

RIGGING GUIDE

vol 1.5 Oct 2023

NIKKI S.S

Don't be a stranger!

Let us know how you're going with your new Nikki.

You can stay in touch with us, or share your experience with us and the Nikki and Skeeta community at:









Printed on recycled paper

Index

Introduction	3
Inspecting your new Nikki	3
Trolley	4
<u>Hull</u>	6
Wings	7
Hiking Straps	9
<u>Mast</u>	10
Sail	11
Sail Numbers	13
<u>Boom</u>	14
<u>Mainsheet</u>	15
<u>Outhaul</u>	15
Vang System	16
- Vang rope tailing system	
Rudderbox/Tiller	18
- Rudder angle adjuster	
<u>Rudder</u>	20
<u>Daggerboard</u>	22
- attaching the pushrod	
Wand - height sensor	23
Launching and leaving the shore	26
Returning to shore and unrigging	26
Towing and anchoring	26
<u>Maintenance</u>	27
Warranty	28

Introduction

This rigging guide explains in detail how to rig your Nikki from the very beginning. It is intended to provide you with details of how to rig the boat ready for sailing. It does not instruct you on how to sail, seek proper training and guidance prior to sailing Nikki.

Information on how to launch and sail, capsize recovery and safety precautions are contained in the *Operating Guide*.

Inspecting your new Nikki

Check everything is in the package when delivered and first opened. Immediately let your distributor know if any parts did not arrive.



- 1 x Nikki Hull
- 2 x Wings
- 1 x Trolley
- 1 x Rudder box assembly
- 1 x 2-piece Carbon mast
- 1 x Sail
- 1 x Boom assembly
- 1 x Daggerboard and Rudder Vertical
- 1 x Main and Rudder horizontal lifting foil
- 1 x Wand and wand tube
- 2 x Displacement Tips
- 1 x Hull cover
- 1 x Mast Bag
- 1 x Foil Bag

Optional extras

4.3, 5.5 or 6.5 rig kit:

1 x mast base, 1 x Sail, 6 x sail numbers

Trolley

The flat pack trolley is quickly and easily assembled with spring clips.



1. To join the trolley centre bar and the trolley rear bar together, push the spring clip in and insert the centre bar into the square tube on the trolley rear bar. The spring clip will click into the hole.





2. To insert the axles, again push the spring clip in and insert the axle into the tube on the trolley rear bar. The spring clip will click into the hole on the underneath side of the tube. Repeat for opposite side.



3. To attach the wheels, place the wheels onto the axle, then place the washer over the axle. Insert the linch pin into the hole on the outside of the axle.



4. To attach the centre T-bar, push the spring clip in and insert the T-bar into upstand on the trolley centre bar. The spring clip will click into the hole.





5. Attach the handle by again pushing the spring clip in and inserting it into the tube at the very front of the trolley. The spring clip will click into the hole.





Hull

The hull is custom built from a solid foam core with a durable epoxy glass skin. The hull is very unlikely to leak or sink, and there are no inspection hatches or drain plugs. All fittings have been attached from factory. It comes in its very own boat bag. EVA foam is applied to the deck for comfort and grip.

Do not paint, vinyl wrap or heavily sticker the hull in dark colours, as overheating may cause damage to the hull.

The handle at the bow is made for lifting the bow of the boat.





WARNING:

DO NOT cover up any of the air valves.

This hole needs to breathe, covering this will void warranty.



CARE:

Never leave your boat in damp conditions. For example, in a damp bag.

The hull is made to be reasonably lightweight for foiling.
On land, do not sit on the hull, or put weight on, as this may create dents.

Wings

The port and starboard wings are provided with trampoline covers already laced up.

1. Simply slide the font wing bar into the hole.



2. Lower the rear bar into position and push the bar over the inner pin.





3. The outer pin will sit inside the hole on the bracket attached to the rear bar. Push the retaining pin in place.





The righting rope is used when capsized, and is lead under the wings.



To remove wings: Undo the retaining fast pin (1), lift the rear wing bar up and pull it away from the hull to clear of the 2 attachment pins (2). Then slide the front wing bar outwards and away from the hull (3).







The wing covers are supplied fully assembled, laced together with cable ties. Should the covers need replacing, these ties are easy to cut off and replaced. Only use UV stable Nylon with at least 50Kg breaking load.



The underside of the wing covers have yellow stripes to help make the boat more easily visible when capsized.

Hiking straps

Hiking straps are attached to the boat. They are placed over the front wing bar so you can easily get your feet under. The straps sit under the rear wing bar so that the wings are easy to attach and remove.



There are 2 different hiking strap positions. Rope is provided so you can adjust the front of the straps to suit your personal preference.





WARNING:

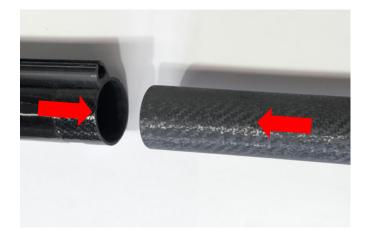
When changing the rear strap position, be sure to ONLY use the screws provided.

DO NOT use power tools to screw these in – they must ONLY be screwed in by hand.

Mast

The two-piece carbon mast is fitted with a head sheeve, halyard, halyard lock, Vang saddle, plastic sail track, a plastic sleeve and a mast base plug.

1. Slide the mast base and mast tip together, making sure the sail track aligns, if you like, put some tape over the join to stop it rotating.







2. Make sure the mast hole is clear from any debris, then raise the mast and insert it with the sail track facing the bow into the mast hole.





Once fully down, rotate the mast 180degrees to its sailing position with the sail track towards the stern.



To remove:

Disconnect the vang and mainsheet systems, pull the sail down and remove the boom.

Rotate the mast so the sail track is facing the bow and then lift the mast out of the mast hole.

Sail

The sail comes in its own bag with battens inserted, but not tightened. Use the allen key or screwdriver provided to tension up the battens before hoisting the sail. To achieve correct batten tension, wind the screw in to tighten the batten tension until the crinkles in the batten pocket just disappear.

From there, it is a matter of fine tuning for different weather conditions.

Typically, in more wind, slightly loosen off the battens. In lighter winds, tighten the battens slightly.



1. Insert the head of the sail into the sail-feeder and feed the luff up the sail track on the back of the mast and attach the Halyard shackle to the eye at the head of the sail.





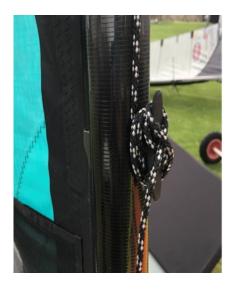
2. When the sail is fully raised, insert the swage into the halyard lock on the front side of the mast.



3. Run the excess rope through the halyard keepers on the front of the mast.



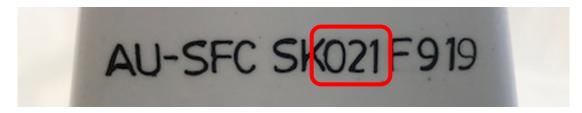
4. Cleat the rope onto the horn cleat near the base of the sail track. The remaining halyard rope can be stored in the sail pocket.





Sail Numbers

Sail numbers are supplied with each sail. In the manual pouch, there will be 6 x 230mm numbers. The sail number is the same as the boats serial number located on the transom of the hull.



If you have digital #8 numbers, to achieve correct sail numbers relative to your boat, follow these steps.



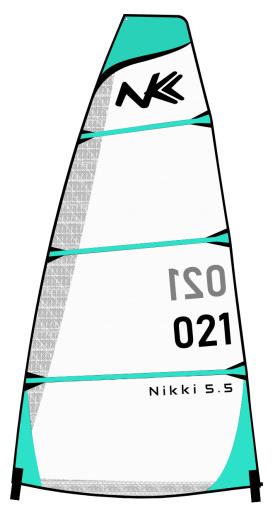
1. Cut out the grey areas with a sharp pair of scissors



- 2. Place them on the sail roughly parallel to the battens
 - Numbers on the starboard side of the sail must be higher than the port side.
 - Place the numbers above the bottom batten as shown.
 - Position the numbers a minimum of 45mm apart and to the edge of the sail.

230mm numbers





Boom

The boom is a parallel carbon fibre section to which a yoke, vang loop, mainsheet loop, vang loop and outhaul have been added.

Once the sail is up;

1. Insert the outhaul end of the boom through the webbing loop on the clew of the sail and attach the hook onto the small loop on the sail.



2. Insert the yoke end into the webbing loop on the tack of the sail and clip the yoke onto the mast. Ensure the webbing is positioned in front of the boom hook.



TIP:

Once the boom is inserted into the loops, you can roll the boom up with the sail when unrigging.

Mainsheet

The 4:1 mainsheet system is threaded through the pulleys provided as shown and tie a knot on the end the goes through the hole in the center of the pulley.

Tie a figure-8 knot of the end of the mainsheet to make sure the mainsheet doesn't unthread itself whilst sailing.

The Boom can be detached from the sail and left on the deck with the mainsheet still threaded, or the mainsheet can we unthreaded to remove the boom.

The Dyneema loops from the pulleys to the boom can be removed if needed.



Outhaul

1. To attach the outhaul control, clip the hook onto the webbing loop on the clew of the sail.



2. On the topside of the boom there is a clam cleat, the rope passes through this and can be adjusted as necessary.



Vang system

The vang is a 12:1 with a sliding gooseneck yoke. When the vang is applied, the luff is free to move down the mast, which applies both luff and leach tension at the same time. This greatly simplifies the controls and gives more time to concentrate on sailing the boat.



1. Attach the snap shackle to the mast saddle. Be sure to not twist or tangle the ropes.





2. Attach the hook onto the boom vang loop.

If you find it difficult to attach the vang, it can be easier to attach the mainsheet first and apply pressure to the sail. This will lower the boom and will allow the vang to be easily attached.





- Vang rope tailing system

Ensure wings are properly connected to the boat before connecting.

1. Pull the end of the vang rope through the loop on the forward end of the outer wing bar.





2. On the underneath side of the wing (where the yellow stripes are) near the aft and inner wing bar, there is a sister clip. Pull both sister clips together and connect them.



Rudder box/tiller

The rudder box and tiller are a single unit.

- 1. Position the rudder box over both plates on the stern post of Nikki.
- 2. Insert the rudder pin and secure it with the ring provided.





3. Loop the restricting rope/shock-cord over the tiller and clip the snap shackle onto the saddle or to the eye of the dyneema.





4. To adjust the shock cord tension. Loosen the knot on the shock cord, and re-tie the knot in the desired location.





Always make sure the shock cord across the tiller is loose enough as this helps the boat to round up if you do go overboard.

WARNING:

DO NOT hold on to the tiller or tiller extension in the event of a capsize or falling overboard as you may damage the boat, rudder box, tiller or tiller extension.

- Rudder Angle Adjuster

The angle of attack of the rudder lifting foil is adjustable by a knob on the end of the tiller, or twisting the tiller. This is to finely adjust the attitude of the hull in varying weather conditions.

A good base setting is so the Rudder Pin is parallel to the Rudder Vertical.

Twist Knob Version

Rotate the knob clockwise to increase angle of attack on the rudder lifting foil, to lift the stern of the boat during foiling. The Rudder Pin will move towards the front of the slot.



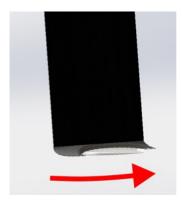




Rotate the knob anti-clockwise to reduce angle of attack on the rudder lifting foil, to sink the stern of the boat during foiling. The Rudder Pin will move towards the back of the slot.





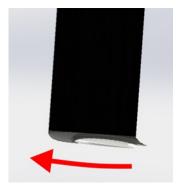


Twist Tiller Version

Rotate the tiller clockwise to increase angle of attack on the rudder lifting foil, to lift the stern of the boat during foiling. The Rudder Pin will move towards the front of the slot.







Rotate the tiller anti-clockwise to reduce angle of attack on the rudder lifting foil, to sink the stern of the boat during foiling. The Rudder Pin will move towards the back of the slot.







Rudder

1. Insert the rudder blade from above and apply the toggle clamp to hold it in place.





2. Attach the horizontal foil by aligning the pins, press the push button in and pushing it up into place. Make sure the push button is fully engaged before going sailing. The button will sit flush on the outside surface of the rudder.





3. Insert the pull-down rope into the hole on the top of the rudder and tie a knot. The rudder is pulled down into place using this rope after leaving the shore.



4. The excess rope can be hooked over the knob at the end of the tiller.



5. To lock the rudder into place, pull the retaining toggle pin over the top of the rudder and onto the opposite side of the rudder box. Insert it through the rudder box and rudder hole. Make sure the toggle pin nose drops to be engaged properly.







WARNING:

Be aware of the water depth or damage to foils may result.

Daggerboard

1. Insert the daggerboard into the centre case from above, so that it sticks out around 50mm under the boat (so you can see the hole on the port side) and hold it in place with the toggle clamp.





2. Attach the horizontal main foil under the boat whilst on the trolley by aligning the pins, press the push button in and slide the foil it up into place.







Make sure the push button is fully engaged before going sailing. The button will sit flush on the outside surface of the rudder.

3. When leaving the shore, use the foil clamp to hold the daggerboard at the appropriate height to safely leave the shore.





4. Once in deep water, open the clamp and push the daggerboard fully down and insert the retaining pin through the hole in the foil case and daggerboard. Pull the shock cord attached to the retaining pin over the rudder and over the other end of the retaining pin.







WARNING:

Be aware of the water depth or damage to foils may result.

- Attaching the pushrod

The horizontal lifting foil is controlled by the wand via the pushrod.

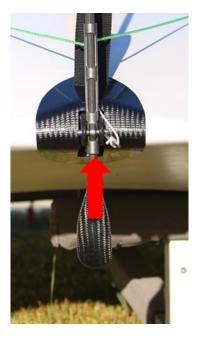
Once the daggerboard is secured in place, attach the clevis on the end of the pushrod to the bell crank on top of the daggerboard using the fast pin provided.

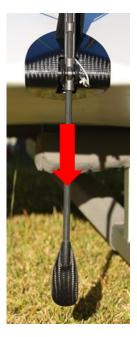




Wand - height sensor

The fully retractable wand is detachable, and must be put on, threaded and tensioned correctly.





1. Thread the rope through the wand tube and out the slot in the back of the wand tube.



2. Insert the wand inside the wand tube assembly, ensuring the rope is sitting in the groove at the back of the wand.

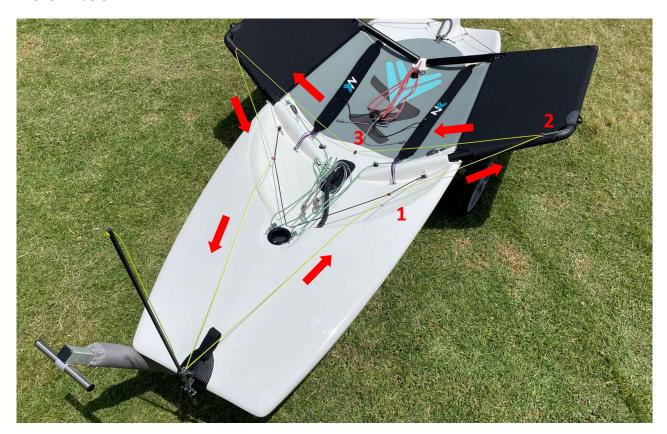


3. Push the wand tube assembly into the groove on the bow mechanism and push the fast pin into the holes to connect both components together.





4. Run the wand rope around the boat, threading the wand cord through the fairleads and pulleys as shown below.









5. Return the cord to the wand tube and thread the cord up the wand as shown.

When finishing the closed loop, it is best to push the wand down the tube, so the top of the wand is just below the entry and exit slot for the rope. Then insert the tail of the wand rope in and push the wand up.





6. Insert the tail of the wand rope in the top wand hole and tie a knot to the correct tension.

To tension the wand rope correctly, make sure the wand is fully up and in a vertical position. In this position, the tension on the wand rope should be very light. The tension will increase as the wand paddle is rotated towards the hull.

- If there is not enough tension on the wand rope, the wand may sit in one position and cause the main lifting foil to have too much lift, potentially causing the foil to breach the water's surface. If this does happen, tension the wand rope tighter by re-positioning the knot on the wand rope.
- If there is too much tension on the wand rope, the wand can be difficult to adjust whilst sailing and can cause the wand to dig into the water's surface. If this happens, reduce the tension by repositioning the knot on the wand rope.





The wand is now ready for use, pull the cord to raise or lower the wand. This changes the ride height whilst sailing.

Always start with the wand raised until you are ready to fly.

If you need to stop foiling or slow down quickly and safely, raise the wand to lower the boat to the water surface.

TIP:

When displacement sailing with foils, it helps to pull the wand down about 200mm. This allows the main foil to lift slightly to counteract the lift on the rudder foil and will prevent the boat from nosediving.

Launching & leaving the shore

When launching;

- 1. Retract the wand fully.
- 2. Lower the daggerboard and rudder roughly halfway and clamp with the toggle clamp.
- 3. Sail away from the shore into deep water.
- 4. Lower the daggerboard and rudder and insert their retaining pins.

Returning to Shore and Unrigging

When returning to shore;

- 1. Retract the wand fully.
- 2. Pull out the centerboard retaining pin and the clevis fast pin.
- 3. Raise the centerboard and rudder part of the way, leaving enough centerboard and rudder in the water for steering. Apply the foil clamp to hold them in place.
- 4. When in shallow water, carefully get off the boat. Stand next to the boat and release the vang so you can undo the halyard and lower the sail.
- 5. Remove the wand from the bow mechanism and store in a safe place on the cockpit you do not need to unthread the wand rope at this stage.

The daggerboard and rudder can be removed in the water.

Alternatively, you can leave them fully raised and the wand in the fully raised position, then gently place the boat on the trolley. This enables the boat ready to sail again, simply by launching and hoisting the sail.

Towing & anchoring

The boat may be tethered for towing or anchoring via the forestay plate.

If there is crew aboard, it is recommended to use the forestay as a guide, wrap the tow rope around the mast and the crew to hold the end of the tow rope. This allows the crew to let go of the tow rope to avoid danger if necessary.

Make sure you remove the bow wand to avoid damaging it.

The centerboard should be raised or removed. The rudder inserted but held to the centerline of the boat. This will help the boat track straight and is easy to tow.

For anchoring, the centerboard may be kept in place raised halfway. The rudder should be fully raised or removed. So that the boat swings freely at anchor. The sail may remain hoisted in up to 8 knots of wind, with the vang fully eased.

MAINTENANCE

Maintenance is a key part of looking after your investment and keeping your Nikki in the best possible working order.

It is most important to thoroughly wash all items with fresh, clean water after each sail.

While the hull, rig, wings, and foils are all manufactured from corrosion resistant materials, they can be susceptible to attack from salt residues especially if left in the hot sun.

It is also most important to remove any silt, sand or abrasive material, especially from all moving components and the internal surfaces of the bow mechanism, daggerboard case, rudder box, mast hole, wing tubes, vang system, daggerboard, rudder and pushrods.

Unclip the lifting foils and wash thoroughly with fresh water, making sure the push button and t-joint moves freely.

Always dry foils and hull before placing them in their bags.

Do not leave the foils in sand or mud and avoid leaving them in direct hot sun - this is why protective bags are supplied.

Never store hulls or foils in damp conditions.

The foil clamp is only an aid for holding the verticals and is designed to support the weight of the foils, it must not be relied on when sailing or foiling. If overtime the clamp becomes looser, simply glue a thin piece of plastic behind the clamp so it can apply more pressure against the vertical foils.

If the Hull has damage and needs repairs, seek professional advice.

The Hull is made with a styrene foam core and epoxy/glass/carbon fibre skin then painted with 2-Pac Polyurethane paint.

If any repairs to the hull need to be done, ONLY use epoxy resin.

We wish you many happy years foiling and sailing with your Nikki!

www.skeetawatersports.com

WARRANTY

Skeeta Watersports Pty Ltd (SW) guarantee that the products are free of any defects or damage caused by workmanship or faulty materials, for the duration of 365 Days (1 year) from the date of original purchase (or longer if required by law).

Any boat used for any commercial purposes, including charter or rentals; This warranty will expire 90 Days after the date of original purchase.

If you believe a product has defects to workmanship or faulty materials, contact your dealer within 30 days from the date on which the defect or damage is discovered.

No repairs under warranty are to be done without written approval from Skeeta Watersports Pty Ltd. The customer must produce the original dated proof of purchase.

The owner must look after their boat, with regular maintenance and care as stated in this document.

Warranty of this Boat DOES NOT cover any of the following Claim conditions in relation to damage or defects caused by:

- Collisions or impacts with any third-party, material, objects, or wildlife.
- Abuse, misuse, careless sailing, vandalism, or accidental damage.
- Breakages or defects as a result of prior damages or repairs not made by SW.
- Transport, freight carriers, loading, unloading, dropping, out of water handling or similar.
- Sailing/foiling in over 23 knots of wind, or in rough waves/conditions.
- Failure to thoroughly wash the boat and all components with fresh, clean water after each use.
- Failure to follow any procedures in corresponding SW written manuals/guides/documents.
- Exceeding specified weight as stated on boat plaque.
- Inappropriate storage or handling, including storage of the boat in closed, damp conditions (for example, a wet boat bag).
- Constant exposure to temperatures under 0 degrees Celsius and over 50 degrees Celsius.
- Painting, wrapping or heavily stickering the hull in dark colours.
- Natural occurrences such as earthquakes, fires, floods etc.
- Alterations or modifications to the boat, rigging, foils or trolley.
- Usage of the boat after a warranty claim is reported.
- Using equipment other than specified for that product e.g.: a larger rig, a larger sail, different rigs or foils etc.
- Storage or transport of the boat with a blocked or closed air-valve.
- Covering up the air-valve located on the bulkhead.
- Improper mounting or adjustments of fittings/foot straps, foils etc.
- Neglect, weathering, or normal use and wear.

We reserve the right to make further changes and modifications to our products or corresponding documents at any time to maintain the functionality, value, and quality of the product.

For further questions or information, please contact your distributor.

Skeeta Watersports Pty Ltd
Factory 16/59-65 Keys Rd
Moorabbin, Victoria
Australia 3189