INSTRUCTION MANUAL
OWNERS MANUAL

TOPCAT®



AVANTI

ROOKIE
CLUB
ADVANCED


AVANTI
TOPCAT®

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OVERVIEW

INTRODUCTION:

First of all, thank you for purchasing a ***TOPCAT AVANTI***, our first catamaran based on rotomolded hulls. There are 3 different versions depending on the intended use:

The ***TOPCAT AVANTI ROOKIE*** especially designed for the needs of aspiring newcomers, the ***TOPCAT AVANTI CLUB*** designed for the rough day to day exposure in resorts and sailing schools and the ***TOPCAT AVANTI ADVANCED***, easy and agile to put a smile on every recreational sailors face. This manual is for all 3 versions.

The ***AVANTI*** was designed with the same sophistication as our fibreglass ***TOPCATS*** - carrying the same DNA which creates a true ***TOPCAT*** experience:

The ***AVANTI*** is ***fast and easy to set up***!

The ***AVANTI*** is ***easy to sail yet agile and fast***!

The ***AVANTI*** is ***very durable*** and ***outstanding build quality made in Germany / Italy.***

We even treat the ***AVANTI*** with the infamous and patented ***TOPCAT*** rudder system.

Have fun!

PREPARATION:

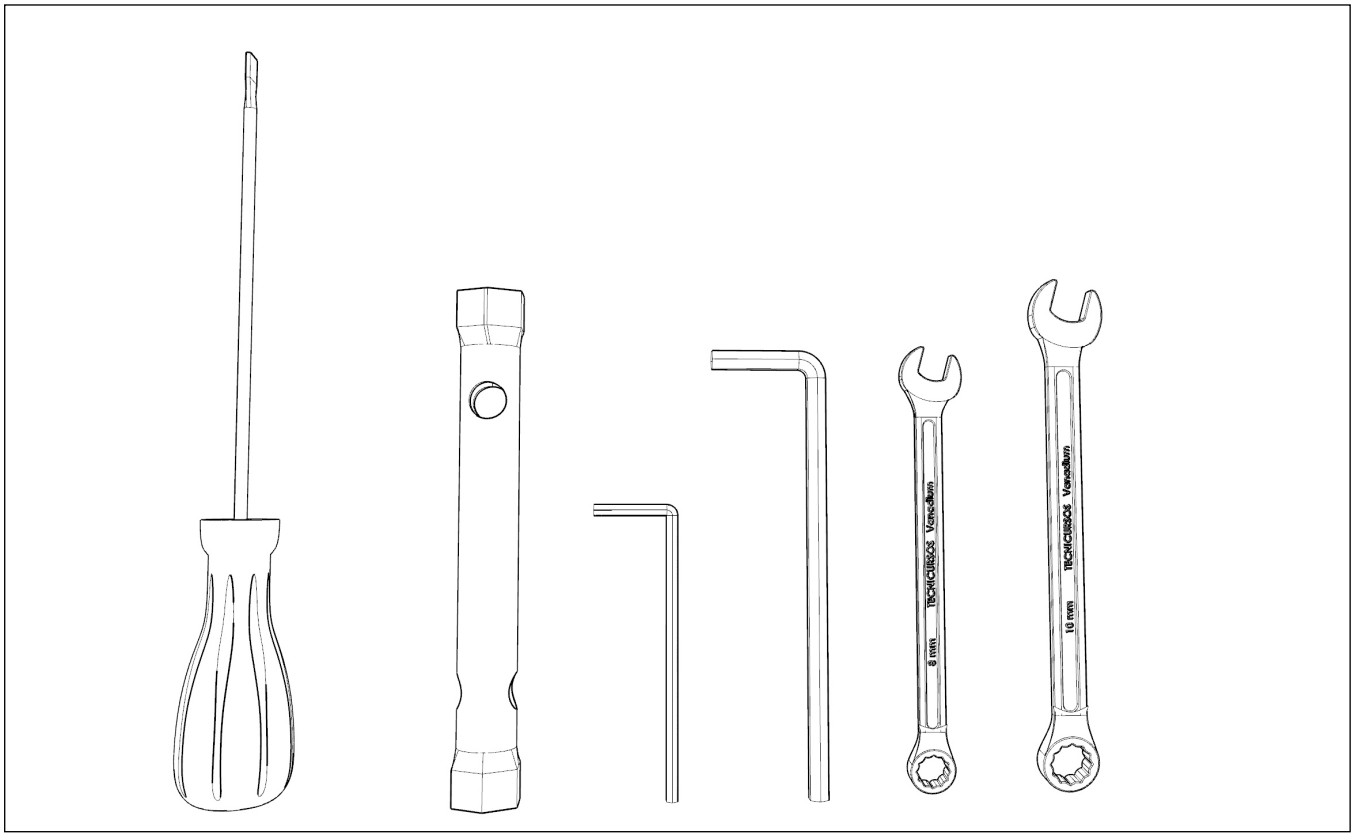
What do you need to assemble an AVANTI?

Time: 2h (Innitial setup)
Space: 5x8m
Mood: Good
Help: Ideally a 2nd person
Tools: See below

- (Ratchet) Spanner SW 13 (M8)
- Long nut SW13 (included)
- Screwdriver to drive the long nut
- Cutter knife
- Allen key 3mm, 5mm

What you DON‘T need to assemble an ***AVANTI***?
You won‘t need silicone and other funny mess as usually required with other rotomold cats.
So it is also very easy to disassemble your ***AVANTI*** for winter storage or transport!

Ideally, you find a shady and wind-protected spot with sufficient space to setup the platform and stepping the mast. The setting up experience is even better if you have some clean spot to layout your tools and components.



COMPONENTS

To get an overview, lets take a look at all components of an **TOPCAT AVANTI:**

2x Hulls
2x Beams
1x Mast
1x Power spreader
1x Crossbar
1x Tiller extension (AVANTI ADVANCED & AVANTI ROOKIE only)
1x Fixation kit (TC110)
1x Beam plug set (TC201)
1x Sheet set (TC380A)
1x Trampoline and fibreglass rod
1x Trampoline fixation set (TC308A / TC308 B[PRO])
1x Shrouds set
1x Forestay set
1x Bridal wire with jib furling drum
1x Traveller swivel
1x Main sheet block
2x Jib sheet block
1x Cunningham 2:1
1x Small parts set (TCI600Classic): Tiller joints, keyplates, springs, halyard shackle.
3x Hatch covers (1 spare)
1x Trapeze set (AVANTI ADVANCED & AVANTI ROOKIE only)
1x Port & 1 starboard rudder housing
2x Rudder boxes
2x Rudder blades
1x Main sail
1x Jib Sail
1x Batten set
1x This manual

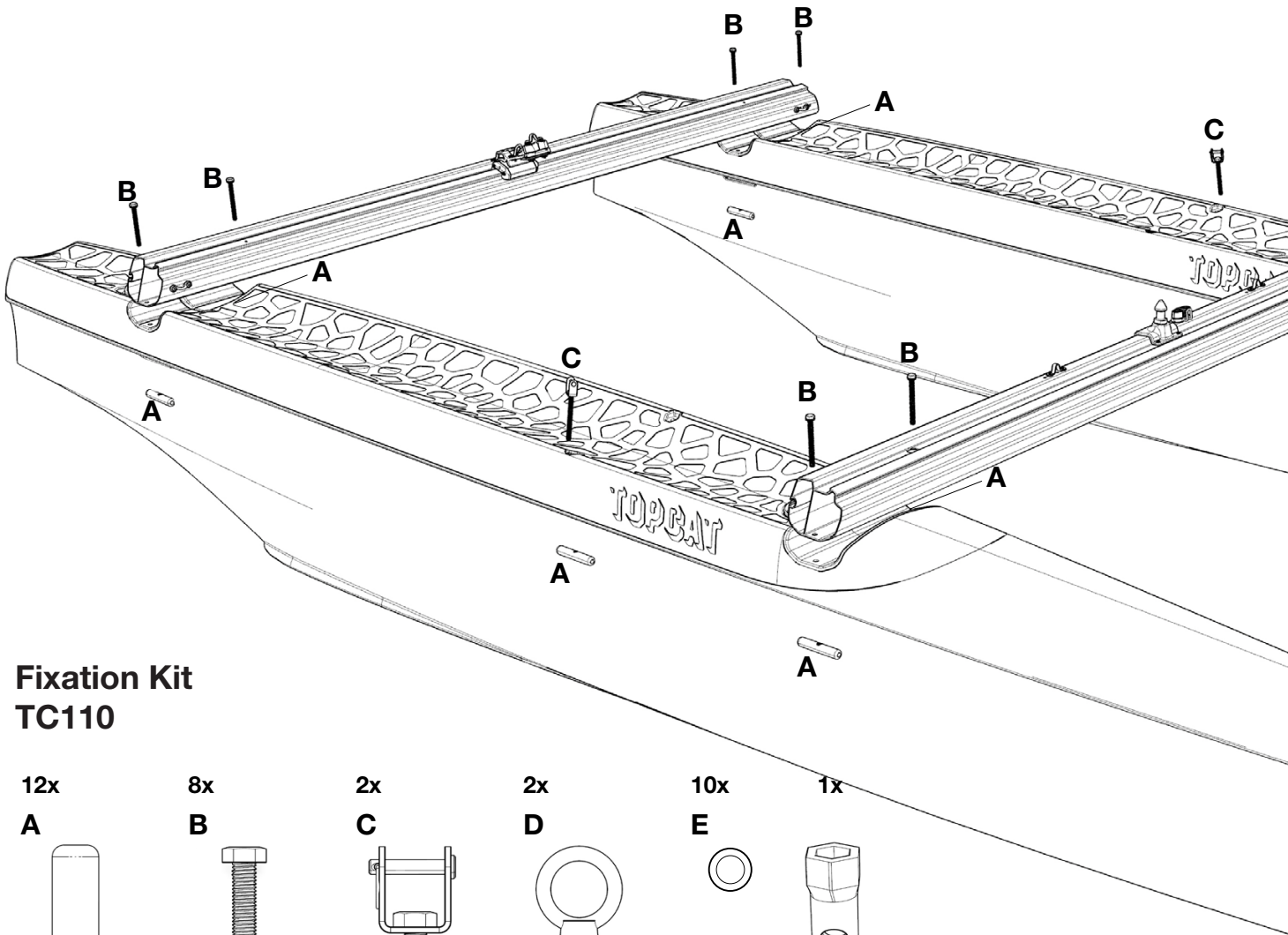
AVANTI SHEET SET

MARKING	FUNCTION
AV1	MAIN SHEET
AV2	JIB SHEET
AV3	MAIN HALYARD
AV4	JIB HALYARD
AV5	FORESTAY TENSIONER
AV6	JIB FURLING SHEET
AV7	TRAVELLER SHEET
AV8	TRAMPOLIN LACING SHEET
AV9	UPRIGHTING LINE
AV10	SHOCK CORD


TOPCAT®
AVANTI

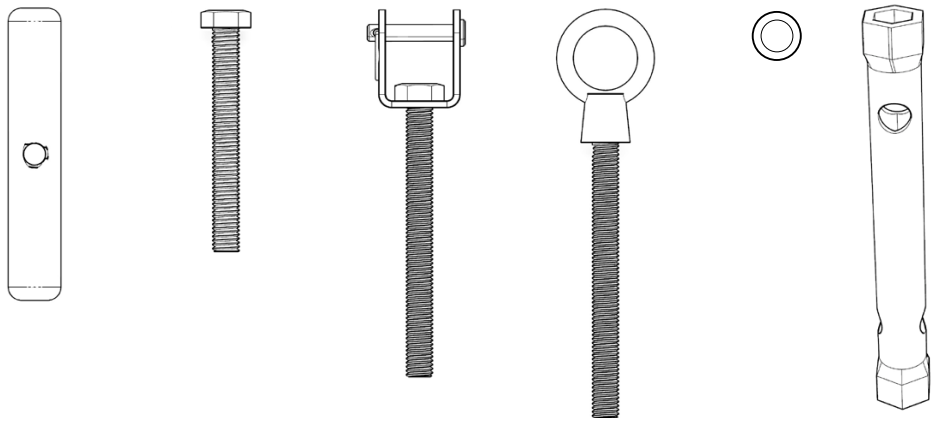
1 PLATFORM ASSEMBLY

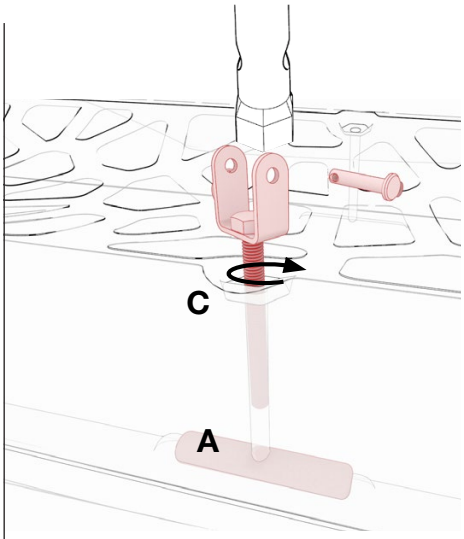
Place beams on the hulls and fasten them in the order of the outside screws first.
Make sure to fasten the screws C & D for the rig on the outside position.

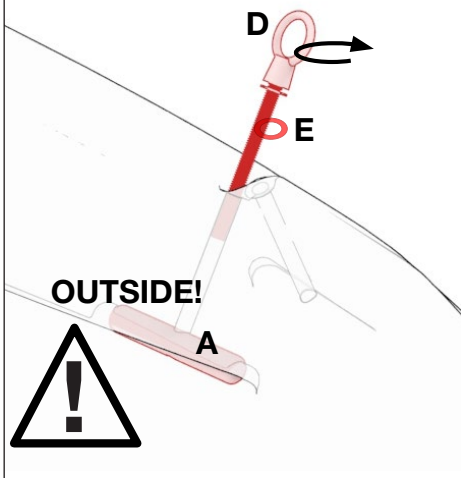


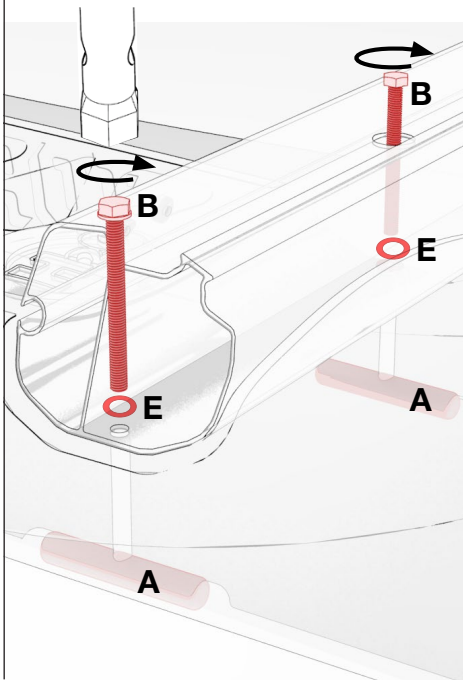
Fixation Kit
TC110

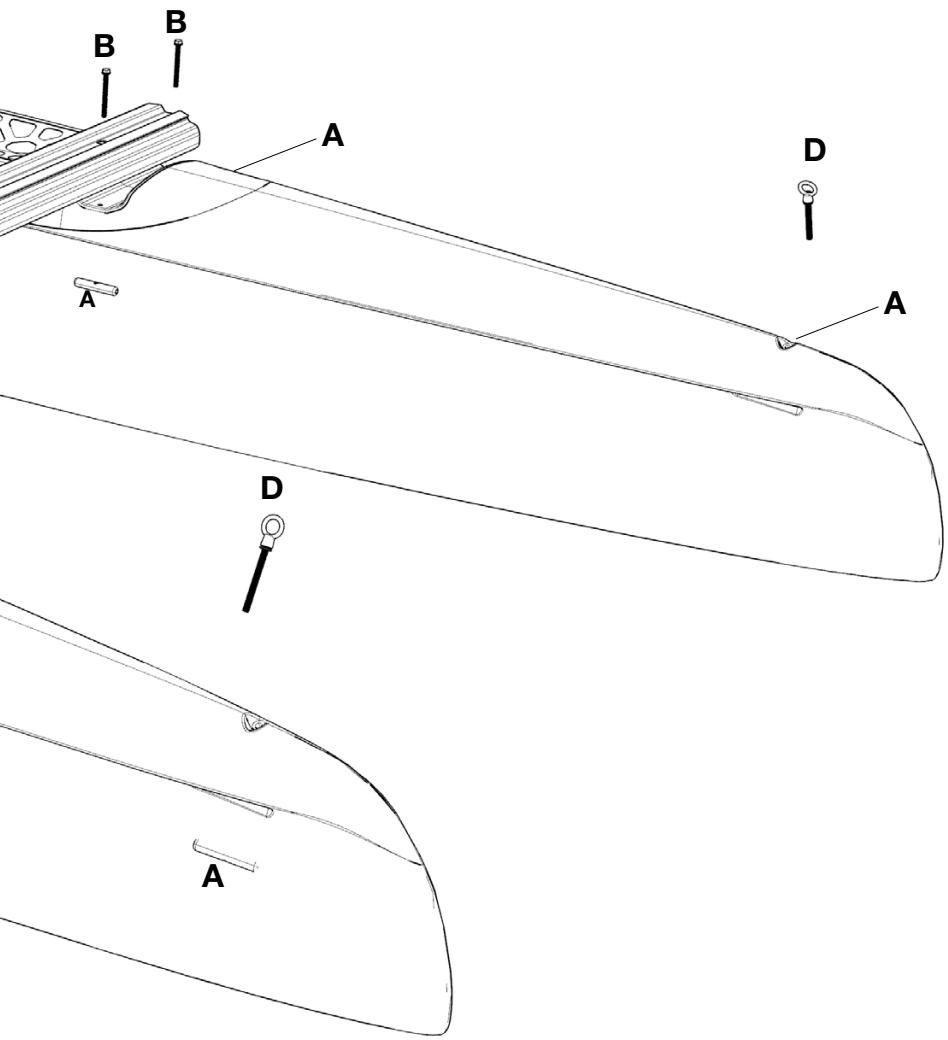
12x	8x	2x	2x	10x	1x
A	**B**	**C**	**D**	**E**	




C
A

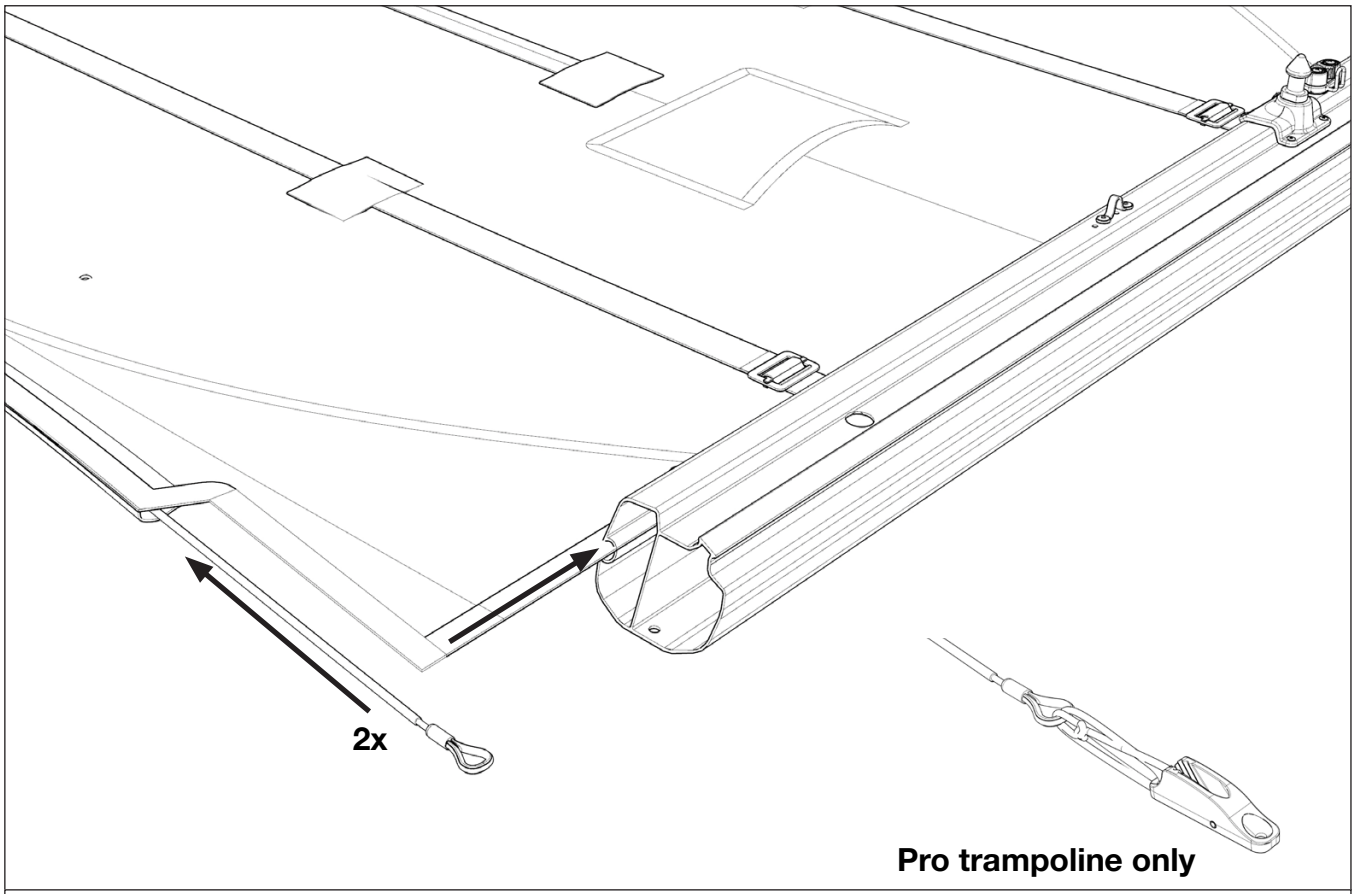

D
E
OUTSIDE!
A

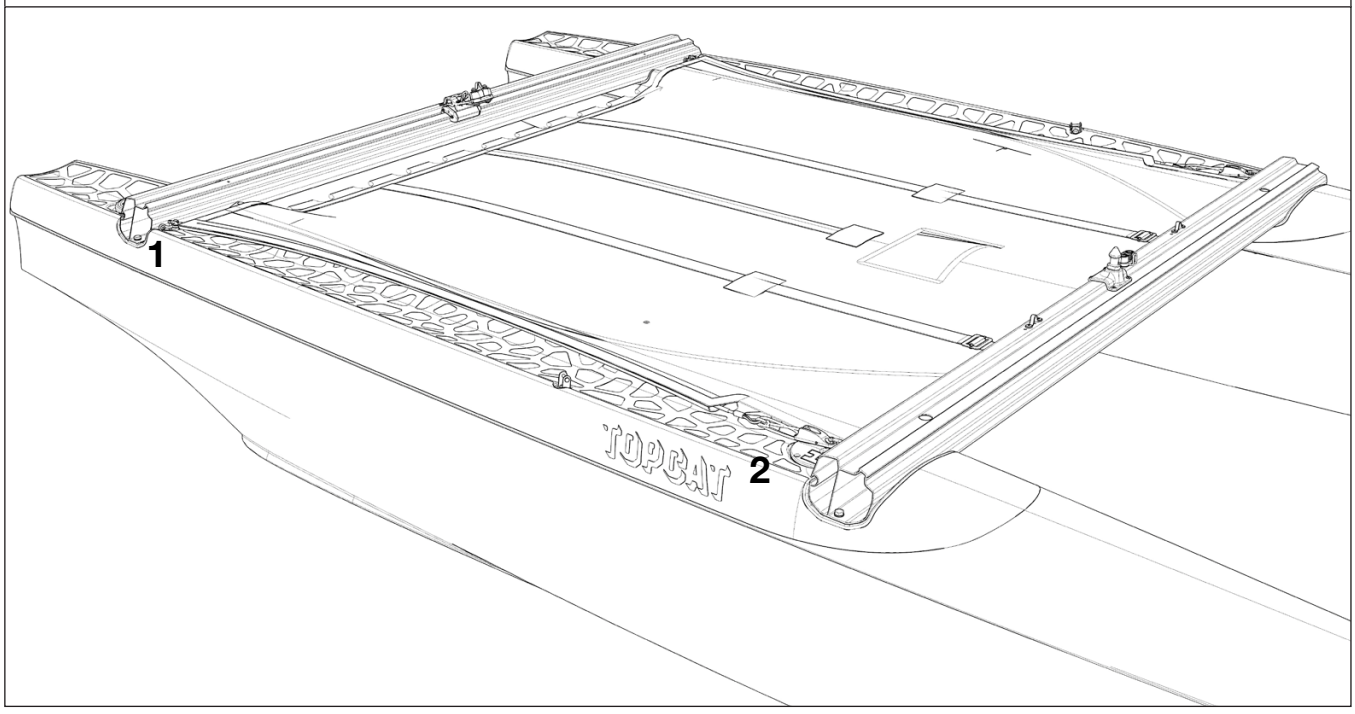

B
B
E
E
A
A


B
B
A
A
D
A
D
A

2 INSERT TRAMPOLINE

- Feed the front welting of the trampoline into the notch of the front beam
- Tie a bow knot to the front thimble of the wire and feed it through the clam cleat (pro trampoline only)
- Feed the trampoline wires through the channels on left and right side



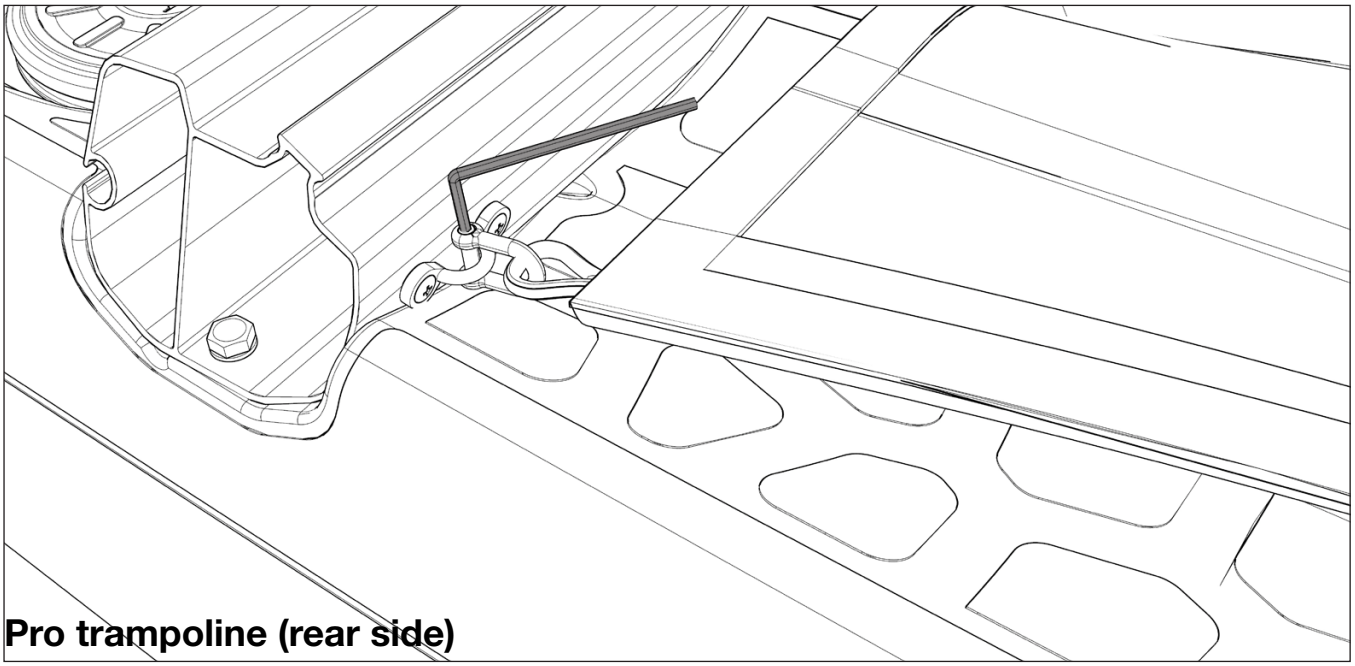


Pro trampoline: (AVANTI JUNIOR / AVANTI ADVANCED)

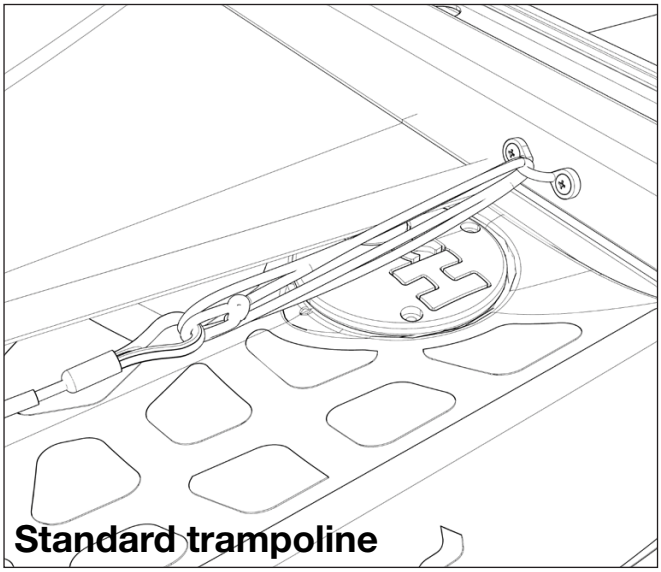
1: Shackle rear thimbles of the trampoline wires to the rear beam with 3mm Allen key
2: Shackle the clam cleat to the front beam.
3. Use the main sheet block* to get more tension on it. |*Main sheet block see Chapter 9.

Standard trampoline (AVANTI CLUB):

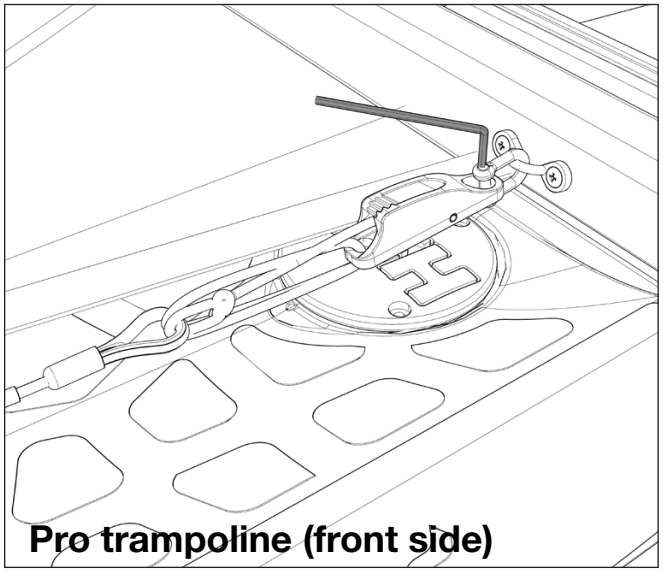
1. Tie the rear thimble to the rear beam with the shorter AT1 sheet with ca. 5 cm distance
2. Tie the front thimble to the front beam with the AT2 sheet and feed it 3-4 times around. Put a bow knot at the end and secure it so it won‘t open.



Pro trampoline (rear side)



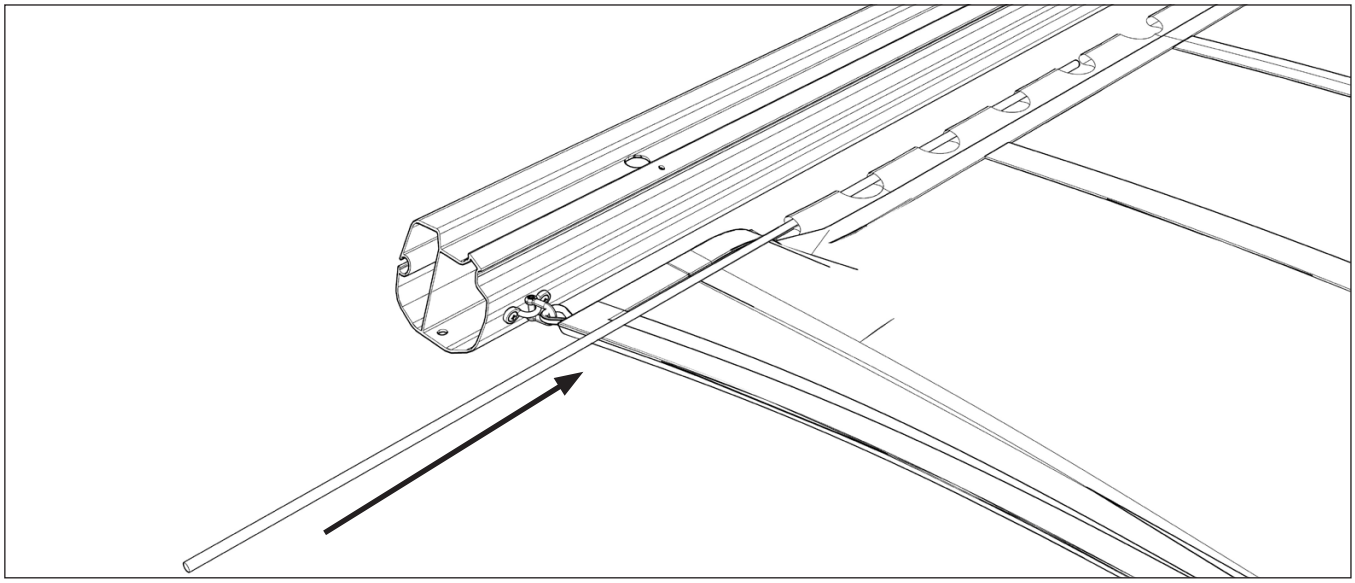
Standard trampoline

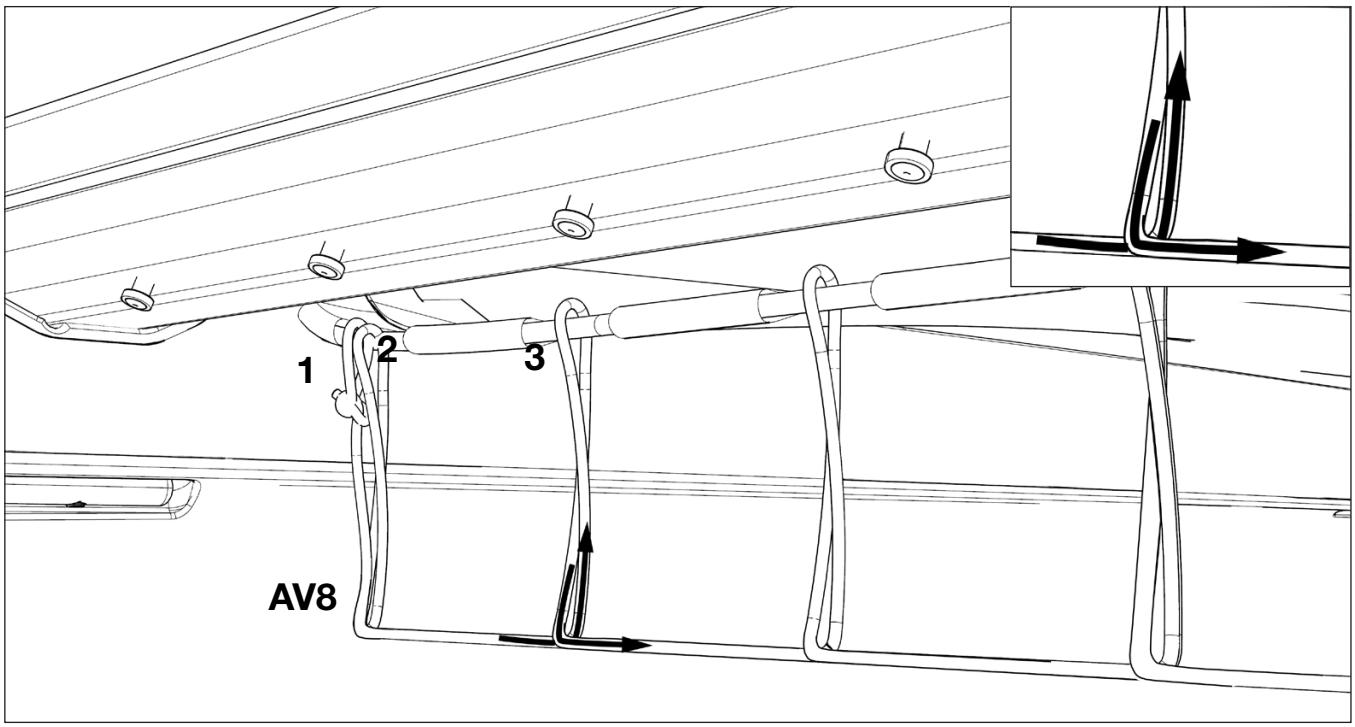


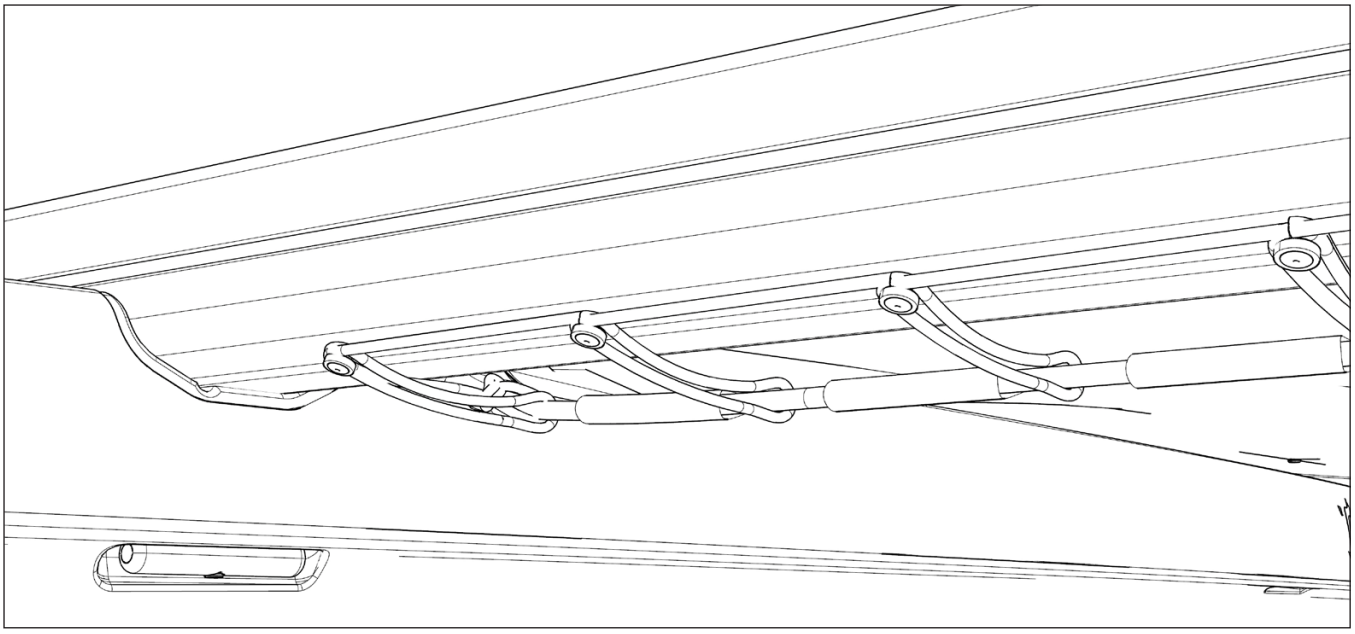
Pro trampoline (front side)

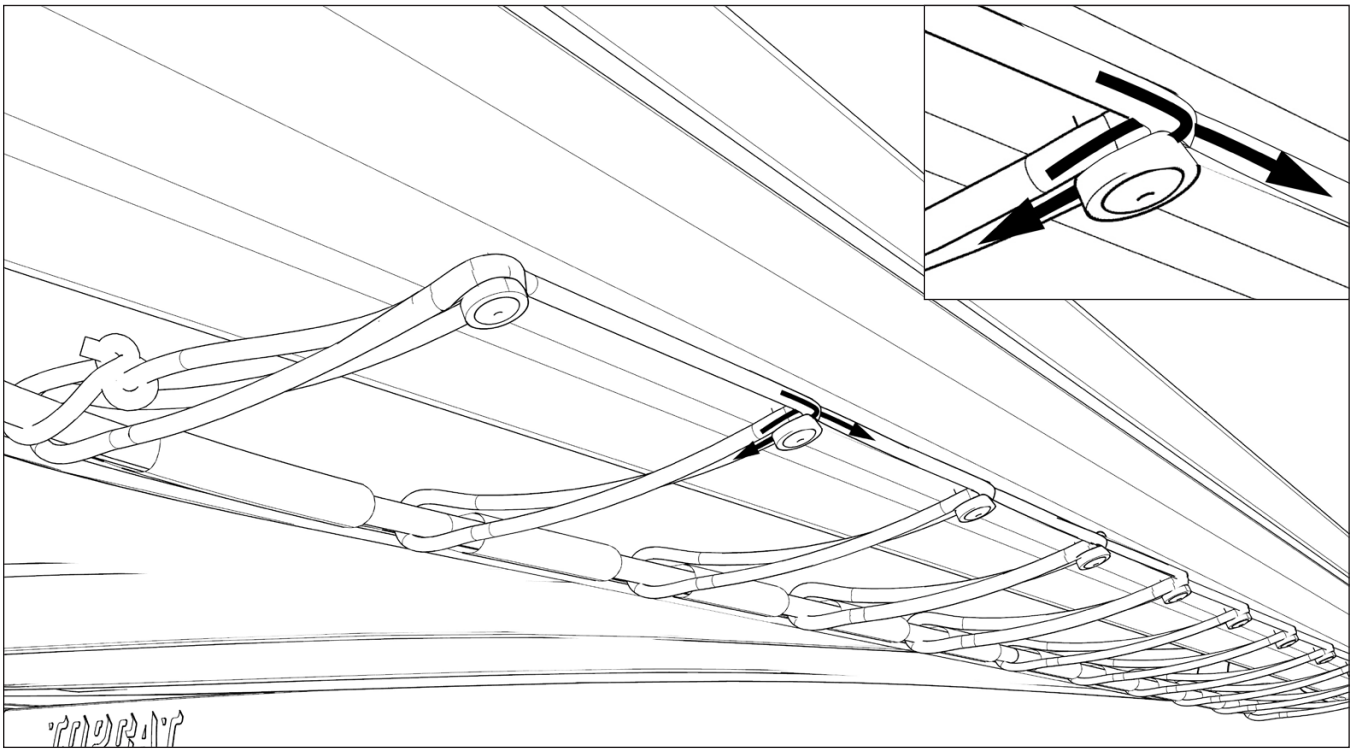
Rear lacing:

- Feed the fibreglass rod through the channel and the cut outs at the rear edge of the trampoline
- Tie the lacing sheet AV8 with bow knot to the rod at the first cut-out (1). Loop it once around the first cut out (2) and then proceed with the other cut-outs (3), loop it twice on the last cut out on the far side. Make sure to feed the loop always from the same direction with an overlap.
- Once the sheet is threaded around the rod in all cut outs, the loops can be laid around the fixation points and firmly tensioned.
- Secure both loops on the far side with 2 half hitches, feed the remaining sheet through the gaps inside loops and tie it with a bow know the loop near its end.







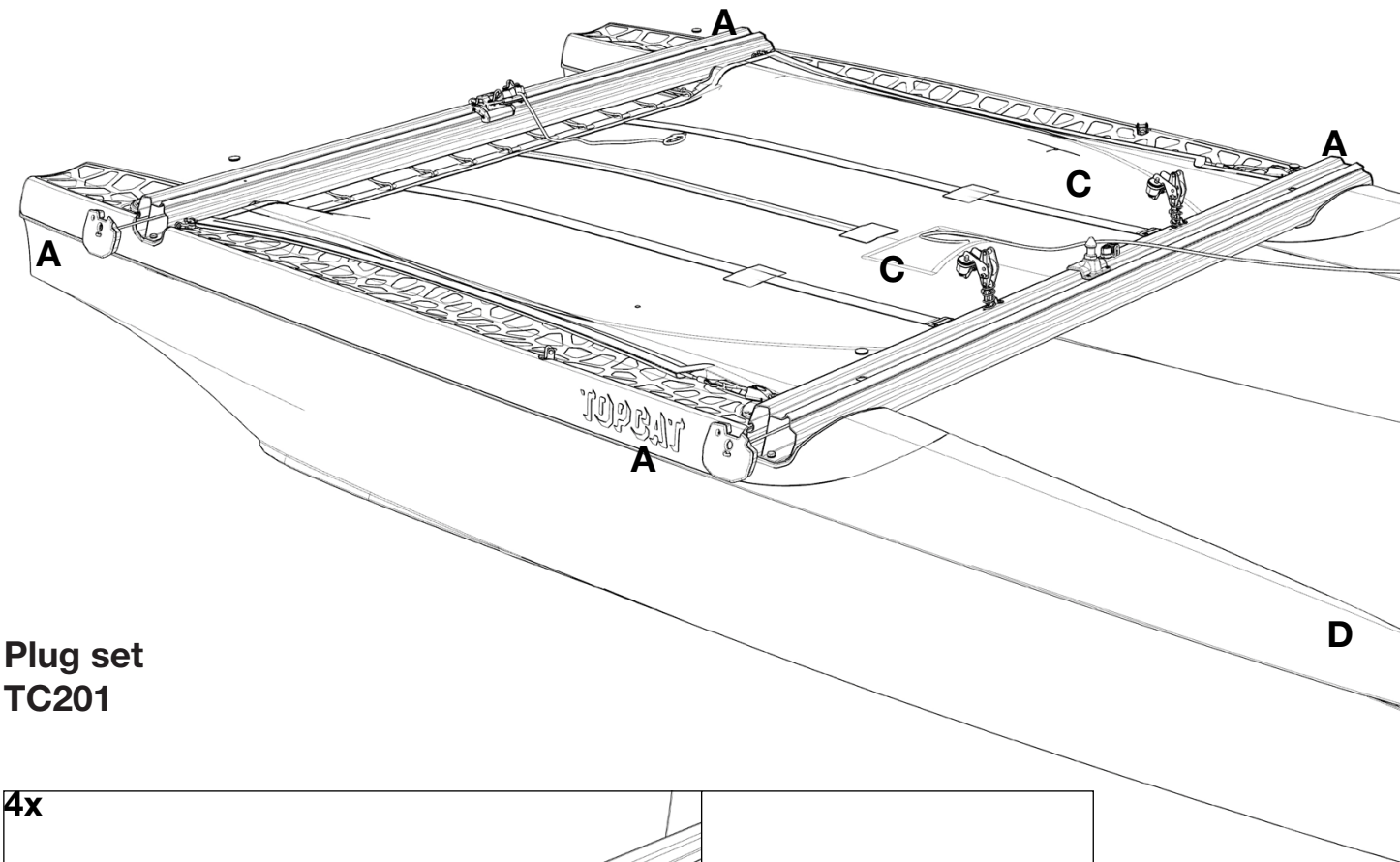


Hint:

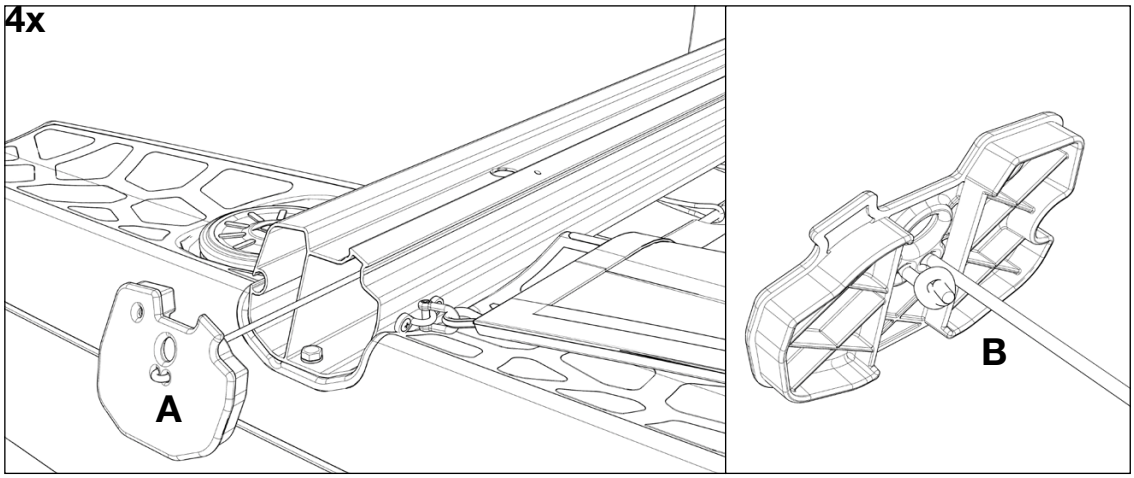
The lacing is similar to those at the bigger TOPCATs. Check out the lacing in the tutorial video:

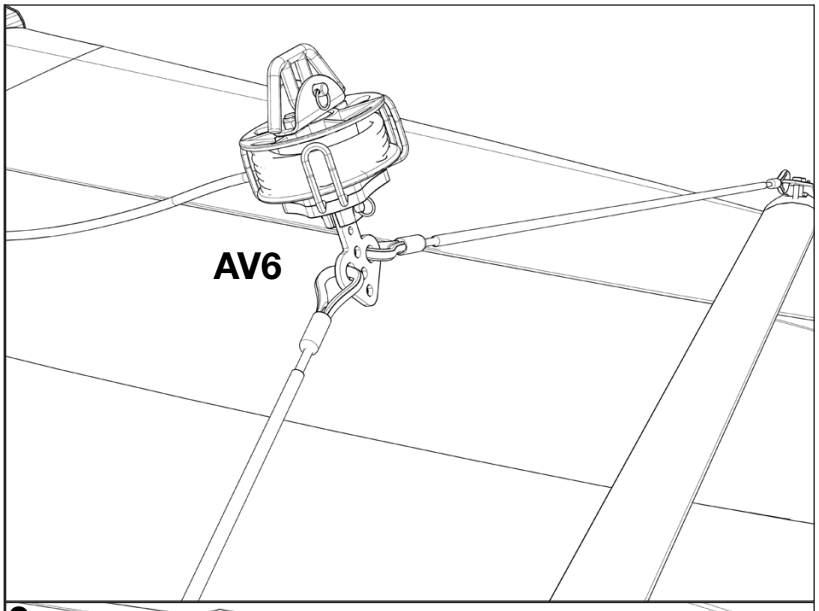
3 COMPLETE PLATFORM

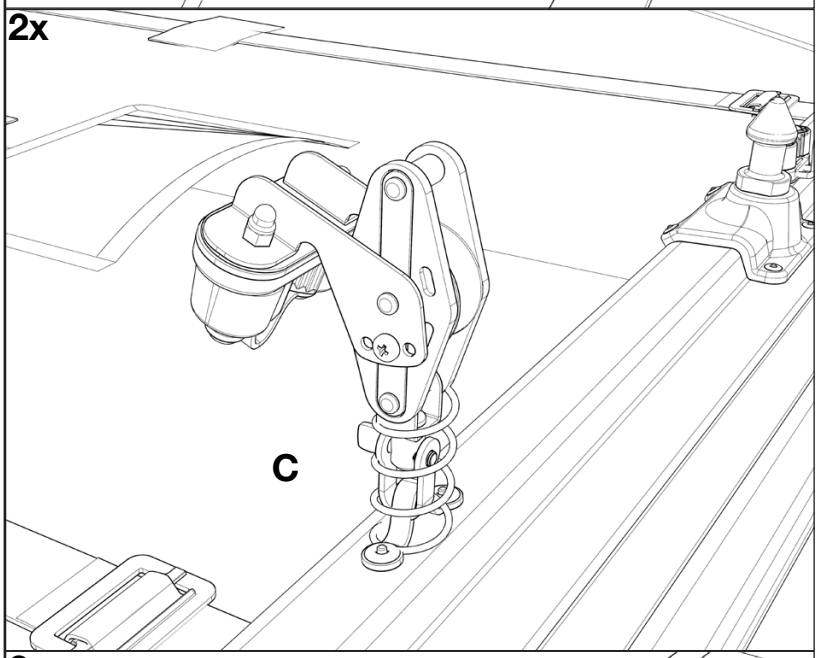
- Close beams with the Plug set (TC201): Connect opposing beam plugs (A) with shock cords (B) and secure with half hitches.
- Shackle jib sheet blocks to the front beam with spring (C)
- Shackle bridle wires with powerspreader (D) to the front fitting, watch out for the right orientation marked in the cast end pieces of the bridal wire (BB = port side / STB = starboard side).
- Feed the jib furling sheet (AV6) in furling drum
- Tie the uprighting line (AV9) with a bow knot to the mast foot and store it in the trampoline bag.

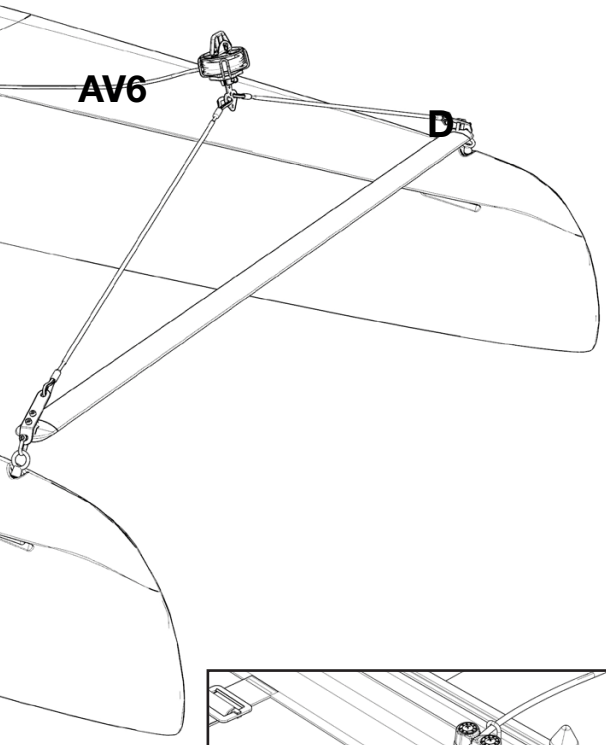


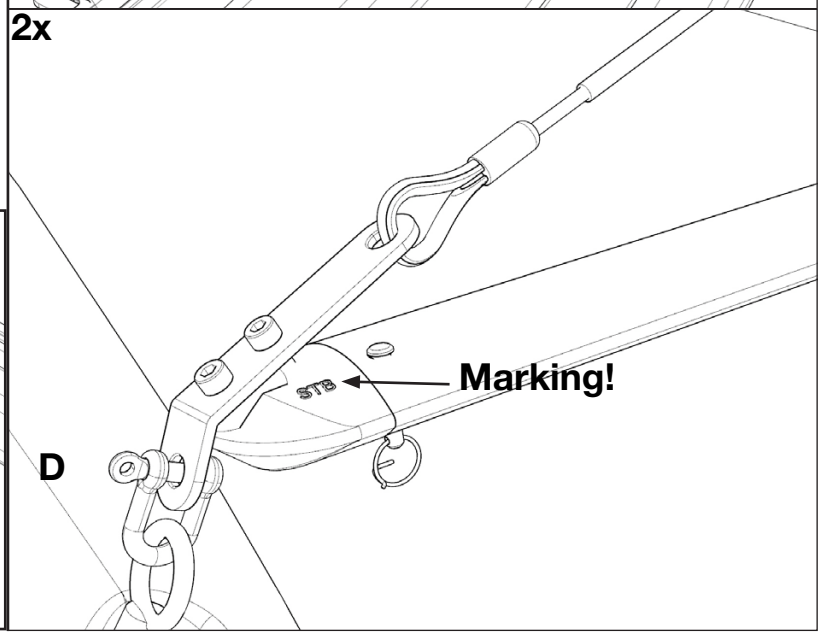
Plug set
TC201

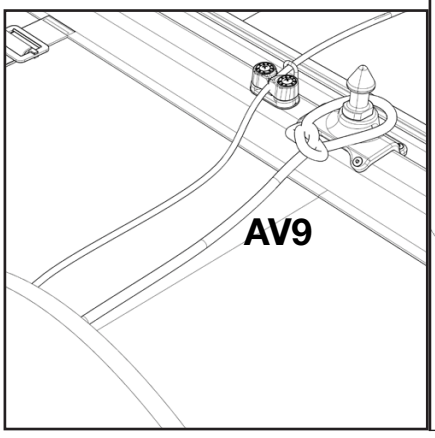



AV6


2x
C

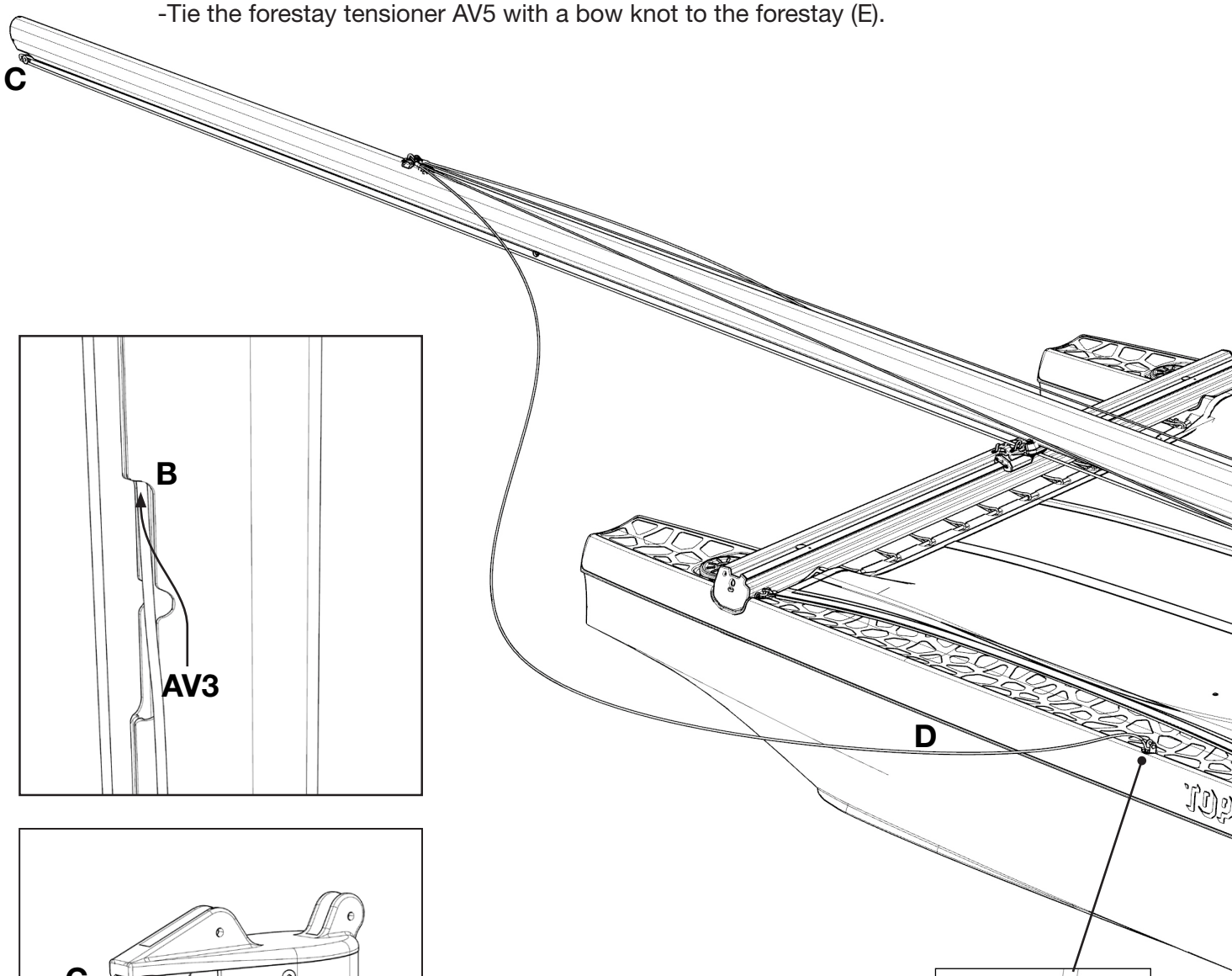

AV6
D

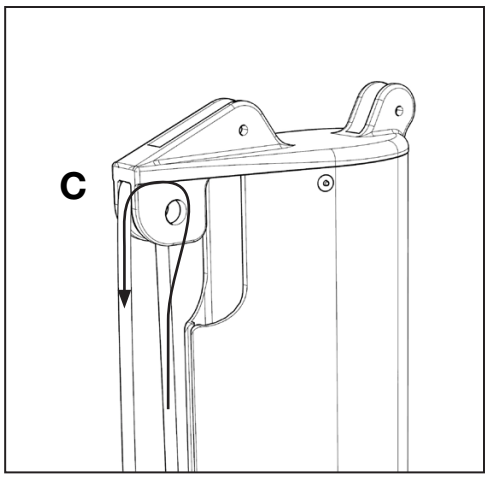

2x
Marking!
D

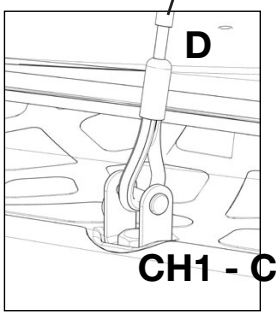

AV9

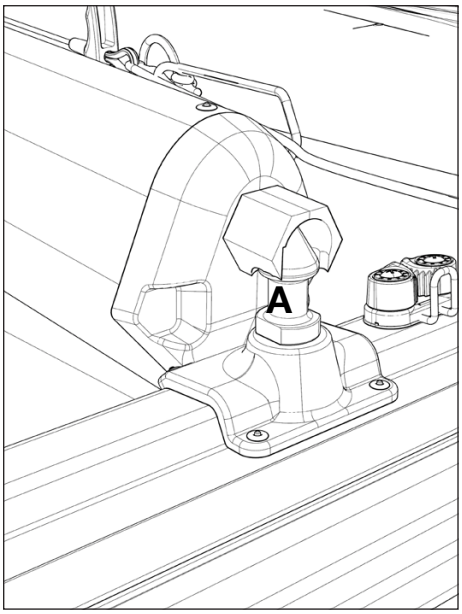
4 PREPARE RIGGING

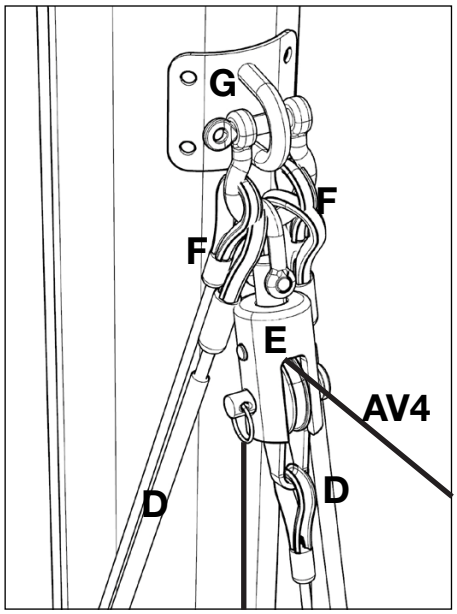
- Place the mast on the platform - the mast foot should lock onto the pin on the front beam (A)
- Feed the main halyard AV3 inside the rear channel at the opening (B) to the top, around the halyard shave (C) back down and tie both ends together.
- Shackle the shrouds (D), forestay with top swivel (E) and the optional trapeze wires (F) to the main mast fitting (G).
- Feed the jib halyard AV4 through the top swivel and secure both ends together with 2 bow knots and the jib halyard shackle (H), one side can bed also fed through the lower eye of the forestay. HINT: Remove the sheave of the top swivel if you have difficulties feeding in the jib halyard.
- Shackle the shrouds to the fittings at the hulls (see chapter 1 - part C).
-Tie the forestay tensioner AV5 with a bow knot to the forestay (E).

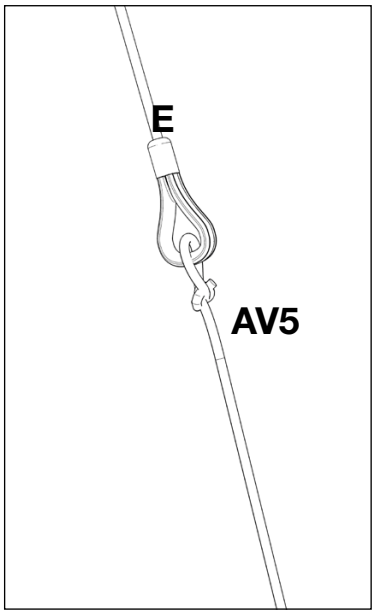


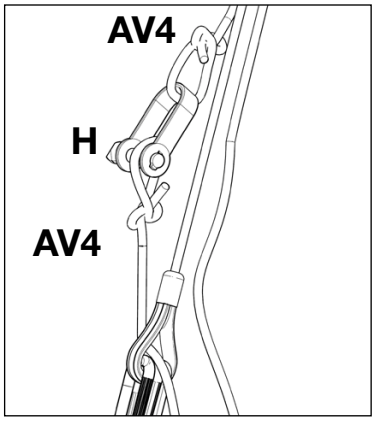





A


G
F
F
E
AV4
D
D

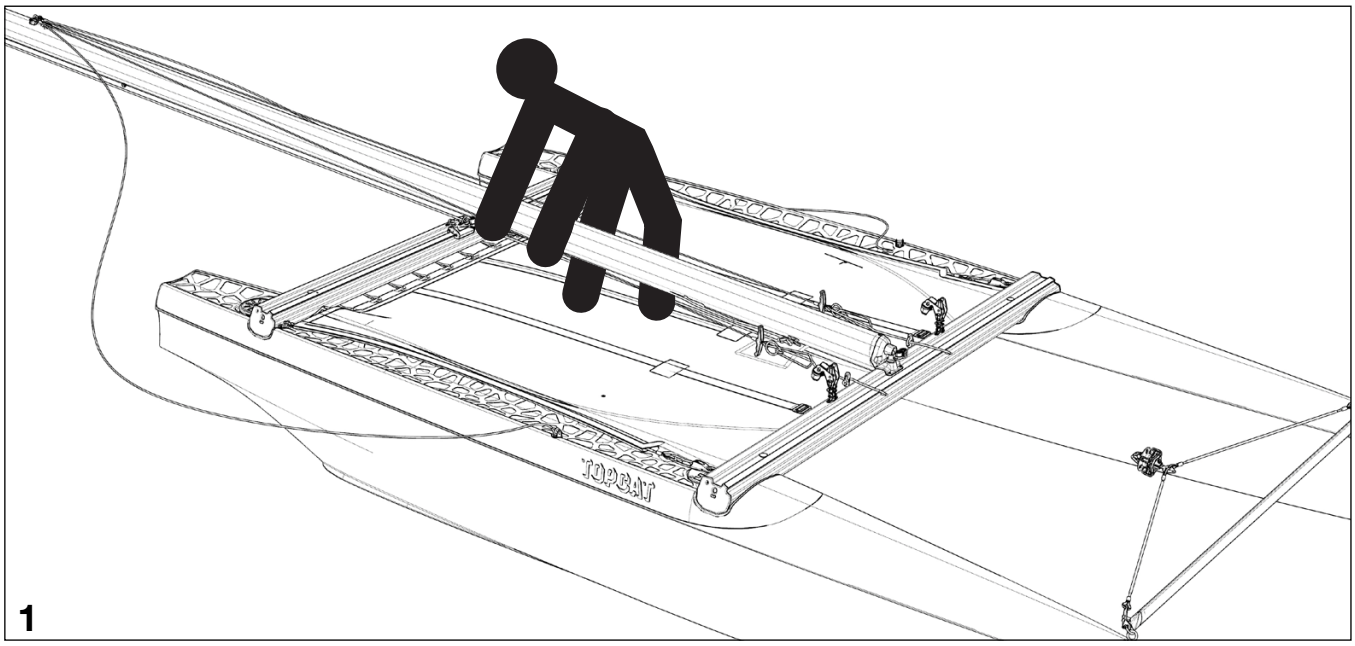

E
AV5


AV4
H
AV4

D
B
A
AV5

5 STEPPING MAST

- Make sure you are clear of power lines or other obstacles above and around you.
- Make sure shrouds and other components are clear and not tangled up
- Stand on the rear section of the trampoline and lift the mast with both arms (1)
- Further lift up the mast while turning to the front - move forward with the mast (2)

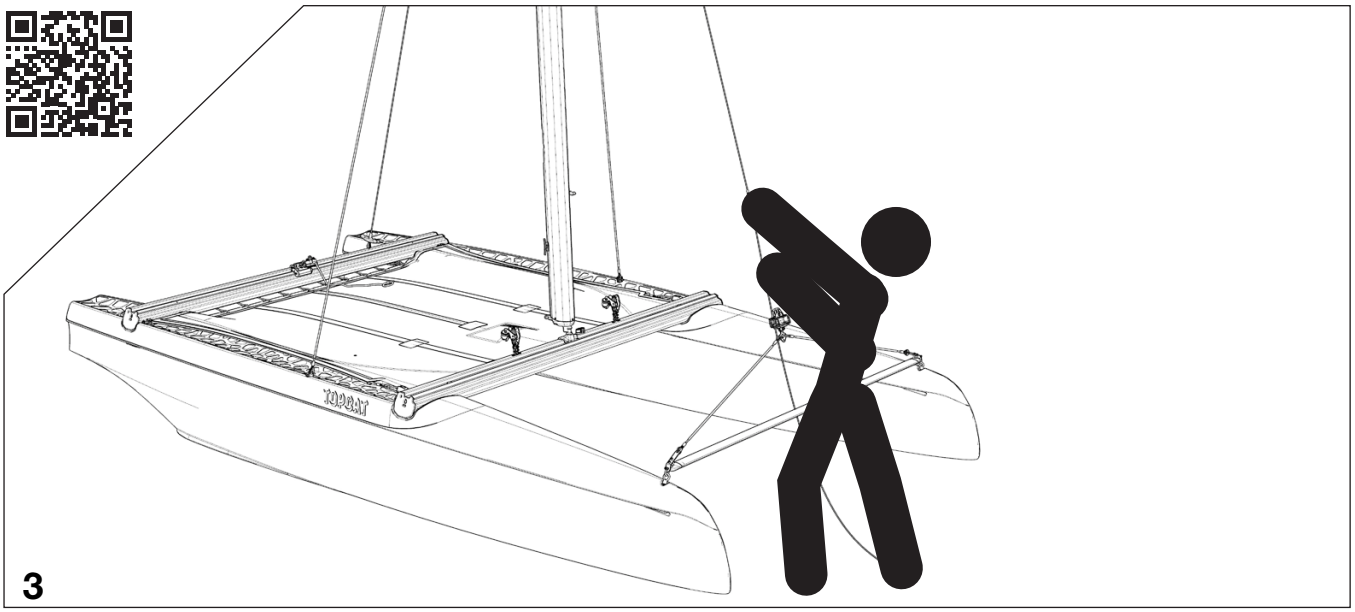


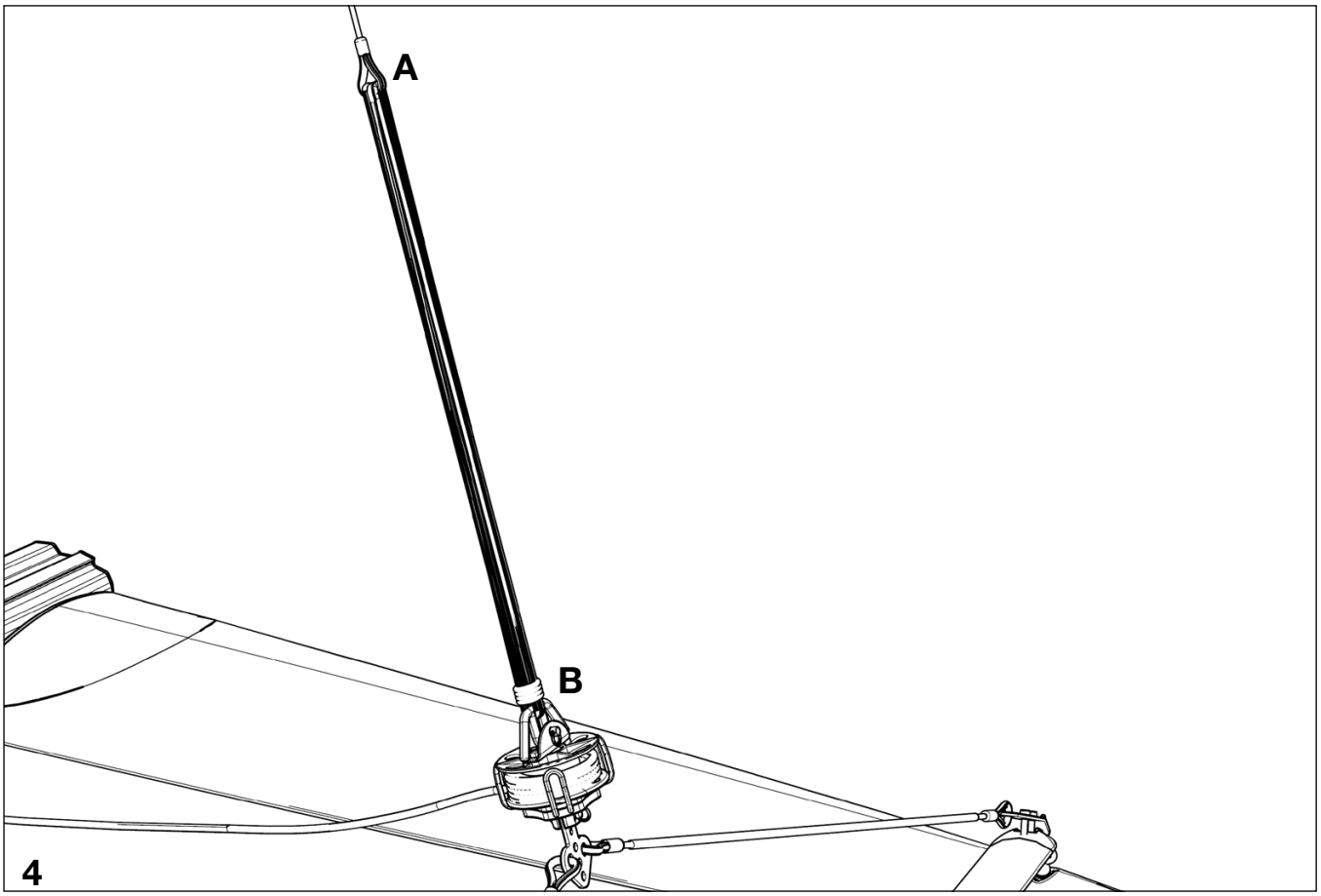
1



2

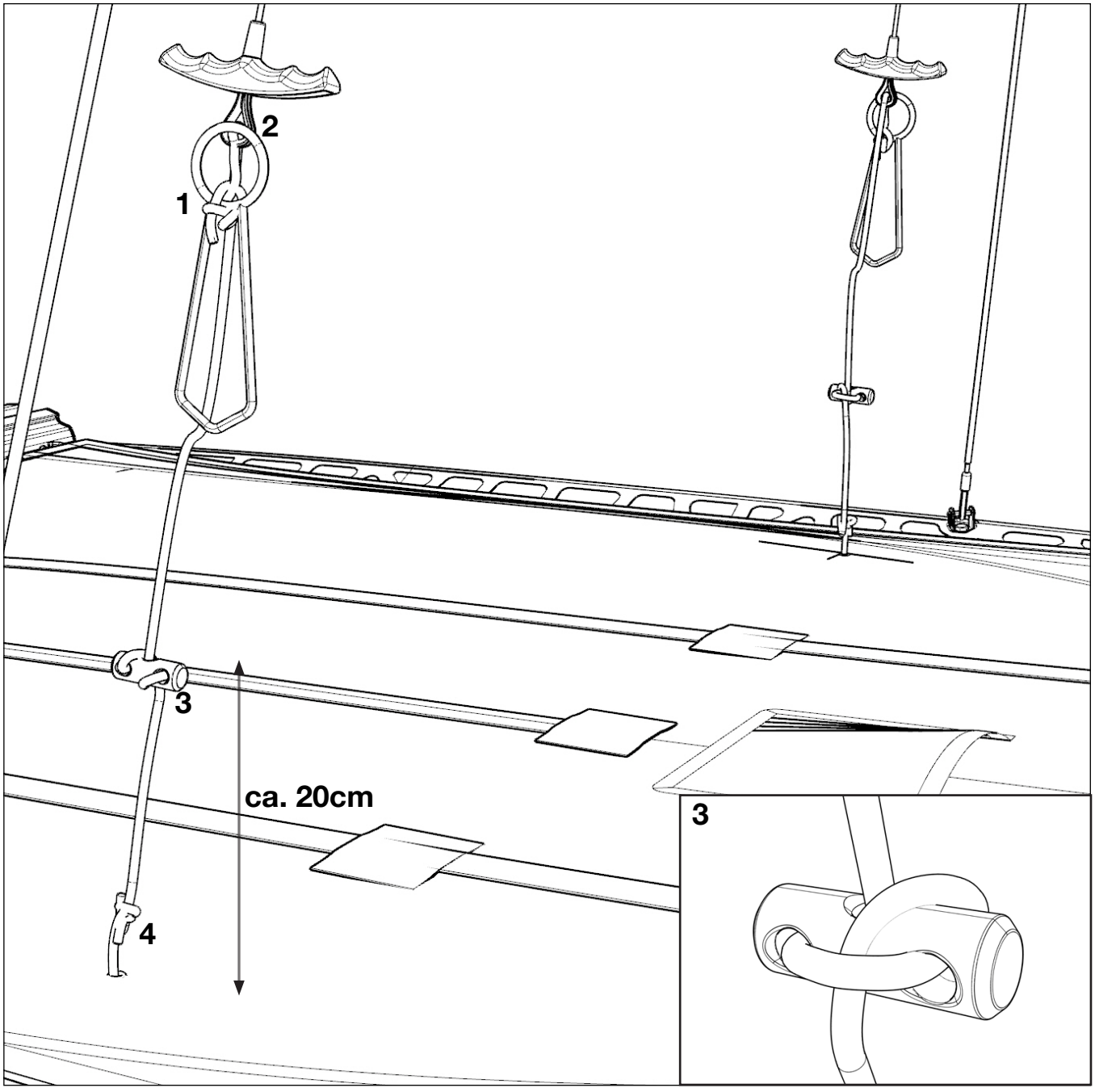
Note: Once the mast is stepped up, it can‘t fall to the front direction!
- Now take the forestay tensioner (AV5) which is attached to the forestay under tension.
- While keeping the tension, go to the front (or hand it to a second person) (3)
- Feed it 3 times between the lower thimble of the forestay (A) and the middle of the forestay fitting on top of the jib furling drum (B). Secure it with 3 or more half hitches (4) on your desired tension. You can tune it later - please check *MAST RAKE* at the *TOPCAT ABC* to learn more about it:





6 TRAPEZE *(ADVANCED / ROOKIE)*

1. Tie the trapeze cord with a bowline to the centre bar of the trapeze ring.
2. Feed the cord through the lower eye of the trapeze wire.
3. Feed the cord through the trapeze stopper around 20cm over the trampoline in the following order: A. From top through the centre hole. B. From front through the left hole while keeping a loop. C. From the bottom through that loop and then tighten it. D. From the front through the right hole and then tighten it.
4. Connect on one side the trapeze cord with the shock cord using a double sheet end. The ends of each cord can be extra secured with half hitches.
5. Feed the shock cord under the trampoline through the eyelet to the other side and connect to the other trapeze.

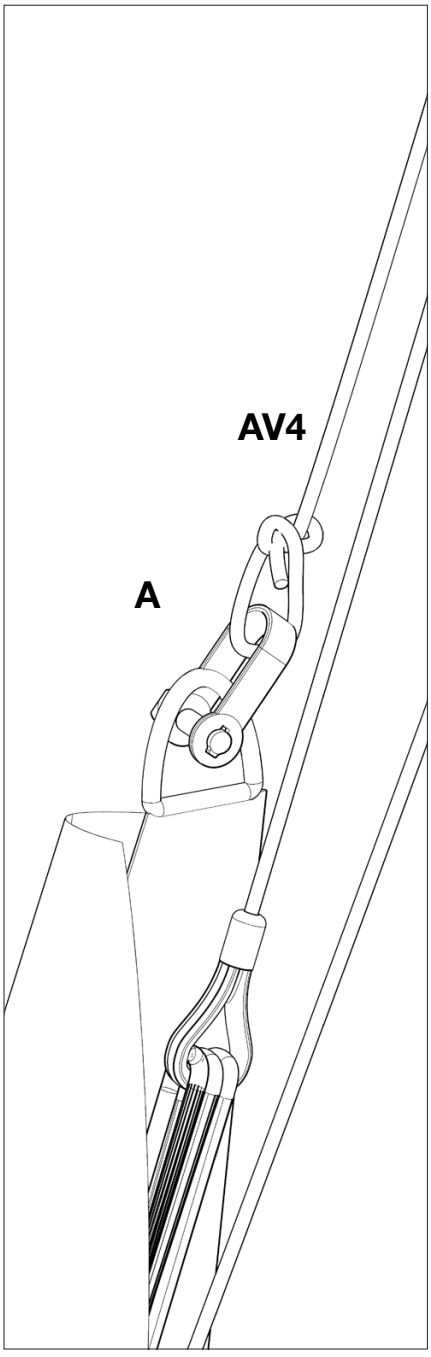


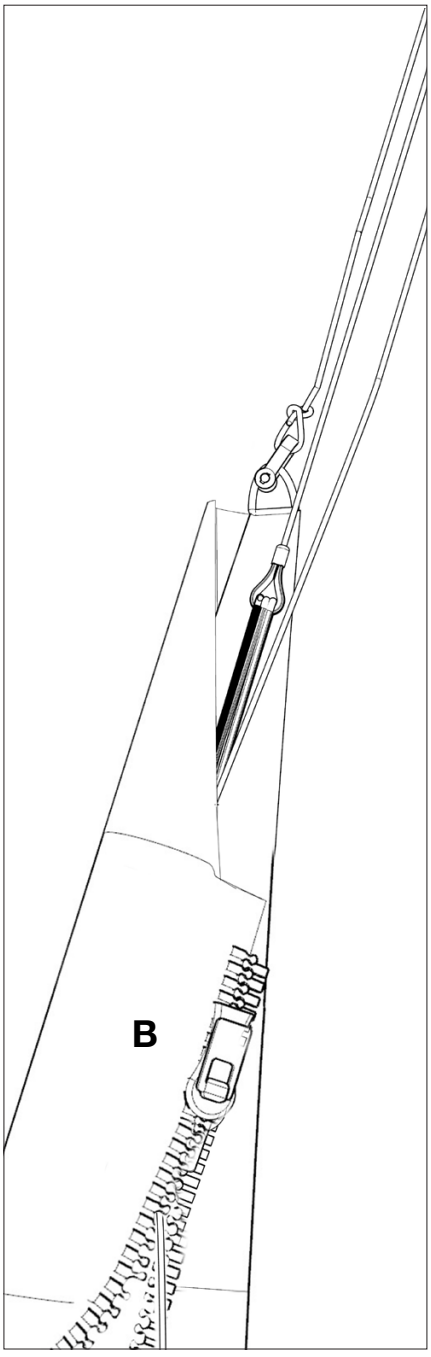
7 ATTACHING JIB *(ADVANCED / ROOKIE)*

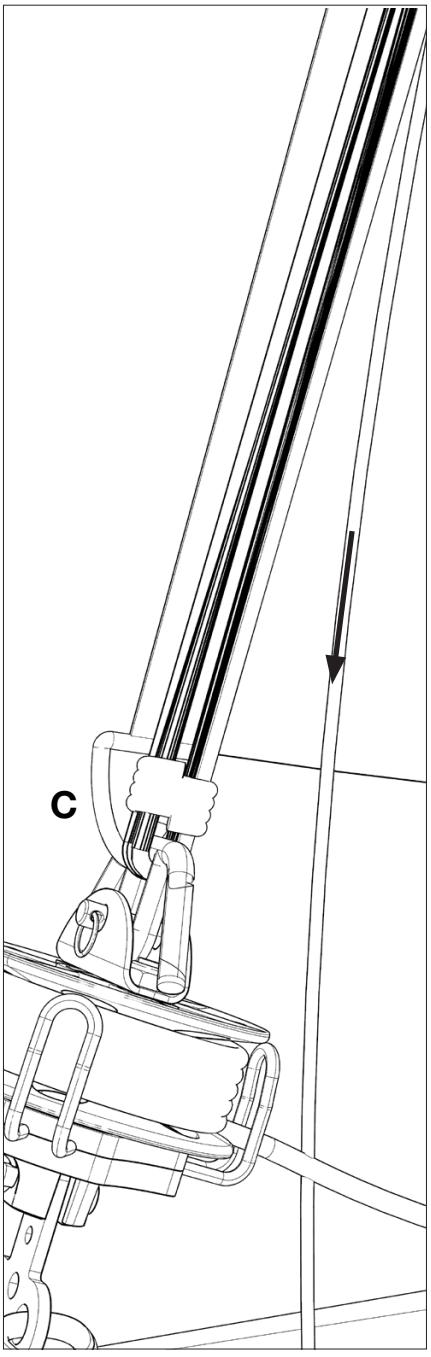
1. Remove the lower bow knot of jib halyard AV4 from the halyard shackle (A) and hook the top ring of the jib into it.
2. Close the zipper (B) around the forestay and the jib halyard.

BEFORE PROCEEDING, MAKE SURE BOW IS STILL IN WIND DIRECTION !

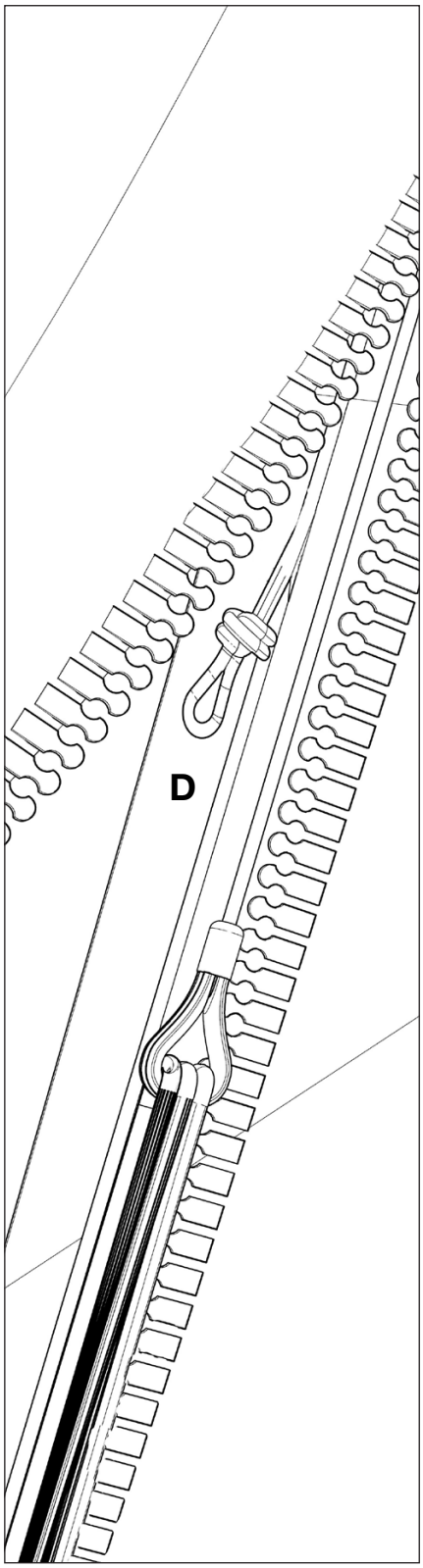
3. Hoist the jib while pulling the halyard and closing the zipper simultaneously until the ring at the tack of the jib (C) can be hooked on the forestay fitting. Leave the last 0.5m of the zipper open.

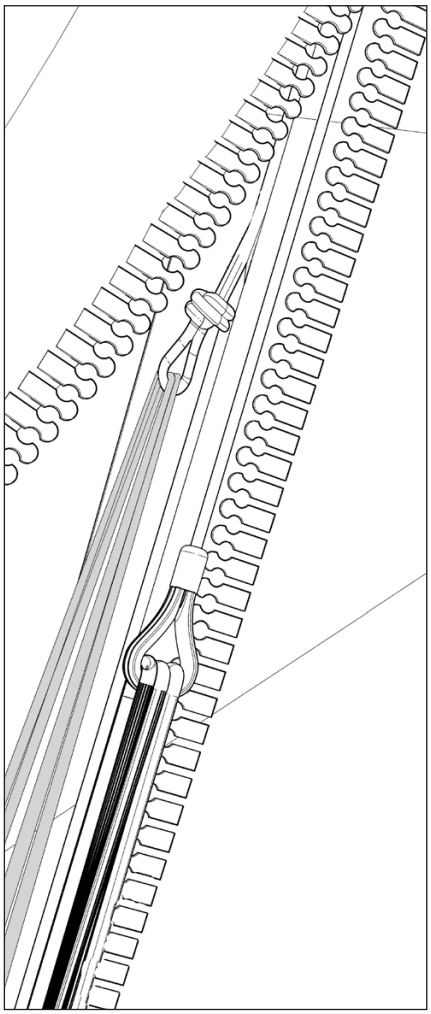


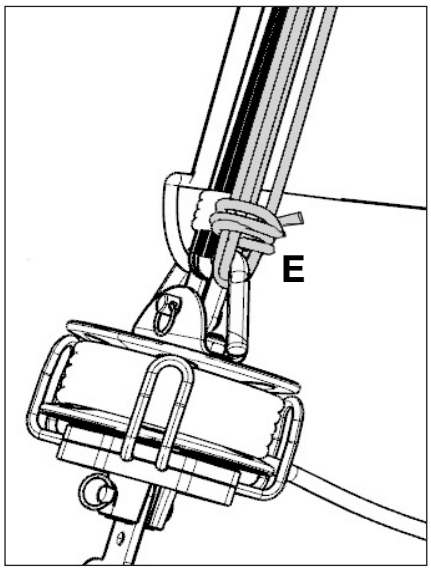


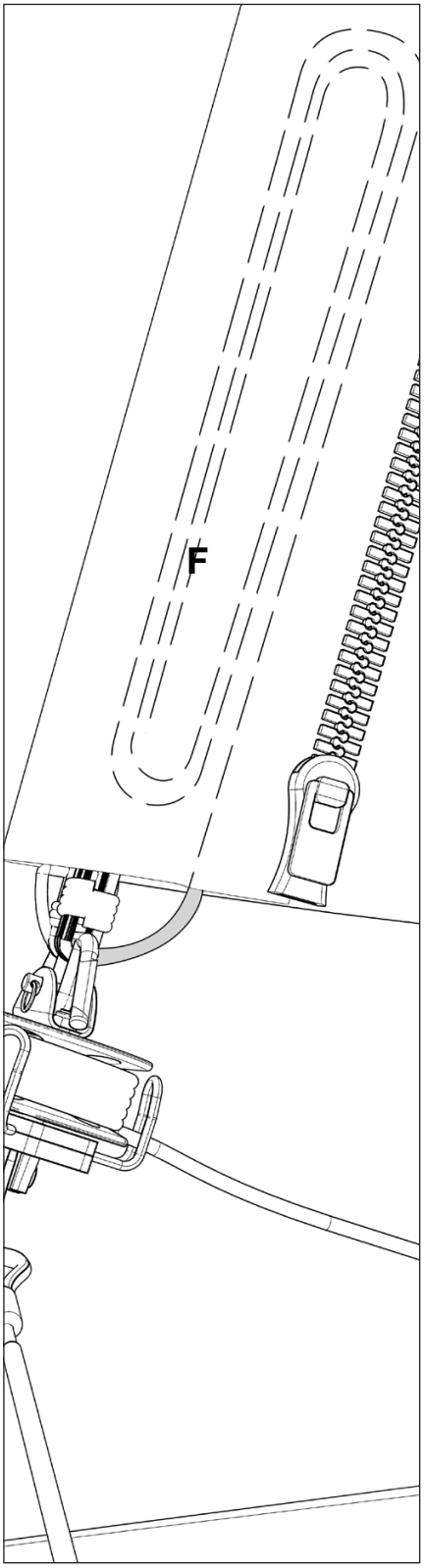


4. While keeping tension on the halyard, tie a loop knot (D) around 20cm above the lower eye of the forestay. (Make a bight and then make a half hitch with that bight). Alternatively you can use a butterfly knot.
5. Loop the open end of the halyard through the loop knot and the forestay fitting to bring the right forestay tension on the jib and secure it with at least 2 half hitches (E). Close the zipper completely. Remaining halyard can be placed inside the closed jib (F).

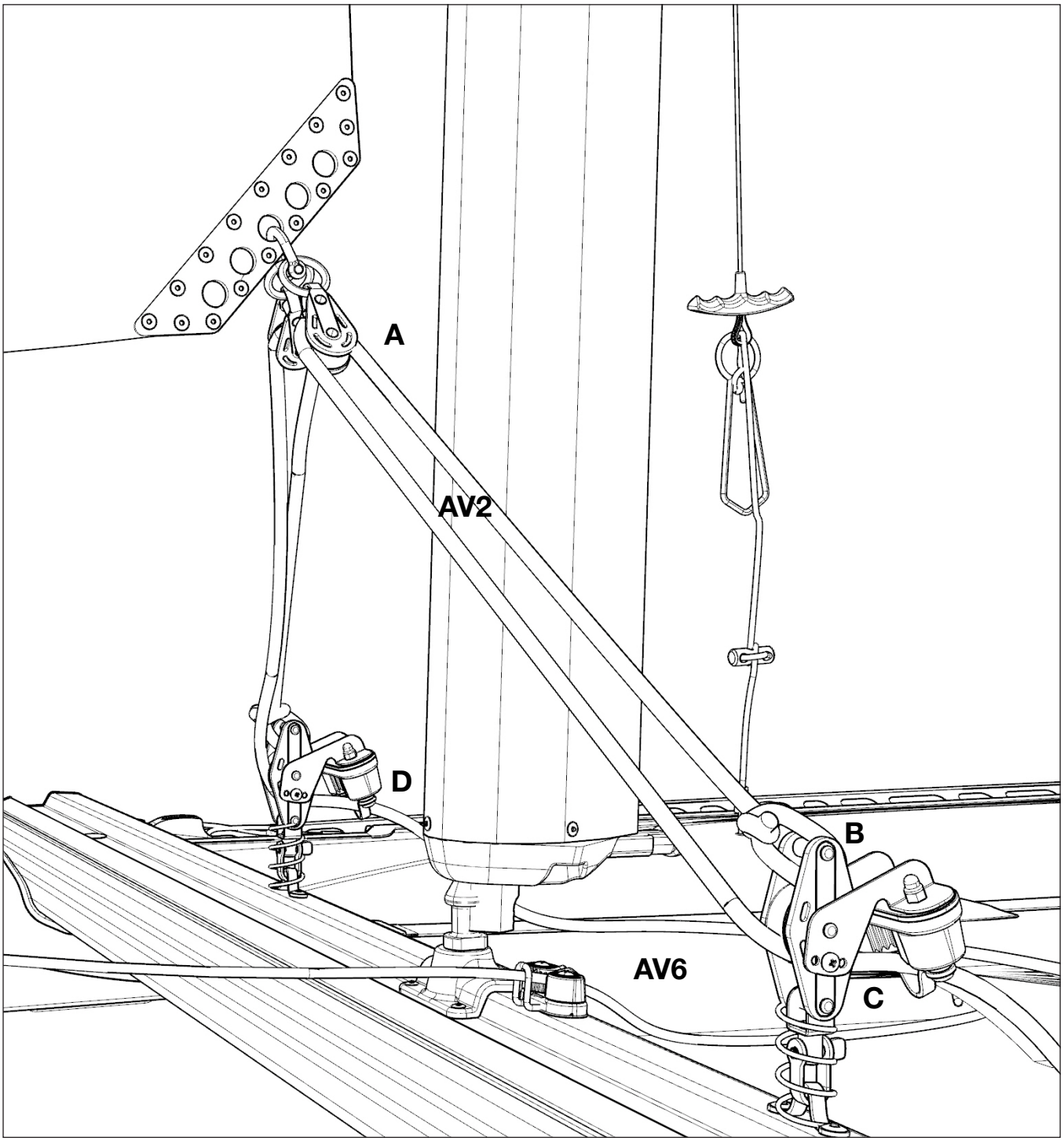




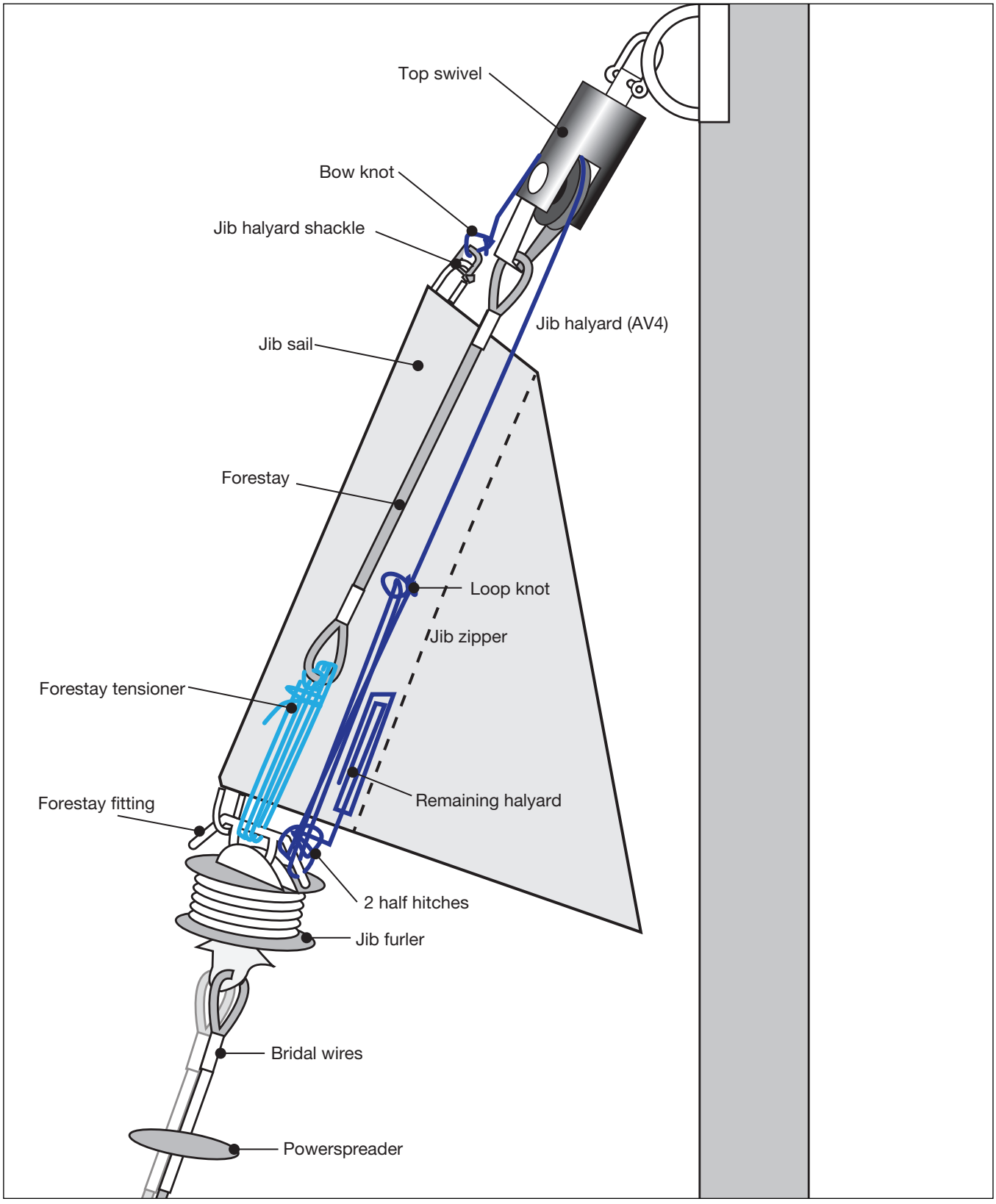




5. Attach the jib blocks on the middle clew hole of the jib (A). In stronger wind conditions, move one hole to the front, in light winds one hole to the back.
6. Take the jib sheet AV2 and tie one end with a bow knot to the upper bar of the jib sheet block (B). Feed it through the first jib block on the same side (A) and back through the clamp of the jib sheet block (C). Take it behind the mast to the other jib sheet block (D) and feed it in the same manner.
7. The jib is now completely set up - if required the jib can be furled up with the jib furler line AV6.

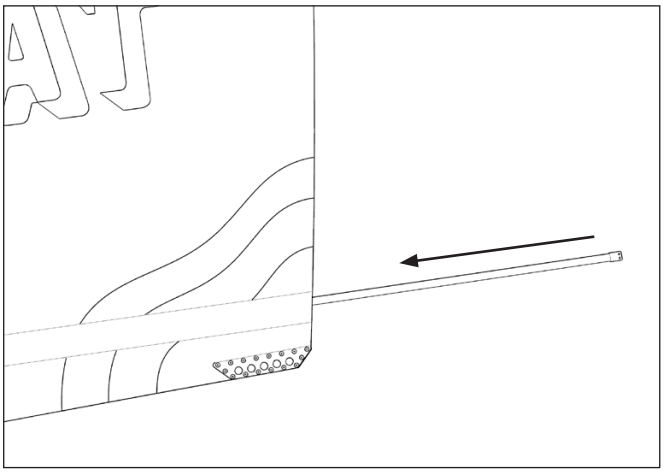


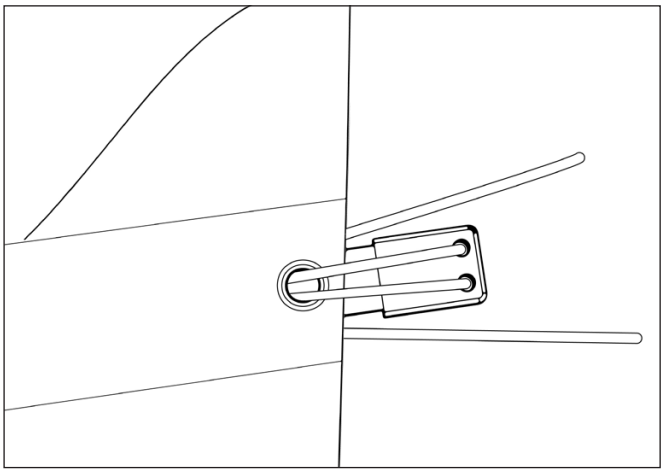
SCHEMATIC JIB SETUP

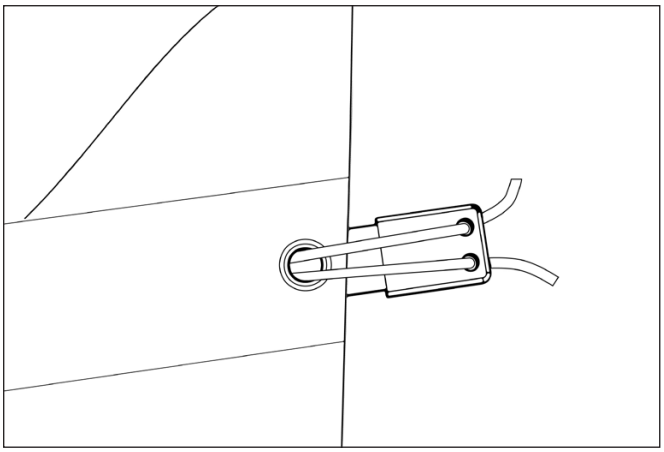


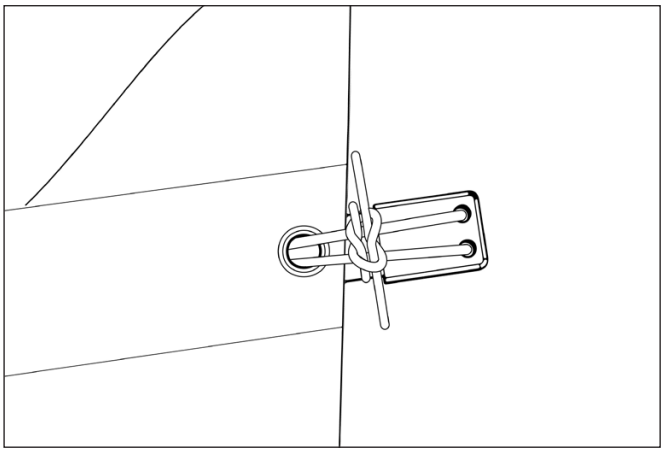
8 SETTING UP MAIN SAIL

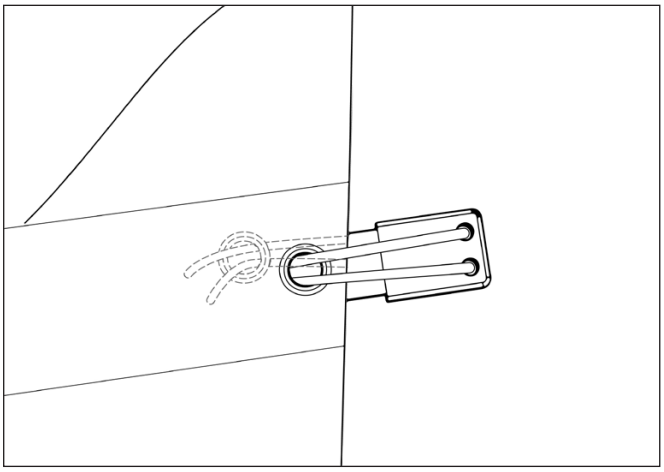
1. Protect your hands with gloves to avoid any splinters of fibreglass in your hands!
2. Insert all battens in the right order into the batten pockets of the mainsail so they slide into the batten stopper at front and the end cap will stick out by a bit.
3. Lace the battens with the lanyards attached to the sail through the batten pockets while putting tension on the battens. Secure with a reef knot and feed the remaining lanyard into the batten pocket.

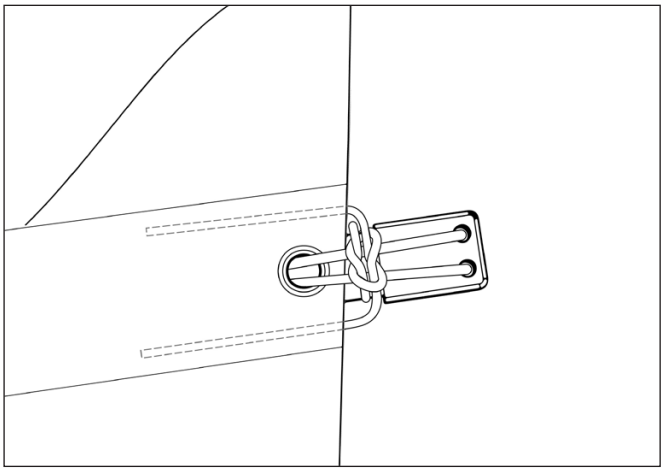






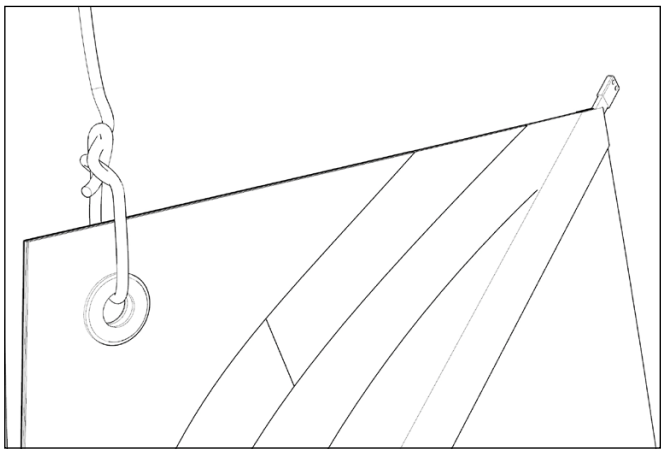


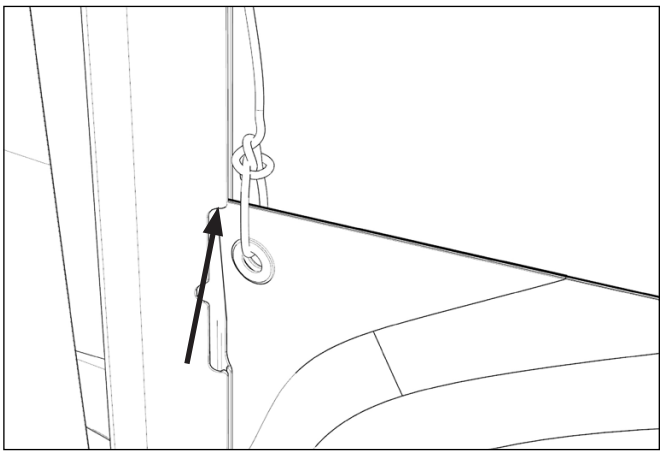


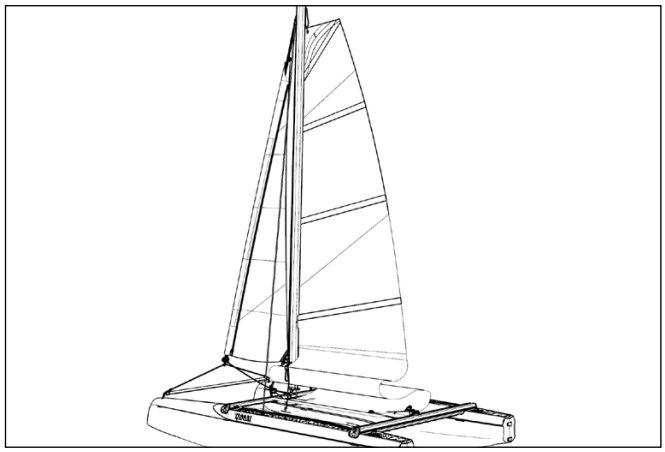


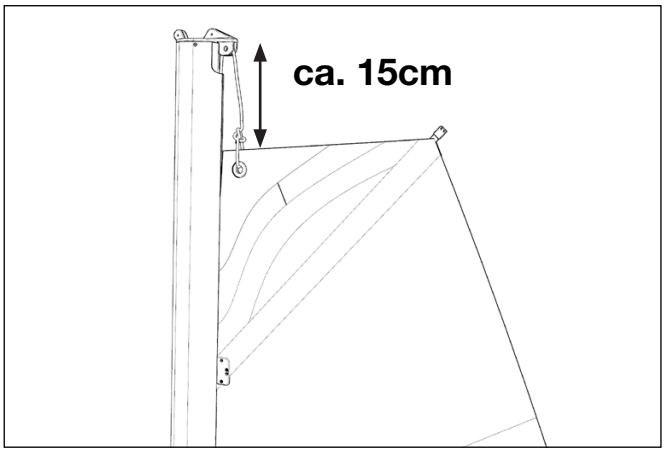
! BEFORE PROCEEDING, MAKE SURE BOW IS STILL IN WIND DIRECTION !

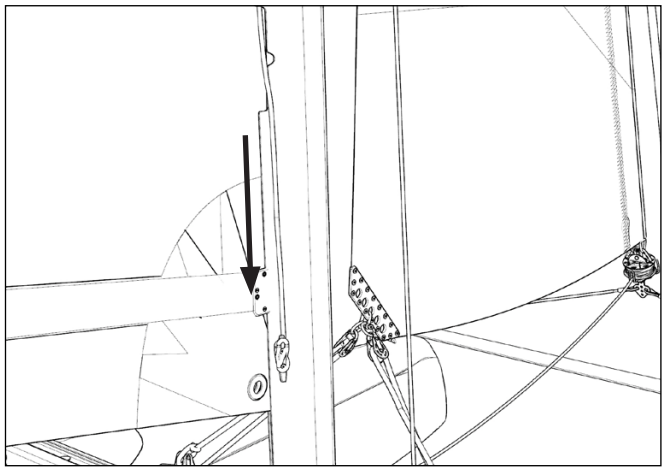
1. Put the mainsail on the trampoline and tie the main halyard AV3 with a bow knot to the head of the main sail.
2. While keeping the main halyard under tension, feed the top of the sail into the lower mast groove and continue to hoist.
3. Hoist the mainsail until the top gets around 15cm around the mast top and secure the halyard with the clamp on the starboard side of the mast.
4. Feed the lower end of the mainsail in the mast groove.
5. Attach the cunningham to the mainsail and connect it to the mast foot.

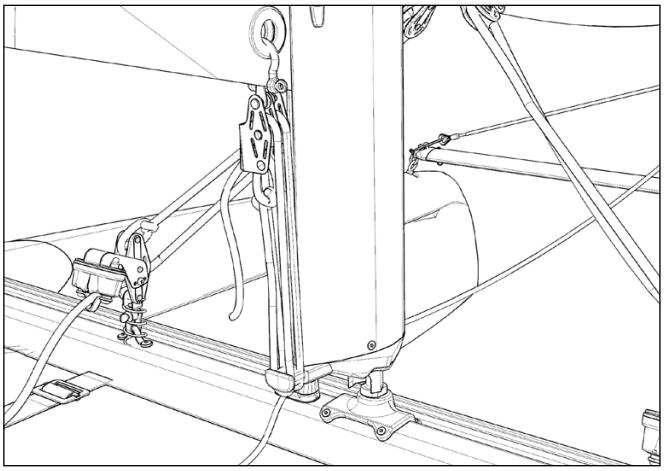






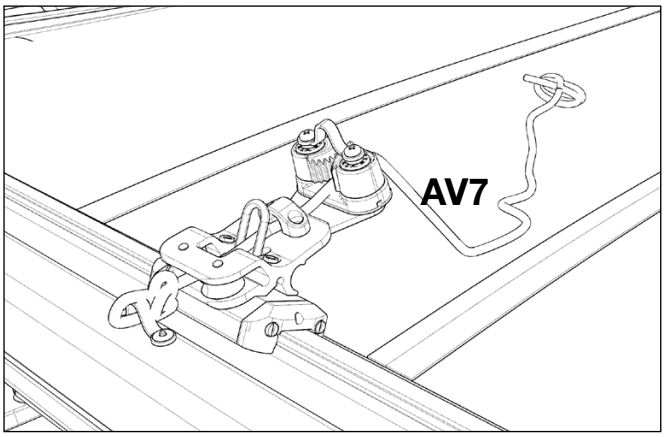


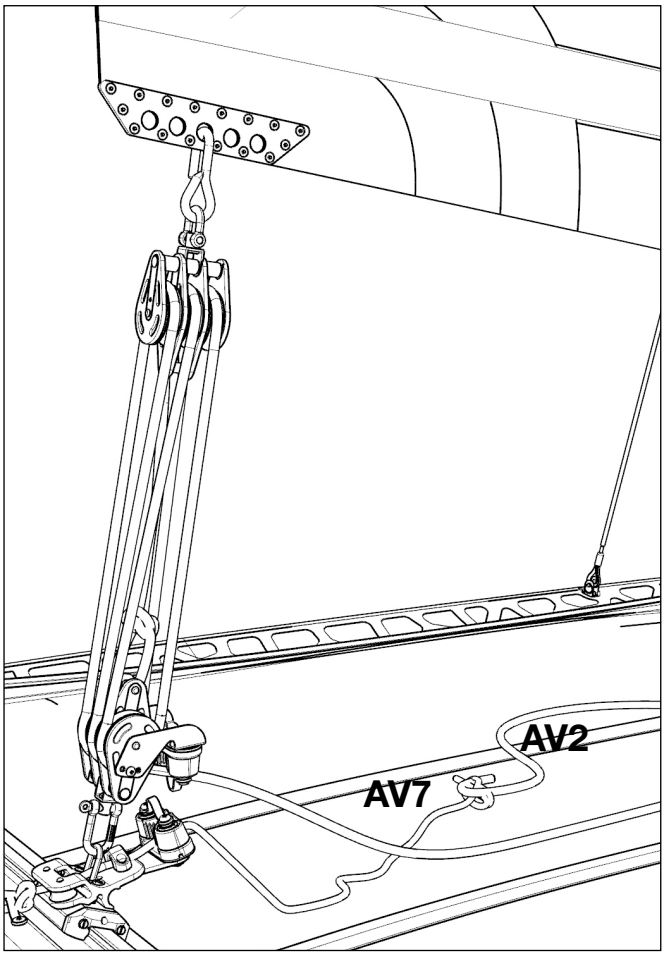


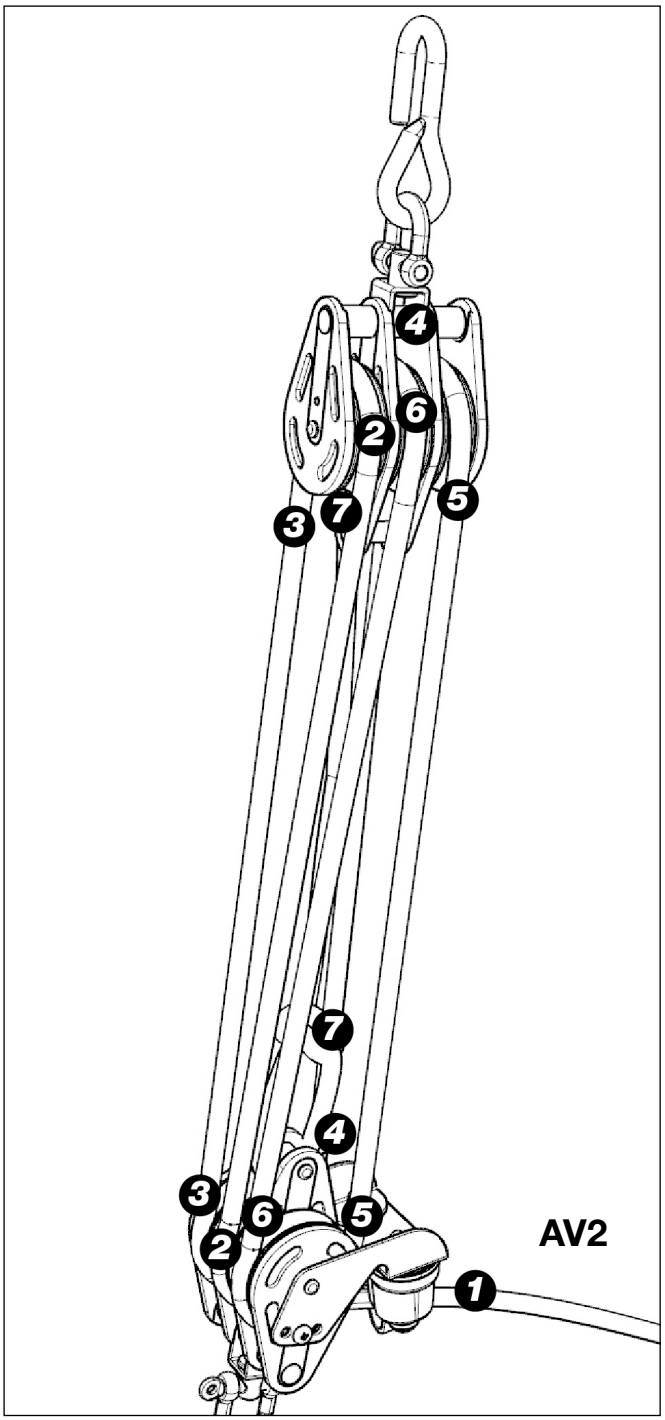


9 MAIN SHEET AND TRAVELLER

1. Attach the traveller sheet AV 7 to the eyelet on the rear beam with a bow knot and feed it through the main traveller and traveller swivel.
2. Feed the mainsheet AV1 through the main sheet blocks as shown below from 1 to 7 and tie it with a small bow knot onto the bar at the lower part.
3. Hook the main sheet block medium hole of the clew of the main sail and shackle the bottom section to the traveller car (NOT THE SWIVEL!). Depending on wind conditions, change to a more forward hole in strong winds and into a more aft hole on lighter conditions.
4. Connect both the main sheet AV2 and traveller sheet AV7 with a double sheet bend.

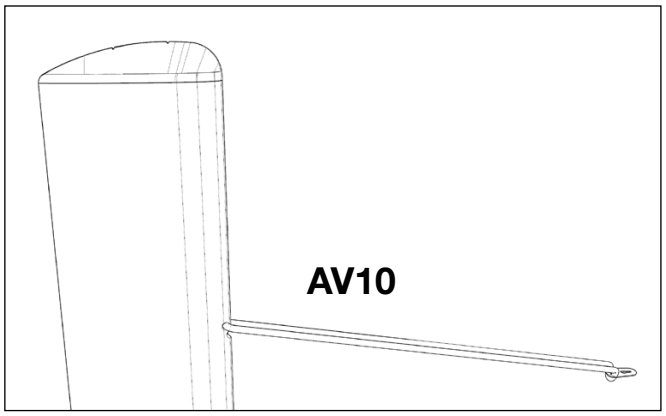


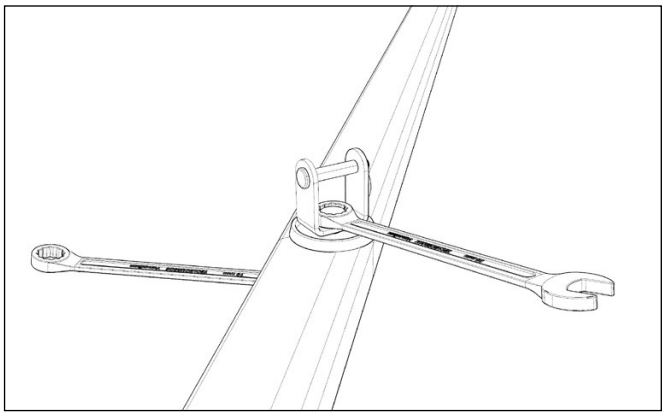


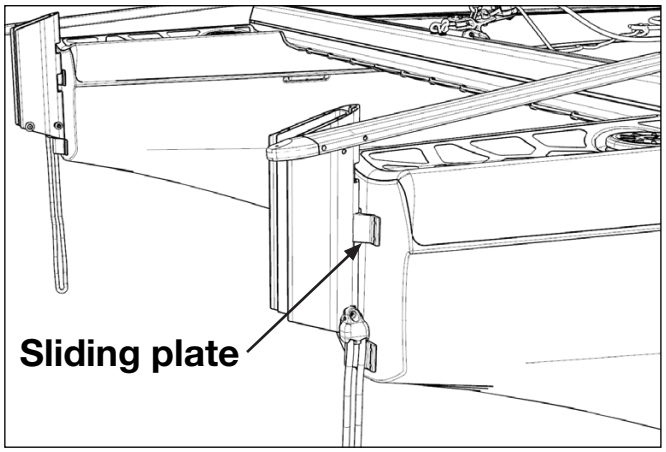


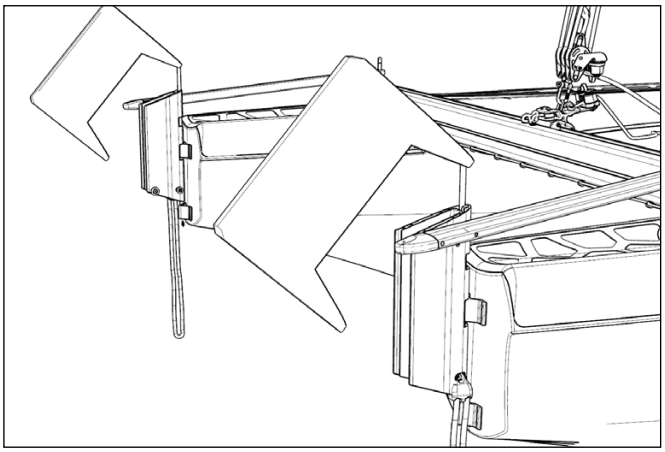
10 RUDDERS

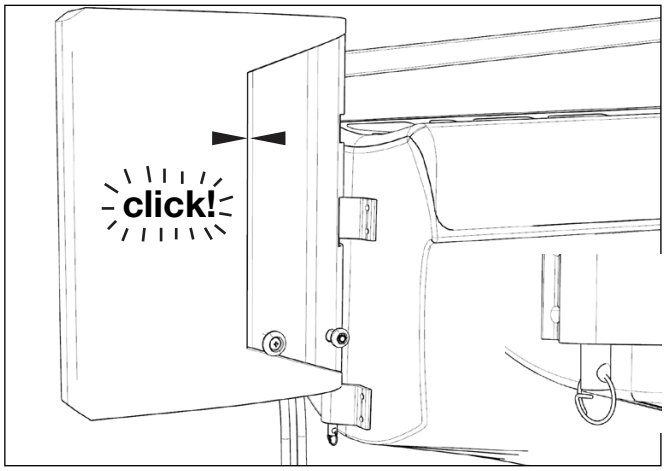
1. Prepare the rudder blades: Feed the shockcord AV10 through the hole in the rudderblade and then from top through the key plate. Secure both ends with half hitches.
2. Mount the tiller extension joint on the cross bar with (2x)10mm wrenches so it still swivels easily.
3. Place the rudder housing with the lower cutout on the upper rudder fitting - sitting on the sliding plate.
4. Feed the rudder axle which is attached to the rudder box through the rudder housing and fittings.
5. Close the rudder boxes so they lock into the rudder housing with a “click” sound. Secure with spring ring.
6. Place the cross bar on the tiller bars so the flattened side of the end caps point to the front.

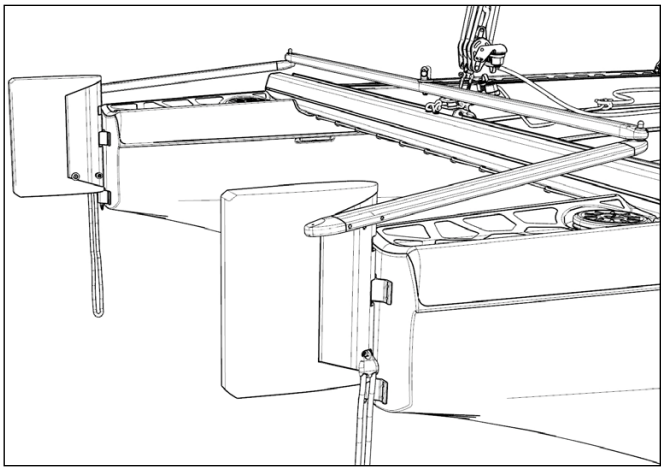




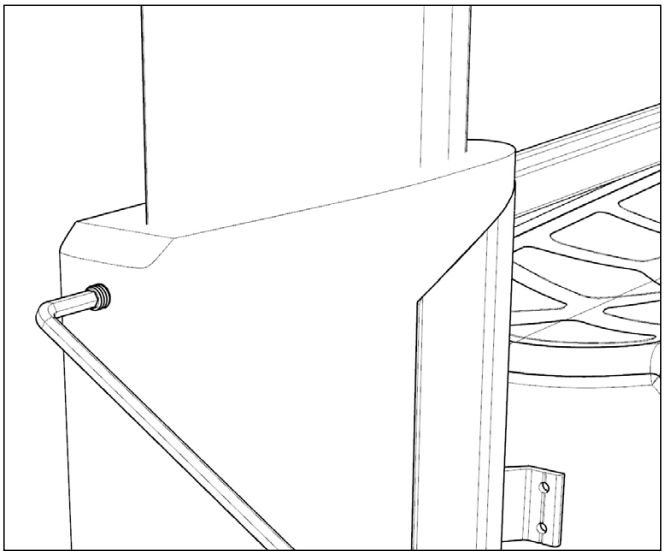


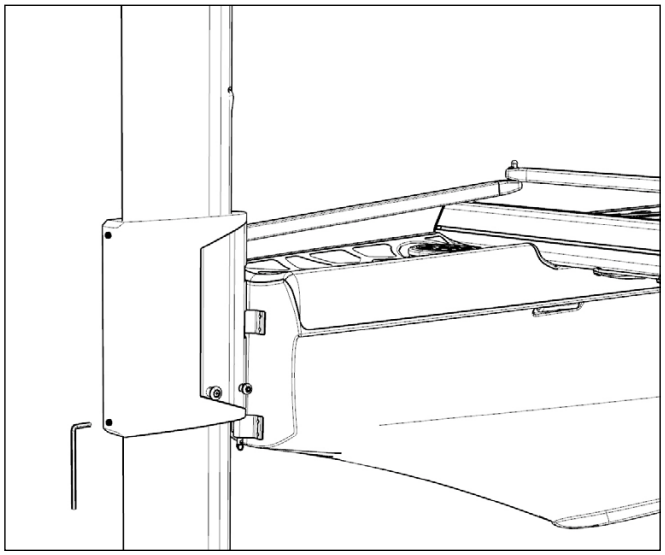


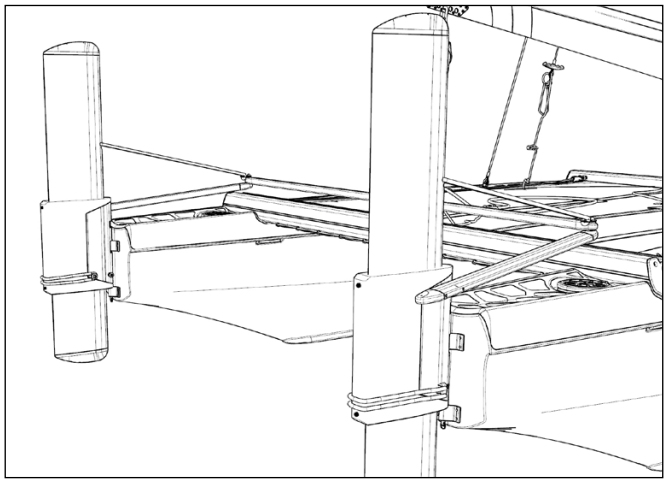


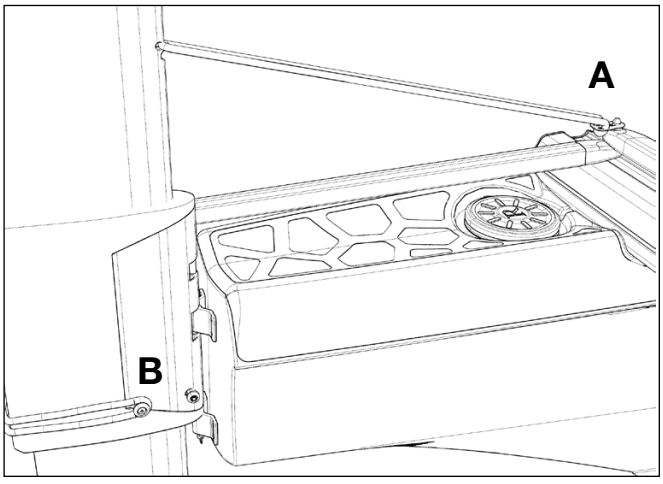


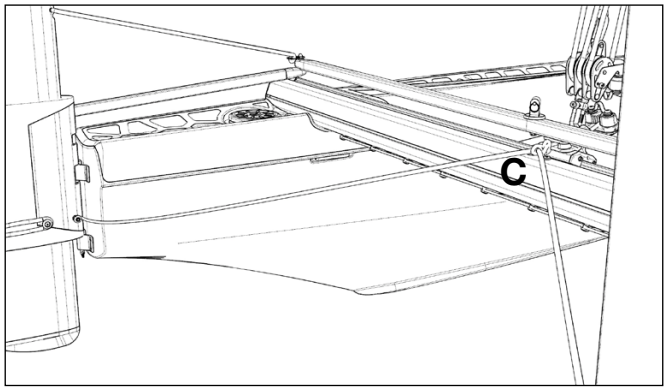
7. To set the rudders, open both grub screws using a 5mm Allen key so the rudder blades are easily sliding through the rudder box. Then, tighten the upper grub screw until the rudder blade stops sliding. Now open the screw back by 1/4 of a turn. Repeat the same procedure with the lower grub screw.
8. Now hook the upper shock cord with the keyplate on the pin at the end of the crossbar (A) and the lower shock cord around the rudder box (B).
9. Connect the connection line between the rudder boxes and feed it through the bow knot of the traveller sheet (C).
10. Attach the tiller extension to the cross bar (D).

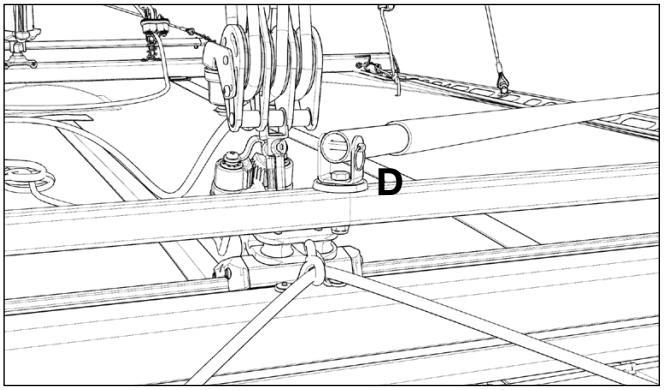


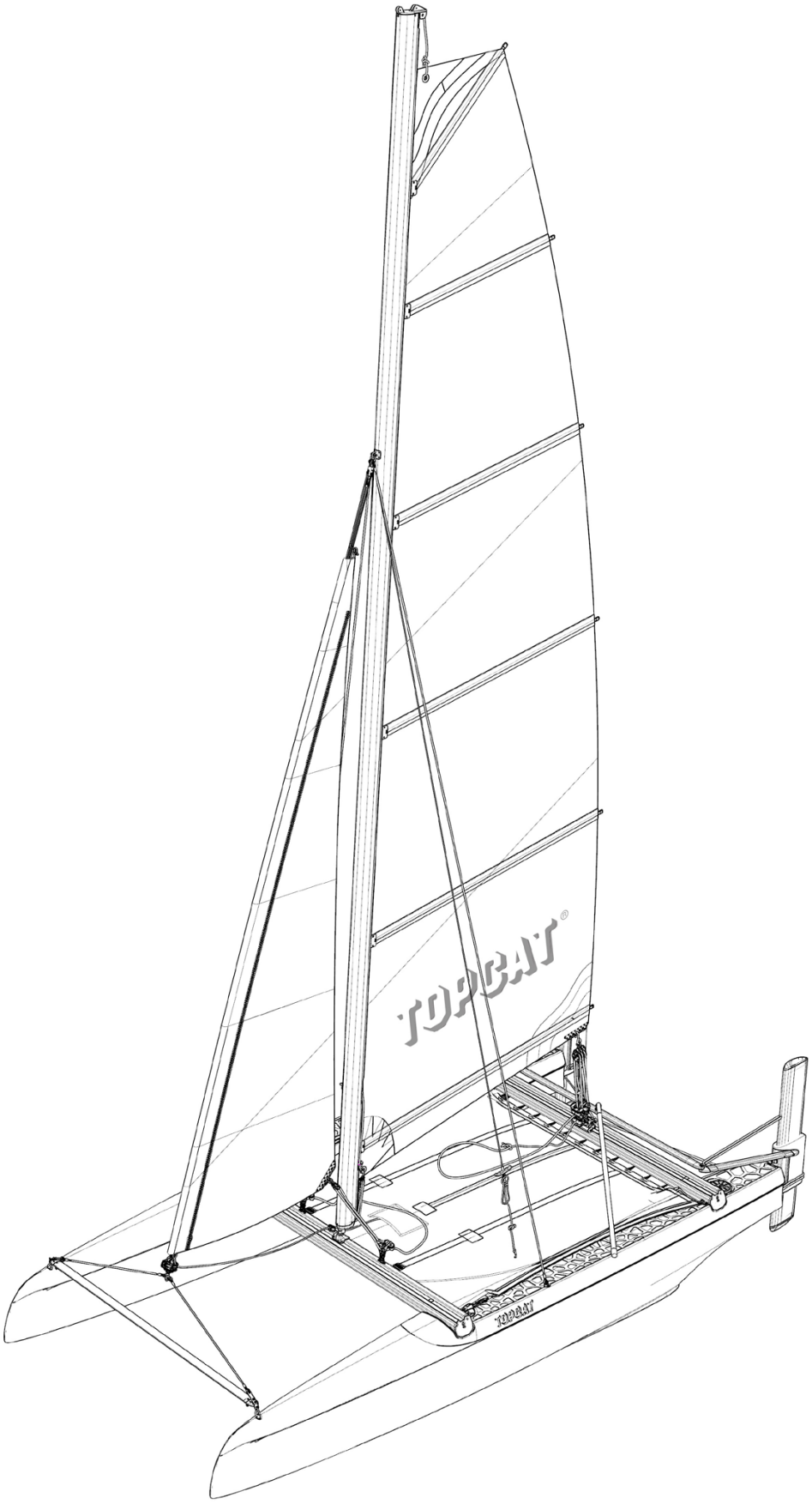











TOPCAT

OWNERS MANUAL

MANUAL FOR OWNERS AND SKIPPERS

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1 INTRODUCTION

This manual was designed to enable you to sail your TOPCAT safely and with pleasure.

The manual contains information about the catamaran and about accessories supplied or installed.
You will also find information about operation and maintenance.
Please read it carefully and familiarize yourself with everything before sailing your boat. Do not sail until you have adequate insurance coverage (see chapter 21. „Miscellaneous“).

If this is your first catamaran or if you have changed to a type of boat you are not yet familiar with, please make sure for your own safety and convenience that you gain the necessary knowledge of handling and operation before taking command.

TOPCAT GmbH will be happy to inform you about the TOPCAT class association and sailing schools or recommend experienced instructors.

An owner‘s manual is a technical document that describes the catamaran and is intended to help the skipper operate the catamaran safely. Furthermore, it serves the owner to ensure maintenance and care of the catamaran, thus preserving its value.

However, this owner‘s manual cannot replace the necessary knowledge of seamanship!

PLEASE KEEP THIS MANUAL IN A SAFE PLACE AND HAND IT OVER TO THE NEXT OWNER WHEN YOU SELL YOUR CATAMARAN.

Please pay special attention to all instructions with this sign:



Mistakes due to non-observance could result in loss of health or life!



2 DESIGN CATEGORY

TOPCAT AVANTI catamarans receive following watercraft design categories*:

Category	Crew	Max Load (kg)	Wind force (Bft)	Significant wave height (H⅓, metres)
C	2 persons	150	up to & incl. 6	up to & incl. 2
D	3 persons	225	up to & incl. 4	up to & incl. 0.3

* According to: DIRECTIVE 2013/53/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 November 2013 on recreational craft and personal watercraft and repealing Directive 94/25/EC

C: Designed for cruising in offshore waters, large bays, estuaries, lakes and rivers where weather conditions may occur with wind force up to 6 bft and significant wave heights up to 2 m.

D: Designed for cruising in sheltered coastal waters, small bays, on small lakes, narrow rivers and canals where weather conditions may occur with wind force up to 4 bft and significant wave heights up to 0.3 m.

3 CERTIFICATION

The EC Directive provides for certification module A for a boat of this size. This means that the manufacturer certifies the compliance of construction, equipment, stability and buoyancy with the directive itself.

After module A

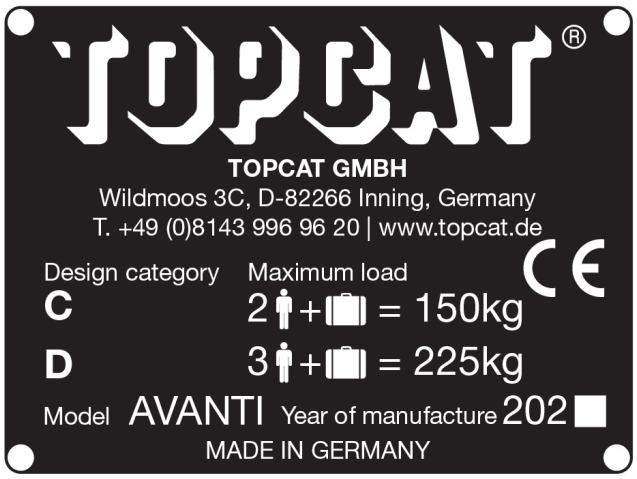
4 IDENTIFICATION

On the stern on the starboard side of both hulls, the hull identification plate was attached. This is a unique sequence of numbers and letters in the world. It reads, for example:

DETOPG1234A123

5 NAMEPLATE (MANUFACTURER'S PLATE) ON THE REAR BEAM

The sign is black with silver lettering.



6. DECLARATION OF CONFORMITY

Applied standards and/or technical rules:

Hull number	EN ISO	10087
Manufacturer badge	ISO/WD	14945
Owner's Manual	EN ISO	10240

See attachment for complete declaration of conformity.

7. DESCRIPTION OF THE BOAT

7.1 MAXIMUM NUMBER OF PERSONS

This catamaran is designed for cruising in (sheltered) offshore waters, (large) bays, estuaries, lakes and rivers, i.e. day trips.

Therefore, the recommendation is the following:

For day trips, there should be no more than 3 persons (max. 225kg) on board, and for more than 3 Beaufort wind force, a maximum of 2 persons is recommended.
Note: Life jackets must be on board for all persons on board. In addition, 30m towline and a paddle should be on board.

7.2 LOAD CAPACITY

For the catamaran TOPCAT the maximum load is 150kg (category C) or 225kg (category D). The stability of the catamaran is also designed for this capacity.

8. BRIEF DESCRIPTION OF CONSTRUCTION

8.1 TYPE

All TOPCAT catamarans are centerboard-less. The battened mainsail is operated without a main boom. The mast can be rotated and is water proofed. Split masts have an additional foam core for safety. The rudder system has an overrun safety device. The jib can be reefed by a furling device.

8.2 MATERIAL

The hulls are made of rotomolded polyethylene. Foam cores are also incorporated into the laminate to provide buoyancy in the event of an accident.

8.3 SAIL AND RIGGING PLAN

See the cover sheet of this manual. The cloth quality of the sails is selected for the corresponding wind load. The jib is equipped with a furling system as standard. The mainsail is fully battened.

8.4 MAST

The mast is made of anodized aluminum alloy and rotates on the front beam. It is water protected. The halyard lock for the mainsail is located in the top.

The profile dimensions are above the minimum required moments of inertia and resistance for the rigging.

8.5 STANDING RIGGING

• Forestay	3mm	Niro 1x19
• Shrouds	4mm	Niro 1x19
• Bridal wires	4mm	Niro 1x19
• Diamonds	4mm	Niro 1x19
• Trapeze wires	2,5mm	Niro 1x19 or 7x7
• Backstays	3mm	Niro 1x19

8.6 RIGGING

- For boats standing on the beach, rinse all moving parts copiously with water before each sail to remove sand.
- After each sail and before winter storage, rinse the entire rig abundantly with fresh water.
- For winter storage, inspect standing and running rigging for wear and replace damaged or bent parts.
- Maintain the moving parts (mast foot, traveler, jib swivel and furler, halyard sheaves) with appropriate lubricants (silicone spray dry).
- Spray the luff of the mainsail with a suitable lubricant from time to time.

8.7 SAIL

- Do not store wet sails.
- Sails should be rinsed with fresh water before winter storage and then dried thoroughly to prevent rust or mildew stains.
- Seams and thimbles should be thoroughly inspected for wear and repaired if necessary.
- Remove or relax the sail battens when not sailing.

Instructions for trouble-free sailing:

ATTENTION:

Before you go out on the water:



- Check wires, ropes, bolts and split pins, as well as the rudder system.
- Secure the split pins against loss by taping them off.
- Replace deformed or damaged bolts immediately.

Please also note chapter 20. „Danger warnings“ at the end of the owner‘s manual.

9 ASSEMBLY

During assembly, follow the supplied „Assembly Instructions“ exactly. This will ensure correct assembly and thus a safe sailing experience.

10 TOWING

If you are being towed or want to tow a boat yourself, attach the towing line to the front beam, the mast foot, or the rear beam.

11 LAUNCHING

The catamaran is pulled ashore with a launching trolley. When standing on the launching trolley for an extended period of time, it is recommended that the catamaran rest on at least four evenly spaced, large-surface support points.

12 TRANSPORT

Watch out for live overhead lines during all movements of the boat with the slip trolley! Danger to life!

The transport is unproblematic if certain precautions are taken. For transport, use only the special trailers, special roof racks, hull supports and fasteners recommended by the shipyard!
Make sure that your catamaran is securely fastened at the beginning of and at regular intervals during the transport!
Adjust your driving style to the changed situation due to the high roof load (or trailer load) and crosswind exposure! Do not exceed the approved total weight when transporting on the car roof.

12.1 SAFETY DURING TRANSPORT

Mobility is a decisive factor in the TOPCAT concept. Some models virtually invite roof transport. Unfortunately, the trend towards smaller and aerodynamically shaped cars is not without problems.

If you decide to use roof transport, we recommend:

Check whether the design or permitted loads are sufficient for the roof of your car and roof rack, and determine which parts of the boat are to be transported on the roof. The more parts, the greater the weight and the effort required for lashing.
Mandatory for roof transport is a split mast, since according to (German) road traffic regulations no part may protrude beyond the front edge of the car. At the rear, the projection in Germany can be up to 1 m without marking. However, before starting a journey, inform yourself about the respective valid regulations abroad as well. In Italy, for example, the special white and red plate is mandatory in such cases.
Use rubber pads for a secure fit of the hulls and only CE approved tension straps. For more safety in crosswinds, additionally secure the hulls with a 5 - 6mm pre-stretched line. At the front chocks cross to the tow hook and at the rear at the rudder fittings cross to the tow hook or trailer hitch if available.

Adjust your driving to the roof load and pay particular attention to crosswind susceptibility. Take frequent stops and check the tightness of all parts.

Only with responsibility and care will you avoid dangerous situations.

Attention! There is potential danger if these points are disregarded during transport!

13 CLEANING

Clean your boat only with clear water and the cleaning agents recommended by the shipyard (no aggressive cleaning agents).

14 MAINTENANCE AND REPAIRS

- Check hulls, rigging and steering gear for damage and repair if necessary. Repairs should only be carried out by the shipyard or according to instructions.
- Check standing and running rigging.
- Check trampoline seams for possible chafing.
- Hulls must be dry inside, if necessary remove water with sponge and let dry well (cover boat with a boat cover and open hatches).
- Regularly rinse all moving parts (rudder system, traveler, main and jib sheet blocks, mast foot, jib furler, top swivel with halyard swivel, main halyard swivel and halyard hook) with fresh water and maintain with lubricating spray.
- Ball bearing travelers require special attention. They must not hit the hull stopper hard when sailing. This will damage the end caps, causing the balls to fall out immediately or even later. A total failure is the result. You can prevent this with controlled jibes. In this case, the sheet bundle is to be shifted and intercepted by hand. Nevertheless, make an additional stopper in the traveler sheet with a plastic ball. Since sheet and knot give way, so that min. 5cm between end cap and hull stopper remain free.

Ball bearing travelers must be regularly checked, cleaned and maintained, otherwise damage may occur, resulting in total failure.

	Inspection	Cleaning	Maintenance
Before each sailing	X		
After each sailing		X	
In fresh water			At least every 2 years
In salt water			Every year

The inspection of the ball bearing roller includes a detailed visual inspection to detect any damage or contamination. During the associated functional check, you will determine whether the ball bearing traveler can still be moved easily and unhindered. If you find any faults during the visual inspection and/or functional check, you must not sail without eliminating the defect by cleaning or maintenance. Pay particular attention to whether the plastic end caps are cracked or otherwise damaged.

Cleaning mainly involves rinsing with fresh water. When doing so, move the traveler and keep the water jet especially on the slots located at the bottom of the aluminum housing. This will help to rinse out any dirt. Afterwards, care with marine spray on Teflon basis is mandatory. Sprays that are provided with a small tube are advantageous so that you can spray directly into the housing and the plastic end caps. Do not spray onto the traveler rail. This will cause the balls to slide on the rail but not move in the housing and wear unevenly. Never use agents containing oil, as they can damage the plastic balls and caps. Furthermore, these agents tend to gum up and attract additional dirt.

If you notice any damage or faults, or if cleaning does not produce the desired results, you must not sail until the necessary maintenance has been carried out. The easiest way to do this is to take the rear beam to your TOPCAT dealer or to TOPCAT headquarters in Inning. If you perform the maintenance yourself, all necessary parts must be present. Once your TOPCAT is assembled, slant it slightly to create a slope on the aft spar. Place a clean cloth on top the trampoline and under the aft rail at the level of the traveler to prevent balls from being lost. Remove both end caps from the housing and collect all balls. Remove, inspect and clean the empty housing with cleaning solvent or mineral spirits. The rail must also be carefully cleaned. End caps and balls are late. Replace with new parts every 2 years. If used exclusively or predominantly in salt water, every year. Keep the old parts for emergencies. Assembly goes in reverse order. So put the housing and end caps on the rail and screw on the slanted end cap at the bottom. Tighten the screws only slightly, otherwise the plastic caps may crack. Fill the balls into the housing until it is full. For the other end cap, apply grease to the baffle and put two balls in each baffle, for a total of four balls, and then screw onto the housing. Maintain with silicone or Teflon spray as described before and check the function. Now the traveler runs like new again and shows its advantages to full advantage.

Please also watch our video here:

15 WINTER STORAGE

When winterizing, you should pay attention to the following points:

- Thoroughly rinse and clean the catamaran with fresh water.
- The hulls must be completely dry inside.
- The storage place itself should be absolutely dry.
- The accessories and sails should be stored cleaned, dry, well ventilated.

16 SAFETY ON BOARD

This point is the exclusive responsibility of the helmsman. Only through thorough training, sufficient experience and a healthy self-assessment can this point be met. TOPCAT GmbH will be pleased to inform you about suitable training opportunities.
However, the following points should always be followed:

- For each person a life jacket
- Shoes and warm clothes for each person
- Emergency signal on board
- Paddle and tow line on board
- Weather observation

17 RIGHTING AFTER A CAPSIZE

Each AVANTI has a righting line delivered and to be put around the mast foot, with the help of which it is possible to right a capsized or even turtled boat:

After capsizing, the crew climbs over the bow onto the lower hull of the boat. By standing in the bow area of the lower hull, the boat turns into the wind and during the subsequent righting process, the wind can reach under the mast and sail and help lift the boat out of the water. It is essential that sheets and travelers be released, and the gennaker / reacher be hauled in or furled. The righting line is passed around the keel from the front beam on the hull above, and then the crew hangs on to it with their full weight (standing on the keel of the lower hull just aft of the front beam at about the center of gravity of the boat). When the boat is righted again, the righting line should not be released until the front beam has been securely gripped. After the boat has righted, the crew climbs up the front beam - if this is difficult, the use of a boarding aid is recommended.

Once the boat has turtled, the righting line of the windward hull is passed over the trampoline and the crew pulls on it while standing on the empty hull in the area of the stern rail until the boat slowly moves back to the side position. The boat must then be completely righted as described above. Capsizing and righting should definitely be practiced so that routine and experience help in an emergency.

18 ENVIRONMENTAL PROTECTION

Ten golden rules for water sports enthusiasts:

1. Avoid entering reed beds, reed belts and all other densely and cluttered shoreline areas. In addition, avoid gravel, sand and mud banks (resting and staging areas for birds) as well as riparian woods. Also avoid shallow waters (spawning areas), especially those with aquatic vegetation.

2. Keep a sufficient minimum distance from reed beds, reed belts and other unclearly overgrown shore areas as well as shore trees - on wide rivers, for example, 30 to 50 meters.

3. Be sure to follow applicable regulations in nature preserves. Often, water sports in nature reserves are completely prohibited throughout the year or at times, or are only possible under certain conditions.

4. In „wetlands of international importance“, take special care when practicing water sports. These areas serve as habitats for rare animal and plant species and are therefore particularly worthy of protection.

5. When landing, use the designated places or such places where visibly no damage can be done.

6. Also, do not approach reed belts and other dense riparian vegetation from land to avoid invading and endangering the habitat of birds, fish, small animals and plants.

7. If possible, observe and photograph animals only from a distance.

8. Do not approach seal berths in the tidal flats so as not to disturb or drive away animals. Keep at least 300 to 500 meters away from seal berths and bird aggregations, and be sure to stay close to the

marked fairway here. Drive at a slow speed here.

9. Help keep the water clean. Waste does not belong in the water, especially the contents of chemical toilets. This waste, as well as used oils, must be delivered to existing collection points in the harbors. In ports themselves, use only the sanitary facilities ashore. Do not run your boat‘s engine unnecessarily when it is at rest, so as not to pollute the environment further with noise and exhaust fumes.

10. Make these rules your own and inform yourself about the existing regulations for your cruising area before your trips. Make sure that this knowledge and your own exemplary behavior towards the environment are also passed on to the youth and especially to non-organized water sports enthusiasts.

20 WARRANTY

With the purchase of a new AVANTI, TOPCAT GmbH guarantees faultlessness in accordance with the following terms. Please understand that natural wear and tear and damage due to overuse, improper handling or unauthorized modifications are excluded from the warranty. Please refer to the owner‘s manual for instructions on proper installation, use, maintenance and care.

If the purchaser is an entrepreneur, we shall initially provide warranty for defects of the goods by rectification or replacement delivery at our discretion.
If the Buyer is a customer, he shall initially have the choice as to whether the subsequent performance is to be effected by repair or replacement delivery. However, we shall be entitled to refuse the type of subsequent performance chosen if it is only possible at disproportionate cost and the other type of subsequent performance does not involve any significant disadvantages for the consumer.
Within the scope of subsequent correction, we may in any case correct the defect ourselves or have it corrected by a third party commissioned by us. The place of rectification shall also be determined at our reasonable discretion.
If the subsequent performance fails, the customer may in principle, at his discretion, demand a reduction of the price (abatement) or rescission of the contract (withdrawal). However, in the event of only a minor breach of contract, in particular only minor defects, the customer shall not be entitled to withdraw from the contract.
Entrepreneurs must notify us in writing of obvious defects within a period of two weeks after receipt of the goods; otherwise the assertion of the warranty claim is excluded. Timely dispatch shall be sufficient to meet the deadline. The entrepreneur shall bear the full burden of proof for all claim prerequisites, in particular for the defect itself, for the time of discovery of the defect and for the timeliness of the notice of defect. Consumers must notify us in writing of obvious defects within a period of two months after the time at which the condition of the goods contrary to the contract was determined. The receipt of the notification by us shall be decisive for the observance of the deadline. If the consumer fails to provide this information, the warranty rights shall expire two months after the defect is discovered. This shall not apply in the event of fraudulent intent on the part of the Seller. The burden of proof for the time of the determination of the defect lies with the consumer. If the consumer was persuaded to purchase the item by inaccurate manufacturer‘s statements, the consumer shall bear the burden of proof for his purchase decision. In the case of used goods, the consumer bears the burden of proof for the defectiveness of the item.
If the customer chooses to withdraw from the contract due to a legal or material defect after subsequent performance has failed, he shall not be entitled to any additional claim for damages due to the defect. If the customer chooses compensation for damages after failed subsequent performance, the goods shall remain with the customer if this is reasonable for him. Damages shall be limited to the difference between the purchase price and the value of the defective item. This shall not apply if we have fraudulently caused the breach of contract.

For entrepreneurs, the limitation period is one year from delivery of the goods. For consumers, the limitation period is two years from delivery of the goods. For used goods, the limitation period is one year from delivery of the goods. This shall not apply if the customer has not notified us of the defect in due time (clause 5 of this provision).
If the purchaser is an entrepreneur, only the manufacturer‘s product description shall be deemed agreed as the quality of the goods. Public statements, recommendations or advertising by the manufacturer shall not constitute a contractual description of the quality of the goods.
If the customer receives defective assembly instructions, we are only obligated to deliver assembly instructions that are free of defects and only if the defect in the assembly instructions prevents proper assembly. The customer does not receive any guarantees in the legal sense from us.
The warranty claims shall expire insofar as they relate to defects in parts on which the customer or a third party has carried out interventions without our consent. They shall also expire if the customer does not retain the defective parts for inspection by us in the condition in which they are at the time the defect is discovered.
In particular, we do not assume any warranty for damages caused by the following reasons: unsuitable or improper use, in particular the non-observance of the instructions in the manual for the owner and skipper, missing or incorrect assembly, sailing errors and excessive stress.

20.1 LIMITATION OF LIABILITY

In the event of non-negligent breaches of duty, our liability shall be limited to the direct average damage foreseeable in accordance with the type of goods and typical for the contract. This shall also apply in the case of slightly negligent breaches of duty by our legal representatives or vicarious agents. We shall not be liable to companies in the event of a slightly negligent breach of immaterial contractual obligations. The above limitations of liability do not affect claims of the customer arising from product liability. Furthermore, the limitations of liability shall not apply in the event of bodily injury or damage to health attributable to us or in the event of loss of life of the customer. Claims for damages by the customer due to a defect shall become time-barred one year after delivery of the goods. This shall not apply if we can be accused of fraudulent intent.

21 DANGER NOTICE:

Learn proper catamaran sailing under professional supervision and guidance.

The TOPCAT company will gladly name suitable sailing schools. Accidents and damages are caused by ignorance and can be avoided.
If you sail on larger- especially on open waters, please note the following:

- never in strong winds
- never alone
- never with an inexperienced crew
- never without life jackets on
- never too far from shore and without sufficient observation from shore
- never without sufficient and warm clothing
- never without sufficient check of the technical equipment

In the event of capsizing or falling from the boat, always and under all circumstances maintain the connection to the boat. Never let go!

Never try to swim ashore from the boat for any reason.

Always stay with the boat, it is unsinkable and easy to see.

After a capsize, try to get the boat up again as quickly as possible. The mast and hatch cover are only partially watertight. Once the mast or hull has been filled with water due to a leak, it may no longer be possible.

Practice righting yourself after a capsize before your first sailing trip in moderate conditions, so that you know the procedures. Open all sheets and the traveler before righting, furl the jib away so that the boat does not sail away after righting.

For detailed instructions on righting after a capsize, see the instructional booklet Catamaran Sailing, which can be purchased from TOPCAT.

Practice the „man overboard“ maneuver with your crew so that you do not make any mistakes in case of an emergency.

22 MISCELLANEOUS

Take out a water sports liability insurance for your boat and possibly an additional comprehensive insurance for your boat. Most boats are damaged by storms damaged on land. Get professional advice. For most regattas, proof of sufficient protection against liability damage is required.

22.1 TOPCAT CLASS ASSOCIATION

Become a member. The class association informs you regularly about innovations, safety-related details and other activities. Take part participate in training events or regattas offered there and you will learn how to handle your TOPCAT even in the most difficult conditions, for example such as surprising changes in the weather. The events are secured accordingly and you do not take any incalculable risk. Especially TOPCAT class regattas offer you the best opportunity to test your performance level and to improve it immediately, because it's only the same boats against each other and expensive material battles are forbidden by the regulations of the one design class You are welcome in the circle of TOPCAT sailors.

Please keep in mind when participating in national or international open regattas (e.g. Yardstick, Catstick, Texel), please observe the technical regulations valid there, as these may differ from the TOPCAT class rules. More info at *www.topcatclass.com*

Have fun with your new TOPCAT AVANTI!

Inning, 01.07.2023
TOPCAT GmbH, Inning am Ammersee, Germany.

APPENDIX

1. FEEDBACK

2. RESOURCES

3. SUPPORT

4. KNOT TABLE

5. GLOSSARY

1. FEEDBACK

If you are satisfied with our product and our service, we would be very happy to get your feedback in terms of a google review:

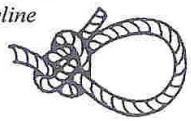
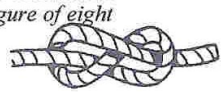
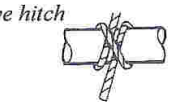
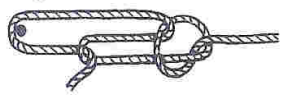
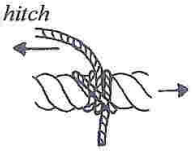
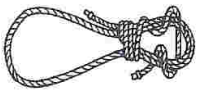
2. RESOURCES

If you are looking for tips regarding setting up, tuning, maintaining or sailing your TOPCAT, please take a look on our website and our youtube channel.
From the perfect adjustment of your rudders to practical advice how to trim your sails, we are sure you will find some useful information digging through our resources.

3. SUPPORT

Although we spend great effort to build easy to use and high quality catamarans, we want to let you know that our team is happy to help if you have any issues or questions. Don't hesitate to give us a call at **+49(0)8143/9969620** or write us an email at **support@topcat.de**

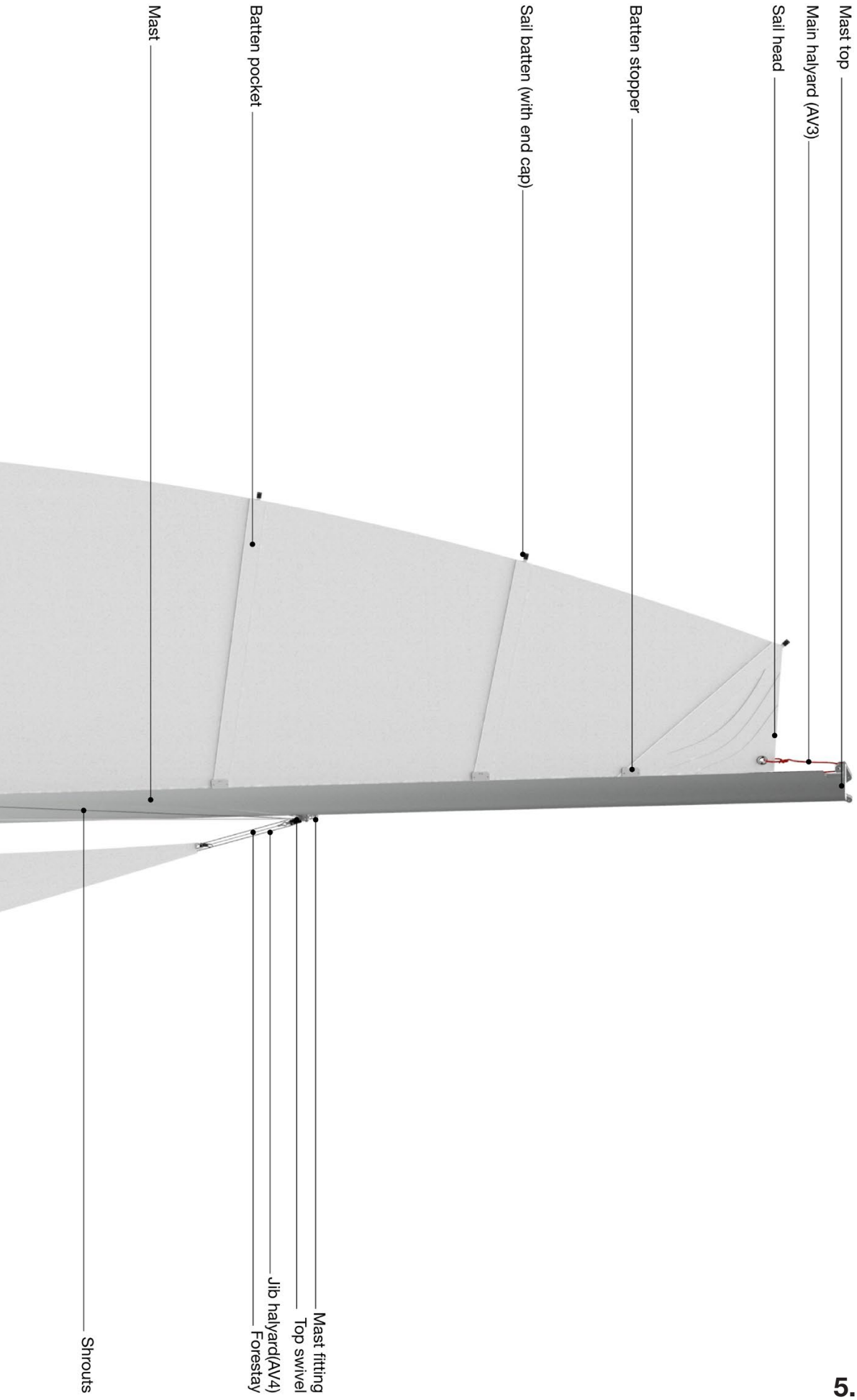
4. KNOT TABLE

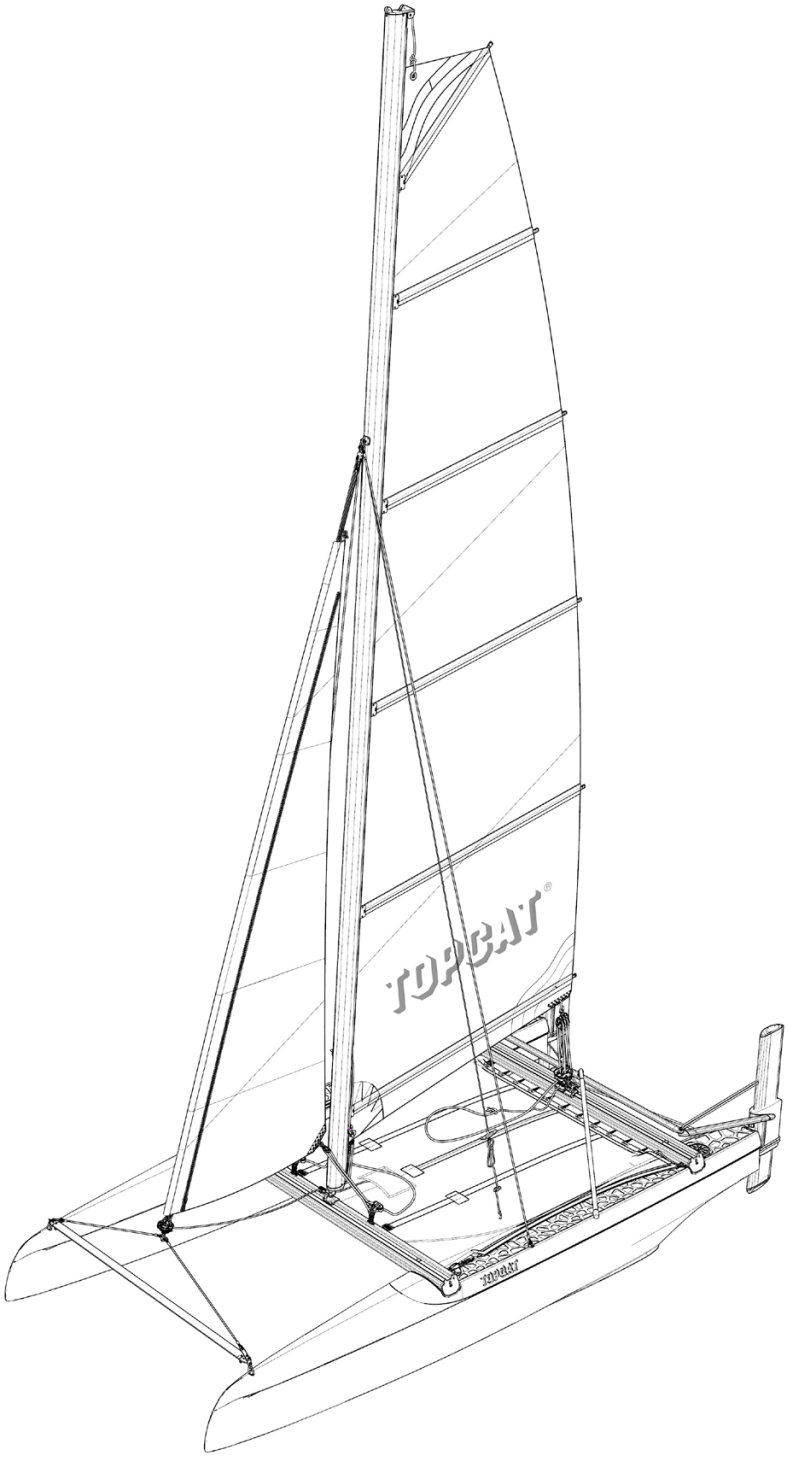
	Properties of the knot	Applications
1. Der Palstek *bowline* 	The bowline is a non-tightening eye, to be tied to a stake or ring. A very safe and versatile knot.	Attachment of sheets to blocks, mooring lines to the pile, trapeze harness, tensioning straps, etc.
2. Der Achtknoten *figure of eight* 	The figure eight knot prevents rushing out of a block or eye.	A safety knot for all types of sheets and lines.
3. Der Kreuzknoten *reef knot* 	The square knot connects two ends of equal strength. Only holds under tension and must be secured to the ropes by figure-of-eight knots when alternating.	Batten knot, extension of lines of equal strength.
4. Der Schotstek *sheet bend* 	Ends of unequal strength are connected by a sheet bend. Holds only under tension. Use the double sheet stay for alternating strain	Pulling in halyards, extension of towing lines.
5.Doppelter Schotstek *double sheet bend* 	Like sheet stay, also holds under alternating stress.	Connection of mainsheet and traveler line.
6. Der Webeleinstek *clove hitch* 	Weaving hitch holds only under tension and is not suitable for alternating stress.	Attachment of fenders to the railing, short-term attachment of a mooring line to a bollard or pole.
7.Der Verzurrknoten *tie loop* 	The loop knot holds only under load. A very versatile knot that allows very tight lashing due to the pulley effect.	Putting through halyards and lines, lashing catamaran hulls to trailers or roof racks.
8. Der Stopperstek *rolling hitch* 	To attach a line to a thicker line or hawser. Holds only under tension in the direction of pull and can be easily shifted against the direction of pull on the hawser without load.	Tie to a tow hawser, to a spar, etc. A knot that always helps when all else fails.
9. Der Kopfschlag *coil* 	Prevents a „ bunch „ of halyards or sheets from coming „afoul“.	Tidying halyards and lines.


Jib
Luff
Leech
Main sail
Mast groove
Forestay fitting
Jib furler
Jib blocks
Halyard clamp
Tack with cunningham
Jib furling line (AV6)
Bridal wire
Mast foot and uprighting line (AV9)
Jib sheet blocks
Power spreader
Trapeze
Trampoline
Front beam
Clam cleat
Beam plug
Hiking belt
Hull
Clew plate
Foot
Rudderblade
Shock cord (AV10)
Keyplate
Main sheet (AV1)
Main sheet block
Tiller joint
Main traveller
Tiller extension
Rudder release line
Cross bar
Rear beam
Hatch cover
Rudder box
Rudder fitting
Rudder housing
Rudder axle
Keel

AVANTI

5. GLOSSARY


Mast top
Main halyard (AV3)
Sail head
Batten stopper
Sail batten (with end cap)
Batten pocket
Mast
Mast fitting
Top swivel
Jib halyard(AV4)
Forestay
Shrouts



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