1.2.12 Inspection hatches.

- 1.3 The following additions and alterations are permitted. Parts may be obtained from any supplier except where specified:
- 1.3.1 Non slip material of any kind (maximum thickness 2.5mm) may be added to the hull or decks
 - 1.3.2 The use of flexible adhesive tape, thin line or shock cord, as long as this does not modify the effective sheeting of any sail nor the intended purpose or action of any equipment
 - 1.3.3 Packers may be fitted under cleats
 - 1.3.4 Any number and design of mechanical wind indication devices may be fitted
 - 1.3.5 Calibration marks of any kind are permitted
 - 1.3.6 Any compass, timing device or a combination of both may be fitted provided that it/they can only provide information relating to A) the boat's heading and B) current or elapsed time
 - 1.3.7 Any additional equipment required for safety purposes may be fitted
 - 1.3.8 Clips, ties or bags to secure safety or other equipment are permitted
 - 1.3.9 Additional drainage holes and inspection hatches may be fitted to the hull provided they do not compromise the watertight integrity of any hull compartments
 - 1.3.10 Drainage holes may be drilled in the mast heel plug and sprit
 - 1.3.11 Sail battens may be tapered or adjusted as required
 - 1.3.12 The head of the centerboard or rudder may be packed or sanded to maintain a good fit
 - 1.3.13 A maximum of four foot straps may be fitted to the wings. When standing on the strap a sailor's foot shall not be extended more than 10mm from the wing bar.
 - 1.3.14 Any number of items may be fitted to the hull or spars provided their sole function is to stow food and/or drinks
 - 1.3.15 Maps, charts & means for recording compass headings may be carried or fixed to the hull
 - 1.3.16 The total velocity ratio in each of the control line systems shall not exceed:- kicking strap 16:1, cunningham 8:1, jib luff tension 2:1.
 - 1.3.17 Control line takeaway systems may be altered or improved in any way, so long as any extra fastenings are made only to the inside of the fore and aft wing bar tubes, and all lines/shockcord are maintained externally, alongside and close to any wing bar tube
 - 1.3.18 Protective chafe pads of any material are allowed under the wing u-bolts, so long as no fixings are added
 - 1.3.19 The use of a jamb cleat, and the type of swivel base & final turning block for the mainsheet is optional. The final turning block may be raised by means of a "turret", with the sole purpose of raising the swivel base/final turning block/jamb cleat directly above the standard position on the cockpit floor. The only permitted turret is the "standard" RS800 Class turret, supplied by the licensed builder.
 - 1.3.20 The upper shrouds may be tensioned by (a) a bottlescrew or (b) a rope purchase that utilises any fittings, so long as the purchase has a maximum velocity ratio of 4:1 and is solely attached to the original fitting on the mast or mast step fitting and the upper shrouds.
 - 1.3.21 A maximum of two lacing eyes and blocks, solely for the purpose of routing the helmsman's trapeze elastic, may be fitted at any point on the cockpit floor, or the elastic may be led via a shackle, loop or block attached to any of the lacing eyes already fitted to the inside face of the cockpit sides.
 - 1.3.22 A maximum of two fairleads may be fitted to the cockpit floor, or to other existing fittings, not more than 500mm from the centre jammer, solely for the purpose of routing the spinnaker halyard/downhaul line.
 - 1.3.23 Additional blocks, fairleads elastic and rope may be fitted solely for the purpose of providing quick release of the spinnaker halyard from its cleat. Such fittings may only be attached to existing fittings or lines on the hull or spars.

- 1.3.24 Trapeze shockcord systems may be altered or improved in any way, so long as any extra fastenings are made only to the inside of the fore and aft wing bar tubes, and all lines/shockcord are maintained externally, alongside and close to any wing bar tube.
- 1.3.25 The main sheet arrangement may be modified as follows: the velocity ratio may be increased to 5:1; multiple mainsheet strops are permitted, provided that all such strops are attached using the "standard" attachment points and that the attachment points on the boom are no more than 1530mm from the aft face of the mast; the mainsheet must pass through a final turning block mounted either on the cockpit floor or on a turret, in accordance with 1.3.19.
- 1.3.26 A maximum of three deck loops may be fitted solely for the purpose of attaching toe straps for the helm. If fitted, they shall be positioned on the inner faces of the cockpit floor kick blocks and on the upper surface of the transom turret a maximum of 100mm from the aft wing bar locating plugs.

2. SAILING REQUIREMENTS

- 2.1 The RS800 shall be raced with two persons on board
- 2.2 The Sail Number shall be displayed on each side of the mainsail between the two lower battens, with the upper numbers on the starboard side
- 2.3 There is no requirement to carry sail numbers and national letters on the spinnaker
- 2.4 The sprit shall be retracted so that its forward end is within 400mm of the forward most point of the hull at all times other than when the spinnaker is set or in the act of being set or recovered
- 2.5 The forestay, upper shrouds, main shrouds and lower shrouds shall not be adjusted while the boat is racing
- 2.6 The RS800 may only be raced if the wings are on the designated settings and the required corrector weights fitted relevant to the weight of the helm and crew in accordance with rule 3. The corrector weights must be fixed to the hull using the fittings as supplied or approved by the Licensed Builder on the floor of the hull. The position of these fittings cannot be changed.
- 2.7 The lower spreaders shall be 460mm +/- 10mm in length, when measured from the centre of the shroud wire along the spreader to the wall of the mast. From a line between the centre of both main shrouds at the spreader ends, the distance to the aftermost edge of the sail track will be 150 mm +/- 10 mm when measured without loads on the mast or supporting stays.
- 2.8 The upper spreaders shall be 360 mm +/- 5mm in length, when measured from the centre of the shroud wire along the spreader to the wall of the mast. The spreaders will either be free swinging or fixed, limited swing is not permitted. When the upper spreaders are fixed, then from a line between the centre of the both upper shrouds at the spreader ends, the distance to the aftermost edge of the sail track will be 145 mm +/- 10 mm when measured without loads on the mast or supporting stays.

3. PERFORMANCE COMPENSATION

- 3.1 The boat may be sailed in one of two modes:
- 3.1.1 “Twin Trapeze” where both helm and crew may use the trapeze. In this mode, rule 3.2 applies.
- 3.1.2 “Single Trapeze” where only the crew may use the trapeze. In this mode, rule 3.3 applies.

3.2 Twin Trapeze Mode: The rack and corrector settings will be calculated using the tables in Annex A – Righting Moment Correction Chart.

3.2.1 Correction for Combined Righting Moment (CRM): The righting moment of each crew member will be measured on a Class Association approved measurement beam. The beam shall be 2 metres long and used in conjunction with Class Association approved scales. Each crew member must (in turn) lie flat, facing upwards, upon the beam with arms folded such that hands touch elbows. The reading from the scales for the two crew members will be added and then multiplied by 2 to give the CRM. This figure and the Combined Crew Weight (CCW) will then be looked up on the Righting Moment Correction Chart to determine the rack hole settings that shall be used. Rack holes are numbered from 1 to 16 starting from the innermost position. The CCW and the CRM are to be rounded up or down to the nearest even number for rack hole position.

3.2.2 Use this table to determine the number of corrector weights to fit for a given CCW:

Combined Crew Weight	Corrector weight in Kg	No of corrector weights
151Kg or more	None	No correctors
148-150.9 Kg	3Kg	1 corrector
145-147.9 Kg	6Kg	2 correctors
142-144.9 Kg	9Kg	3 correctors
139-141.9 Kg	12Kg	4 correctors
138.9 Kg or less	15Kg	5 correctors

3.2.3 One intermediary rack bar per side, as supplied by the manufacturer, may be used in twin trapeze mode. The intermediary bar will be positioned in board of the outer rack beam and outboard of the side deck. The intermediary bar will be located securely and its position cannot be altered whilst racing. When used, the 2 intermediary bars (i.e. one each side) will be deemed to be equivalent to one corrector weight, for equalisation purposes as outlined in rule 3.2.2

3.3 Single Trapeze Mode (also referred to as “RS800S”): Rack holes are numbered from 1 to 16 starting from the innermost position. The weight of the crew members shall be measured on Class Association approved scales. The rack and corrector settings are determined from the table in Annex B – Single Trapeze Mode (“RS800S”) Rack Hole Setting and Corrector Weight Requirements. The box corresponding to the relevant helm and crew weight is selected, with the rack setting read from the top left of the box and the number of corrector weights from the bottom right of the same box.

Annex B – Single Trapeze Mode (“RS800S”) Rack Hole Setting and Corrector Weight Requirements

3.1.1.1 Select the box corresponding to the relevant helm and crew weight – rack hole setting top-left, corrector weight requirement bottom-right
 Crew weight range (kg)

		55 57	57.1 59	59.1 61	61.1 63	63.1 65	65.1 67	67.1 69	69.1 71	71.1 73	73.1 75	75.1 77	77.1 79	79.1 81	81.1 83	83.1 85	85.1 87	87.1 89	89.1 91
Helm weight range (kg)	55.0 57.0	9	9	9	9	9	9	8	8	7	7	6	6	5	5	4	4	3	3
		5	5	5	5	5	5	5	5	4	4	4	3	3	3	2	2	2	1
	57.1 59.0	9	9	9	9	9	9	8	7	7	6	6	5	5	4	4	3	3	2
		5	5	5	5	5	5	5	4	4	4	3	3	3	2	2	2	1	1
	59.1 61.0	9	9	9	9	9	8	8	7	7	6	6	5	5	4	4	3	3	2
		5	5	5	5	5	5	4	4	4	3	3	3	3	2	2	2	1	1
	61.1 63.0	9	9	9	9	8	8	7	7	6	6	5	5	4	4	3	3	2	2
		5	5	5	5	5	4	4	4	3	3	3	2	2	2	2	1	1	0
	63.1 65.0	9	9	9	9	8	8	7	6	6	5	5	4	4	4	3	3	2	2
		5	5	5	5	4	4	4	3	3	3	2	2	2	2	1	1	1	0
	65.1 67.0	9	9	9	8	8	7	7	6	6	5	5	4	4	3	3	2	2	2
		5	5	5	4	4	4	3	3	3	2	2	2	2	1	1	1	0	0
	67.1 69.0	9	9	8	8	7	7	6	6	5	5	4	4	3	3	3	2	2	2
		5	5	4	4	4	3	3	3	2	2	2	1	1	1	0	0	0	0
	69.1 71.0	9	9	8	8	7	6	6	5	5	5	4	4	3	3	2	2	2	2
		5	4	4	4	3	3	3	2	2	2	1	1	1	0	0	0	0	0
	71.1 73.0	9	8	8	7	7	6	6	5	5	4	4	3	3	2	2	2	2	2
		4	4	4	3	3	3	2	2	2	1	1	1	0	0	0	0	0	0
	73.1 75.0	8	8	7	7	6	6	5	5	4	4	4	3	3	2	2	2	2	2
		4	4	3	3	3	2	2	2	1	1	1	0	0	0	0	0	0	0
75.1 77.0	8	8	7	7	6	6	5	5	4	4	3	3	2	2	2	2	2	2	
	4	3	3	3	2	2	2	1	1	1	0	0	0	0	0	0	0	0	
77.1 79.0	8	7	7	6	6	5	5	4	4	3	3	3	2	2	2	2	2	2	
	3	3	3	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0	
79.1 81.0	7	7	6	6	5	5	4	4	4	3	3	2	2	2	2	2	2	2	
	3	3	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	
81.1 83.0	7	7	6	6	5	5	4	4	3	3	3	2	2	2	2	2	2	2	
	3	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	
83.1 85.0	7	6	6	5	5	4	4	4	3	3	2	2	2	2	2	2	2	2	
	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	
85.1 87.0	6	6	5	5	5	4	4	3	3	2	2	2	2	2	2	2	2	2	
	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
87.1 89.0	6	6	5	5	4	4	3	3	3	2	2	2	2	2	2	2	2	2	
	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
89.1 91.0	6	5	5	4	4	4	3	3	2	2	2	2	2	2	2	2	2	2	
	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	