

69F

OWNER MANUAL

INTRODUCTION

This manual outlines the order in which the instructions contained in the 69F manuals available in the 69fsailing.com website portal should be carried out when setting up the boat in a timely, safe and damage-minimising way.

MANUALS SEQUENCE:

- MAST SET UP
- BOOM AND VANG SET UP
- RACKS INSTALLATION
- RIGGING CIRCUIT
- FOILS INSTALLATION
- RUDDER INSTALLATION
- MAST TUNING
- SAILS PREPARATION
- HAULING
- LAUNCHING
- TOWING
- HOISTING
- SAFETY

Here the ANNEXS of the owner manual:

69F - GEAR GUIDE

69F - ROPE GUIDE

69F - RIGGING LAYOUT

MAST SET UP

Prepare 4x stands spaced 4m apart, place split mast on stands. Rotate top and bottom mast sections until the loop going through the bolt holes is clear and not twisted. Join top and bottom sections and fit bolts through.

Fit spreaders on boomerang with the pin and safety pin. Make sure the spreaders' soft loops are properly tightened over the shrouds. Verify that the upper part of the V1 (between the top fitting and the spreaders) is equally spaced and brings the spreaders at the proper height.



Attach shrouds to mast in their respective positions. Starboard side and port side shrouds are marked with blue and red duct tape on the top fittings, respectively.



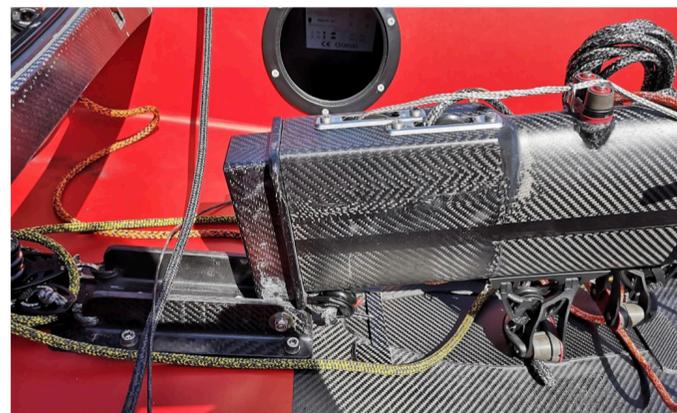
Before attaching the forestay, cow-hitch the spliced end of the jib halyard to the forestay top fitting. The jib halyard running outside of the mast is 2:1.

Attach forestay making sure to pass it through the deflector ring. The jib halyard must also pass inside the deflector ring.



Bring all halyards to mast foot, be sure that nothing pass inside the spreaders.

Lift mast and insert mast base over mast foot. Be careful that the 40mm pivoting cleats and the boom gooseneck do not touch the cockpit floor.



Check the spreaders are not bent up or down by the V1s and lie in their natural position

Lash shrouds lashing of V1 in the fwd loop shroud attachment, make 2 and a half loops and attach it to the soft-shackle in the lower ring.

Attach the forestay tensioner line to the jib halyard's soft loop and hoist it. When the splice on the jib halyard comes out of the mast foot, attach the tylaska belonging to the jib halyard purchase running underneath the deck cover to it (be aware to not to pinch under the splice the mouse line) and block it.

IF YOU DON'T HAVE THE FORSTAY TENSIONER YOU CAN FIND THE APPROPRIATE DIMENSION IN THE ROPE GUIDE



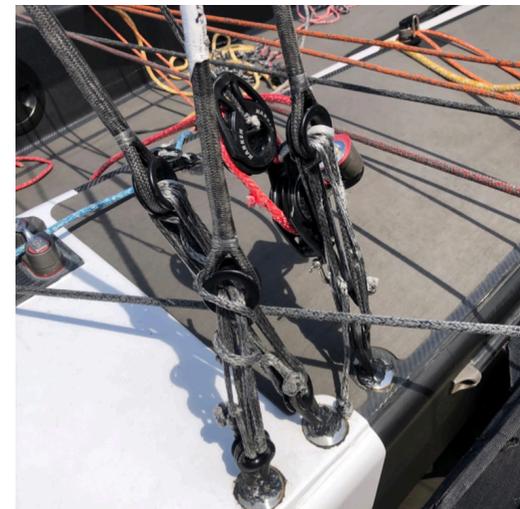
Lift the mast up pivoting about the foot with one person pulling from the forestay tensioner line, and one inside the boat pulling up the mast (be aware that with the weight of the people in the back of the boat it will topple so you will need something under the back or someone on the bow to avoid it).



Pass the tensioner's soft loop around the bowsprit and pull the bowsprit out for safety. Make sure the purchase is completely eased off before doing so.



Now attach the other shrouds to the loop, the D2 on the further one and D1 in the middle one and take a bit of tension and attach the forestay loop to the ring to continue working on the boat.



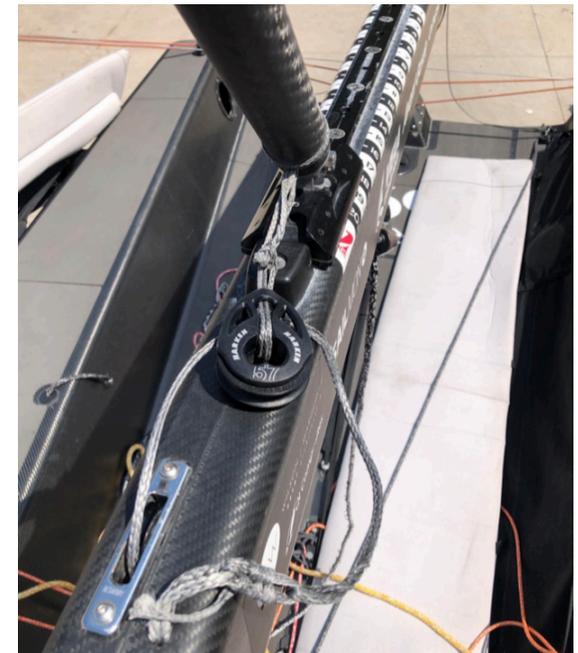
VANG AND BOOM SET UP

Stepping on the boom goosneck bolt the vang pole to the vang gooseneck (be aware that the softshackle coming out in the lower part of it is facing front).



Bolt the boom fork to the boom gooseneck.
Bolt the vang pole to the car on the boom track.

Attach the 57 block of the vang line to the soft shackle passing through the vang pole. Then after putting on the Sailmon support pass the vang red line in the first 40 block over the boom then in the hole in the gooseneck, the sailmon support, the 40 block on the mast foot and then staying under all the other rope in the 40 pivoting cleats.



RACK INSTALLATION

Before starting to install the racks, make sure the fwd end of the rack net is fit through the fwd pole.

One person should hold the rack seat halfway between the tubes and slide it in making sure the tubes are going in evenly. It is strongly advised this operation to be carried out by a single person.

In case the rack gets stuck because one tube has slid in more than the other, pull the rack back out until it gets unstuck and slide it in again evenly. The racks net should be left untied until all systems have been set up in order to make it easier to have access to the cockpit from the boat's sides.

In order to tie the net, first slide the luff rope into the track bonded to the hull side.



Pass the gennaker sheet block's soft shackle through the cut in the net.

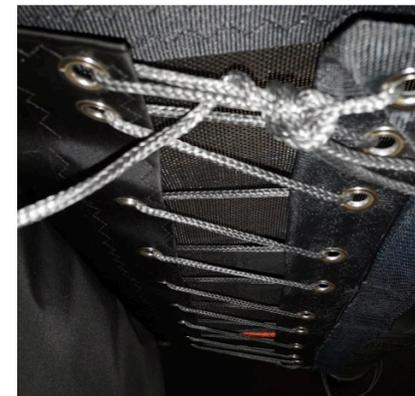


Make sure the net is in the positions shown in the picture below relative to the rack tube.



Fix the net to the soft loops bonded to the underside of the seat.

Then begin lashing between the grommets. In order to achieve enough tension, you may need to pull the line and remove slack 2 or 3 times before tying it.



The rack seat cover is to be used during transport and storage as well as at the dock as a fender. The cover should be used at all times while at dock to avoid the rack seat and antiskid to be damaged in case of contact with other boats or with the dock itself.



CIRCUIT RIGGING

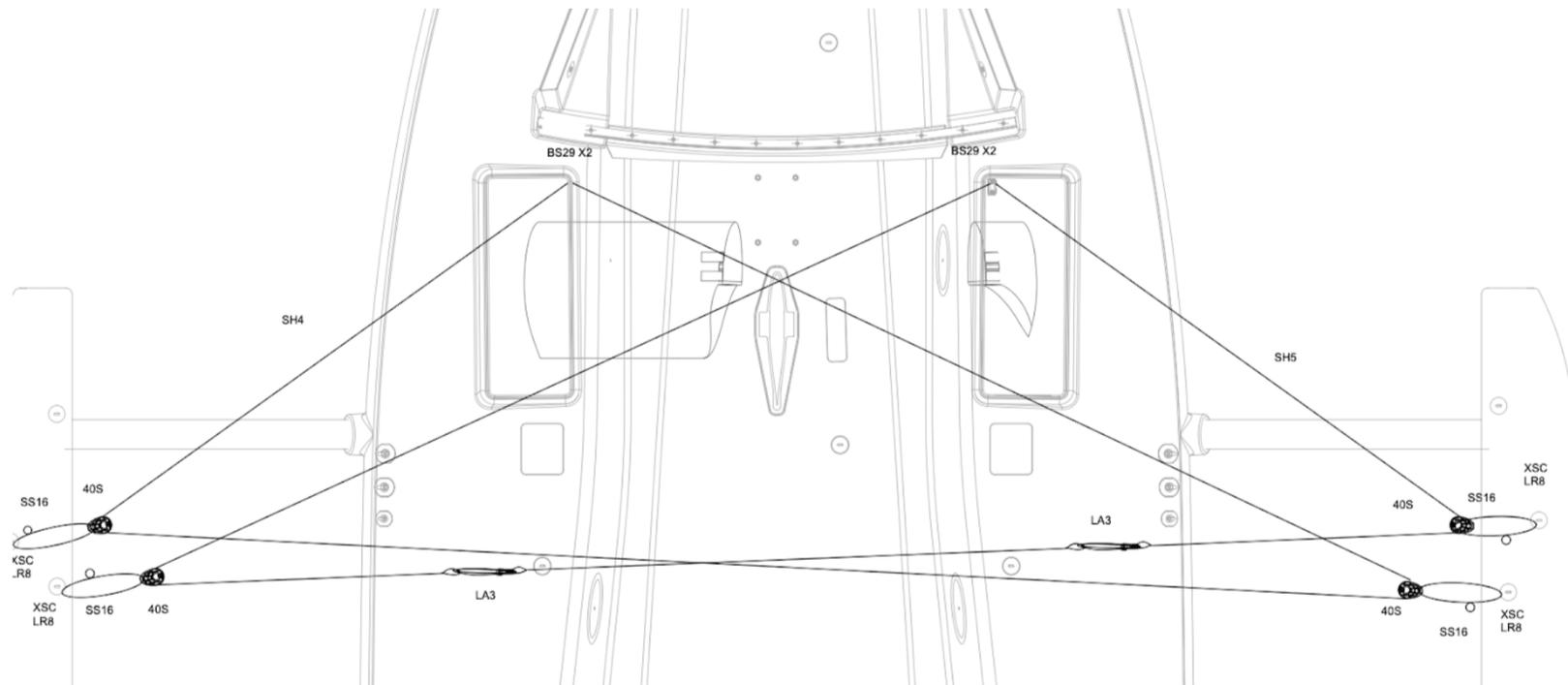
You can find all the specific dimension of all the rope that are allown by the class on the boat in the Rope Guide

DAGGERBOARD RAKE SYSTEM

The daggerboard rake system line is tied up inside the upper bearing foil, one for each side.

Starting with the red one, on the left side, taking the end of the rope coming out from the upper part of the rake organizer we make it pass through the forward 40 block on the left rack (the one with the longest shackle), we move the line on the other side of the boat and we make it pass in the 40 block with the longest shackle in the second forward group of 40 block, then we join with the other end of the rope passing through the d3 and d2.

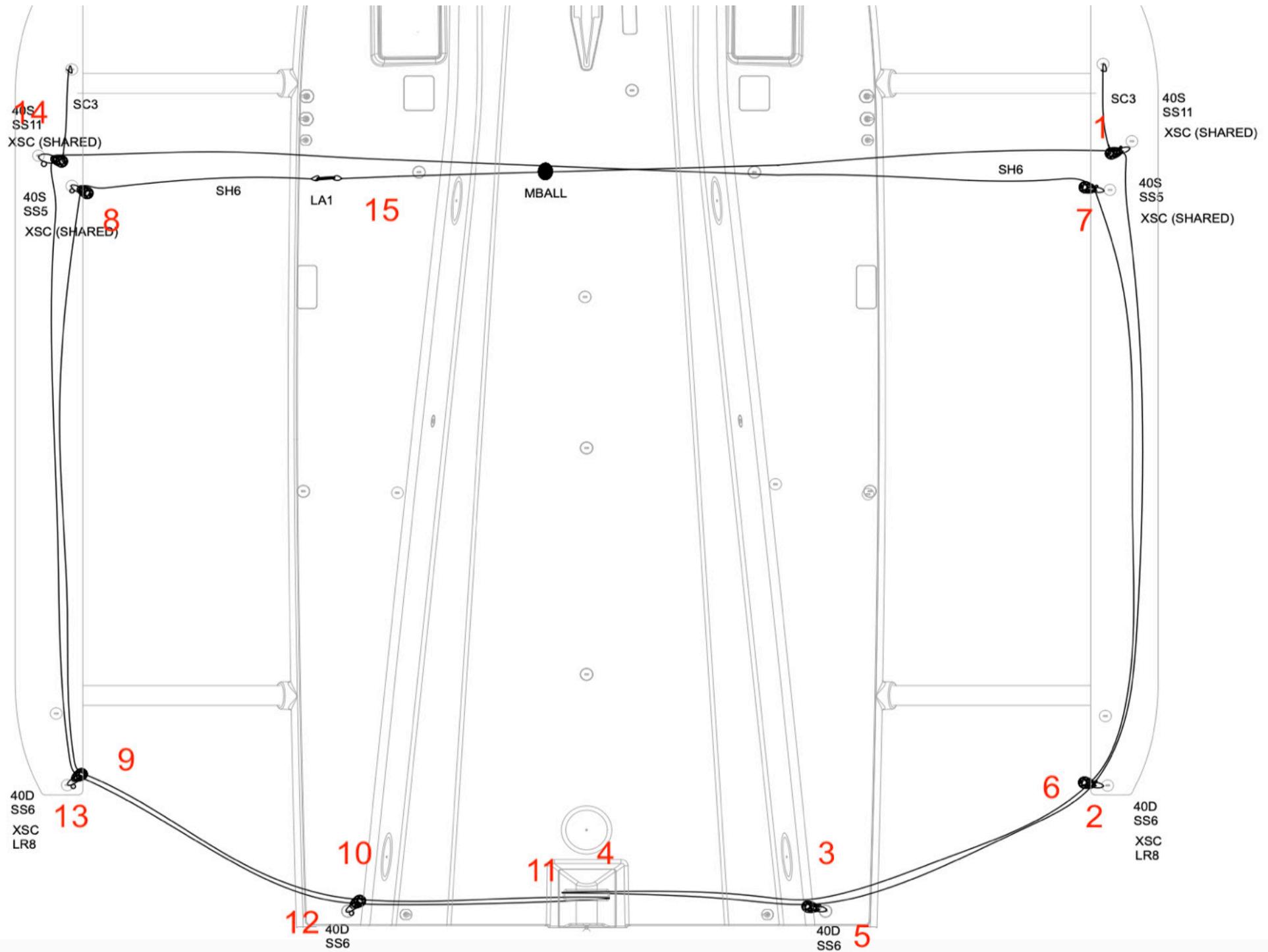
For the gray rope, starboard side is the same mirrored, just be aware on the left side the rope red stay upper than the gray and on the right side the gray say upper than the red.



RUDDER RAKE SYSTEM

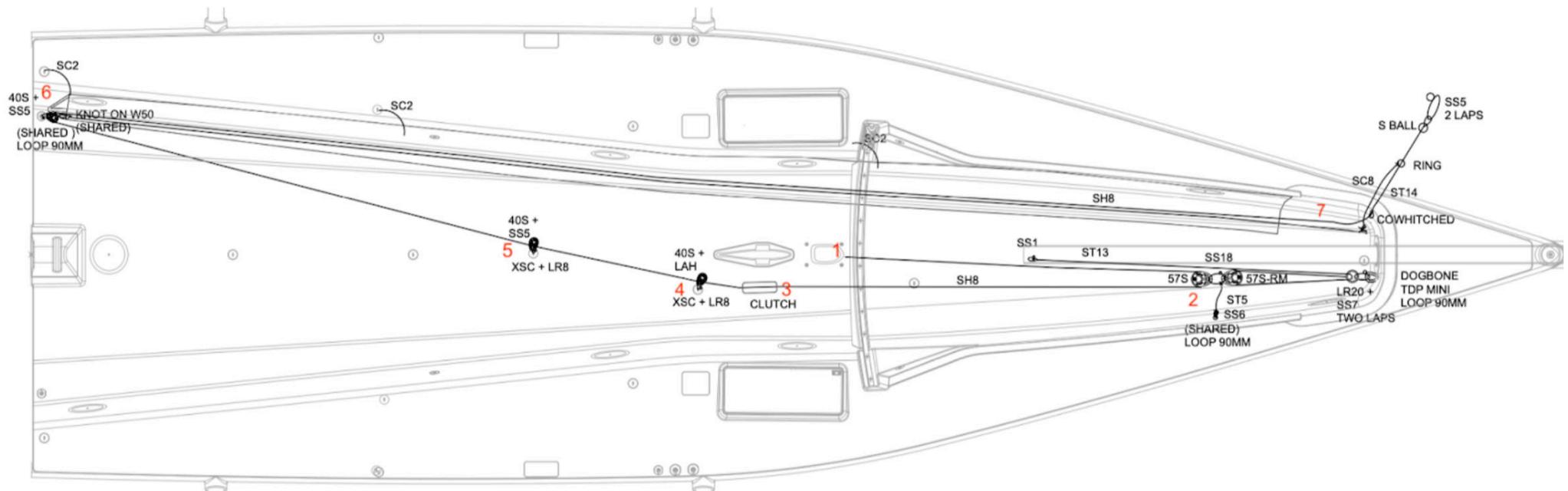
We start from the ball in the middle of the rope, we take one end and we make it pass in the first forward 40 block on the right rack, we go back on the rack and make it pass in the lower side of the 40 double block then, as before, in the lower part of the double block at the end of the boat, then inside the rudder shave going in from the low, clock side watching the bow, then back to the two double block and forward to the 40 with the shortest shackle, we make a knot and pass on the other side.

We take the other end of the rope, on the other side of the ball, we make it pass all over the foil rake and we go in the furthest back 40 block, we go back on the rack and make it pass in the lower side of the 40 at the end of the rack and then at the end of the boat, then in the shave going in from the low so as anti clock side and then back in the double and the last 40 free forward in the boat. At this point we can join the other end of the rope and close the rake circuit, To give same tension in all the circuit, while tensioning the lashing, make the rope slide on the sheave. Then align the position of the ball with the position of the rake indicator number turning the orizzontal pin.



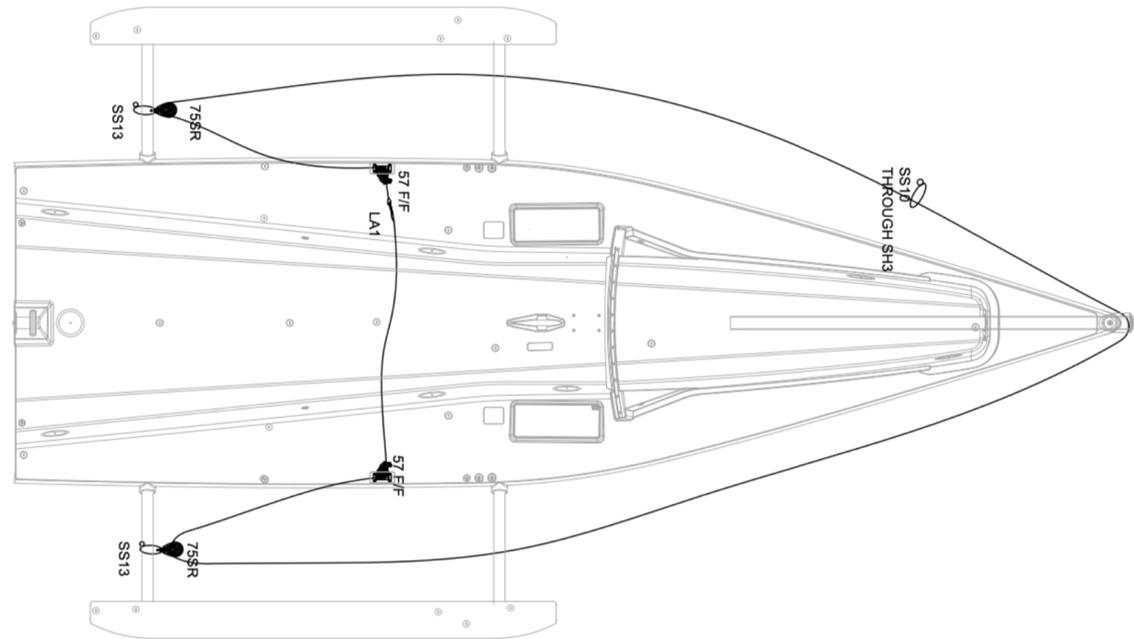
GENNAKER HALYARD

We take the halyard where it comes out from the mast, helping us with a tiller extensioner we pass the end of the lines under the cover up to 57 in the bow, under the gennaker bag, being careful not to twist it with the jib sheet and the jib tensioner, it has to go straight in the middle, then back to the clutch, passing under the tensioner of the jib-but over the blue line of the down foil. After the clutch inside the 40 block just in front of it then in the 40 block in the middle of the boat, further than the one with the orange jib sheet, pay attention to pass over the jib sheet, then in the 40 block at the back of the boat near the gennaker bag. Now, as before, with the tiller extensioner we make it pass the line all through the gennaker bag till the big hole on the bow where we will rig the gennaker.



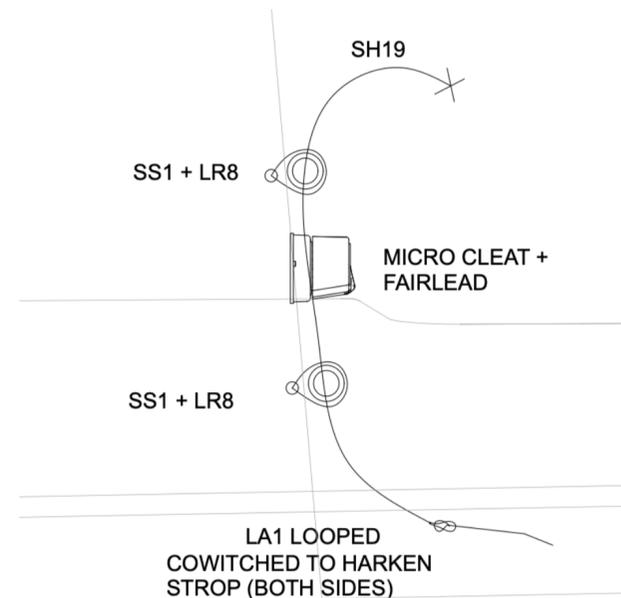
GENNAKER SHEET

We pass it all the way around the boat over everything and between the two flip flop with the cleat we close the circuit knotting the lashing on the two end.



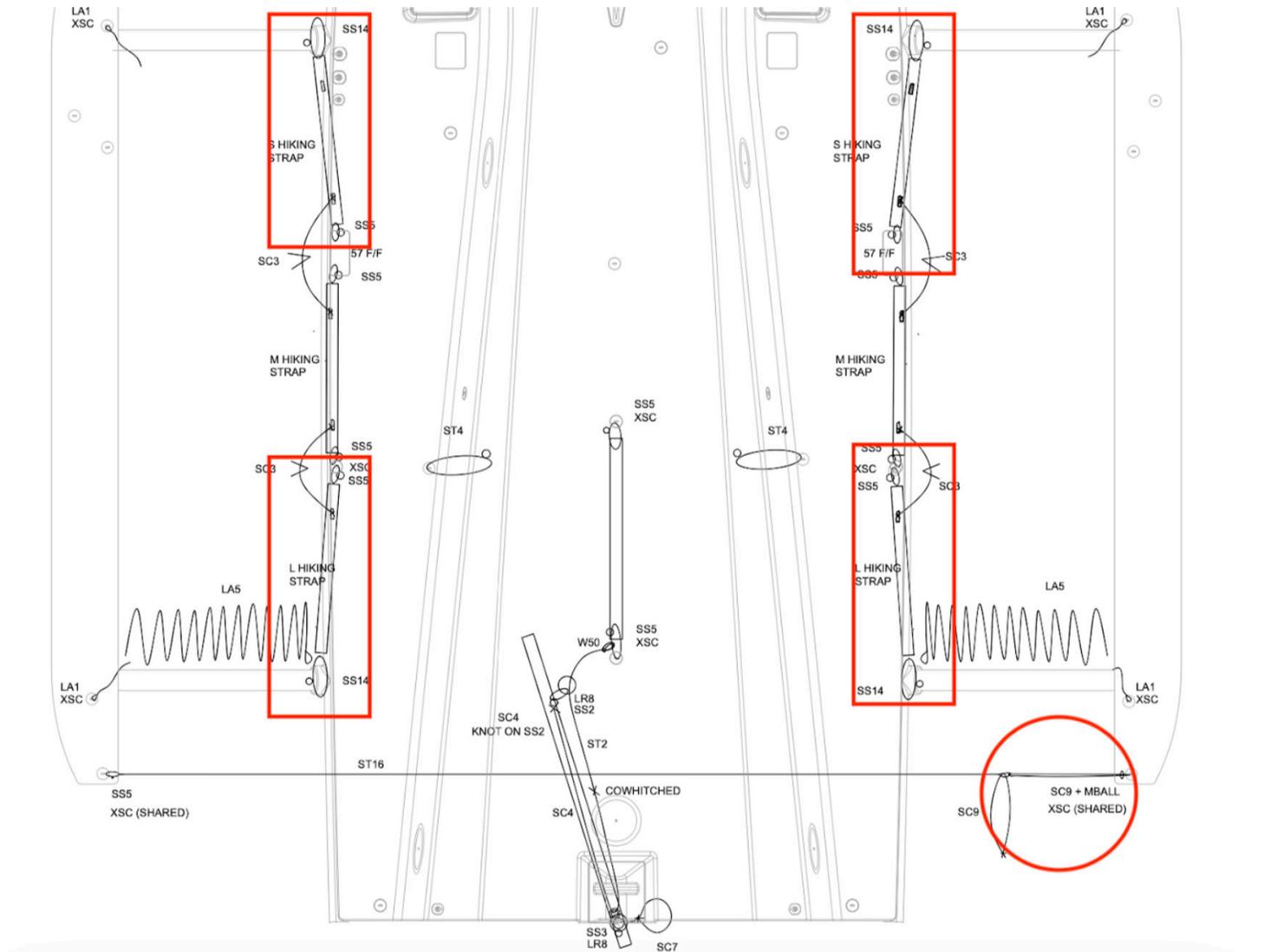
JIB CAR

Take the yellow line on the jib car and make it pass trough the two rings and the cleat in the front part of the mast, then make a knot to make the car stop before it crash at the end of the track.



HIKING STRAPS

Open the two big softshackle on the hiking straps so you can attach properly the one in the front and the one in the back. Then attach the bungee passing through the band on the rack net and then on the other hiking straps. Attach the nofallstick on the other rack closing the bungee on the ball.



FOIL INSTALLATION

The installation procedure is as follows:

Remove foil strut cover

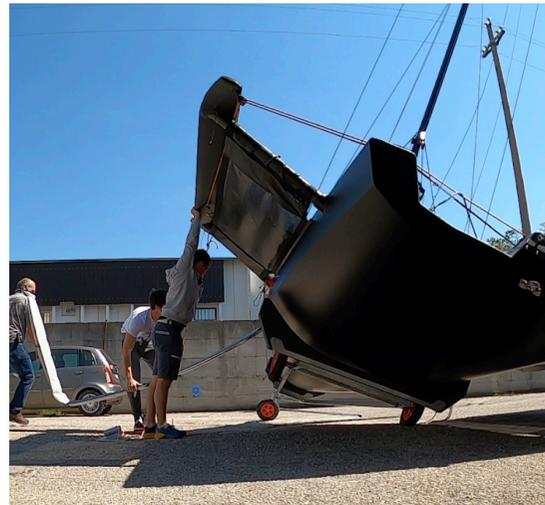
Remove up-line pin and sheaves to allow sliding through the top bearing. Be careful not to lose the sheaves' bushing when removing the pin

Fix the boat to the trolley by lashing the rack tube to the trolley frame to avoid the boat sliding during the next step. Make sure to protect the wrapping with some soft cloth or similar



Heel boat over lifting from the rack and slide foil through both bearings, pay attention to have the upper bearing in a rake between 3/4.

Lift the foil up and bring boat level again. Leave tip cover on put it down.

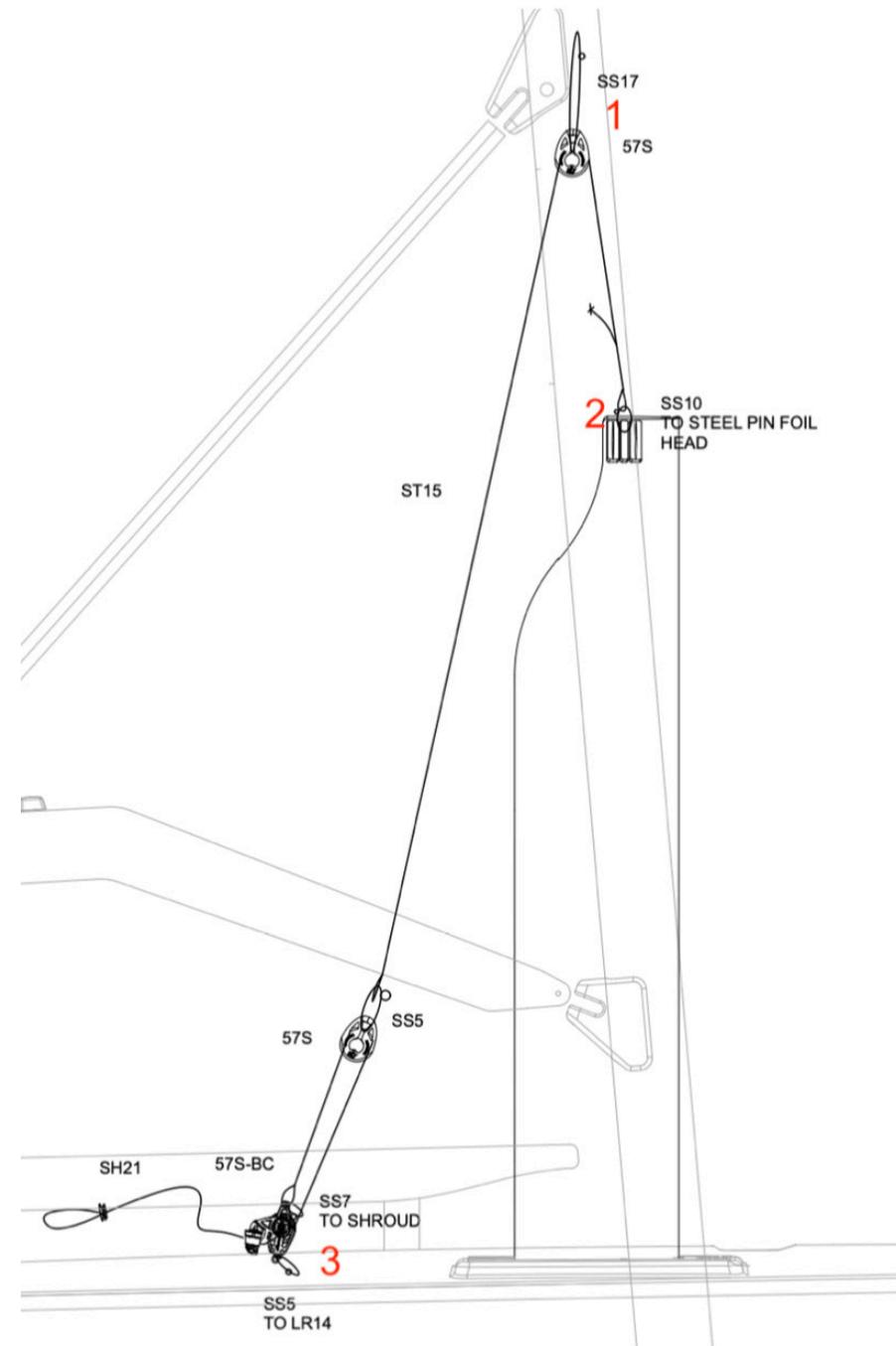


FOIL UP SYSTEM

Make the uncovered part pass through the 57 block attach on the D1, Make the shackle at the end of the uncovered part pass through the pin of the foil shave and put the shave back on the foil.

Attach the two shackle you find on the block to the D2 and clear the red line to put the foil up.

Put up the foil completely ready to put the other foil in and do the same.



FOIL DOWN SYSTEM

Take the blue line that pass inside the two ring aside the clutch of the gennaker halyard and make it pass in the 40 block in the back of the upper bearing then in the offshore cleat and in the bolt-down.

After put in the foil make the blue line pass trough the 57 block indside the foil from the back then up to the forward shave down to the extern 57 block from forward to back, up again in the further back shave and down attached to the softshackle inside the foil on the 57 block.



MAINTENANCE

The use of sanding paper, abrasive sponge, grinding or polish paste or cream is not permitted by the Class Rule; nor the use of any liquid or cream or filler like nanotech or similar are not permitted. The only action permitted is the use of simple soap and sponge, with the goal to remove eventual dirt or grease from the surface.

Sanding is forbidden in order to preserve the integrity of the paint. Moreover, sanding carried out routinely could lead to the removal of the paint layer and damage to the carbon fibers making up the external layer of the appendage.

Varnishing:

1-Only one varnishing service per year will be allowed for the rudders, daggerboards, and foils of vessels in the 69F Sailing One Design category.

2-The varnishing service will be carried out by 69F Official Dealer and must be signed and dated when performed. The varnishing will be done on the surface of the components (rudders, daggerboards, and foils).

3-An internal record of all varnishing services performed will be maintained, including the date and the signature of the responsible technician. Additionally, it will be signed underneath the varnishing.

The 69F Class will keep track of each service performed to ensure compliance with the restrictions.

4. Responsibility: only 69F Official Dealer is authorized to perform varnishing services and ensure they meet the required standards.

5. Non-Compliance: as written in the 69F class rules, any violation of these restrictions, including unauthorized sanding, will be considered an illegal modification.

A disqualification (DSQ) penalty will be applied for non-compliance. This means that the team will be removed from the current event and will be prohibited from competing until they rectify their status and comply with the regulations. This regulation aims to maintain fairness and equality in the competition by ensuring that varnishing services are performed on the surface of the components in a standardized manner and in accordance with established 69F class rules.

The foil strut external layer is made up of an anti-abrasion, low-friction surface film which is extremely hard. Any sanding of this part will not be effective and will only result in turning the surface opaque, thus making it obvious that the foil has been tampered with.

Every two month (if you sail in salt water one month) take off the upper and lower foil bearing for maintenance.

UPPER BEARING : take off the bearing clean the carbon guides and bearing from grease and open the shave to check the sphere, (if some is broke change it) then reassemble it using white nautical grease or lithium grease.

BOTTOM BEARING: if you have the 2022 systems you don't need anymore big maintenance just once in a while check if the roller is in good condition.

If you have the old system evry two month take off all the roller from the bottom bearing thake of the pin and clean the roller, if reallt rusty change the inner bearing.

RUDDER SETUP

Firstly, install the rudder foil (rudder elevator) to the strut. In order to do so, insert the rudder strut into the foil's top recess. To make sure the strut is inserted all the way you may use a mallet protecting the foil from scratching with some soft cloth.

Once the joint is complete, tighten the 2 bolts with washers on the bottom winglet recess. It is suggested not to use thread locker on the bolts in order to avoid them getting seized and to ease the winglet removal procedure.

Warning: The bolts tightness should be checked every day before going sailing and they may become a little loose with the vibrations.

In order to install the rudder on the boat, this procedure shall be followed:

Make sure the bottom and top bearings are aligned by sliding the pin through both. If they are not aligned, slide the pin from the bottom bearing up into the top one

Fit the tiller through the rudder head socket

Fit the rudder to the top bearing taking care that the mainsheet bride is over the tiller and the nofallstick under.

Pass the pin through the rudder head and tiller and top bearing and leave it halfway.



Attach the middle of the winglet to the bungee on the no fall stick
Attach the carabiner coming from the tiller to the middle hiking steps loop in order to avoid the tiller rotating excessively.

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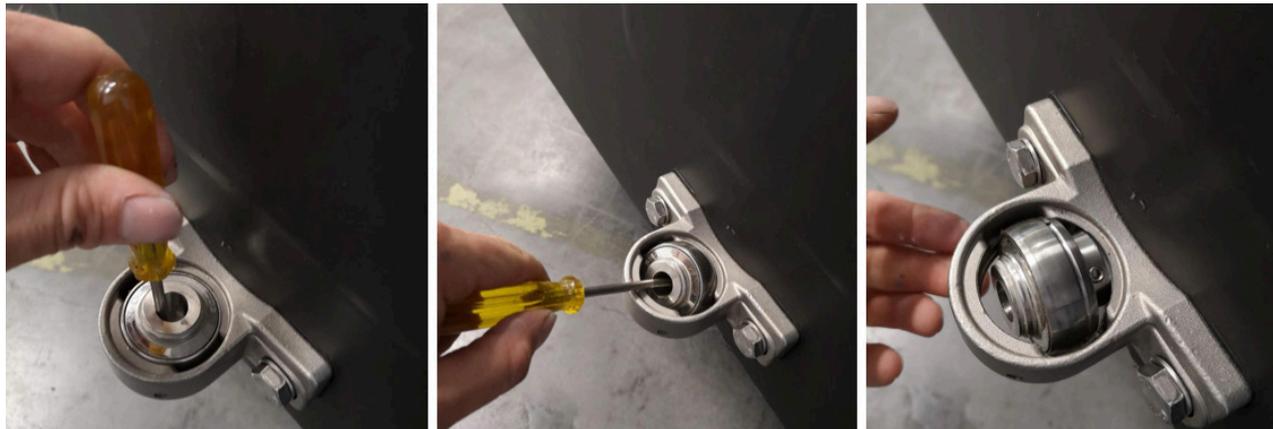
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The top bearing bushing sliding inside the rudder tower must be greased after a while or if it became stuck. The suggested is white marine grease or lithium grease. The removing sequence is shown in the pictures below.

The bottom bearing must be greased about every 10 days of sailing in fresh water and every 2 days of sailing in salt water. The suggested is white marine grease or teflon grease.

The bottom bearing removing sequence is shown in the pictures below.



SHROUDS TENSION

For the mast tuning use again the forestay tensioner

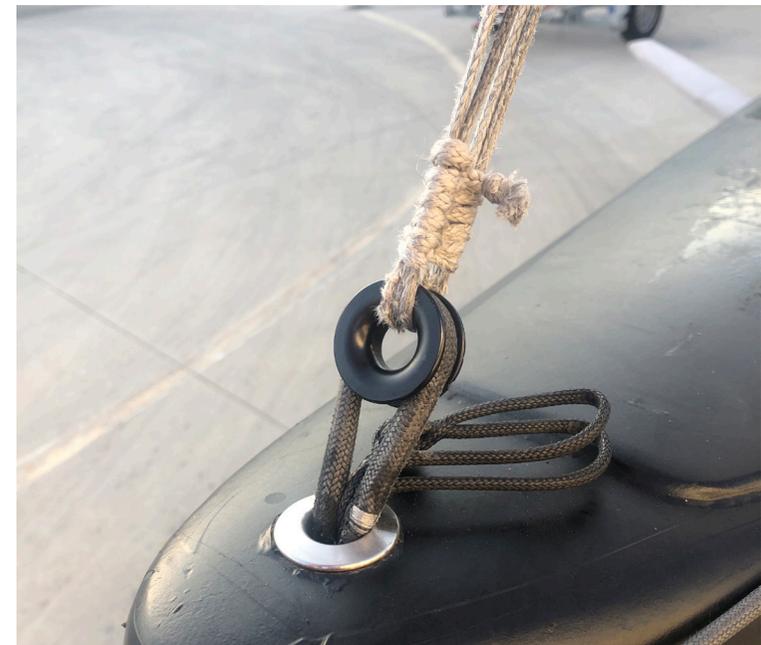
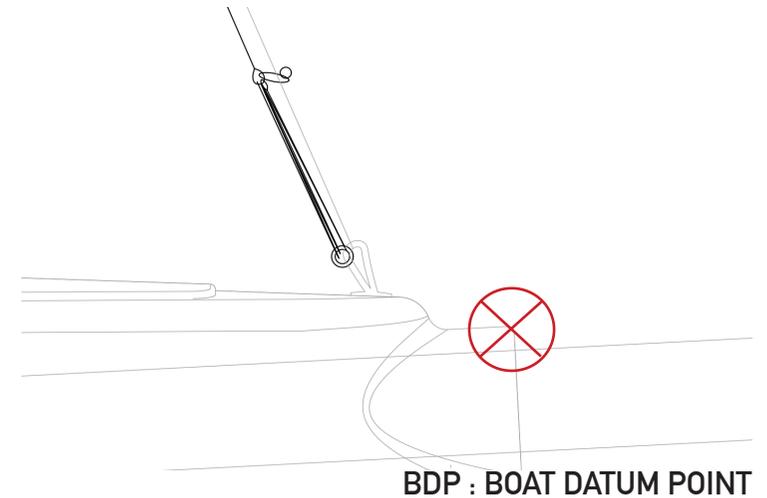
By class rules the tension off the shrouds should be in side the range (misured with Spinlock RGS 0508) :

- V1 600/700 Kg
- D2 300/400 Kg
- D1 250 / 350 Kg

Rake range measured between BDP and the gennaker halyard fully hoisted with standard soft shackle and plastic ball(45/55 mm) : 10460 mm / 10500 mm

To change the assett of the mast take of the tension of forestay using the tensioner , open the forestay lashing, take of tension on the shrouds and cange the position of the splice of the shrouds lashing than close the loop and take tension again.

For the forsetay lashing make at least 3 turns and than block it with a portuguese knot in the lower part (as in the photo)



SAILS PREPARATION

MAINSAIL

Prepare the mainsail on the rack ready to get hoist, check the tension of the batten and attach the lock strop to the head of the sail.



JIB

Prepare the jib on the cover of the boat, attach the tack on the shackle on the bow and the clew to the carabiner of the sheet (pay attention that it has no twist) in the hole you prefer based on the wind condition.

Attach the three “tacos” (hank of the sail) and then attach the head of the jib to the halyard shackle doing a turn around the forestay with the shackle.



GENNAKER

The gennaker has to be rigged on the left side of the boat, attach the clew/tack/head as a standard gennaker (sheet inside so tack over the sheet) then take the retriwer line pass it throught the ring of the shockcord, pass it under the sheet and the gennaker and attach it to the tape on the luff with a knot.

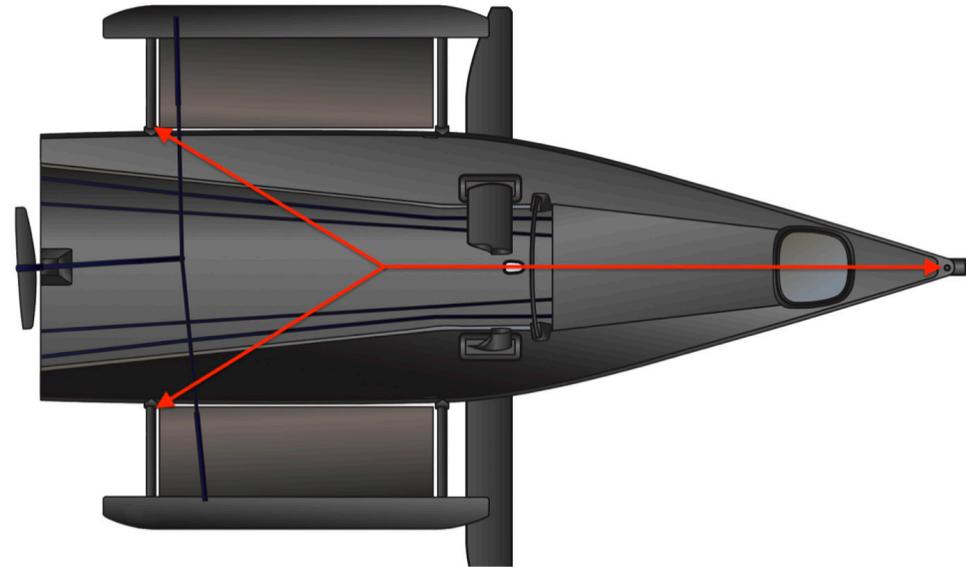
HAULING

The rigged boat can be easily launched with any kind of crane.

The 3 attachment points on the boat are the bow soft shackle in the forestay ring and the 2 aft rack posts.

The “balance point” to have the proper boat pitch (bow down to avoid mast touching the crane) is on top of the boom kink.

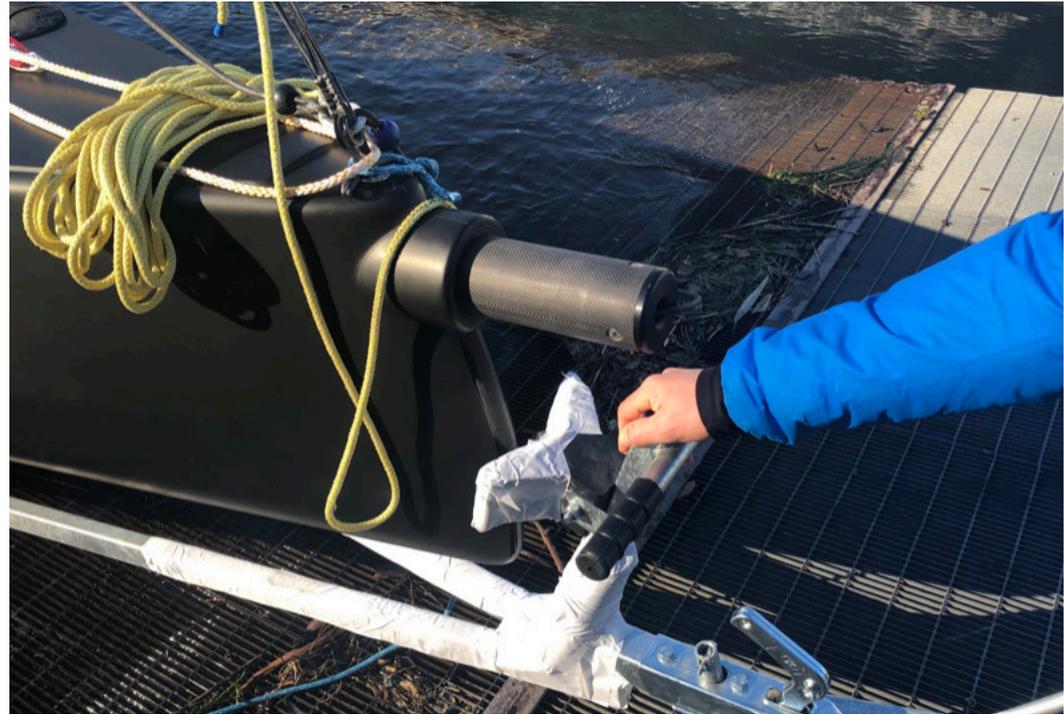
As soon as the bow hits the water, start pulling the bow in order to avoid the crane touching the mast.



LAUNCHING

The rigged boat can be easily launched from a slipway with the supplied trolley.

WARNING: Avoid putting a hand directly under the bowsprit (as shown in the picture below) when launching or pulling out the boat as there is a serious risk of it getting crushed between the bowsprit and the launch trolley.



TOWING

Is recommended to have always a rib giving assistance for dock in and dock out procedures.



To tow the boat attach the towing line to the dedicated cover soft shackle on the forestay.

As soon as the boat is in the water put the daggerboard in (opening completely the boom and paying attention to the Instruments push down the daggerboard) and close the hatch with the plate; put the rudder securing the pin with the strop at the end of it, then put the tiller secure attaching the carabiner to the center hiking strap and then attach the tiller extentioner.

Put both foils down with same rake and tow it.

We suggest to avoid towing with sails up.

HOISTING

Start hoisting the sails from the MAIN, one person take the head of the sail and stepping on the boom slide it inside the start of the track, the other two people start to pull the mainsail halyard and so hoisting the sail. when the top is reached you will heard the sound of the lock, you have to pull slowly and sure the lock strop on the lock only makes one sound (the second will be unlocking the strop).

Attach then the cunningham carabiner to the two tape inside the sail(one for side of the vang pole) and tension it a bit, close the zip of the patch around the mast and under the lower shrouds.

As last open the vang, attach the outhaul and the clew strop going twice around the boom.

After hoist the JIB, one person go on the bow, open the sail tie around the jib and start closing the zip of the luff of the sail while another person start to pull the mouse line of the halyard. When the splice of the halyard comes out from the mast attach the Tylasca on it (NOT on the mouse line) and then tensione the halyard with the tensioner.

Tide up the two halyards in the gennaker bag.

Now you can open the knot of the towing line on the bow and start sailing!



SAFETY

SAFETY WARNING

Despite the Persico 69F has been designed with a particular attention to the safety of the crew, the high speed that it can reach and the sharpness of the appendages' trailing edge can be dangerous.

When sailing, the following personal protections are strongly recommended, therefore each crew member shall wear:

- a helmet that shall be to the minimum standard EN1385, EN1077, EN 966, ASTM 2040, Snell S98 or equivalent with a brightly coloured region of at least 250 square centimetres of the exterior surface that can be seen from above the water with crew lying face down or face up,
- a personal flotation device to the minimum standard ISO 12402-5 (Level 50), or USCG Type III, or AS 4758 Level 50, or equivalent. Inflatable buoyancy vests are not permitted.
- a cutting device with a blade length of no more than 150mm,
- cut resistant gloves,
- sailing shoes,
- long-leg wetsuit.

It is also recommended to have always onboard a VHF or other communication device.

To go in front of the mast when the boat is foiling can be very dangerous and it therefore should be avoided. It is not allowed by the Class Rule.

SPEED AWARENESS

Due to the high speeds that the boat can reach (up to 35knots), the space between the boat and any other object or obstruction reduces very quickly as compared to traditional boats. Therefore, manoeuvres shall be called adequately in advance.

Moreover, on a downwind in gusty conditions an increase/decrease in pressure can lead to wide changes in bearing angle (30° - 40°). It is therefore advised to keep an eye not only to possible obstructions straight in front but also accounting for a sharp change in bearing due to a wind shift/intensity change

CAPSIZING

Due to the technical characteristics of the Persico 69F, capsizing most likely will happen at low speeds because at high speeds the leeward foil is providing a huge righting moment that makes it almost impossible to capsize. Usually, it happens that for various reasons the boat hits the water, slows down sharply and, after being slow and losing the lift from the foil, it capsizes.



Nosedive sequence.

It's important for the crew to grab a "strong" hold in the sharp slowdown that is usually the more critical moment where in the beginning there is a forward momentum and immediately after the water from the bow tends to push back.

As an example, tiller extensions are not designed to withstand the weight of a person. Therefore, when capsizing the helmsman should leave the tiller extension (possibly throwing it aft) and hold on to the dedicated helmsman handles.





The racks are also slowing down the capsizing therefore usually the crew has some time to move up to the boat's side without going into the water.

CAPSIZE RECOVERY

- As soon as the mast hits the water is important that at least one person, possibly two, jump on the daggerboard in order to avoid the mast sinking, capsizing the boat at 180°.
- The third person can stay in the cockpit in order to check that the mainsheet, vang and jib sheets are completely eased. Please note that both vang and jib sheets have powerful purchases hence is probably needed to manually pull the final line to release the purchase. This is mostly needed if the capsize occurred in 20+ TWS.
- In case the capsize occurred with the gennaker up, it's strongly recommended to drop it with the retriever line before straightening the upturned boat.



- Both daggerboard and foils' trailing edges are very sharp, it is very risky to hold on it because it can easily cut. - Moreover, when lifting yourself up onto the daggerboard or foil holding onto the leading edge, be careful that the sharp trailing edge may cut through your clothing.
- Depending on the sea conditions, the boat orientation to the wind and crew weight, the third person, after carrying out all the above actions, will probably need to go on the daggerboard as well.
- In case of very strong wind it can be helpful to completely disconnect the jib sheet.
- When the boat straightens up, it is important that the first person that jumps on board takes the tiller extension to gain control of the boat.
- In case a person struggles to jump onboard from the water, the easiest way to help him is to sink the winward rack and let him swim on it.
- In case the boat capsizes to 180°, the recovery sequence is: stand on a rack holding the foil, then move on the foil holding the daggerboard, then stand on top of the daggerboard holding the other foil, finally jump onto the boat.

