

TIMPENNY TRAILABLE YACHT ASSOCIATION AUSTRALIA INC (A0041637N)

770 SPECIAL CLASS RESTRICTIONS BY-LAWS



SWING KEEL

1. GENERAL

1.1 The object of the Timpenny Yacht Association of Australia Inc, 770 Special Class Restrictions By-Laws is to establish the Class as one in which all matters affecting performance are strictly controlled. Enough latitude is permitted to maintain interest in fitting out, maintaining and racing the yachts.

2. BUILDERS

- 2.1 Builders of the Timpenny 770 shall be those certified as such by the Association.
- 2.2 Builders shall be responsible for supplying yachts within the measurement rules and specifications.
- 2.3 A builder shall be at his/her own expense correct or replace any boat, which fails to pass measurement due to a lapse on his/her part, and failure to do so can be cause for cancellation of his/her licence.
- 2.4 A metal or plastic plaque stamped with the Timpenny 770 class insignia and the sequential hull number approved by the Association will be supplied and fixed conspicuously to the mast post by the builder.

3. **REGISTRATION**

- 3.1 No yacht shall be allowed to race in the Class unless it has a valid Measurement Certificate.(See Attachment 2)
- 3.2 A Measurement Certificate shall be issued by a Timpenny State Association on receipt of:
 - (a) A correctly completed measurement form; and
 - (b) The registration fee (if any required); and
 - 1. A name for the Yacht. (The Association will not accept a name that is duplicated in Australia); from an appointed State Association Measurer or his/her interim stand-in.
- 3.3 Change in ownership shall not invalidate the measurement certificate and shall not necessitate remeasuring.
- 3.4 The Measurement Certificate is only valid if the Owner is a paid up Member of a recognised Timpenny State Association.
- 3.5 A Sail Number may be issued for new Yachts when the State Association Measurer has checked and accepted the completed measurement form forwarded by an appointed Measurer who is not the owner of the yacht being measured.
- 3.6 The responsibility for ensuring the validity, currency and continuity of a yachts Measurement Certificate shall rest with the owner.

4. MEASUREMENT

- 4.1 Hull: The hull shall be constructed of glass reinforced plastic from a mould approved by the Association and recognised as a Timpenny 770, or from duplicates of this mould approved by the Association. The lay up and structure shall be completed in a manner which ensures structural strength of the yacht. No openings are permitted other than as accepted as normally delivered, except that skin fittings for sink drains, logs, etc. are permitted providing they comply with Association requirements. The deck moulding may or may not incorporate a sliding hatch fitted directly into the cabin or a cabin roof which incorporates a pop top
- 1. The hull shall be supplied with keel, keel casing, forward berth, cabin bunks, portable toilet housing, floor reinforcing, main hatch, forward deck hatch, after cockpit lockers, forward anchor locker, chainplates, hand rails to cabin top, bow and aft inbuilt buoyancy of approximately 0.8 cubic metres and keel lifting mechanism. In this condition the hull shall weigh at least 1500 Kg. Weighbridge certificate to be supplied on new boats by the builder.

- 4.3 The keel shall conform to a pattern approved by Timpenny Yachts for swing keels and shall weigh not less than 72 Kg. Furthermore, not less than 310 Kg of the ballast must be built into the floor of the hull. Whilst racing the keel must be locked down.
- 4.4 Rudder design shall conform to Timpenny Yachts Drawing No. 770/1. (See Attachment 1)
- 4.5 The distance from the aft edge of the top of the transom to the centre of the mast pivot shall be between 4450mm and 4600mm.
- 4.6 The distance from the centre of the mast pivot to the after top line of the transverse self tacking jib track measured on the yacht centre line shall be between 200mm and 220mm. The length of the jib track plus two fair leads shall be not less than 1600mm.
- 4.7 The jib track shall not curve in plan .
- 4.8 Mainsheet Track

It shall not curve in plan.

- 4.9 The point of attachment of the jib luff shall be between 40mm and 180mm from the front of the vertical nose of the deck mold.
- 4.10 The measurement fore and aft Rule for 4.5, 4.6 and 4.9 shall be horizontal with the hull set up so the water line is horizontal.
- 4.11 The amount of inbuilt foam buoyancy shall not be reduced after delivery from the builder. Sealed tanks fore and arf.

5 MAST.

- 5.1 The Mast shall be taken from a minimum aluminium alloy extrusion 90mm round or oval section. Other sections may be used provided they equal or exceed the fore and aft and athwartships dimensions 90-120mm of the above sections and provided a 9000-9250mm length of the alternative section weighs at least 17.1 Kg.
- 5.2 The length of the mast extrusion shall not exceed 9250mm untapered with the top capped and the bottom plug suited to the tabernacle fitting. All holes drilled into the mast to allow for rivets or bolts shall be sealed after assembly with an appropriate sealer. The top cap shall be sealed as well as fastened into place.
- 5.3 The mast may not rotate. The mast plug and any thrust bearing materials used under the mast and on top of the tabernacle shall be such that the bottom of the extrusion to the bearing surface of the tabernacle is not more than 14mm.
- 5.4 The mast shall be mounted on the standard tabernacle either supplied or approved by the Association.
- 5.5 The mast shall be stayed by two pair of shrouds, one forestay and a backstay. The effective attachment points of the side stays are inners 3300-3650 mm, outers 6700-7400mm and the jib halyard shall be 6600-7250mm from the heel of the mast section. The forestay attachment to the mast may be a further 50mm higher.
- 5.6 The mast shall be braced by spreaders fixed to the mast 3400-3650mm +/- 25mm above the heel. The length of the spreader shall be not more than 800mm and not less than 750mm measured from the side of the mast. The spreader shall be of welded, riveted or bolted aluminium fabrication and aluminium alloy flat section designed to fit snugly to the mast.
- 5.7 The gooseneck shall be fixed to the mast allowing up to200mm of vertical movement. The gooseneck must limit the travel of the boom so that the top of the boom section extended to meet the aft side of the mast cannot be less than 600mm or more than 800mm from the heel of the mast section.

5.8 The diameter of the standard rigging to the mast shall be not less than

Forestay	1 x 19 x 4mm
Shrouds	1 x 19 x 4mm
Backstay	1 x 19 x 3mm

- 5.9 Permanently bent masts are prohibited.
- 5.10 Standard mast not tapered
- 5.11 Fittings needed for the use of trapezes are prohibited.
- 5.12 Internal halyard fittings or other openings into the mast step are standard.
- 5.13 The height of the spinnaker halyard ring attachment to be no greater than 1300 mm from the base of the mast. Recommended height 1100 mm.
- 5.14 No Diamonds allowed.
- 5.15 Maximum height of spinnaker halyard block is 7130mm 50mm

6 BOOM

- 6.1 The boom shall be of aluminium alloy and not permanently bent.
- 6.2 The boom sections shall be at least 90mm X 80mm Round or oval and 2mm think walls.
- 6.3 The length of the boom measured from the aft side of the mast track when set with its track on the yacht centre line shall not exceed 3330mm.
- 6.4 An adjustable adequate boom vang shall be fitted.

7. JIB POLE

7.1 The jib pole shall be of aluminium tube of at least 45mm outside diameter and shall not exceed 3120mm in length including end fittings.

8. SAILS

- 8.1.1 Each yacht shall submit for measurement all sails for use in class racing controlled or sponsored by the Association or its member Associations. The measurer may measure any sails again at any time at his/her discretion.
- 8.1.2 The sails shall be hoisted on a halyard and shall be capable of being set lowered and reefed whilst sailing.
- 8.1.3 The Class Insignia, the pattern of which appears in Timpenny Yachts Drawing No. 770/1 shall be of a colour which contrasts with that of the sails and shall be affixed on both sides of the mainsail near the top. Sail numbers shall appear below that of the Insignia.
- 8.1.4 For a class racing series each boat must declare its sail plan, consisting of not more than one mainsail, and three jibs and two spinnakers. A damaged sail may be replaced.
- 8.1.5 An official measurer shall measure the jibs, mainsail and spinnaker and sign and date them on their tacks. Measurement details and mainsail number shall be shown on the measurement form.

- 8.1.6 Sails shall be of appropriate material and be capable of being stowed in a normal sail bag.
- 8.1.7 Elastic boltropes are prohibited.
- 8.1.8 Sails shall be measured by the method described below, which is appropriate to the class measurement form.
- 8.1.9 All measurements are overall, eg. the outside of the bolt ropes.
- 8.1.10 Short cuts which save time but which give less accurate results shall not be used.
- 8.1.11 Sails shall be measured off the spars and laid on a flat surface with the corners tied to suitable pegs as described below.

8.2 MAINSAIL

- 8.2.1 The mainsail luff will be tensioned to 15 Kg measured with a spring balance. The head and tack shall be tied to pegs leaving the tension in the luff rope.
- 8.2.2 The clew will then be pegged so that both the foot and leach are tensioned.
- 8.2.3 The luff and leach shall either be held flat and free from wrinkles by inserting and tensioning the battens or by pulling them out by hand and holding them by weights around the edges. The foot of loose-footed sails without foot ropes is measured flat.
- 8.2.4 Measurements will be made as shown on the Class Measurement Certificate.
- 8.2.6 The mainsail shall be loose-footed.
- 8.2.7 A double luff is not permitted.
- 1. At least one set of cringles for reefing shall be fitted at the luff approximately 800mm above the foot, and at the leech of the sail to suit. If two reefing points are fitted the second set should fitted approximately 1640mm above the foot and at the leech of the sail to suit. Additional cringles may be carried.
- 8.2.9 Mainsail Measurements (Sail Area 15.9 Sqm)
 - i. Headboard 150mm by 150mm
 - 1. The luff measurement "A" shall not be more than 7700.
 - iii. The foot measurement "B" shall not be more than 3100.
 - 1. The leach measurement "C" shall not be more than 8300.
 - 2. There are three further cross measurements at the $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$ leach heights.
 - 3. The $\frac{1}{4}$ cross measurement shall be not more than 2500mm.
 - 4. The $\frac{1}{2}$ measurement shall be not more than 2000mm.
 - 5. The $\frac{3}{4}$ measurement shall be not more than 1250mm.
 - 6. The cross measurements shall be the distance from the leech measurement points as defined below to the nearest points on the fore-edge of the bolt rope. The points on the leech from which the cross measurements are taken shall be determined bridging any, hollows in the leech with straight lines. The mid-point of the leech shall be determined by folding the clew and head to the mid-point. All of these positions can be marked during folding by means of a pencil.
 - x. Not more than four battens shall be used which shall be full length, with not less than 1.4m between the head and the first batten, and not less than 1.2m between the first and second battens both measured down the luff.
 - xi. The leech of the mainsail shall consist of a curved line between battens.
 - xii. The sail width along the top edge of the top batten pocket shall be not more than 1080mm.
 - xiii. The round in the centre of the foot shall be not more than 100mm.

8.3 JIB/GENOA

8.3.1 For yachts fitted with a luff wire the measurement between the outer inside edge of the eyes in the luff wire shall not exceed 7500mm when the luff wire is tensioned to 15 Kg as measured with a spring balance.

8.3.2 Genoa Measurements

- i. The luff measurement shall not be more than 7100.
- ii. The foot measurement shall not be more than 4700.
- iii. The leach measurement shall not be more than 6500.
- iv. Point of measurement taken to projection of foot and leach intersection.
- v. Head to centre foot 6950mm maximum.
- vi. The foot to be a fair curve.
- vii. ³/₄ girth 1800mm maximum.
- viii. ¹/₂ girth 3100mm maximum.
- ix. ¹/₄ girth 3900mm maximum.
 - Note: Girth measurements determined as per Rule 8.2.9 (ix)
- x. Not more than 3 leech battens may be used. The batten pocket must not exceed 300mm in length. No other restrictions are placed on batten position. Battens are optional.
- 8.3.3 The sail shall be smoothed out as far as possible but tension will not be applied during measurement.
- 8.3.4 Above deck furling gear for reefing may be used.
- 8.3.5 Under deck jib furling gear is prohibited.
- 8.3.6 The jib tack shall be fixed approximately on the centre line of the yacht.
- 8.3.7 The jib luff may be attached to the forestay along its length.

8.4 SPINNAKERS

- 8.4.1 The spinnaker may be symmetrical about its vertical centre line.
- 8.4.2 The length of the luff and leech shall be 6700 mm +/- 30 mm.
- 8.4.3. The maximum width 4800 mm +/- 30 mm.
- 8.4.4 The spinnaker pole shall be the same measurements as the jib pole refer to Section 7.1

9 MISCELLANEOUS

- 9.1 A serviceable out board engine must be carried in an operating position. If the weight of the motor with a petrol tank carrying 151 litres of fuel is not equal to 40 Kg. the weight difference shall be attached to the underneath of the cockpit floor as close to the aft as possible.
- 9.2 If a ships head is not carried a weight of 8 Kg shall be attached at a height equal to the standard head above the floor in a position where the head is normally fitted.
- 9.3 No outboard swinging device may be used other than toe straps.
- 9.4 If bunk cushions of foam approximately 75mm thickness are not carried a weight of 8 Kg shall be attached to mid forward bunk position and two weights each 5 Kg. shall be attached one to each side bunk top below the cockpit side benches.
- 1. Flotation Marks

Water line length is 7260 mm. To obtain flotation marks measure 20mm up the transom from the centre of keel line (Mark A) and measured with a parallelogram 7.26 metres to the stem. At this point the corresponding mark is located (Mark B). The boat shall float to these marks.
