

# topaz ranger

## » Rigging Instructions



www.toppersailboats.com

#### Introduction 1 » Manufacturers Details 1 » Maintenance 2 » Glossary 3 - 4 » 5 - 6 Raising the Mast » 6 - 7 Attaching the Boom and Gnav » 7 - 9 Raising the Jib » **Rigging the Mainsail** 10 - 11 » 11 - 12 **Reefing the Mainsail** » Rudder 12 »

## // introduction

// contents

These RIGGING INSTRUCTIONS have been compiled to help you to rig your Topaz RANGER sailing dinghy. Please also ensure that you refer to your TOPAZ OWNERS MANUAL.

The OWNERS MANUAL has been compiled to help you to operate your craft with safety and enjoyment. It contains details of the craft, the equipment supplied or fitted, it's 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 craft, or you are changing to a type of craft you are not familiar with, for your own comfort and safety, please ensure that you obtain handling and operating experience before assuming command of the craft. Your dealer or national sailing federation or yacht club will be pleased to advise you of local sea schools, or competent instructors.

PLEASE KEEP THE RIGGING INSTRUCTIONS AND THE OWNERS MANUAL IN A SECURE PLACE AND HAND THEMOVER TO THE NEW OWNER WHEN YOU SELL THE CRAFT. For further information, spares and accessories, please contact the manufacturer:

TOPPER INTERNATIONAL LTD, Kingsnorth Technology Park, Wotton Road, Ashford, Kent TN23 6LN Telephone +44 (0) 1233 629186 email info@toppersailboats.com

## maintenance

The Topaz RANGER is designed to require very little maintenance, but there are some simple ways to keep your boat in the best condition.

### Rudder

Never launch your boat without checking that the retaining clip has clicked into place beneath the upper transom fitting, as this will prevent the rudder from falling off.

### Sails

After you have finished sailing, roll the mainsail loosely, this will extend its life better than folding.

Never let the sails flap unduly, this can be done by furling the jib as soon as possible after hoisting. Although the battens protect the mainsail to a certain extent, do not leave the mainsail hoisted for extended periods of time.

Always rinse the sails and the boat after sailing in salt water.

### ALWAYS RELEASE JIB TENSION WHEN NOT SAILING

### **Foils**

Any nicks or deep scratches in the rudder can be repaired using gelcoat filler, as the smallest damage will affect the performance of the boat. Make sure that the rudder blade remains tight between the stock when down. Any movement between the blade and the stock, or the stock and the hull may cause steering problems.

### Hull and fittings

Small dents can be repaired by gently warming the hull with a hot air blower (take care not to melt the hull). For any more substantial repairs refer to Topper Sailboats.

Check the attachment of all fittings regularly. This is particularly important for the fittings that are screwed onto fixings that are set in the hull. Keep all blocks, cleats and ropes clean and rinse them after salt water exposure.

Always remove the bung to empty any water after sailing, and when not sailing leave the bung out to prevent the buildup of pressure within the hull as the temperature fluctuates.

### Ropes

Always replace any ropes that are showing any signs of wear immediately.

## // glossary / useful terminology

### hull

Nose:	Front of the hull	
Painter:	Rope from the nose of the hull used for towing or tying the board to a jetty, buoy or trolley	
Transom:	Back of the hull	
Fore:	Forward	
Aft:	Rearward	
Mast Step:	Integral tube where the mast heel/foot of the mast locates	
Rail:	Upper/outermost edge of a hull	
Port:	Left side of the hull when looking forward	
Starboard:	Right side of the hull when looking forward	
Leeward:	Direction away from the wind	
Windward:	Direction from which the wind is coming	
Gudgeon:	Fitting on the transom used to hang the rudder	
Gudgeon:	Fitting on the transom used to hang the rudder	

### spars

Mast:	Main vertical spar supporting the rig/sail
Mast Heel:	Lower edge/foot of the mast
Boom:	Spar at the bottom of the mainsail
Outhaul:	Purchase system on the boom for tightening the lower edge/foot of the sail
Vang:	Purchase system for tightening the rear/aft edge (leech) of the sail
Cunningham:	Purchase system for tightening the forward edge/luff of the sail
Sheet:	Rope for controlling the inward/outward position of the mainsail

## foils

Daggerboard	Blade found in the middle of the hull used to counteract leeward slippage
Rudder:	Blade found at the transom used for steering
Pintle:	The male part (pin) of the rudder hanging system

## // glossary / useful terminology (...)

## sails –

Mainsail:	Sail aft/rearward of the mast (Larger of the two)
Jib:	Sail forward of the mast (Smaller of the two)
Tack:	Forward lower corner of a sail
Clew:	Rear lower corner of a sail
Head:	Upper corner of sail
Leach:	Rear edge of the sail
Luff:	Forward edge of the sail
Foot:	Bottom edge of the sail
Batten:	A thin stiffening strip in the sail to support the leach

## // rigging instructions

### raising the mast



- 1. Position the boat head to wind, away from power lines and other overhead obstructions.
- 2. Lay the mast along the centre of the boat, having fitted the spreaders as per the Selden/Super Spars instruction sheet.
- 3. Untape all lines from the base of the mast.

Attach the shroud adjusters to the shroud eyes each side, on approximately the 5th hole down on the stern side.



Fix the base of the mast to the mast step on the cross beam with the pin and ring from the mast step.

Pull the mast up using the forestay. To make it easier, someone else can lift the top of the mast.

1



### raising the mast (...)



Having pulled the mast upright, secure the forestay around the stainless steel chute mouth bar.

Ensure all halyards are clear and not twisted.

### attaching the boom & gnav



Attach the boom onto the mast with the pin on the lower of the two fittings. Remember to put the pin in from the top and flip the pin end over.

- 1. Next attach the strut to the upper fitting on the mast. Ensure the toggle is correctly orientated as per the Selden/Superspar info sheet.
- 2. Fix the gnav strut carriage on top of the boom, although this should already be fixed for you.



Having fixed the boom and gnav to the mast you can thread the gnav control line. This comes out from the boom at the front, and then feeds through the swivel cleat on the mast.

TIP: You can tie a stopper knot in the end of the main halyard and then attach this to the end of the boom, so that the boom is held up while the rest of the rigging is completed. You may also want to re-rig the downhaul / cunningham at this time. This will give you a 4:1 purchase, effective to flatten the sail on a windy day.

### attaching the boom & gnav (...)



Now thread the mainsheet. Starting from the centre cleat on the hull.

#### (NB: ensure the ratchet clicks when the rope is pulled in),

Go up to the front block, and thread the line front to back. Then go to the pulley on the top of the ratchet block, and thread it front to back. Then go to the rear pulley on the boom, and thread it back to front. Finally, the main sheet goes to the pulley on the top of the ratchet and through the hole in the centre of the pulley. Tie a stopper knot to prevent the line unthreading.

### raising the jib



Attach the foot of the jib to the furler at the front of the boat. Ensure the furler is fully wound up.

TIP: Wrap some electrical tape around the furler.



Do the same for the head of the jib onto the furler on the jib halyard. Again, wrap some tape around it.

NOTE: To ensure swivel movement is not restricted, avoid taping across the swivel

### raising the jib (...)



Pull the jib halyard in order to raise the jib, and then cleat the halyard off on the right side of the mast. In order to apply the most rig tension, pull the jib halyard as the forestay is pulled forward by another person.

Once the rig tension has been applied, the forestay can be moved back from the P clip at the front and then tied off to the mast.



Tie the jib sheets onto the eye on the clew of the jib (push a loop at the centre of the jib sheets through the eye, then pull the tails through the loop and pull tight.)

### raising the jib (...)



Thread the jib sheet through the cleats on each side of the beam, then tie the ends together with a Fisherman's or Love Knot.





Furl the jib by pulling the thin line, so that it ends in this position.



Cleat the jib furler off in the cleat underneath the crossbeam.

The tail of the jib halyard can be stowed in the pocket on top of the cross beam.

It is not advisable to leave the jib up overnight, and always take the jib tension off when the boat is not being sailed.



Now tie the lowers onto the fitting on the mast.

NOTE: do not tie the lowers tight, have around 5cm of slack in the wire

### rigging the mainsail



Tie the flotation panel to the top of the mainsail by passing the white lines through the eyelets in the sail and secure with a figure of eight knot.



Tie the free end of the main halyard to the eyelet on the top of the mainsail. We suggest tying a stopper knot on the end of the halyard, then taking a round turn through the eye at the top of the sail. Then tie a half hitch with the stopper knot hard against the halyard.



Raise the sail by placing the bolt rope in the cut out of the mast just above the boom, and then pulling on the halyard.

NB: It may be easier to raise with two people, as one can pull the halyard while the other can feed the luff of the sail into the mast. Ensure that the boat is still head to wind before the sail is raised.



Cleat the main halyard in the cleat on the left of the mast or at the cleat at the top of the mast. If the cleat is at the base of the mast you can sweat the halyard in order to make sure that the sail is at the top of the mast

This is done by holding the halyard just above the cleat and then pulling away from the mast at 90 degrees. Then re-cleat the halyard until the sail is at the top of the mast.

TIP: Check the halyard for excessive wear regularly, particularly where the line goes over the masthead sheave. Wear can be prevented by moving the knot at the head every so often by adding additional overhand knots.

### rigging the mainsail (...)



Insert the slug at the clew of the sail into the cut out in the boom, and slide it along to the end of the boom.



Pass the outhaul through the eyelet in the clew, and then back to the end of the boom, where the stopper knot end of the outhaul is fixed behind the slug on the boom end fitting.

The outhaul can then be tightened at the mast end of the boom.



Cunningham - Take the tail attached to the gooseneck fitting and feed through eye in the sail then down through the cleat on the side of the mast. To stop the rope coming out of the cleat and to act as a stopper you can tie a figure-eight knot on the end of the line.

### reefing the mainsail



Pull on the red reefing line so that it comes out of the boom some way.

### reefing the mainsail (...)



Feed the reefing line through the eyelets in the leech of the sail.



From the top eyelet, the reefing line comes back down to the boom.

Tie a stopper knot in the end of the line, and then slide the knot into the cut out in the boom.

Use a similar system, with the end of the reefing line at the mast end of the boom, on the luff of the sail.



Tie the end of the reefing line onto the end of the boom so that it is secure.

Release the main halyard from the cleat, and uncleat the gnav, and then pull on the reefing line.

The foot of the sail should fold up so that the sail area is reduced.

Once the desired sail area is achieved, cleat the reefing line and main halyard, and re-apply gnav tension.

### rudder



When the Rudder is attached, ensure that it is fully engaged on to the pintle and gudgeon so that the retaining clip is able to spring out to hold the rudder in place.





TOPPER INTERNATIONAL LTD Kingsnorth Technology Park Wotton Road Ashford Kent TN23 6LN United Kingdom

T: +44(0) 01233 629186 E: info@toppersailboats.com

Test sails available on request

