



# TOPPER OWNERS MANUAL

[www.toppersailboats.com](http://www.toppersailboats.com)

# TOPPER OWNERS MANUAL

## INDEX

Introduction	2
Address of Manufacturer	2
HIN Number	2
CE Builders Plate	2
Declaration of Conformity	3
Principal Dimensions	3
Design Category	3
Class Association	3
Important Safety Information	4-5
<b>SAIL NUMBERS &amp; LETTERING</b>	
STANDARD CONTROL LINES	10
RACE CONTROL LINES	11
ASSEMBLING THE MAST	12
SLEEVING THE SAIL	12
STEPPING THE MAST	13
FITTING THE BOOM	13
4:1 RACE OUTHAUL	14-15
STANDARD OUTHAUL	16
RACE TRAVELLER	16-17
STANDARD TRAVELLER	18
6:1 RACE DOWNHAUL	18
STANDARD DOWNHAUL	19
RACE KICKER	19
STANDARD KICKER	20
MAINSHEET	20-21
PAINTER	22
RIGGED TOPPER	23
<b>ADJUSTING SAIL</b>	
TUNING FOR PERFORMANCE	24
Maintenance & Service	25
Warranty Conditions	26
Registration of Warranty	26
ITCA MEMBERSHIP	27

## INTRODUCTION

This document contains important safety information which should be read and understood before moving on to the Rigging Manual.

This manual has been compiled to help you to operate your craft with safety and pleasure. It contains details of the craft; the equipment supplied or fitted, its systems and information on its operation and maintenance. Please read it carefully, and familiarise yourself with the craft before using it.

If this is your first sailboat, or you are changing to a new type of sailboat you are not familiar with, for your own comfort and safety, please ensure that you obtain handling and operating experience before assuming control of the sailboat. The Topper Class Association will be pleased to advise you of local sailing schools, or competent instructors.

**PLEASE KEEP THIS MANUAL IN A SECURE PLACE AND HAND IT OVER TO THE NEW OWNER WHEN YOU SELL THE CRAFT.**

## ADDRESS OF MANUFACTURER

For further information, spares and accessories.

Please contact:

Topper International Ltd  
Kingsnorth Technology Park  
Wotton Rd  
Ashford  
Kent TN23 6LN  
Telephone +44(0)1233 629186  
Fax +44(0)1233 645897  
email [info@toppersailboats.com](mailto:info@toppersailboats.com)  
website [www.toppersailboats.com](http://www.toppersailboats.com)

## WATERCRAFT IDENTIFICATION NUMBER (WIN)

The WIN number is engraved on the hull at the starboard side of the transom.

## CE BUILDERS PLATE

The Sail number is detailed on the CE Builders Plate which is located in the deck cockpit of the boat.

The CE plate also contains information on the Design Category, the Builder, the Maximum number of crew, the Maximum load and the CE number of the Notified Body assessing the boat.

**DECLARATION OF CONFORMITY**

**EU Declaration of Conformity of Recreational Craft with the Design, Construction and Noise Emission requirements of Directive 2013/53/EU**

Craft manufacturer: Topper International Ltd. Kingsnorth Technology Park, Wotton Road, Ashford, Kent TN23 6LN, UK.

Module used for design/construction assessment: A1

Notified Body used for assessment: HPi Verification Services, The Manor House, Howbery Park, Wallingford OX10 8BA, UK.

**Description of Recreational Craft**

Watercraft Identification Number: GB-TOPA - - - - -

Brand name of craft: Topper

Type of craft: Sailboat

Type of hull: Decked Monohull

Type of Propulsion: Sail

Construction Material: Injection moulded polypropylene

Hull Length: 3.40 m

Hull Beam: 1.20 m

Unladen weight: 65 kg

Recreation Craft Design Category: C

Max no. of persons: 2

Max load: 160 kg

This declaration of conformity is issued under the sole responsibility of the manufacturer. I declare on behalf of the manufacturer that the recreational craft detailed above fulfils the requirements specified in Article 4 (1) and Annex 1 of Directive 2013/53/EU.

Name and function: Martin J Fry (Managing Director)

Signature:



Date and place of issue:

01 September 2017.

Ashford, Kent, United Kingdom.

**Applicable standards:**

EN ISO 8666:2002

Small craft - Principal data (ISO 8666:2002)

EN ISO 12217-3:2015

Small craft - Stability and buoyancy assessment and categorization

- Part 3: Boats of hull length less than 6 m (ISO 12217-3:2015)

EN ISO 14946:2001

Small craft - Maximum load capacity (ISO 14946:2001)

EN ISO 14946:2001/AC:2005

**DESIGN CATEGORY**

This sailboat has been assessed for stability and buoyancy by the RYA (Royal Yachting Association) and has been certified by HPi Verification Services as a Notified Body in Design Category C.

CATEGORY C – Craft designed for voyages in coastal waters, large bays, estuaries, lakes and rivers, where conditions up to and including wind force 6 and significant wave heights up to and including 2m may be experienced.

The TOPPER sailboat complies with this design category, subject to:

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

Users of the boat are advised that:

- All crew should receive suitable training.
- The boat shall not carry more than the maximum load.
- Any water in the hull should be kept to a minimum.
- Stability is reduced by any weight added high up.

**Class Association**

Congratulations on becoming the owner of a brand new Topper sailboat. We at Topper International believe that Topper's advanced design and sophisticated construction process will ensure that you enjoy many years of trouble-free and exciting sailing.

To enhance the enjoyment of your new Topper we have arranged for new Topper owners to receive FREE membership of the Topper International Class Association for the first year of ownership.

There are many benefits and full details are included at the back of this Owner's Manual.

If you should incur any problems with your Topper, our sales staff will be pleased to offer advice and supply any spare parts and accessories you may need.

Your International Topper Class Secretary will be pleased to advise you on the many aspects of Topper ownership.

**IMPORTANT SAFETY INFORMATION**

Please read the important safety information and read the manual before sailing the boat.

**BEFORE YOU GO SAILING**

***DANGER! Check for overhead cables when rigging, launching and recovering. The mast sticks up a long way and shock or death could result if it comes in contact with overhead wires. So look up when moving the boat around or even stepping the mast and give any wires a wide berth.***

*Check you are wearing suitable clothing and safety equipment for the conditions and time of year.*

*Always wear an approved buoyancy aid or lifejacket.*

*A sailor's safety knife should be carried on board.*

*Make sure a third party knows where you are sailing and how many there are of you. If possible when sailing at a club, ensure there is at least one other boat on the water in the vicinity.*

*Check the weather forecast.*

*Check the time of high and low tides if applicable.*

*Seek advice of local conditions if sailing in a new area.*

*Always check the condition of your craft before setting off. Ensure that the hull is free of water and the drain plug is properly sealed.*

The Topper is equipped with a sealed buoyancy compartment. 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 repaired.

You may have to replace fittings from time to time.

Ensure that all fastenings are resealed properly using an appropriate sealant.

**Car Topping**

The Topper is designed to be car topped on a two bar roof rack. Load the boat upside down, bow forwards and ensure that the front bar supports the boat immediately behind the aft end of the foredeck.

Always secure the straps or ropes around the bars.

Ensure that both the bow and the stern are tied down tightly to the car's bumpers. The spars can be neatly carried alongside the boat. If you have a launching trolley, this can also be carried on the upside down hull of the Topper or packed down in the boot.

**Trailing**

When trailing your Topper you should only use an approved trolley and road trailer. Tying down the boat to its trailer is important because too much or too little tension could result in damage. Follow the instructions below for safe trailing:

Ensure the boat is located correctly on the trolley, with the gunwale supports up under the gunwales and the bow located in the bow snubber of the trolley.

Ensure the trolley is properly located on the road base and the retaining pin is fitted.

Tie the boat down to the trailer 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 padded material where any straps touch the deck.

It is also a good idea to tie the boat down when it is left in the dinghy park to prevent any damage to your boat in the event of strong winds.

**ON THE WATER**

*Conform to the sailing rules of the road.*

*Look out for changing weather conditions.*

*Never sail beyond your ability or that of your crew.  
Ensure that you and your crew can cope with any changes in the wind conditions.*

*Understand and be competent in the sailing skills and righting techniques.*

**Stability and buoyancy**

The Topper has been independently assessed for stability and buoyancy by the RYA.

The RYA have assessed that the boat can be righted by the crew and will subsequently float.

The stability and buoyancy have been certified by an EU Notified Body, HPI Verification Services.

The Topper is stable, but even if used with care a capsize is always a possibility, even in light conditions. It is therefore essential that you should familiarise yourself and practice capsize recovery when you first sail the boat, ideally in an area where there is some kind of safety patrol to assist you should you get into difficulty.

Minimum crew weight required for righting Topper 30 kgs

**Capsize recovery technique**

The mainsheet should be uncleated and made sure that it will run freely when the boat is righted.

The vang/kicker should be eased to de-power the top of the mainsail.

If the boat inverts it should be pulled onto its side so that the rig is horizontal to the water. It sometimes helps to pull it up with the aid of the wind blowing over the deck and rig.

Then there are two basic situations to recover from:

- When the rig is lying in the water, pointing downwind.
- When the rig is lying in the water, pointing upwind.

**Rig pointing downwind**

Climb onto the daggerboard and pull the boat slowly upright using the mainsheet. As the boat gets to 45 degrees one of the crew should climb in. As the boat continues to right take the tiller so that as the boat returns to its normal orientation you are under control of the boat as soon as possible. Once you are in control, you can sort yourself out, tidy the boat and get sailing again.

**Rig pointing upwind**

This is quite often the position the boat ends up in. Climb onto the daggerboard. As you begin to right the boat, the wind will blow under the mainsail and help you right it. Depending on the wind strength the boat will right at different rates. If the wind is strong the faster you will have to move. As the mast leaves the water, one of you should climb aboard and get to the windward side to prevent the boat capsizing again. Should the boat capsize again to the other side, simply climb over on to the daggerboard and follow the procedure for the rig pointing downwind.

**Man Overboard Prevention and Recovery**

The working deck of the Topper, which is intended only to be occupied when the boat is afloat, are the areas covered with non slip coating. These are over the cockpit floor, the top surface and outer edge of the side deck, and the forward part of the cockpit.

It is advisable to reboard the boat from the windward side when climbing aboard via the gunwale.

**Towing afloat**

Should it become necessary to tow the Topper you should secure the towing line around the base of the mast. Raise the daggerboard and stay at the tiller. In the event of the loss of the rudder sit well aft.

**Anchoring and Mooring**

The Topper is not normally required to anchor/moor, as they are day boats for racing or cruising in inshore or inland waters.

**Outboard Engine**

The Topper is not normally designed for use with an outboard engine.

## SAIL NUMBERS AND LETTERING

Before you sail your new boat for the first time, it is most important to apply the self-adhesive numbers to the sail. The sail numbers are exclusive to the boat and correspond with the serial number/sail number plate. These are always located inside the boat attached to the toe strap. Follow these instructions carefully it is not a job to be hurried.

In our experience the best way to stick the numbers down is to peel away a corner, line up the letter and then attach the corner. Pull away the backing paper slowly as you push the number onto the sail.

### IF IN DOUBT - PLEASE ASK

#### SAIL NUMBERS

(please note all measurements are minimums)

- Should be placed on both sides of the sail with the numbers on the starboard side being above the ones on the port side.
- They should be placed two panels below the Top Hat logo.
- The height of the numbers should be 230mm.
- The numbers are supplied as 'digital eights' from which you can produce your own sail number.
- The preferred style of cutting numbers from 'digital eights' is shown below.
- There should be 45mm between each element of the complete number.
- The numbers should be in a contrasting colour to the white sailcloth.

#### STARBOARD SIDE

- The upper edge of the numbers should be placed 45mm from the upper seam of that panel.
- They should start 45mm from the back of the sail.

#### PORT SIDE

- The upper edge of the port numbers should be 45mm below the starboard side numbers.
- They should finish 45mm from the back of the sail.



\* NOTE: Topper Sail Numbers are derived from digital 8 numbers from which any number from 0-9 can be obtained. Ten digital 8 numbers are supplied.

**GBR SAIL LETTERING**

- Should be placed on both sides of the sail with the letters on the starboard side being above the ones on the port side.
- They should be placed in the panel beneath the Top Hat logo.
- The height of the letters should be 230mm.
- They should be pre-formed letters at least as clear as helvetica.
- There should be 45mm between each element of the complete letter.
- The letters should be the same colour as the sail numbers.

**STARBOARD SIDE**

- The upper edge of the letters should be placed 45mm from the upper seam of that panel.
- They should start 45mm from the back of the sail.

**PORT SIDE**

- The upper edge of the port letters should be 45mm below the ones on the starboard side.
- They should finish 45mm from the back of the sail.



**CHAMPIONSHIP SAIL NUMBERS**

(please note all measurements are minimums)

- Should be placed on both sides of the sail with the numbers on the starboard side being above the ones on the port side.
- The height of the numbers should be 230mm.
- The numbers are supplied as 'digital eights' from which you can produce your own sail number.
- The preferred style of cutting numbers from 'digital eights' is shown previously.
- The outside corners should be snipped as shown.
- There should be 45mm between each element of the complete number.
- Both sets of numbers should be in the 2nd coloured panel from the bottom of the sail.
- The numbers should be in a contrasting colour to the sailcloth.



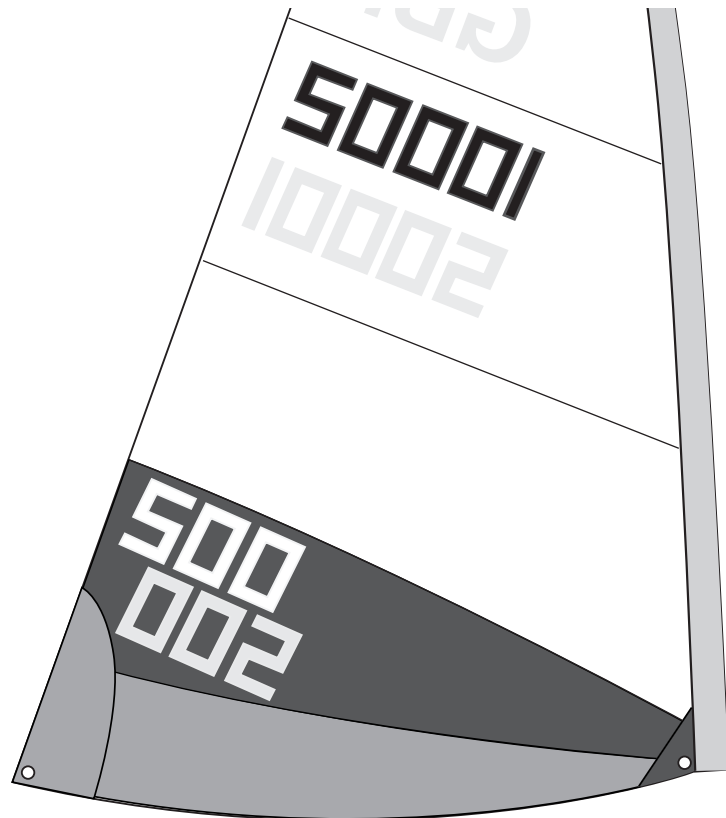
Snip 2/3mm off the corner of all championship numbers.

**STARBOARD SIDE**

- The start of the number should be placed 45mm from the leech of the sail.
- The upper edge of the number should be 45mm from the upper seam of the panel.

**PORT SIDE**

- On the port side of the sail, the upper edge of the numbers should be 45mm from the lower edge of the starboard numbers.
- The end of the last number should finish 20mm from the reinforcement patch.





**4.2 - SAIL NUMBERS**

(please note all measurements are minimums)

SAIL NUMBERS: (please note all measurements are minimums)

- Should be placed on both sides of the sail with the numbers on the starboard side being above the ones on the port side.
- They should be placed in the panel beneath the Top Hat logo
- The height of the numbers should be 230mm.
- They may be pre-formed numbers or 'Digital Eights'.
- The preferred style of cutting 'Digital Eights' as shown previously.
- There should be 45mm between each element of the complete number.
- The numbers should be in a contrasting colour to the white sailcloth.

**STARBOARD SIDE**

- The upper edge of the numbers should be placed 45mm from the upper seam of that panel
- They should start 45mm from the back of the sail.

**PORT SIDE**

- The upper edge of the port numbers should be 45mm below the starboard side numbers
- They should finish 45mm from the back of the sail.

**4.2 - GBR SAIL LETTERING**

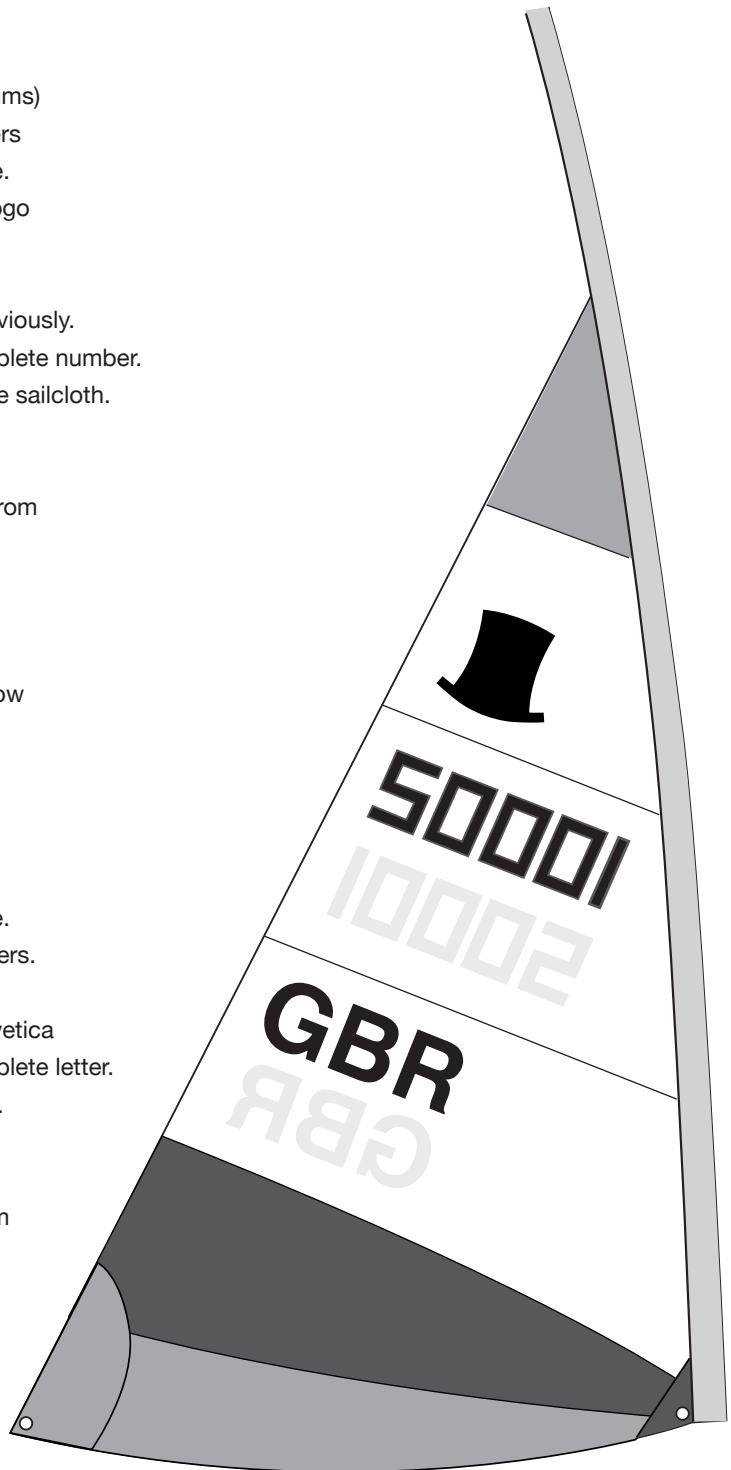
- Should be placed on both sides of the sail with the letters on the starboard side being above the ones on the port side.
- They should be placed in the panel beneath the sail numbers.
- The height of the letters should be 230mm.
- They should be pre-formed letters at least as clear as Helvetica
- There should be 45mm between each element of the complete letter.
- The letters should be the same colour as the sail numbers.

**STARBOARD SIDE**

- The upper edge of the letters should be placed 45mm from the upper seam of that panel
- They should start 45mm from the back of the sail.

**PORT SIDE**

- The upper edge of the port letters should be 45mm below the ones on starboard.
- They should finish 45mm from the back of the sail.



\* NOTE: Topper Sail Numbers are derived from digital 8 numbers from which any number from 0-9 can be obtained. Ten digital 8 numbers are supplied.

**CONTROL LINES**

A. OUTHAUL

B. MYLAR BOOM SLEEVE

C. TRAVELLER

D. DOWNHAUL

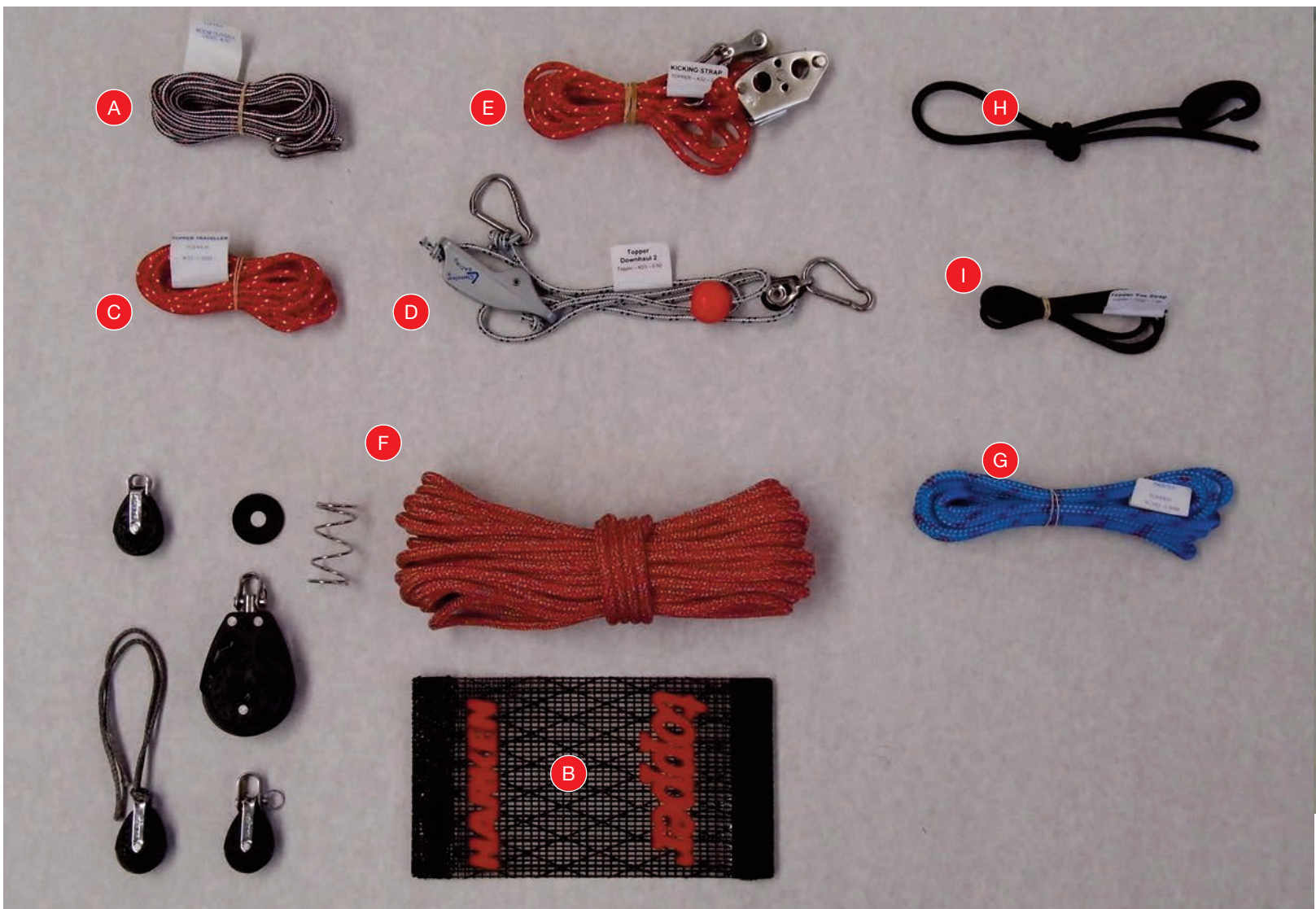
E. KICKER

F. MAINSHEET

G. PAINTER

H. DAGGERBOARD SHOCKCORD

I. TOE STRAP SHOCKCORD



It is a good idea to unpack everything, lay out the various control lines and identify them before starting to rig the boat.

**RACE CONTROL LINES**

A. 4:1 RACE OUTHAUL

B. MYLAR BOOM SLEEVE

C. RACE TRAVELLER

D. 6:1 DOWNHAUL

E. RACE KICKER

F. MAINSHEET

G. PAINTER

H. DAGGERBOARD SHOCKCORD

I. TOE STRAP SHOCKCORD



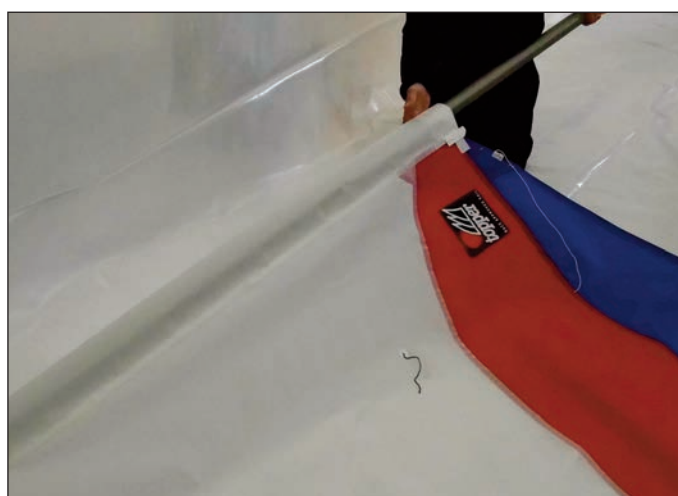


**ASSEMBLING THE MAST**

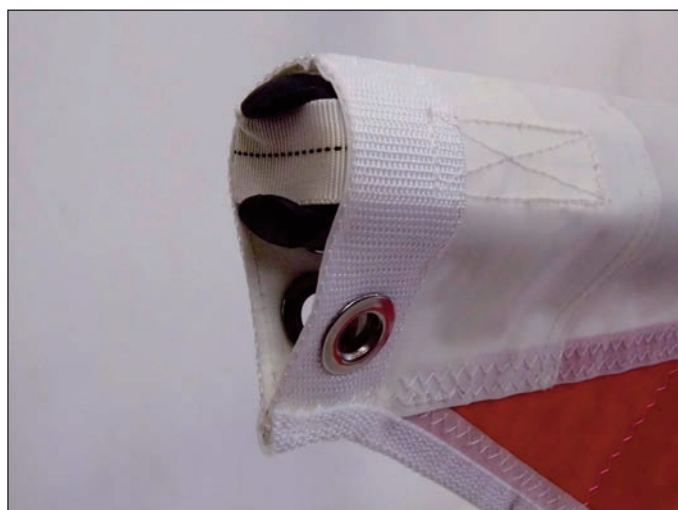
Slide the Upper Mast into the lower mast section.  
Align the two red arrows printed on the metal.

**SLEEVING THE SAIL**

1. Unfold the sail and lay it down. Slide the top section of the mast into the luff tube of the sail.



2. Once the mast reaches the top of the luff tube, it should appear as shown, with the webbing strap held between the two tabs on the top of the mast. At this stage, the sail can be rolled around the mast for ease of movement and storage.



**STEPPING THE MAST**

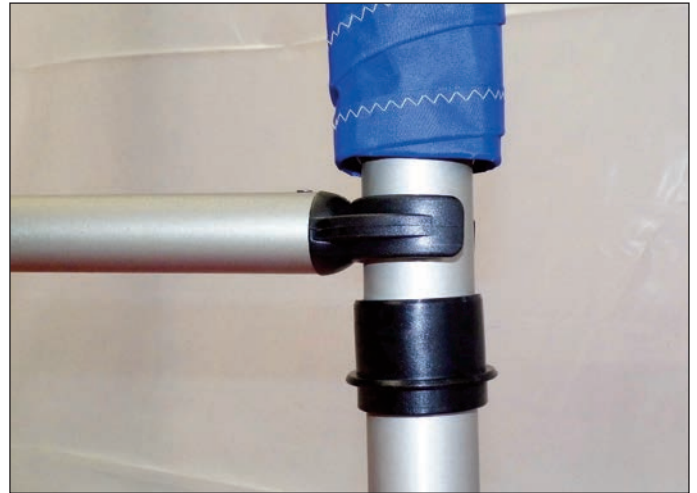
1. Ensure that the mast gate is open, and then place the bottom of the mast into the gate. Ensure that the black plastic ring on the mast sits underneath the level of the deck.



2. Lift the mast until it is vertical, and then use the rope toggles to close the mast gate and secure the mast.

**FITTING THE BOOM**

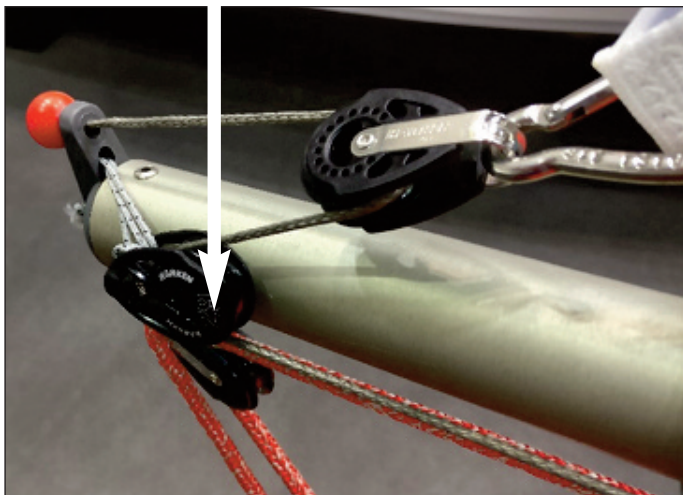
Attach the boom by placing the clip around the gooseneck, above the plastic lip, and applying pressure until the clip is around the mast as shown.



**4:1 RACE OUTHAUL**

To rig the Race Outhaul you will need: the red outhaul line with round handle attached, grey outhaul line with pulley pre-attached, 2 pieces grey dyneema, Mylar stop, 2 red rope stoppers (one large one small), 3 pulleys and one karabiner.

1. Tie the pulley shown to the stern end of the boom using one of the lengths of grey dyneema. Use the inner drilled holes to tie on the pulley.



2. Attach the Mylar stop around the midpoint between the two ends of the boom. The front edge of the stop should be 120cm from the gooseneck of the mast, as stated in the Class Association racing rules.

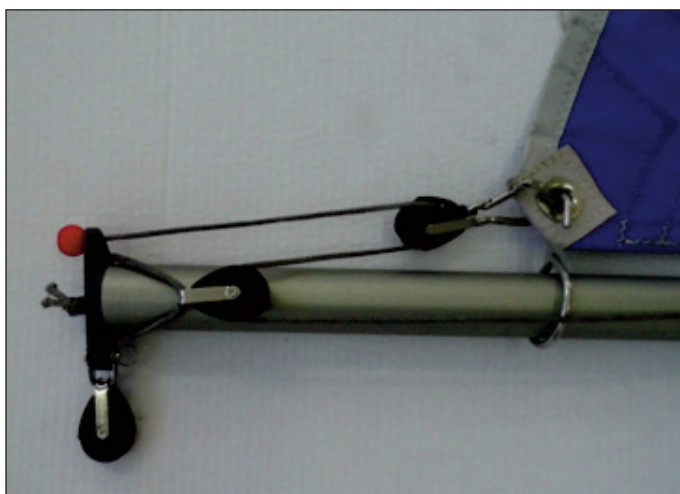


3. Take the grey length of rope with the pulley pre-spliced onto one end. Pass the free end of the line (the end without the pulley) through the mylar stop on the boom.



4. Take one more pulley for this step, and then attach the karabiner to it as shown. Pass the end of the grey line through the pulley that was tied to the end of the boom, then through the pulley with the karabiner.

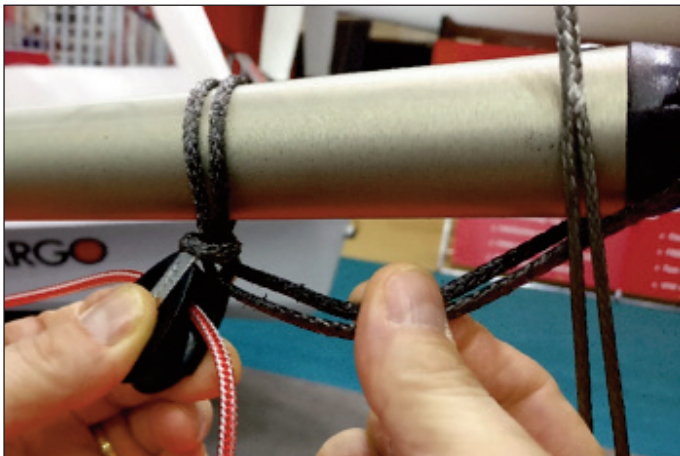
Pass the free end of the grey line through the outer hole in the boom cap, attach a rope stopper and tie a figure 8 knot.





5. Using the other length of grey dyneema, tie the final pulley to the gooseneck, using the pre-drilled holes.

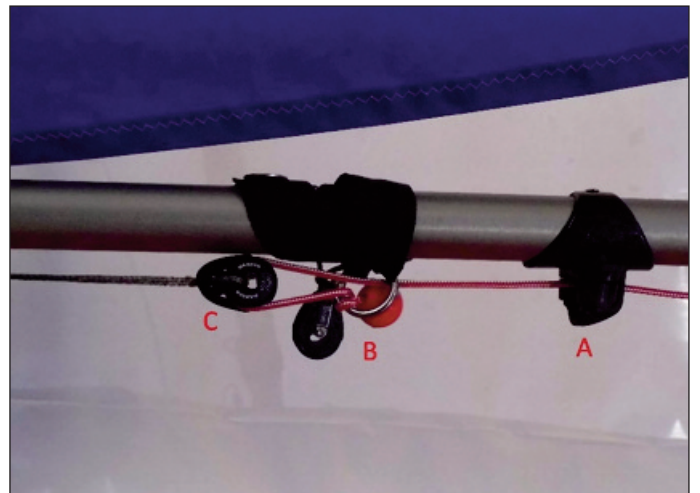
Pass a loop of the dyneema through the top of the pulley, and then pass the ends of the dyneema through the loop as shown. Then pass the ends over the top of the boom, back through the metal ring of the pulley, and then through the pre-drilled holes in the gooseneck. Tie a stopper knot in both ends of the dyneema.



6. Attach the other end of the outhaul using the red outhaul line with the pre-attached handle. Take the free end of the red line, and pass it through the pulley that was just attached to the gooseneck.



7. Take the free end of the red line, pass it through the attached cleat (labelled A), and then through the ring labelled B. Then through the pulley labelled C (this is pre-attached to the grey line labelled C used in previous steps), and finally tie the red line around ring B, using the large red rope stopper as shown.



**STANDARD OUTHAUL**

1. Tie a stopper knot in one end of the outhaul, and poke the other end through the top, outer hole in the boom end. Pass this end through a karabiner, and then back through the inner hole on the same side.

Then pass the end through the inner hole on the other side, so the line should end up as shown.



2. Pass the end of the outhaul through the metal ring, and then through the pre-attached cleat. It may help to tie a loop in the line to make applying tension easier.



3. When using the outhaul, clip the karabiner onto the metal ring in the clew of the sail.

**RACE TRAVELLER**

1. Take the grey length of dyneema with a metal eye spliced part way along.

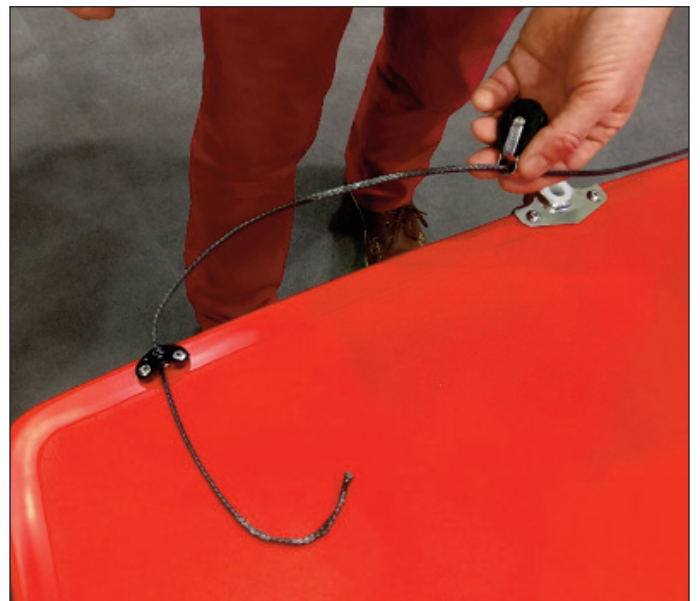
The metal eye is closer to one end, leaving a long end and a short end. Pass the long end through the deck eye on the left (port) side of the stern.



2. Then pass the end through the metal ring (not the wheel) of the pulley.

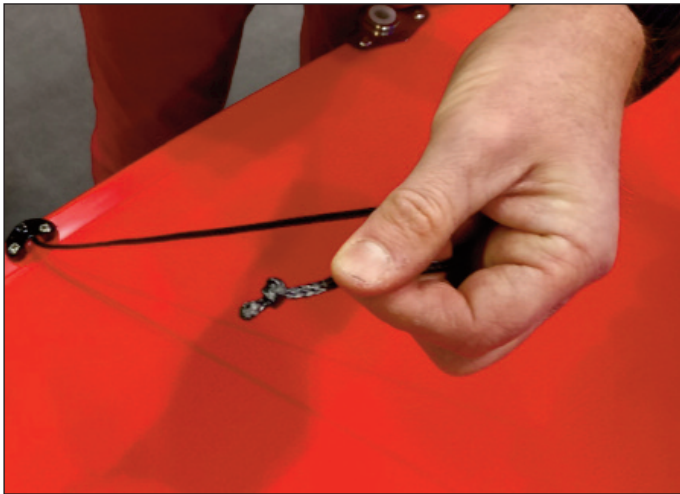


3. Then pass the end through the other deck eye on the right (starboard) side of the stern, from back to front.

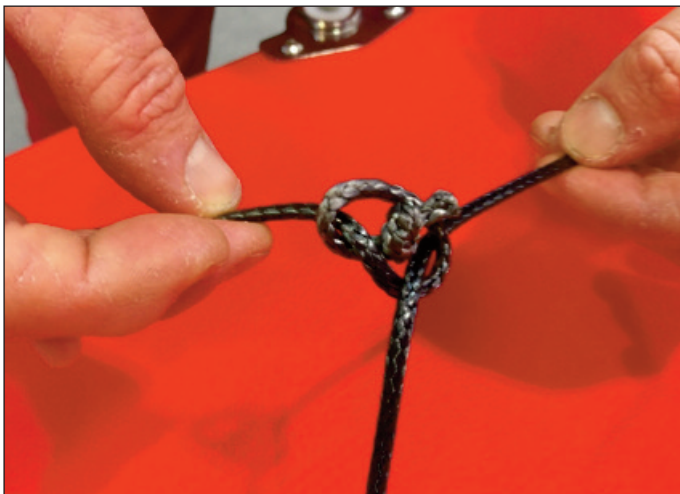




4. Tie an overhand knot in the end of the dyneema.



5. Tie another overhand knot around the dyneema through the first deckeye, in order to form a triangle of dyneema.



6. Pass the short end of the grey dyneema around the wheel of the block on the stern of the cockpit in the direction shown (front to back).



7. Pass the short end through the metal ring that is pre-spliced into the grey dyneema.



8. Pass the short end through the V of the cleat to secure it. It may be helpful to tie a bowline in the end of the line in order to form a loop and make it easier to adjust the tension in the traveller while sailing.



9. When finished, the traveller should look as shown. The approximate correct tension is around a 5cm gap between the tip of the 'triangle' and the stern.



**STANDARD TRAVELLER**

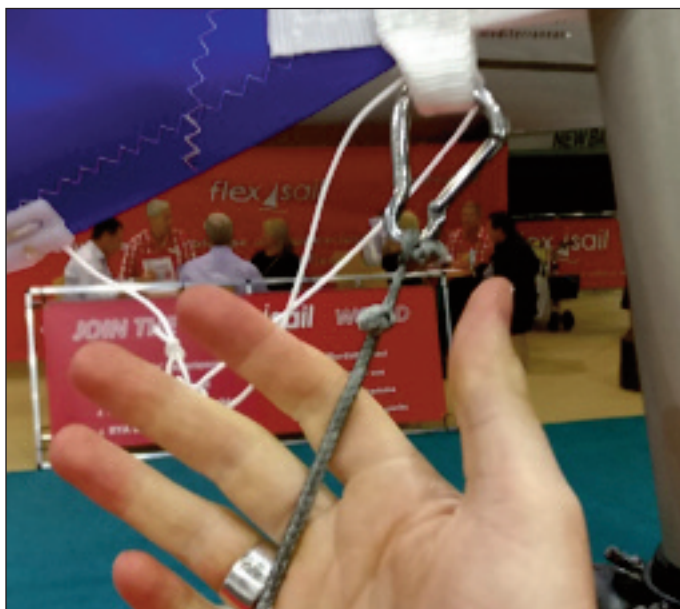
The standard rig is set up very similar to the racing rig.

1. Tie a bowline in one end of the Traveller rope.
2. Thread the tail through the two deck eyes, back through the bowline loop and down through the cleat on the rear of the cockpit.

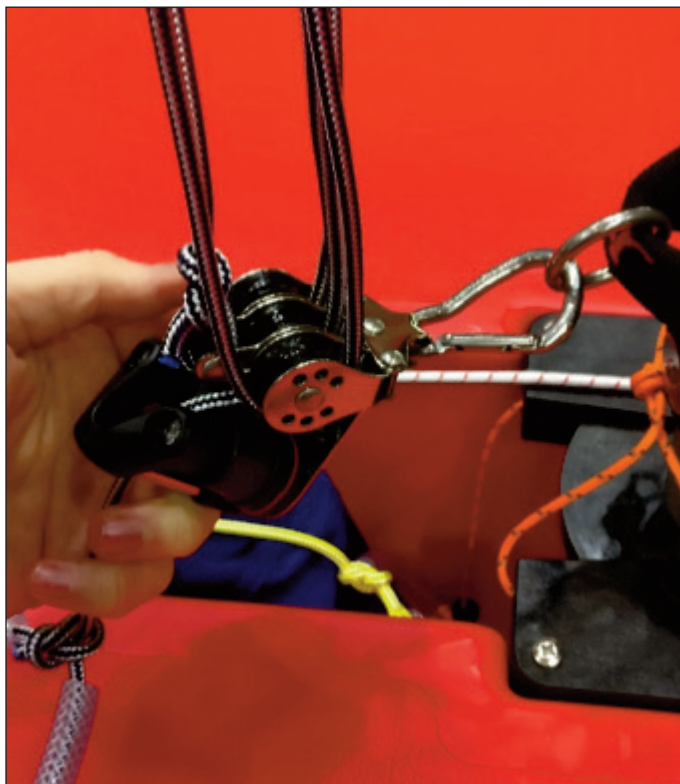
It may be useful to tie a loop in the end of the Traveller to allow easy adjustments.

**6:1 RACE DOWNHAUL**

1. Clip the top karabiner of the downhaul (the karabiner attached to the single length of grey dyneema) onto the white fabric loop on the tack of the sail.



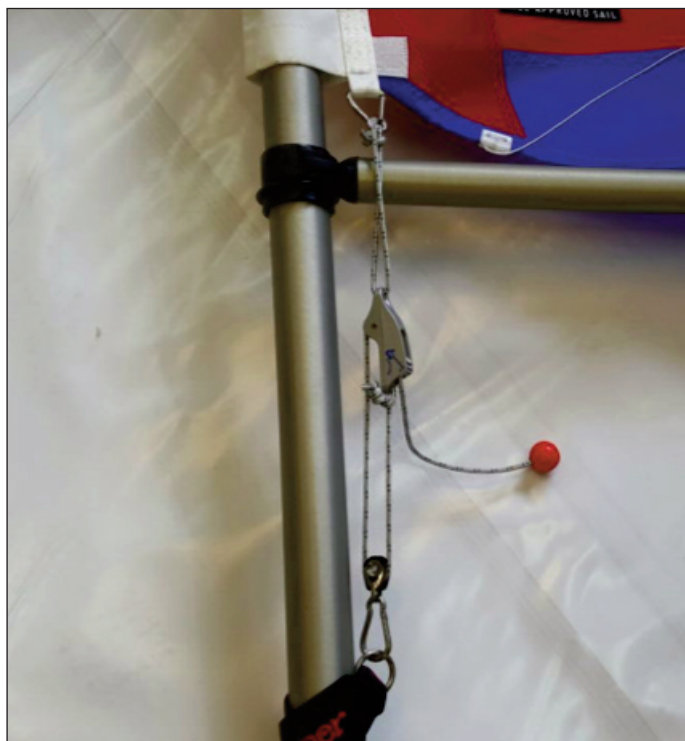
2. Clip the bottom karabiner (the one attached to the cleat) onto the metal ring near the base of the mast.





**STANDARD DOWNHAUL**

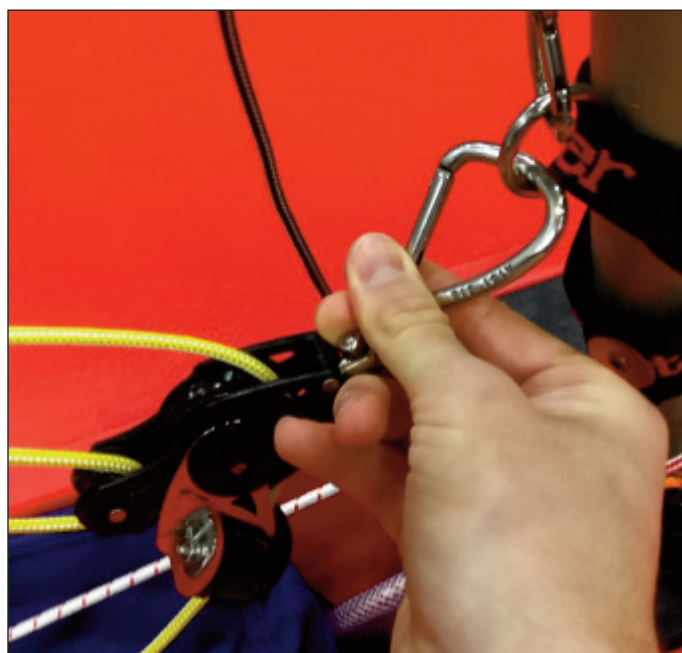
The standard kicker is very similar to the racing version, simply attach the top karabiner to the fabric loop on the sail, and the bottom karabiner to the ring near the base of the mast.

**RACE KICKER**

1. Attach the top block of the kicker to the ring on the boom using the attached pin and split ring.



2. Clip the karabiner attached to the cleat of the kicker to the ring close to the base of the mast.

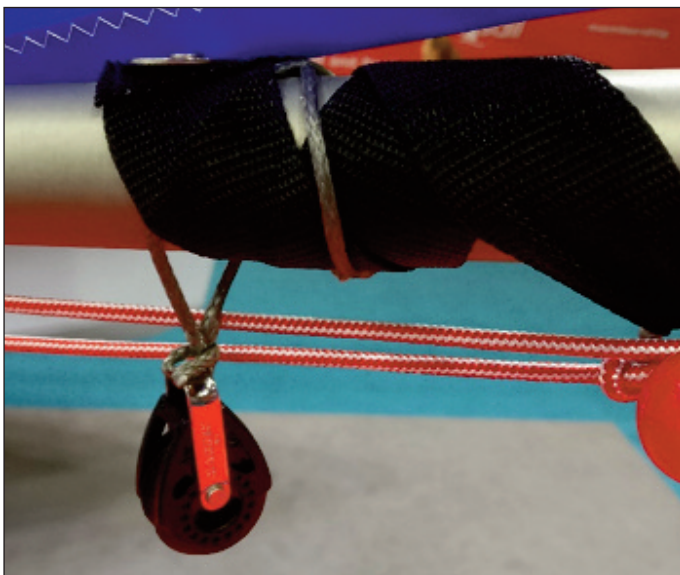


**STANDARD KICKER**

The standard kicker is very similar to the racing version. Attach the karabiner at the top of the kicker to the ring on the boom, and use the pin and split ring on the cleat to attach it to the ring on the mast.

**MAINSHEET****MAINSHEET**

1. For the mainsheet rigging, you will need: 2 harken pulleys, one short length of grey dyneema, one U-bolt with split ring, and long red mainsheet line. Using one of the pulleys and the short length of dyneema, tie the pulley to the boom under the black fabric. This will prevent the pulley from sliding along the boom.



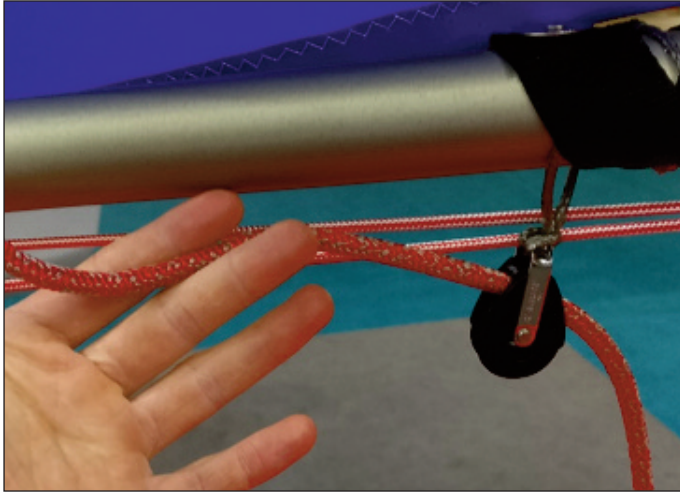
2. Pass the mainsheet through the large harken pulley that is attached to the deck of the cockpit. This is a ratchet block, so it is important to ensure the mainsheet is threaded the correct direction. The block should click when the mainsheet is pulled in.

There is a small switch in the centre of this block that can be rotated to enable/disable the ratchet mode.

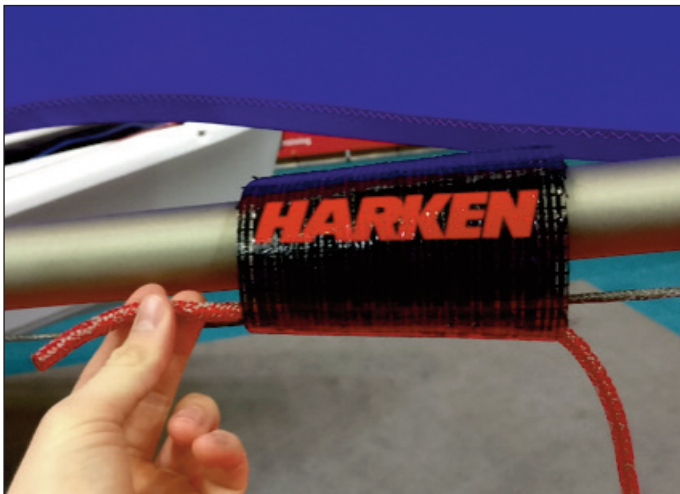




3. Pass the mainsheet line through the pulley that was just tied onto the boom, running towards the stern.



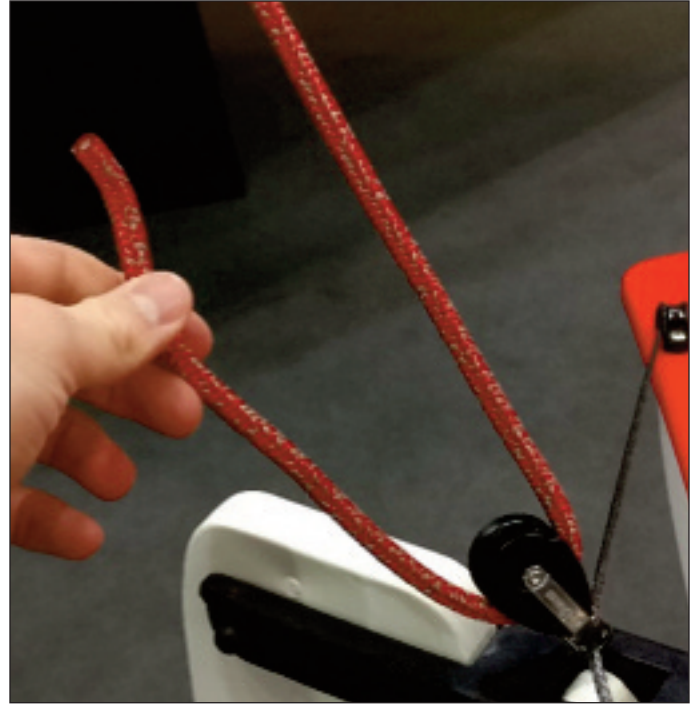
4. Pass the mainsheet through the mylar strop on the boom.



5. Attach another pulley onto the end of the boom using the U bolt and split ring. Then pass the mainsheet through this pulley front to back.



6. Pass the mainsheet through the pulley that is on the traveller on the stern of the boat.



7. Pass the end of the mainsheet through the U bolt that is used to attach the pulley. Then tie a figure 8 knot in the end of the mainsheet.

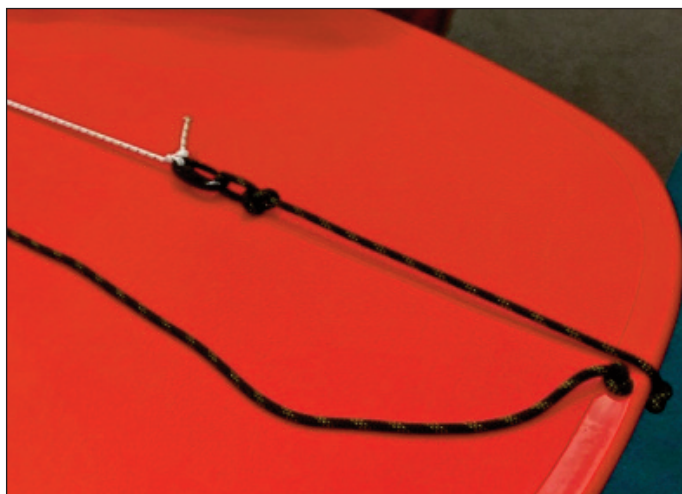


**PAINTER**

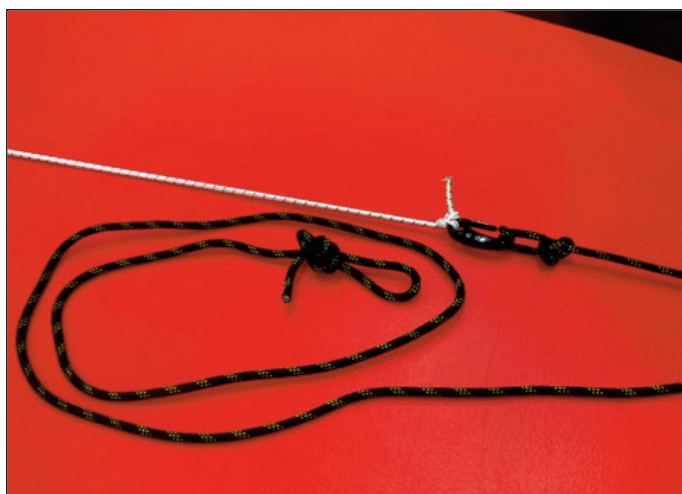
1. Pass the painter through the hole in the bow, leaving a short length on one side. Tie an overhand knot either side of the deck to keep the painter secured in this position. Tie a bowline in the short end of the painter to form a loop.



2. Clip the bungee attached to the top of the daggerboard to the bowline in the short end of the painter.



3. Tie a loop in the other end of the painter as well. Then use a short length of bungee around the mast to hold the rest of the loose painter.





RACE RIGGED TOPPER



STANDARD RIGGED TOPPER



## ADJUSTING THE SAIL

Your new sail is made from the highest quality Dacron material which has exceptional durability and resistance to stretching. These properties ensure that your sail will retain its shape throughout its long life.

Follow the simple setting instructions given below to obtain optimum performance from your sail throughout the range of wind strengths.

### BASIC PRINCIPLES

In strong winds it is best to have a flat sail, achieved by using lots of downhaul and lots of kicker but keeping some shape in the bottom of the sail with the outhaul.

In medium winds it is best to have a full sail, achieved by using no downhaul, only a little kicker and by having the outhaul at a looser setting.

In light winds a flat sail is needed again. Achieve this with the outhaul set quite tight. Do not use downhaul or much kicker in these conditions.

### VERY LIGHT

#### FORCE 0 - 2

Kicker – sheet in the mainsheet so the mainsheet blocks are 200mm apart. Take up the slack on the kicker.

Downhaul – none.

Outhaul – tight but not so tight that there is a crease in the foot of the sail.

Traveller – Tight but just loose enough that the shackle can slide across the tiller without catching.

### HUNTING FOR EXTRA POWER

#### FORCE 2 - 4

Kicker – sheet in the mainsheet so the mainsheet blocks are 75mm apart.

Take up the slack on the kicker plus a little more.

Downhaul – none.

Outhaul – so there is a maximum distance from the boom to the sail of about your hand length.

Traveller – very tight.

### BEING OVERPOWERED

#### FORCE 4 - 6

Kicker – as much as you can pull on.

Downhaul – as much as you can pull on.

Outhaul – tight but just little enough to maintain a curvature in the foot of the sail.

Traveller – very tight.

These are a guide only. Much depends on your experience, weight and strength. In waves you will need a fuller sail – use less outhaul for a given windstrength.

## TUNING FOR PERFORMANCE

The performance of the Topper gives very exciting racing, yet her simplicity and handling qualities make it quite feasible for those with little experience to sail competitively. The class rules aim to ensure that the one-design principles of the class are maintained and the racing is a true test of the helmsman's sailing skills. No one is able to gain advantage by making expensive modifications or adding sophisticated or specialised gadgets.

However, although the rig is very simple there is some scope for tuning to improve performance which is given in these notes. More detailed information can be obtained from the Dave Cockerill and John Caig Sailing book which is recommended for both the novice and the expert.

### SAIL FOOT TENSION

Outhaul: In light winds the tension on the foot of the sail should be less than in strong wind but never slack.

For windward sailing the sail should never be baggy. In moderate winds, tension the foot of the sail so that it is just pulled into horizontal creases at the foot. In light winds ease the outhaul so that the creases just disappear.

### FOOTLINE

For sails with a footline, with the outhaul pulled slightly tension the footline so that the edge of the sail just curls.

### ROPE TRAVELLER

This controls the position the boom takes up relative to the boat when the sheet is pulled hard in. In stronger winds going to windward, the boom should be out towards the corner of the stern. This is achieved by tightening up the traveller as hard as possible so that the mainsheet slides across easily from one side to another. In light winds going to windward you may choose to let out the horse so that the mainsheet does not travel so far across the boat. The position of the boom is of course also controlled by the mainsheet itself, but the tension of this is constantly under adjustment, whereas the traveller is only occasionally adjusted to suit the general prevailing conditions.

### KICKER

This is an important piece of equipment as it not only improves performance by controlling the shape of the sail, it also helps to prevent uncontrollable gybes. The function is to hold down the boom and control the tension in the leech of the sail and reduce inefficient twist.

A tighter kicking strap is required in strong winds. Push down on the boom with one hand and haul in on the kicking strap with the other and jam it. In light winds the kicking strap should be just tight when the sail is hauled in when going to windward. It will then be just about right for running and reaching.

### DAGGERBOARD

This should be fully down when going to windward in light airs, but may be raised slightly for windward sailing in strong winds. It can be raised about half way when reaching and nearly all the way when running.

Take care when the board is raised, not to gybe and hit it with the kicking strap - or it may cause a capsized.

### RUDDER

The rudder blade should generally be fully down. In very light airs, beating to windward, it may help to push the boat round from one tack to another if the blade is raised two notches. The strains on the rudder assembly are considerably increased when the rudder blade is partially raised, so do not sail with it partly up in strong winds at full power. Only use in partially raised position in strong winds when negotiating shallows at reduced speed.

### SELF BAILER

This clears the water from the cockpit by suction under the hull. It pays to have the self-bailer operating and the boat kept free of water and as light as possible, but the bailer in the operating position does cause drag, so it is best to have it open only if it is really needed.



## MAINTENANCE

Very little maintenance is required to your Topper, but some care and attention will produce better sailing performance. Your boat should only be used with the propriety launching trolley. The use of any other trolley may damage the hull and invalidate your warranty.

Care must be taken to support the hull adequately if the boat is not stored on the correct launching trolley. Any sustained point loading could permanently dent or distort the hull.

Any repairs to the hull should be undertaken by qualified personnel with the relevant skills and equipment. Contact Topper International for advice.

UV light may cause fading to some components and fittings, a good quality cover is recommended to reduce UV degradation.

Keep the equipment clean by frequently flushing with fresh water. The stainless steel fittings will also bleed with a rust colour if not rinsed off after sailing at sea.

Excess water should be removed from the hull. Keep your Topper drained and well ventilated. Ensure the boat is stored with the bow raised to allow water to drain away. Before you set sail ensure that the transom drain plug has been correctly closed.

Ropes, rigging and fittings should be checked at regular intervals for wear and tear.

Inspect shackles, pins and fittings regularly. Tape up fittings that may snag with sails, ropes, or crew.

Damaged or worn parts should be replaced.

### REPAIRS

Contact Topper International or your dealer who will provide you with the best advice.

### MODIFICATIONS

Contact Topper International or your dealer about any modifications.

Please remember any modifications may endanger your safety and invalidate your warranty.

### HULL AND DECK

The polypropylene from which the hull and deck are moulded is very strong but can be scratched so avoid pulling the boat over shingle or scraping it on anything hard and always try to rig the boat on a reasonably soft surface.

The moulding material has special additives to provide resistance to the effects of ultra-violet light, but very prolonged exposure to strong sunlight may affect the surface over the period of a number of years. Therefore it is recommended that you cover the boat or store it in the shade.

Static electricity on a polypropylene surface attracts dust. The harder you rub it with a duster the more dust will stick. So it is best to wash it or try an anti-static polish.

An annual check of screw tightness is a good discipline, but be careful not to overtighten.

### SELF BAILER

Keep clean and wash out grit. Ensure screws are tight but be careful not to overtighten.

### MAST CUP

Clean out the grit and sand. The base of the cup can may get worn from the repeated movement of the mast heel. If the cup becomes worn, remove the central screw holding the cup in position and fit a replacement cup and disc. Do not tamper with the bolt beneath the cup.

### DRAINPLUG

It is recommended that this is removed at night and for winter storage.

### RUDDER

Make sure that when you attach the rudder that the rudder stop clips over the stock. Sometimes a safety stop is attached from the boat to the rudder stock.

The rudder blade is intended to stay down in the fully lowered position when the tiller is lowered onto the pillar of the rudder stock (aluminium casting). If the rudder blade hits a submerged object hard, the blade will force the tiller to slide up on the pillar to allow it to move forward, thus releasing a locking mechanism and letting the rudder blade come up.

In order to do this correctly - yet not allow the blade to come up during normal sailing - the friction at the joint between the tiller and rudder must be adjusted correctly. This is done by adjusting the spring nut on the tiller pivot bolt. You must get this right by trial and error. It is also important that the bearing surfaces between the locking pegs on the tiller and the notches on the rudder stock pillar are smooth and clean, otherwise the tiller will not slide upwards when the rudder blade hits an obstacle.

### TILLER EXTENSION

No maintenance is required but check that the universal linkage is secure.

### RUDDER PINTLE ON HULL

This is the stainless steel transom plate on which the rudder pivots. Check occasionally that the fixing screws are secure and that there is not undue wear on the pivot pin.

### MASTGATE

Keep washed out and free from grit and sand. Do not lubricate.

### TOP MAST

This is designed to be water tight. The upper end fitting is sealed in with mastic and the lower end is plugged. It is difficult to check the top mast for leakage and the only practical way is by prolonged immersion.

### LOWER MAST AND BOOM

Check screws and rivets on fittings regularly.

### SAIL

The sail is very strong and will not rot, but can be spoiled by unsympathetic use. Occasionally wash any salt off the sail with fresh water with a hose, do not use a washing machine. Dry and fold carefully. Roll up the folded sail and stow it in its bag. If you crumple up the sail or stuff it in the bag unfolded you are liable to breakdown the smooth surface of the cloth and affect the performance of the sail. It will not ruin it but it will become less efficient.

### BLOCKS

Wash these occasionally and keep them free from grit. Do not lubricate.

### ROPES

Check these occasionally for chafe and wear and tear.

### STORAGE

The Topper may be stood on its transom, providing pintle and gudgeon are kept clear of the ground. It can be slung in straps or stored upside down in the same way that it is supported on a roof rack. If the hull is put in a rack the right way up, it is important to ensure that the forward support lies directly under the mast step, and that the load is spread as much as possible.

Trailers should be rinsed with fresh water and checked at regular intervals. It is recommended that the trailer be serviced annually.

**THREE YEAR HULL WARRANTY CONDITIONS**

Topper International Ltd warrants to the original retail purchaser that each boat will be free from defects in material and workmanship under normal use and service for a period of three years (36 months) from date of delivery to said purchaser.

This warranty does not cover defects or breakages caused by misuse, owner error or omission.

Within this three year period, warranty repairs will be made by Topper International at its premises or at the option of Topper International by an authorised Topper International dealer. These repairs will be made at no charge. The transportation costs are the sole responsibility of the boat owner.

Notice of each warranty claim must be submitted in writing to Topper International within a reasonable period of time after discovery of any claimed defect and must be approved by an authorised representative of Topper International who will determine whether the claim is valid or/ and covered by this limited warranty and whose decision shall be final.

Any boat which has been subjected to misuse, negligence or accident, or that has been used for commercial or rental use, or that has been operated contrary to accepted good boating practice is not covered by this warranty. This warranty does not cover loss of time, inconvenience, loss of use of boat or any other expenses incurred.

**PARTS WARRANTY CONDITIONS**

All equipment or accessories which are not manufactured by Topper International whether or not warranted by such other manufacturers are guaranteed for a period of twelve months.

Please refer to terms and conditions of sale.

**REGISTER OF WARRANTY  
AND WATERCRAFT IDENTIFICATION NUMBER (WIN)**

To register your warranty, please email the following information to Topper International Ltd:  
Your name & address,  
Sail Number  
WIN (Watercraft Identification Number / Hull Number)  
Dealer name & address  
Date of Purchase

For further information call Topper on 01233 629186 or email [info@toppersailboats.com](mailto:info@toppersailboats.com)

**JOIN THE FRIENDLY CLASS**

Topper is one of the world's largest and fastest growing dinghy classes!

We are so sure that you will want to keep in touch with the Topper scene internationally that, for the remainder of the year in which you bought your new Topper we are offering you a FREE membership of the Topper International Class Association.

ITCA will send you regular emails, newsletters and a magazine containing information on Topper activities and regattas, technical advice and sailing and rigging hints.

ITCA will put you in touch with Topper sailors in countries to which you may be planning a visit.

ITCA will offer you a range of clothing and accessories designed specially for the Topper sailor.

ITCA will liaise between your own national or regional Association, other regional Topper Associations and International Yachting Administrators.

Free membership is available now to first year owners. Contact the Topper International Class Association at ITCA (GBR), Upper Panteg, Pengefnfordd, Brecon, Powys LD3 0EP  
Telephone: +44 (0) 1874 711576  
email: secretary@gbrtopper.co.uk  
We will then directly process your membership.

**ITCA MEMBERSHIP**

**Welcome to Topper Sailing!**

Welcome to what is probably one of the world's largest and still fastest growing dinghy class. To keep you in touch with the Topper scene internationally, ITCA (International Topper Class Association) will allow you free subscription for the remainder of the year in which you bought your Topper.

Just fill in the form below and return it to us; we will pass it on immediately to your National Secretary for processing and you will then receive your first copy of Topper Times your membership card and details of many other benefits of ITCA membership.

So when you buy a Topper, you are not just treating yourself to the best small boat in the world - you are also becoming part of the exclusive Topper family.

We recommend that in the UK you insure your Topper with the Class Association. We will forward details to you.

**CLASS MEMBERSHIP APPLICATION**

To enrol me as a full member of the Topper International Class Association, please copy and complete this form and return to:

Topper International Ltd, Kingsnorth Technology Park, Wotton Road, Ashford, Kent TN23 6LN

\_\_\_\_\_  
Name

\_\_\_\_\_  
Age (if under 21)

\_\_\_\_\_  
Address

\_\_\_\_\_  
Daytime telephone number

\_\_\_\_\_  
Mobile number

\_\_\_\_\_  
Evening telephone number

\_\_\_\_\_  
Topper Sail number

\_\_\_\_\_  
Deck Colour

\_\_\_\_\_  
Date purchased

\_\_\_\_\_  
Where purchased

\_\_\_\_\_  
Sailing Club

\_\_\_\_\_  
Signed

\_\_\_\_\_  
Date

For further information contact Topper on:  
Telephone +44 (0) 1233 629186  
email info@toppersailboats.com

[www.toppersailboats.com](http://www.toppersailboats.com)



# TOPPER OWNERS MANUAL

Topper International Ltd  
Kingsnorth Technology Park, Wotton Road, Ashford, Kent TN23 6LN  
Telephone +44 (0) 1233 629186  
Fax +44 (0) 1233 645897  
email [info@toppersailboats.com](mailto:info@toppersailboats.com)  
[www.toppersailboats.com](http://www.toppersailboats.com)

Topper International Class Association  
ITCA (GBR), Upper Panteg, Pengefnordd, Brecon, Powys LD3 0EP  
Telephone: +44 (0) 1874 711576  
email: [secretary@gbrtopper.co.uk](mailto:secretary@gbrtopper.co.uk)