

Laser SB3 Class Measurement Rules

Bye Law 1

Version 2 (Amended SR 25/7/06 – V12)

1 Introduction

The Laser SB3 was created as a strict one-design sportsboat where the true test when raced is between crews and not boats and equipment.

The fundamental objective of the Laser SB3 Class Rules (“The Rules”) is to ensure the strict one design concept is maintained.

The English text of the Rules shall govern.

2 Fundamental Rules

2.1 Equipment

The Laser SB3 shall be raced only with hull, mast, boom, sails, battens, keel, rudder system, tiller, fittings, equipment, standing rigging and running rigging conforming to these rules.

2.2 Additions, Alterations and Repairs

No additions alterations or repairs may be made to any part of the boat including the hull, mast, boom, sails, battens, keel, rudder system, tiller, fittings, standing rigging or running rigging supplied by a licensed Builder (see paragraph 3) except when such an addition, alteration or repair is specifically authorised by these Rules (see paragraph 4).

2.3 Replacements

Replacement of the hull, mast, boom, sails, battens, keel, rudder system, tiller, fittings, equipment (including location) standing rigging and running rigging shall

- only be from parts supplied by a licensed Builder unless such replacement from another supplier is specifically authorised by these Rules (see paragraph 4)
- Where replacement alteration or repairs are authorised by these rules, these shall be carried out using materials of construction and in a manner that gives no weight or other advantage.

3 Definition of Builders and Hull identification.

3.1 Definition of Builders

The builders of the Laser SB3 shall be only those licensed by Tony Castro Limited and approved by the World Council of the Laser SB3 Class Association.

3.2 Identification

Each Laser SB3 shall have a builder's Hull identification plaque incorporating the boat sail number fixed in the rear of the cockpit. With the prior consent in writing of the Class Measurer a competitor (for example a charterer) may carry on his sails a number different to that shown on the plaque

4 Permitted Replacements, Additions, Alterations and Repairs.

4.1 Replacements – Similar Type, Size and Function

The following may be replaced by any of similar type, size and function, but from any supplier

- Tiller, tiller extension and universal joint
- Spinnaker bag (must use the builder supplied mounting frame)
- Cleats
- Blocks
- Mainsheet swivel base
- Standing rigging of the same material, diameter and length as that supplied by the licensed Builder [Appendix 2].

4.2 Running Rigging

Running rigging must only be arranged as supplied and documented by The Builder. Lines must be of uniform diameter. All replacements must be of same size and type except:

- High modulus fibre is permitted
- Lines may be of different length and diameter however the minimum diameters for the jib and gennaker halyards and the spinnaker and main sheets shall be 8mm, the main halyard 6mm and the backstay 4mm.

4.3 Additions and Alterations

The following additions and alterations are permitted and may include parts, which can be obtained from any supplier.

- PVC film attached to any part of the hull, sails or spars, for example to display a yacht's name or identify a sponsor, provided their fixing gives no material performance advantage.
- Any small attachment to the end of the boom intended to minimise damage to the deck when the boom is lowered.
- The carrying of ropes, fenders, spares, loose or fitted internal buoyancy and any safety equipment is unrestricted as long as it does not change the stiffness or other structural properties of the boat.

- Any system of tape, line or clips intended only to prevent bottlescrews undoing when racing is permitted.
- Non slip material (Maximum thickness 5 millimetres) may be added anywhere on the decks or down below.
- The use of flexible adhesive tape, and shockcord or any other device to prevent snagging of sails, sheets and lines or to keep the gennaker in its bag is unrestricted but shall not modify the effective sheeting of any sail nor the intended purpose or action of any equipment.
- Additional purchase may be incorporated into the mainsheet system using the existing sheet attachment points; extra blocks may be used to facilitate these additional purchases.
- The cam cleat on the backstay may be reversed to facilitate release aft.
- A single fixed wired Instrument may be fitted that displays all or some of the following information:
 - Compass (Bearing and Tactical)
 - Clock/Timer
 - Speed
 - Depth
- A hand held GPS may be used but it shall not be connected by any means to any other instrument or electronic device on board
- Calibration marks of any kind are permitted
- One mechanical wind indication device may be fitted to the top of the mast
- Wedges may be fitted under cleats
- Clips, ties or bags to secure safety or other equipment are permitted
- Tell-tales may be attached to any part of the jib and mainsail or rig
- Lines and straps for securing additional equipment below the main hatch are permitted
- The method of attaching sheets to jib and spinnaker is unrestricted provided that the sail when flown will not fly further than 10cm from the principal sheet rope.
- The method of attachment of any fitting to the boat is unrestricted but shall not modify the fitting's position, the effective operation of the fitting nor the intended purpose or action of any equipment.
- Rudder fittings of any of the designs fitted by the licensed Builder are permitted however the diameter of the pin may be increased. The fixings may be increased in size and additional reinforcement may be added inside the rudder post.
- A single hole of up to 111mm diameter may be cut in the forward most bulkhead to give access to the back of the towing eye bolt.

4.4 Repairs

- Repairs and preventative maintenance to hull, mast, boom, keel, rudder system, tiller fittings equipment, standing rigging and running rigging and sails may be carried out without violation of these Rules provided such repairs are made in such a way that neither the essential shape, characteristics or function of the original are effected or improved
- Preventative maintenance shall include the replacement of fastenings with alternatives providing that the equipment is replaced in the original position and in accordance with these Rules where relevant.
- No sail repairs are permitted which alter the shape of the sail.
- The head of the keel and the keelbox may be packed using packing strips, Velcro or other materials to ensure a snug fit. Equal quantities of material must however be added to front and rear and/or to each side except that in the case of front and rear packing only the addition in total of <2mm packing to the front only is allowed. No altering of the alignment is permitted. No packing is permitted which has the effect of moving the keel forward or aft in the boat.
- Waxing and polishing of the hull is permitted provided the intention and effect is to polish the hull only. Any work intended or with the effect of lightening the hull or improving, shape or performance beyond the original is not permitted.
- Surface refinishing of the keel and rudder are permitted provided the original shape, thickness, weight, profile, alignment and other characteristics are not altered. Re-profiling is absolutely prohibited.

5 Measurements

5.1 Conformity

The Laser SB3 shall conform to these Rules. All fitted or fixed equipment shall be carried in the position as supplied by the builder. In the case of a measurement dispute not explicitly covered by these rules, the procedure set out in paragraph 5.2 shall be adopted.

5.2 Exception Procedure

A sample of 5 sailboats or, if appropriate a sample of 5 items, not the subject of the measurement dispute shall be taken and measured using identical techniques. The dimensions of the disputed sailboat or item shall be compared to the measurements taken from the sample and if the sailboat or item is outside the maximum or minimum dimensions obtained from the sample. The matter together with details of the measurement methods and any other relevant information shall be referred to the Chief Measurer of the Class Association whose decision shall be final and binding on all parties.

5.3 Disputes

In the event of a dispute alleging non-compliance with these Rules, the matter, together with any relevant information shall be referred to the Chief Measurer of the Class Association whose decision shall be final and binding on all parties.

6 Sailing Requirements

6.1 Crew Numbers and Weights - General

- The Laser SB3 shall be raced with a maximum of 4 people on board.
- The total weight of those on board whilst racing shall not exceed 270kg.
- For the purposes of establishing the weight of those on board whilst racing, each person shall be weighed wearing only lightweight shirts and underclothes.

6.2 Crew Numbers and Weights – Regattas & Events

If specifically designated, a regatta or event may require controlled weight measurement in the following manner:

- During an event if a total weight of those on board whilst racing is found to be more than 10kg under 270kg then during that event that crew will not be required to be reweighed.
- During an event, if a total crew weight is found to be in excess of 270kgs up to a maximum of 280kgs they shall be reweighed the following day and if then in excess of 270kg shall be disqualified from the event.
- Provided a crew has been found to be within the weight limit during a regatta or event there shall be no weighing on the last day except for the the purpose of reweighing.following substitution
- During an event classified in the notice of Race or Sailing instructions as a 'Premier Event' by World Council or a National Committee all crew shall be weighed at the start of the event. There shall be no crew substitution.unless:
 - i. The Race Committee is advised before the pre event 'weigh in', in writing of the exact dates of required crew changes their names and expected weights. The new crew members must be available for weighing if requested before starting to race.or
 - ii. Authorised by the Race Committee before any race starts as being necessary due to wholly unavoidable circumstances.

Should the total crew weight reduce by in excess of 15kg as a result of a substitution under 1 or 2 above the boat shall carry ballast in the form of water in clear containers below decks at the base of the mast such that the adjusted weight is not less than 15kg below the original total.

During all other events crew may be substituted without reference to the Race Committee provided the Skipper undertakes that the total crew and ballast weight (as established in these rules) including the substitutes shall not at any time exceed 270kgs and shall not be more than 15kgs different to the original total crew weight. It shall be the Helmsman's entire responsibility to weigh all members of the crew for which a substitution is made. The crew may be required to establish the new total crew and ballast weight

6.3 Membership and Helmsperson

No person is permitted to race a Laser SB3 in any Fleet, inter Fleet, District or other sanctioned event unless the owner or a joint owner, or a nominated representative of an organisation owning the Laser SB3 is a current Full Member and one person on board is either a Full Member or Associate Member of the Class Association. At Premier Events there shall be no changes in helmsperson for the duration of the event unless prior approval is given by the Race Committee in recognition of wholly unavoidable circumstances

6.4 Standard Equipment, Safety Equipment and Personal Buoyancy

Required Items:

- Anchor (minimum total weight including shackles 3.5kg) and 2m of 5/16"/8mm steel chain – Securely stowed
 - 20m (minimum) of non floating 10mm (minimum) dia. line or 30 m (minimum) of 8mm (minimum) non floating line. Wef 1/1/07. 30m (min) of 8mm (minimum) non floating line is required.
 - First Aid Kit in a waterproof bag or container
 - Adequate Personal Buoyancy for all crew.
 - VHF Radio demonstrably functioning at the start of the event
 - 4 Flares in a watertight container or bag, within date– 2x red and 2x orange smoke.
 - Horseshoe buoy attached at stern
 - Throwing line of min 6mm and at least 10 metres attached at stern
 - Bucket minimum volume 9 litres and 2m min 4mm thickness lanyard
 - Either:
 - Outboard Engine 2 HP or more securely stowed in designated location
 - Outboard Bracket as supplied from time to time by the Builder
 - Minimum of 4 litres of fuel in a plastic container (measured when leaving shore) as well as minimum 1 litre of fuel to be measured when returning to the shore after racing.
 - Fire Extinguisher, within date
- or:
- 22kg Ballast correctors of lead or water securely stowed below decks behind the mast support on starboard side as close as reasonably possible to the position for the engine.

6.5 Keel Position

Whilst racing the keel must be securely tied down in the fully down position, and may only be released for the purposes of re-floating when aground after which it shall be secured fully down at the earliest opportunity.

6.6 Main Hatch

Whilst racing the main and any other hatches shall be securely closed but may be opened to gain access to stored equipment after which they shall immediately be securely closed.

6.7 Rigging

Whilst racing the Laser SB3 it shall be rigged in accordance with the rigging method set out in the owners rigging manual supplied by the Builder (see Appendix 1).

6.8 Identification

Sail numbers and optional international letters shall be in accordance with ISAF Rules and shall be displayed on the mainsail with those on the port side below those on the starboard side of the sail.

6.9 Crew Positioning

Whilst racing no member of the crew in the area between the base of the shrouds and the rearmost end of the side rails may sit with the base of their spine on or over the side rails or outside the forward extension of the line of the side rails.

No member of the crew may sit facing outward and no device or method or sheet may be used to implement or assist hiking or sitting out board other than the aft mounted foot straps.

6.10 Forestay.

The forestay may not be replaced during a regatta unless demonstrably damaged.

7 Racing Rules of Sailing.

The Class Association may prescribe rules and restriction to the ISAF Rule 18 "Advertising and Event Categories"

APPENDIX I

Laser SB3 Class Measurement Rules – Bye Law 1 Version 2 - Interpretations

| No. | Date | Rule | Interpretation |
|-----|-----------------|-------------|--|
| 1 | 2 June 2003 | 4.4 | Use of an anti-foul coating is permitted in a manner that gives no weight or other advantage. |
| 2 | 2 June 2003 | 6.7 | The spinnaker sheet blocks may be arranged with either ratchet forward or ratchet aft. |
| 3 | 13 October 2003 | 4.3, 4.4 | Letting in of sponsorship logos on the spinnaker is permitted. This process is not to change the shape or characteristics of the sail. |
| 4 | 7 August 2006 | 4.1 | Under a ratchet block and a non ratchet block shall be regarded as of similar function. |
| 5 | 7 August 2006 | 4.3, 4.4 | With the written agreement of the Class Measurer not more than 3, 154mm hatches may be installed for the purposes of facilitating repairs |
| 6 | 7 August 2006 | 3.2 | It is envisaged a competitor who regularly charters boats will agree with the Chief Measurer a 4 digit number starting with a 2 for use on his own sails which he uses on the chartered boats. |
| 7 | 1 May 2007 | 4.3 | The installation and use of Tacktick wireless T075 Micronet Race Master System including components reference T070, T121, T138, T910 is permitted. |

APPENDIX II

Measurements:

Measurements are shown below as a guide to replacement and repair in the event of failure.

1. Bowsprit length from front vertical face of bow gunwhale directly under the bow recess to the front forward edge of the pole end fitting 1800mm max.
2. Keel depth, lower hull surface beside centre of keel to top of the bulb 1175mm max.
3. Spreader lengths (cut length of the metal of each spreader) – Top 400mm, Bottom 950mm (nominal)
4. Spreader shroud to shroud measurement – Top 790mm, Bottom 1800mm (nominal)
5. Mast length, top of T terminal slot to base of mast extrusion excluding mast heel, 7315mm (nominal)

APPENDIX III

Advisory

It is our intention that wef 1/1/08, 6.4.1 will be amended to require the min engine power of any engine carried to be increased to at least 2.5hp.

There will be a rule wef 1/1/2008 to restrict the length of forestay within minimal tolerances