OWNER'S MANUAL



DRAGONFLY®
25 Swing Wing

Introduction

We are delighted to welcome you to the family of Dragonfly sailors with our warmest congratulations on your new Dragonfly.

This manual is meant to help you enjoy sailing and understand the comfort and safety of your new boat. The manual describes the boat, the equipment and includes maintenance guidance. Before you and your crew take off to sea, we strongly recommend you all to read the manual carefully to avoid any mistakes and/or damages. Make yourself at home on board your dragonfly before going sailing.

We keep improving our boats as we want you to benefit from new technology and breakthroughs, new equipment, materials and, of course, our experience. Therefore, the characteristics and information hereby provided are not binding and can be changed without prior notice or updated obligation.

Dragonfly is built with more than 55 years of experience in multihulls, and we feel today that we here at Quorning Boats are delivering a consistent product of high quality and design. Quorning Boats endeavours to deliver a perfect product. If minor problems should occur, we kindly ask you to contact your dealer.

Please keep your Dragonfly in respectable condition as well at sea as ashore.

We wish you, your family and crew all the best and lots of fun with your dragonfly.

QUORNING BOATS

Jens & Peter Quorning
Dragonfly Trimarans

Denmark

Registration form

Type of boat: Dragonfly 25 Swing Wing (Trimaran sailboat)

CE-certification: Category C / D

Date of delivery: _____

Name of boat: _____

Homeport: _____

Owner's name and address

Name: _____

Address: _____

City: _____

Country: _____

Registration No

Hull No: _____

Hull ID-No: _____

Engine serial No: _____

***YOUR DEALER*:**

QUORNING BOATS ApS
Skærbækvej 101, DK-7000 Fredericia, Tel. + 45 75 56 26 26, info@dragonfly.dk

Document and receipt

Hull No:_____. Hull ID-No:_____.

Owner's name and address

Name: _____

Address: _____

City: _____

Country: _____

I, the owner of this craft hereby certifies that I have accepted delivery and read the information in the Owner's Manual delivered with the boat – before using the boat.

Date: _____. *Signature*:_____.

Hull No:_____. Hull ID-No:_____.

Owner's name and address

Name: _____

Address: _____

City: _____

Country: _____

I, the owner of this craft hereby certifies that I have accepted delivery and read the information in the Owner's Manual delivered with the boat – before using the boat.

Date: _____. *Signature*:_____.

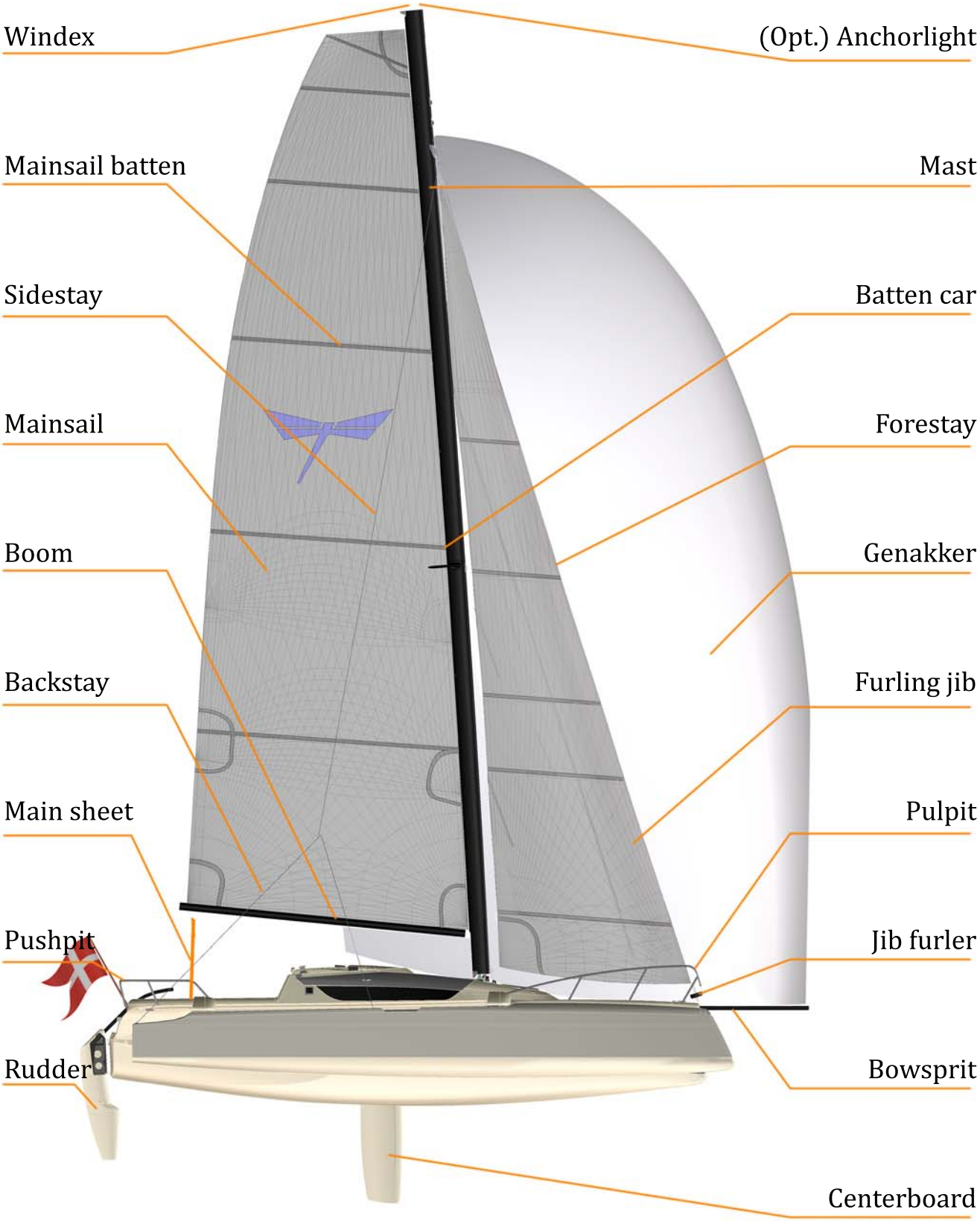
Before use of the craft, please return this slip to:
QUORNING BOATS ApS, Skærbækvej 101, DK-7000 Fredericia.
If not, Quorning Boats ApS cannot be held responsible of any kind of damage or injury.

General specifications – DF 25 Sport

Length overall, folded out for sailing	7.65	m
Length folded	8.95	m
Beam sailing, folded out	5.80	m
Beam folded (also trailer beam and for container transport)	2.30	m
Draft excl. centreboard folded out	0.35	m
Draft, incl. centreboard	1.50	m
Weight of standard boat incl. main, jib and engine (excl. extras)	1,150	kg
Payload max, incl. crew	550	kg
Engine, standard outboard	6	HP
Max engine outboard HP	10	HP
Mast Sport version in Carbon section total, excl. antennas	11.90	m
Mast height Sport version over water level excl. antennas	13.20	m
Mainsail	29	m^2
Jib furling	12	m^2
Code 0 furling	31	m^2
Asymmetric spinnaker	56	m^2
Bowsprit length	1.40	m
Trailer weight (aluminium)	370	kg
Max total trailer weight (aluminium)	1.600	kg
Trailer weight (steel)	450	kg
Max total trailer weight (steel)	1.800	kg
CE-Design category:	C	
Max No of persons in category C	4	
CE-Design category:	D	
Max No of persons in category D	6	

Side-view

Dragonfly 25

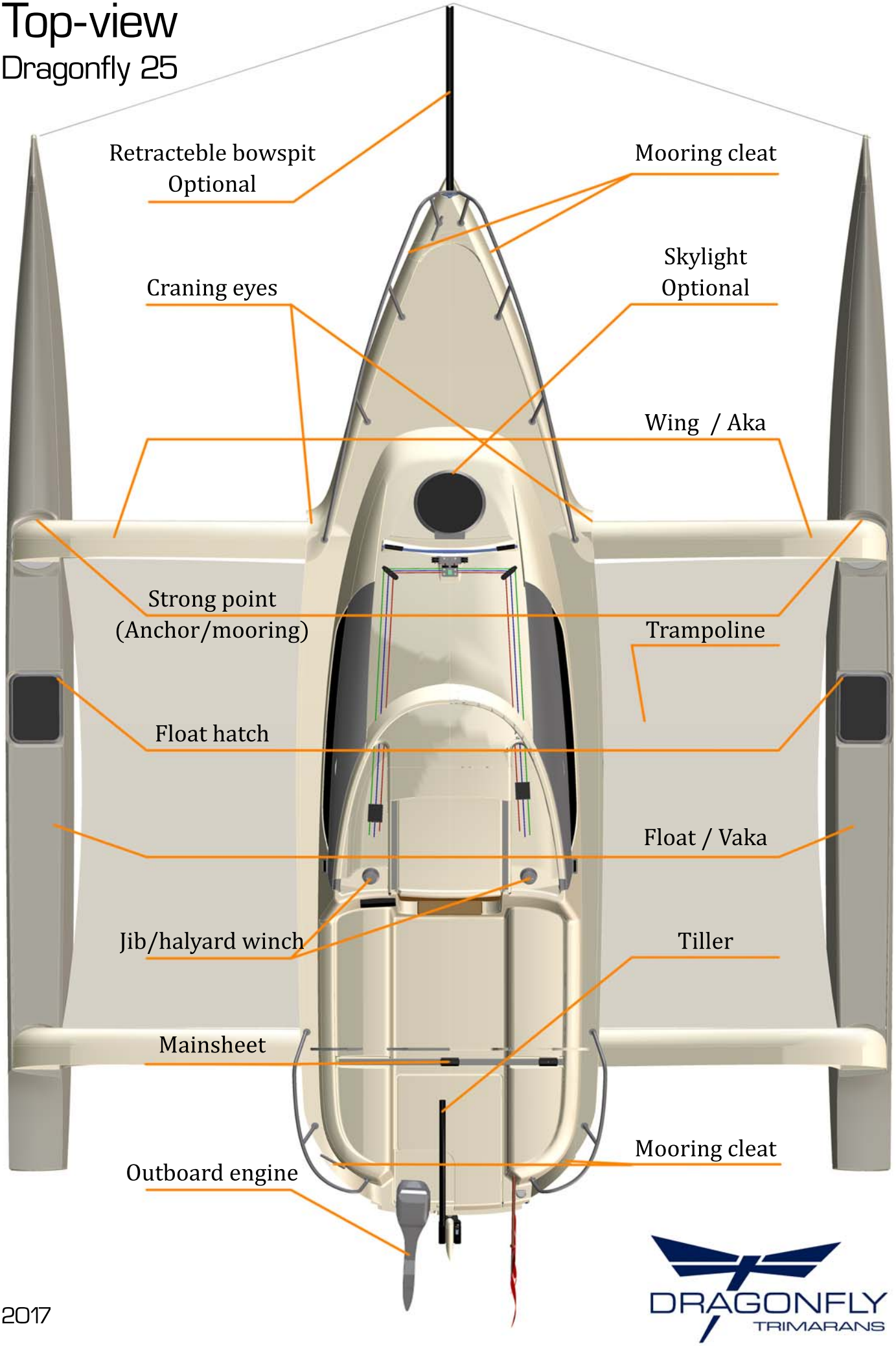


2017

DRAGONFLY TRIMARANS

Top-view

Dragonfly 25



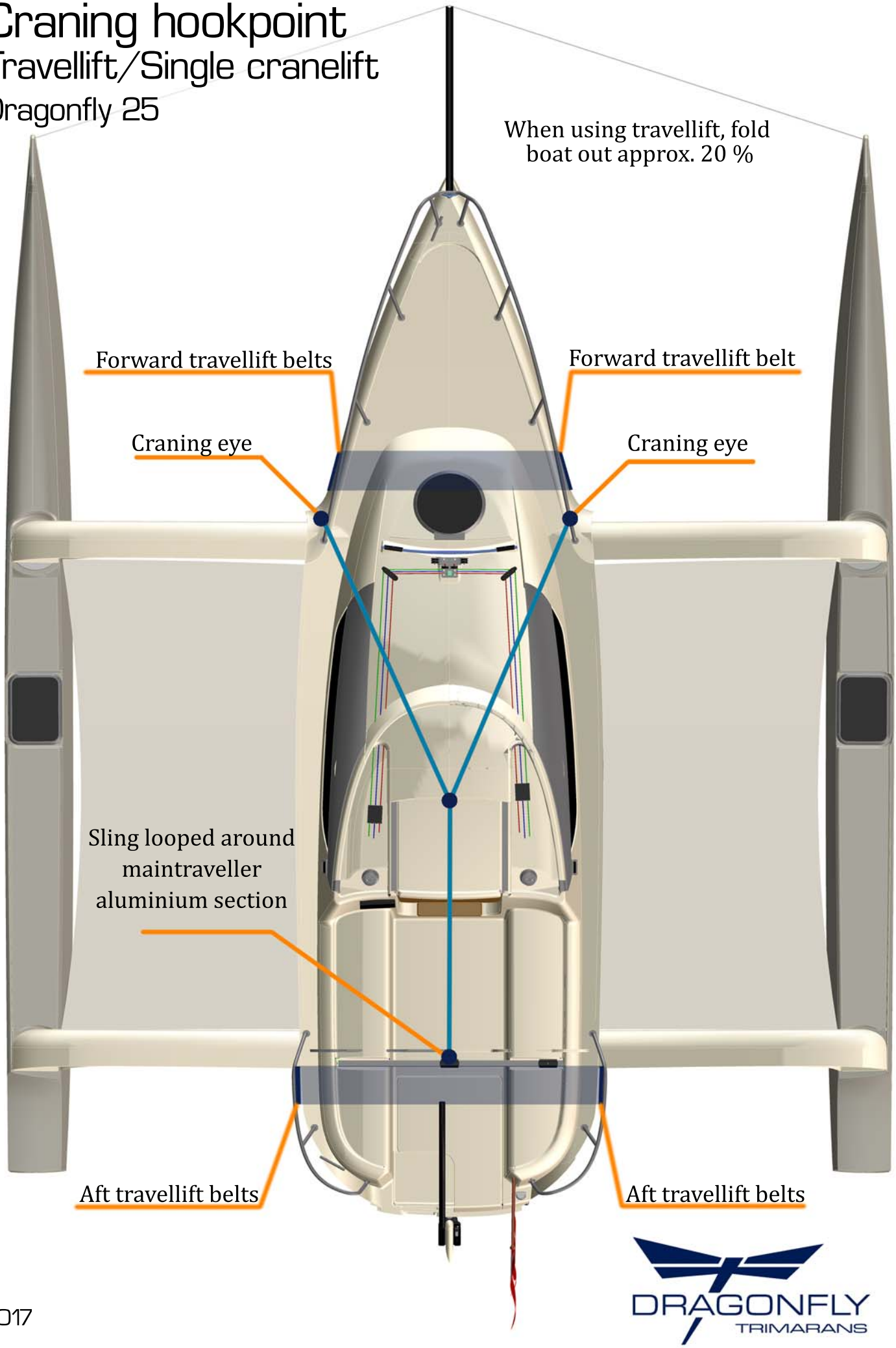
2017

DRAGONFLY TRIMARANS

Craning hookpoint

Travellift/Single cranelift

Dragonfly 25



2017

DRAGONFLY TRIMARANS

Before you go sailing

CHECK LIST

- ✓ Check the weather forecast.
- ✓ Check drinking water for crew.
- ✓ Check fuel tank level.
- ✓ Check that the power on your batteries is adequate (12V option)
- ✓ Check engine oil on the engine.
- ✓ Check that cooling water is coming out when you have started the engine. If not, stop the engine and service it.
- ✓ Check that both the installed- and the handheld pump is working.
- ✓ Check that all equipment is stowed correctly and has been safely secured.
- ✓ Check that water stays and rigging are intact.
- ✓ Check that all hatches are closed – especially the float hatches.
- ✓ Check that there are life jackets for the entire crew onboard.

If the boat is new, please note that electronics are not calibrated when the boat leaves the yard.

BE AWARE OF THE FOLLOWING

- Always make sure that there are lifejackets and/or life preservers onboard for the whole crew – and use them!
- We strongly recommend using lifebelts as a minimum outside the cockpit when sailing or even motoring at night.

- High tension/voltage cables. Mast height above sea level is approx. 14 metres/45 feet – with no antennas. Also, when trailering or moving the boat with mast up on the trailer.

- For offshore long-distance crossings we recommend carrying a life raft in case of fire.

- For offshore long-distance sailing we recommend in main cabin a watertight flashlight and a bigger type of knife to cut lines.

- Take notice that the boat is not standardly equipped with a compass for navigation.

- Also make/prepare a watertight bag with a bit of food, handheld VHF, and necessary flares in case of a capsize.

- In case of capsizing and you are inside the boat, only dive out if you have a knife with you to cut lines if you get caught in lines.

- By sailing long-distance, make sure that all on board are aware of the above-mentioned procedures.

- For long distance sailing, make sure to have up-to-date flares and other safety devices, like EPIRB etc.

- We strongly recommend storing flares, knife, flashlight, EPIRB/mobile/handheld VHF, and a bit of water in the emergency compartment, which is accessible on the starboard side of the main hull, outside just behind the rear/aft crossbeam (when capsized port side).

PERSONAL SAFETY ON TRAMPOLINES

WARNING – RISK OF SLIPPING AND FALLING

The trampolines may become slippery when wet. Always exercise caution when standing, walking or moving across the trampolines.

- Wear suitable footwear with soft, non-slip soles. Be aware that the trampoline surface may also be slippery when barefoot.
- Always keep the trampolines properly tensioned. A well-tensioned trampoline provides a flatter and more stable surface and reduces the risk of slipping or losing balance.
- Do not walk or remain on the trampolines when they are wet.
- When sailing, exercise particular caution when moving on the trampolines.
- Do not walk, stand or remain on the leeward trampoline and/or leeward float when sailing in breezy or stronger conditions above 8 knots true wind speed.
- Although the windward trampoline generally provides a more stable surface when the boat is heeling, it may still be slippery and must be used with caution.
- We recommend staying on the main hull in strong wind conditions.
- Always maintain secure footing and use appropriate handholds when moving around the boat.

Use of the trampolines is at your own risk. Quorning Boats accept no liability for any resulting injury, loss or damage.

GENERAL RECOMMENDATIONS

If this is your first multihull we strongly recommend before “taking command” of the boat, to get some training in controlling the boat while sailing as well as powering (manoeuvring) to ensure your safety and comfort. Your dealer will give you this basic information. We strongly advise when receiving the boat to get to

know the boat well first under easy and calm conditions, especially also manoeuvring the boat under power, try this out in open water first using a fender or similar and manoeuvre the boat around this floating object, get to learn how the boat turns, stops and how it manoeuvres in reverse etc. This is a very important exercise. This boat is not more difficult to handle than a conventional yacht and many times easier, but it behaves differently than conventional yachts.

IMPORTANT – When the boat is folded, the boat and propeller is lifted approx. 7 cm higher, and the propeller has therefore less effect. Test this well under controlled conditions, so you really get comfortable with this. The 6 Hp engine can only motor against the wind in up to max 22-24 knots of true windspeed on flat water and against waves only up to max 20 knots of wind. If you need to motor against strong wind, we recommend assisting with the jib or get a stronger engine if you often meet stronger headwinds while motoring. The boat is only CE approved for max 10 hp.

We do not recommend sailing the boat in more than 4 Beaufort or 15 knots of true wind, before you know the boat very well.

BEFORE TAKING THE BOAT OUT

- ✓ Check that all float hatches are safely closed!
- ✓ Regularly check that all the float compartments are dry.
- ✓ Make sure you have enough fuel on the engine.
- ✓ Always check the weather report before you go sailing.
- ✓ Pull down the centreboard for better manoeuvring. Without the centreboard down the boat cannot make a sharp turn and will drift much quicker.

CLASSIFICATION

The DRAGONFLY 25 series is classified according to the CE-standards in category **C** and **D**.

The DRAGONFLY 25 is designed for CE category **C**, inshore and coastal waters, large bays, estuaries, lakes, and rivers under moderate weather conditions with max 4 persons aboard, during which the wind may rise to max 6 Beaufort on the Beaufort scale = max 30 knots = 15 m/sec of true wind speed, and waves may not rise to more than 2 m significant wave height.

For CE-certification category **D**, max 6 persons are allowed on board to max wind speed of 4 Beaufort = max 20 knots = max 10 m/sec of true wind speed and waves may not rise to more than 1 m significant wave height.

The craft is classified for the CE by notified organisation (body) IMCI No 0609 under the design module AA – internal factory control and external control of buoyancy, stability, and flotation.

IMPORTANT NOTICE

- The provided wind/sail diagram must under all circumstances be respected.

- If the boat is sailed harder with more sail than recommended in our sail area diagram, Quorning Boats or your dealer cannot be held responsible for any problems or defects on the boat, nor claims to recover or repair the boat e.g., after a capsize.

- This boat is a smaller type of multihull vessel, that can and have a potential to capsize if not handled and sailed correctly, therefore we recommend getting familiar with the boat in controlled conditions and if sailing in stronger winds, always be ready to let the sheets go by always holding the sheets in your hands in stronger wind conditions.

- If the boat is stored on land with the mast up, the boat needs to be secured well to the trailer, and the mast needs to be supported sideways away from the boat to prevent strong winds to capsize both boat and trailer!

- If driving/handling the boat ashore on the trailer with the mast up, always secure the boat well and tight to the trailer, turn/rotate the mast full sideways for min windage to prevent the hole setup to flip over. Never move the boat on the trailer with the mast up in stronger winds than 15 knots of true wind speed.

- Always be aware of high voltage power cables in the air and similar when moving the boat on land with mast up.

MANOEUVRING- AND MOORING RECOMMENDATIONS

IMPORTANT SAFETY NOTICE

- Wear your lifejacket.
- In heavy weather conditions always wear the safety harness on deck
- Make sure to have functional lifejackets for the whole crew.
- When sailing in windy conditions, stay on the main hull only.
- Always have minimum 4 mooring lines in adequate dimensions (min 10 mm x 12 m) and suitable for the environment onboard.
- Always manoeuvre the boat with the engine in harbour areas – no sails up.
- Handle the boat consistent with the current and wind.
- Protect the boat with suitably sized fenders.
- Always keep the ropes unfold and home.
- Handle the boat at slow speed – in harbour 2 to 4 knots.
- It can be difficult to stop the boat downwind, especially when the boat is folded, and the propeller is closer to the water surface.

For your own safety - never try to stop the boat with your foot, hands, or a boat hook.

WHEN MOORED IN THE MARINA

- Protect the mooring ropes from chafing maybe with plastic sleeves.
- Make allowance for the tide.
- Make sure to use spring lines before you leave the boat alongside a dock.

PRECAUTION

- Be well acquainted with the boat before going sailing in more than 5 Beaufort (20 knots – 10 m/sec).
- Learn to handle the boat well under power to make safe harbour manoeuvring – note that sometimes it can be difficult to stop the boat in reverse downwind.
- Be aware that the boat may capsize in folded condition by winds exceeding 9 Beaufort (40 knots – 20 m/sec). In that case secure sideways the stability with one halyard to each side, or fold minimum one side out or even better both sides halfway out.
- We do not recommend leaving the boat folded on a swinging mooring.
- Never let the boat dry out in folded position, as the ground may be out of level.
- The boat is unsinkable. If anything should happen, always stay with the boat.
- In case of capsized position, the boat will stay afloat approx. by the middle of the sofa back cushion, if the floats are intact.

Very important: always rotate the mast fully sideways when folded.

For the Sport version, when rotating the mast fully you have to slack the one side mast controller and the mast controller on the mainsail boom – and you might have to slack the lazy-jack a bit so the mast is free to turn by pulling the one side mast controller and make sure the mainsail boom is pulled over to the same side as the backend of mast is also rotated to.

The Touring version also have to rotate the mast when moored in the harbour, and or when the boat has the mast up on the trailer, the Touring version do not have this mast controller to turn the mast, so here you have to use the special extra line/cam cleat system that you will find in the boat and install this on the one side forward lifting pad eye and up to the stainless mast tiller and force the mast to one side, slack the mast control line on the mainsail boom and also the lazy-jack line on the mainsail boom so you can turn the mast almost all over to one side.

Always rotate the mast fully to one side when the boat is in folded position in the water or on the trailer with mast up.

SAILING BY AUTOPILOT

IMPORTANT – Depending on wind and wave conditions, using autopilot in winds exceeding 7 m/sec (15 knots) true wind is difficult and not recommendable.

Autopilot can be used in stronger winds, but only when sails are reefed even more conservatively than the sail to wind diagram, we recommend.

Quorning Boats cannot be held responsible for any damages or problems caused by sailing using autopilot, as this at times can be unreliable.

When using autopilot, keep a good look out, as this boat moves faster than other conventional yachts – not all other yachts are familiar with how fast these boats can sail.

Make sure that your autopilot has been calibrated before use.
The autopilot is not calibrated neither from Quorning Boats, nor from the shop, where you have bought it.

INFORMATION ON THE RIGGING

- Always check the rigging, halyards, reefing lines, water stays, rudder downhaul and Swing-Wing system before taking the boat out to sea.
- Every 6 months or minimum once a year shorten the main halyard and reefing lines approx. 25 cm. After some years, you can turn them around or replace the lines.

- We recommend changing the water stays after max 10 years and/or by max 15.000 nm of sailing – use only same products and quality when changing. The water stays are made in 8 mm dyeform cable ss quality.

- Side stays and forestays must be changed after max 10 years and not later than 10.000 nm of sailing.

- Standing rigging on the mast (diamond stays) must be changed after max 15 years.

- Never use shackles or similar on the boatsman chair when hoisting people up the mast.

- **Never** climb the rigging when the boat is in folded position!!!!

- Tension on the diamond stays rigging, please see rig diagram.

- Never change the tension on the diamond stays without checking tension with a tension meter according to rig tension diagram, changing the rig tension can cause the mast to fail and break.

- Never drill holes in the carbon mast section without asking your dealer or Quorning Boats beforehand.

- Never wrap the carbon mast in any plastic, as this can cause the paint to bubble up. If wrapping is needed, use only breathable textile materials.

- If rigging and diamonds are taken apart for the winter, mark all parts and the exact position of the turnbuckles to get the exact same tension again.

- By releasing tension on the diamond cables, this will affect the stiffness/safety of the mast and can cause the mast to collapse.

Please take note that on the Dragonfly 25 Touring version, if you want to sail with the Code-0 you simply use the same halyard as the spinnaker. But the spinnaker halyard must be a strong Dyneema core line to carry the loads from the Code-0.

If the Code-0 is ordered from when the boat was new, the spinnaker/Code-0 halyard will be installed with a Dyneema core line. If the boat is not ordered with a Code-0 from new, you must check that the halyard is exchanged. If you are in doubt - please contact your local dealer or Quorning Boats for this.

IMPORTANT
when stepping the mast – check and be careful that the forestay and the side stays cables does not get bent, if these get bent – you need to change the bent stays immediately.

Operating the Swing Wing system

The Swing-Wing system must not be operated in winds exceeding 6 m/s, 12 knots or 3 Beaufort true wind speed in open sea and -areas and max. wave height of 0.2 m. Also, look out for waves coming from powerboats.

The boat will stay stable in a slip (moored in harbour), as long as waves are max. 0.2 m and wind speeds from sideway do not exceed 20 m/s or 40 knots of true wind speed with mast fully turned. If higher winds are expected either make sure that the boat faces into the wind or downwind, or secure the mast sideways, or in worst case (like heavy storm or hurricane warning) take the mast down and move the boat to a place, where it can be folded out or hauled/lifted out of the water and remember to secure the boat.

When the boat is in the water, the boat must not be folded completely, the floats must be clear of the main hull, as it provides more stability.

A fully folded boat is for transport only.

IMPORTANT

- **Never** keep the boat folded on mooring or at anchor.
- **Never** let the boat dry out in folded position.
- **Never** hoist any person up into the rigging when folded.
- **Never** set sails when folded.
- **Never** operate the Swing-Wing system with hoisted sails
- **Always** stow and secure the sails safely before you start operating the Swing-Wing system.
- **Always** point the boat into the wind when operating the Swing-Wing system, and, or even better point the boat downwind in stronger winds.

Only use the Swing-Wing system in harbours and wave protected areas. Operating the Swing-Wing system elsewhere is at owner's own risk.

STEP-BY-STEP FOLDING PROCEDURE

FOLD IN PROCEDURE

1. Make sure that the bowsprit is pulled fully into the centre hull.

2. Release and unhook the Wichard safety line on the aft/rear wing by the float.

3. Prepare the endless Swing-Wing line by the double sheave block in the cockpit. The upper line is for folding out and the lower line is for folding in.

4. Release the back stays slowly - only one side (hold the backstay line tight in your hand when releasing, as you may burn your hands due to the at sometimes high tension).

5. Slack other lines like spinnaker sheets, etc.

6. Open the double jammer in the locker under the cockpit seat (both handles, these are fixed together) - the Swing-Wing system is now open.

7. Use the winch with a winch handle on the cabin top for the fold in line or pull it by hand if possible.

8. Fold in the float, while making sure that the fold out line runs easily through without being twisted or jammed, as the Swing-Wing line is endless.

9. Lock the double jammer again to secure the Swing Wing lines and float in position.

10. Repeat step 2 – 9 on the other side.

11. Adjust the backstay on both sides by setting it hand tight.

12. Turn the mast as much as you can – approx. 70 to 80 degrees to minimize sideway windage and to make the boat more stable in half winds.

13. Easily pull the side stays again to remove the remaining slack.

Notice: The trampolines automatically take care of themselves. If the boat stays folded in the water – only pull the float in so the "inside" of the float hull side is approx. aligned with the main hull (trampoline track). This is to have enough stability.

FOLD OUT PROCEDURE

To fold out the boat, the procedure is the same, just reverse:

1. Release the mast rotation.

2. Prepare the endless Swing-Wing line by the double sheave block in the cockpit.

3. Open the double jammer on one side first.

4. Pull the float out while making sure that other lines are not jammed between the wings and the main hull. Normally you can pull most by hand and at the end use the winch to tighten the trampoline well.

5. Lock the double jammer again.

6. Pull the slack on the backstay before folding the other side out.

7. Attach and lock the Wichard safety line on the aft/rear wing by the float. If forgotten, the boat can collapse while sailing, if the Swing-Wing system for some reason get open by the crew by a mistake or fails.

8. Repeat step 2 – 7 on the other side.

No persons are allowed on the trampolines, wings or floats while operating the Swing-Wing system!

In case the boat does not fold or unfold easily, do not force it with power on the winch – some line has probably been twisted or jammed, so please check the system.

Make sure there is no sand or dirt on the sliding wing areas on the floats. If you e.g., just launched or berthed, you should rinse with a bucket of water over each saddle to clean the surfaces. Should the system after some time start squeaking, then use Teflon type spray or similar on the sliding surfaces.

Notice: The boat is more instable when folded. Do not make sharp turns when motoring in folded position, as the boat will heel more over to one side. When motoring in folded position, avoid sideway waves. Only motor in protected areas and beware of power boats that can make bigger waves than 20 cm high. In protected areas, motor around in max. 20 knots – 10 m/sec. of true wind.

Notice: Regularly check that the Swing-Wing lines are ok. Normally, the Swing-Wing lines should be replaced after 3 to 5 years – depending on the use of the boat.

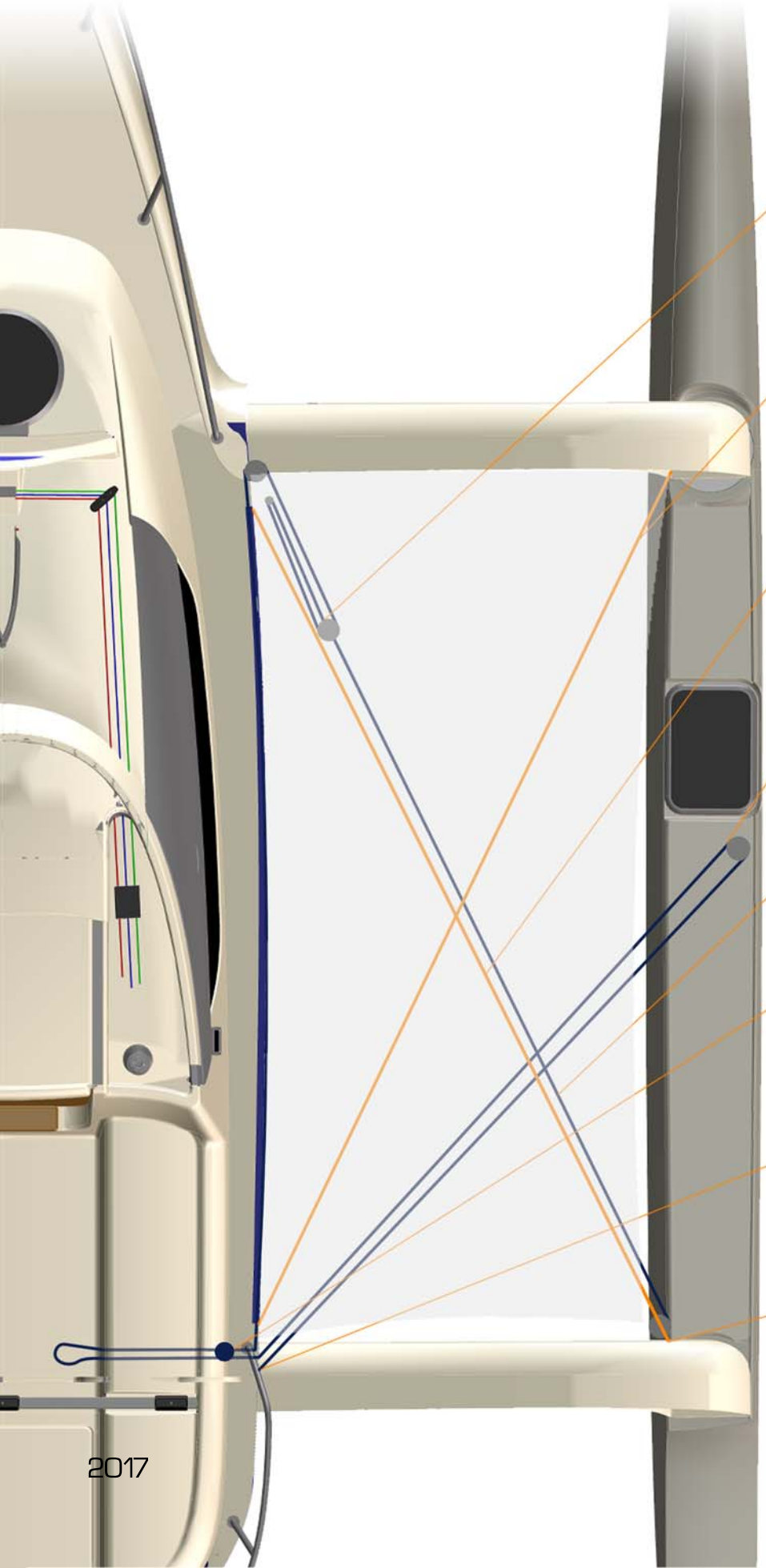
When folding in for trailering, pull up the trampolines so these gets less dirty on the road.

When folding out on dry land, you should **never** use the folding system only, as the floats are missing their buoyancy. Instead, you must push the floats approx. halfway out by hand, before you winch the remaining out with the Swing-Wing system.

When folding in on dry land, it is **very important** to hold the "fold-out" line in your hand to control that the floats do not fold in against the main hull by itself. This can damage the boat, and people around the boat can be injured.

Swingwing-system

Dragonfly 25



End of line

End tied to block

Wing stop cable

Prevents folding out too far

Safety cable

Prevents folding in while sailing

Swingwing lines

Fold in - 7 mm Dynema, 21,5 meter endless

Swingwing lines

Fold out - 7 mm Dynema, same as fold in

Rope clutches

Dubble rope clutch

End of line

Line tied to hull

Snap shackle

Locks safety cable

DRAGONFLY TRIMARANS

2017

Launch and assembly information

STEPPING THE MAST

Quorning Boats only recommend stepping the mast by yourself when using blocks, lines and special supports that are optional equipment supplied by Quorning Boats. If a crane is available, we recommend using this.

The mast can be stepped on the boat, but at owner's responsibility using this handbook as a guideline to raise and lower the mast.

The mast can be set in folded position on the trailer and in calm water.

Never set the mast in stronger wind speed than max 10 m/s or 20 knots of true windspeed and if the wind is stronger than 7 m/s or 15 knots wind, the boat must either face into the wind or downwind (not half wind). This is always important, regardless of whether the boat is on the trailer or in the water when you set the mast.

FORESTAY AND SIDE STAYS ETC.

Forestay and side stays are mounted in the same fitting on the forward side of the mast in the 10 mm (drop shape) quick link that must be secured with a "key" no 17. Please install in this way, side stay – forestay (in centre) – and side stay again. When hoisting the mast, check these stay´s does not get jammed or somehow twisted, if the forestay does not fit to the forestay chain plate in the foredeck – most likely the stays are or can be twisted up in the quick link fitting.

Fix the side stays on the outside fitting (chain plate) on each float, just behind the hatch on the centre deck on the float. For the Sport version, we in the first year recommend installing a 6mm quick link on the port side stay at the float deck fitting to make the side stay a bit longer to easy get the forestay fitted as the side stays has a tight fit and for the Touring version, we also install this 6 mm quick link fitting, but on the starboard side float. This is important. Normally after one season sailing the side stays gets a bit longer so later it is not necessary to use this quick link.

Install maybe Windex or other items you may have in the masthead like also wind wane before you move the mast back on the boat. Also pull all the halyards down before you roll the mast backwards.

Prepare the mast raising pivot fitting at the mast base, with the two bolts in the mast base (see photo). Release the transport spanners on the mast and roll the mast backwards, one person can easily do this, but please also keep the mast in balance sideways. Then you sit on top of the mast on fix the mast into the mast base pivot fitting, by securing the mast with the 10-mm bolt and the mast is now in position.

In the starboard side deck, you unscrew the stainless cap and install the small, short stainless mast support tube with the two rings on top and when the support tube is fully screwed into the deck fitting make sure the two rings on top is facing fore and aft (like wheels on a car).

Now install the longer aluminium mast support tube on the stainless eyebolt just under the starboard side spreader and the other end on the aft steel ring in the stainless support tube on the starboard side deck.

On the front lower end on the mast, you will see a smaller u-shape stainless fitting on which you install the mainsail boom front end with the 8mm bolt in the u-shape fitting, across the boom fitting. The boom can now rest on the front of the boat.

Prepare the mast raising block tackle system (an 8-mm line with a 2:1 block system) and fix it in the forward eye on the stainless-steel fitting on bowsprit (tackline position), when it is in retracted position.



Install the single block with becket on the eye of the bowsprit (code-0 eye) and the single block on the mainsheet strap on the mainsail boom. Now install the spinnaker halyard in the shackle for the mainsail outhaul line. Next step is to install the smaller spinnaker pole on the folding pad eye on the side of the mainsail boom – and the other end of the smaller aluminium pole on to the forward stainless ring on the side deck support pole. The mainsail boom will now not be in the centre and point to the port side, which is normal. It is very important to check that the aluminium support poles are attached correctly and not only halfway, if these are not attached correctly, this can cause the mast to fall while the mast is being raised. The line in the 2:1 mast raising pully system is lead back to the starboard side cabin top winch and best through one of the halyard stoppers on the deck.

Now turn the mainsail boom up in upright position and fix it with the spinnaker halyard and the 2:1 mast raising line. The spinnaker halyard you simply tie to the turnbuckle on the mast for the spreader cable and make sure the top of the boom is pointing about 10 degrees toward the top of the mast (this is to ensure the mast is not pointing down into the foredeck or pulpit when mast is pulled fully up).

Now you can start pulling the mast up, just pull slow on the winch and the mast will come up, please all the time check that the side stays do not get twisted or jammed e.g., around the floats etc. Please also take note that the mast gets easier to pull up as it comes up higher and at the and you can almost pull it by hand only so pull slowly at the end just before the mast is fully up. When the forestay is still about 1 meter too short, please check the stainless mast pin in the foot of the mast is moving correctly into the stainless-steel mast base fitting and from now just pull the mast up gentle and keep checking the mast pin finds it correct into the mast base fitting, normally, this will work automatically – but it must be checked. Again, all the time check the side stays are ok on the boat but also not least up on the mast where these are fixed to the mast – here the side stays can also make trouble and twist in the bigger quick link fitting.

Now you can fix the forestay to the boat or Furler drum (sometimes clients prefer having the Furler drum on the forestay and other´s leave the Furler drum on the boat´s forestay fitting). When setting the mast, the first couple of times the side stays can be tight and cause the forestay to be 1 or 2 cm too short – for this we recommend to just install a smaller shackle on the portside side stay chain plate

on the float and after setting the mast before you go sailing – you remove this shackle again (when the float is folded out, the side stay is slack again).

When forestay is well secured and fixed with the clevis pin, you can now remove all the mast support tubes, the mast base pivot fitting and you can swing the mainsail boom around and fix this on the normal position on the mast (leave the spinnaker halyard on for this as this will still hold the boom up for you).

SETTING THE JIB

Before hoisting the jib, make sure to roll some furling line on the furling drum. Turn the furling drum clockwise until you have one metre (approx. three feet) line left in the cockpit. In this way you can furl the jib at once when it is hoisted. Now you open the zip in the luff of the jib, you fix the Dyneema halyard on top of the jib and make sure the halyard is inside the luff of the jib and you put the luff of the jib around the forestay and the halyard, start to zip the luff of the jib and now you pull up the jib and zip at the same time. Make sure the three battens are mounted in the leach of the sail. When the jib is pulled all the way up, take off the extra line in the halyard and fix the eye in the jib halyard to the smaller snap shackle that is fixed on the furling drum itself. Tie down the luff of the jib with a smaller line and around the forestay and install the 2:1 jib sheet and furl up the jib.

MOUNTING THE MAINSAIL

The sail is placed on the boom between the lazy-jacks and start from the top of the sail. The boat must be up into the wind. For the Sport version mount the headboard (the top of the sail) into the top double batten car on the mast. Then hoist the sail to the next batten car, fit the next batten car etc.

IMPORTANT

The stainless-steel link/thread must be installed so the nut is on the topside of the batten car. Then there are also a few intermediate cars that are simply fitted just with a plastic pin. The mainsail in the back is fitted with a supplied velcro textile band around the mainsail boom and the outhaul on the boom is just the smaller line that is fitted in backend of the mainsail boom and is only tied 4 or 5 times around the mainsail clew and the shackle on the boom, so you have a curve on the foot of the mainsail of approx. 5 cm (50 mm).

For the Touring version, just take the locking screw just above the boom fitting in the mast grove away and push the batten cars you see attached to the mainsail into the mast track (grove) on the aluminium mast.

Remember to fit the two reefing lines in the sail. Important is that the reefing lines in the backend of the mainsail boom – is that the reefing lines are simply tied around the boom in front (forward) of the mainsail clew velcro to give the right position and line-up for the reefing line when active.

By taking the mainsail off again just leave the double batten car on the mast on both the Touring- and Sport version.

For the Sport version never take off the double top batten car or nor neither the batten cars, as all the balls will fall out.

REEFING LINE - NOTICE

The reefing line in the back end of the boom comes out from a sheave and through the stainless-steel ring in the back of the mainsail and is tied with a bolden knot on the front side of the mainsail clew webbing, so the reefing line does not slide back out. It is also easier to fit the mainsail cover when the sail is up.

CUNNINGHAM

For Cunningham we use the reef 2 line as a Cunningham by pulling the reef 2 line through the luff eye in the mainsail and fix it into the clam cleat on the port lower side on the mast.

Only use chock cord type sail ties to roll up the mainsail when reefed.

Dragonfly 25 Sport





















Sail and trim tips

SAIL DIAGRAM – DRAGONFLY 25 SPORT

DIAGRAM OF SAIL AREA TO TRUE WIND SPEED:

m/sec.	Knots	Beaufort	Upwind and beam reach
0 – 4	0 – 8	0 – 2	Full main + full jib or code 0
0 – 8	0 – 16	0 – 4	Full main + full jib
9 – 12	18 – 25	5	Main 1 reef + full jib
13 – 16	25 – 32	6 – 7	Main 2 reefs + full jib

Beware that the mainsail has only two standard reef positions.

M/sec.	Knots	Beaufort	Downwind (not beam reach)
0 - 8	0 - 16	0 – 4+	Full main + full jib or gennaker or code-o
9 - 12	18 - 24	5	Full main + full jib
13 - 14	25 - 28	6	Main 1 reef + full jib
15 - 17	29-34	7	Main 2 reefs + no jib or only jib
			For code-o please see the following text

For an inexperienced crew we do not recommend sailing in more wind than max 15 knots or max 4 Beaufort. For people with normal sailing experience, but still with no multihull experience, we only recommend sailing in max 5 Beaufort (20 knots). For experienced sailors with good multihull experience, we recommend sailing in max 6 Beaufort (30 knots). For sailing in more than 6 Beaufort (30 knots true wind), this takes really good experience and special expertise.

We must strongly advise respecting this sail/wind diagram for safe handling and sailing. The boat can handle more by highly experienced sailors, but this is totally at owner's own risk.

IMPORTANT - Beware that by sailing from 8 m/sec (16 knots true wind and up, attention to sailing is really required. If pushing the boat hard or sailing in areas with gusting wind, the sheets must always be held in hand for quick release. Especially, beam reach and downwind sailing require full attention. At beam reach or deeper downwind sailing, if a critical situation appears, always bear off the wind very quickly, this is very efficient to depower the boat.

IMPORTANT - If this diagram is not respected Quorning Boats aps and dealers cannot be held responsible for boat, crew and/or gear. Beware that the boat can capsize if not handled correctly.

AUTOPILOT SAILING

When sailing under Autopilot, you must be much more conservative in how much sail you have set compared to windspeed – here you also must take wave conditions into your judgement – but for sure be much more conservative while sailing with Autopilot. Always be very careful and watch out well for other boats.

SAILING AND TRIMMING GUIDE

IMPORTANT - It is of great importance to keep your sheets and halyards tidy when sailing because all lines come to the cockpit. This is an important safety factor and improves the joy of sailing.

MAST TRIMMING

The mast is always in trim from the yard, but generally the mast may bend approx. 5 to max 6 cm over the aft edge in full length. When holding a line to the aft end of the mast ends, the distance to the mast should be approx. 5 to max 6 cm = 2" between jib halyard sheave box and mast base.

MAST ROTATING SYSTEM – TOURING- AND SPORT VERSION

Above 8 knots of wind, the mast turns by itself, and the mast rotation is controlled/adjusted by the preventer in the centre which you adjust on the boom.

- Up wind you should have approx. 35 degrees turn.
- Reaching you should have approx. 45 degrees turn.
- Downwind you should have approx. 80 degrees turn.

MAST ROTATING SYSTEM – SPORT VERSION

The two spring-loaded clams are only to be used in two situations:

1. In light wind conditions to force the mast to rotate, since there in light conditions is not enough wind pressure to rotate the mast by itself.
2. To rotate the mast 90 degrees before leaving the boat. For the Touring version there has been delivered 1:2 clam cleat pully which is attached to the mast rudder and one of the lifting pad eyes above the forward wing.

TRIMMING THE JIB

The luff tension is to be adjusted by the jib halyard. In light winds of course only little tension to avoid wrinkles along the luff. In more wind the luff needs more tension, but only to keep the luff tight, more is not necessary.

In the clew of the jib, you have different options for position of the block for the sheet. The yard recommends having the sheeting block in second position from the top. Otherwise feel free to experiment with the different sheeting positions on the clew.

In stronger wind conditions, the jib on the Dragonfly 25 is not designed with reefing points, and it is at own risk if you decide to make a reef in the jib e.g. furled halfway in to decrease sailing area.

REEFING THE MAINSAIL

Step-by-step reefing procedure:

1. Set the lazy jack (topping lift) on the boom.

2. Sail upwind course only by the genoa.

3. Ease off the main sheet completely.

4. Pull the reef 1 line, which is marked on the easy lock, when the main halyard is loosened.

5. The reef 1 line will then automatically reef the luff first and the leach – both at the same time.

Above step-by-step procedure also applies for reef 2 and the reverse when reefing out. After each reef, the sail ought to be "packed" with chock cords for less wind resistance.

It is recommended to mark on the halyard where "reef 1" and "reef 2" must be locked on the easy lock. The halyard is loosened, and the reef line is pulled hard so that the reefing blocks by the luff are approx. 20 cm = 8" above the boom.

- Check that the reefing block at the luff is not chafing the sail. Normally, it does not, but sometimes you must go up and "arrange" the sail at the luff.

For long distance sailing, we recommend preparing a reefing line from the third optional reef and down to the second reef, so you can control the third reef easier by hand. When using the third reef, the conditions are of course not the easiest. Third reef position is not standard.

- Avoid reefing downwind, as the mainsail can be blown past the side stays and break the battens. Of course, if there is no other way out, you can do it.

MAINSAIL

The mainsail needs much more trimming than a monohull, especially on the main sheet as the boat has many speed potentials within few wind forces. This calls for concentrated trimming if you want maximum speed and fun with your boat.
Generally, the leach seen from the boom end to the mast top must be almost straight: the roach must under no circumstances fall out or twist, unless the boat is pressed too hard. Trimming the main in a breeze takes great effort – use the preventer/boomvang to trim the mainsail.

Always pack and secure the mainsail to the boom before entering harbour to prevent it from lifting and causing unnecessary problems.

TACKING

When tacking the boat, it sometimes helps to ease off the main sheet a little (especially in strong winds and waves). If you stall the boat after a tack, it also helps to ease the main sail until the boat builds up speed again. If the boat starts to go backwards after a tack, then immediately turn the tiller reverse to lee, this helps the bow to bear off the wind and get wind into the sails again. Do not turn the rudder to normal again until the boat starts moving forward again.

MAINSAIL FOOT

- is trimmed normally. Light wind when tacking, light curve. Downwind, big curve. Medium air tacking, flat bottom. And downwind, large curve. Hard wind tacking, flat bottom, and downwind also flat bottom. But – honestly, we normally never trim the foot – main sheet and preventer. Only – normal keep a curve of 5-6 cm on the foot.

MAINSAIL LUFF TENSION

- In light wind you set the mainsail luff only to avoid "wrinkles" in the sail, which has the effect that you easier can help the mainsail when tacking so that the battens are turned right for the new tack. Luff tension also gives more curve and deeper shape in the mainsail.

- In medium air the main halyard is only tightened so much that the wrinkles in the sail are gone and the luff straight.

- In heavy wind the main halyard is tightened hard to flatten the sail at the same time you pull hard in the main sheet.

- If, for example, you are anchoring or beaching for a short time with the mainsail set, then loosen the luff tension in the sail to quieten the boat.

GENNAKER SAILING

Sailing with the gennaker is a "third" dimension in sailing which a lot of people dread caused by bad experiences. On a trimaran gennaker sailing is fun and a comfortable adventure. A trimaran is not heeling from one side to the other (rolling), and the gennaker pole is non-existent. With a little practice, you can handle the gennaker single-handed but always handle it with respect!! If you respect the gennaker and use it with reason, it is great – also when cruising.

If the gennaker has been damp or wet from sailing, it should be dried before packing. Or, if it is not too wet, leave it in the cabin spread out to dry.

SETTING THE GENNAKER

The bowsprit must be folded out in position first. You can best set the gennaker from the lee trampoline netting behind the mainsail. Mount sheets, the halyard, and the tack line. Make sure that the lines run correctly, that the gennaker halyard for example is not twisted around the forestay or the diamond spreader. The sheet runs just around the forestay.

Hoist the gennaker up in the spinnaker sock – set the sheet in leeward side of the winches. The best is to use the genoa winch on the deck, pull the tack line tight, then pull up the spinnaker sock with the endless line, make sure you are sailing downwind. Then the spinnaker sock is up, you can tie the line, that you have pulled up, on the stainless handrail on the cabin top. Then pull out the tack line, so the tack of the gennaker is pulled tight to the bowsprit. Now you can luff up a bit closer to the wind, and the gennaker will fill up.

CAUTION - If you feel any resistance hoisting it or sheeting it, stop pulling immediately. It does not take much to rip it apart if it is stuck! When the gennaker is full, roll in the genoa. It is very important that your gennaker fills first or you will find yourself rolling it into the genoa. It never pays sailing with both genoa and gennaker.

Then roll up the furling genoa, but not before the gennaker is fully set.

VERY IMPORTANT - If a wind gust comes, then bear off the wind quickly, then you quickly depower the boat.

JIBING WITH GENNAKER

Bear off to downwind course without jibing the mainsail. Then pull over to gennaker quickly – make sure the gennaker sheet that you just released, is fully free to go all the way. Pull the gennaker to windward and when the gennaker is 2 to 3 metres to windward past the forestay, then you jibe the mainsail over. **Never** jibe the mainsail before the gennaker.

TAKING DOWN THE GENNAKER

Never sail the gennaker without the mainsail!!!!!

Bear off to a downwind course, pull the sheet in tight, slacken the tack line completely off. Spinnaker will fly back behind the mainsail, where there is a vacuum and even in stronger winds, the spinnaker will find the wind "shadow" behind the mainsail. Now you can easily pull down the spinnaker sock. Make sure to stow away the spinnaker and all lines before you furl out the genoa again and before you change up into a higher course closer to the wind.

CODE-0

The code-0 furling system (tack) must not be installed at the end of the bowsprit using the tack line!!! The code-0 must only be installed on the steel eye on the upper side of the bowsprit on the same stainless fitting that supports the bowsprit sideways and down to the bow.

This means you must install the code-0 sail and Furler before you fold out the bowsprit.

- Always go downwind when furling the sail in.
- Never use the code-0 upwind in more than max. 8 knots of true wind.
- Always check that the Code-0 is fully furled and remember to lock the furling line, especially in strong winds or when leaving the boat, to prevent damage.

IMPORTANT – Remember to check that a swivel have been mounted between the halyard and the Code-0 before use.

ANCHORING

Use chain (8 mm diameter) or 12-14 mm rope with internal lead up front by the anchor of minimum 5 meters and thereafter flexible anchor line.

Total length of anchor line should be minimum 5 times the depth – more is better!

PRECAUTION - Before anchoring check the depth of water, current power and nature of the seabed and stones.

By beaching or drying out the boat beware of rocks and stones. Only beach the boat on sand.

When anchoring, secure the anchor line to the cleats or even better make a bridle, which you can fasten on the stainless pad eye on the front of each forward wing. Using a bridle prevents the boat from fishtailing.

- Always anchor in protected areas!!
- Note that multihulls have more windage than conventional yachts.
- By anchoring off the stern, the engine should be stopped.

We use minimum 10 kgs steel anchor – best type is Delta, Spade A-80 aluminium or FX16 Fortress anchor. Many other types can be used as well but make sure that you have the right anchor gear for your local purpose.

Stow and secure the anchor properly when sailing; in heavy seas, an unsecured anchor may puncture the hull.

The skipper is responsible for ensuring that the additional anchor safety locking system is engaged while sailing.

The anchor windlass is not designed to hold the boat at anchor. Always secure the anchor line to the deck mooring cleats. When using chain, secure it with a chain hook and line to a deck mooring cleat.

Centreboard and kick-up system

The centre board has been constructed in such a way that even the slightest touch of ground makes it kick up automatically via the release cleat on the cabin top. To remount the release cleat, just push down the clam cleat hard again.

The automatic quick release cleat can be fine adjusted on the Allan-screw at the aft end – if it maybe releases too soon or too late.

Up- and downhaul you can adjust from the cockpit cabin top. Just like you can trim a dinghy on the centreboard, you can also profitably do that on the Dragonfly. Generally, we always recommend placing the centreboard all the way down upwind. On a reach halfway down and sailing downwind all up.

Do remember though, lowering the centreboard before tacking again. Under sail pressure you cannot possibly adjust the centreboard – you will have to either luff into the wind or bear off to dead downwind to adjust the centreboard. Downwind you will seldom find adjusting problems.

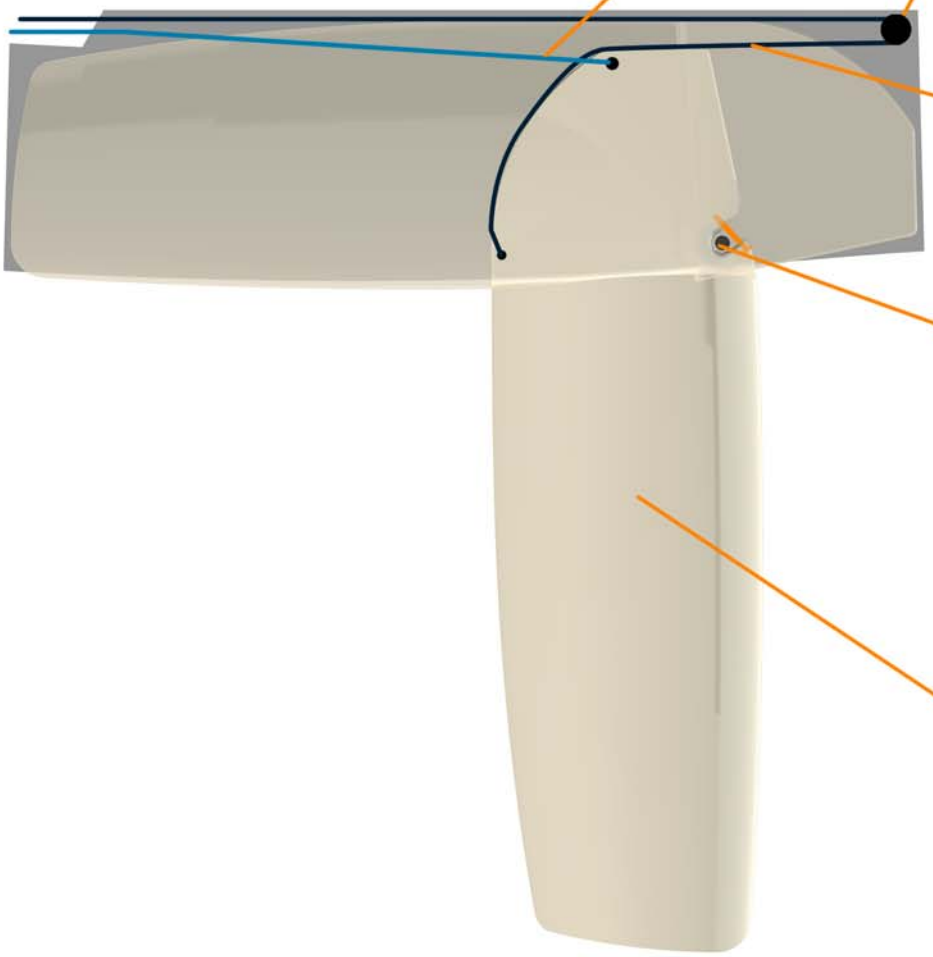
IMPORTANT - The lifting centreboard line has a knot adjusted from the yard, which is the stop knot – preventing the board from coming too far down. This knot must not be moved and/or changed.

If the centreboard comes too far down, the centreboard can break up the centreboard box and damage the boat seriously – and the boat will get flooded.

Of course, if you know that you are going to a beach, we must recommend releasing the centreboard downhaul line, because when hitting the ground in slow speed, the automatic cleat will not release as quickly, and this will put extra unnecessary strain onto this system.

Centerboard-system

Dragonfly 25



Board down line

6 mm dynema - 9 meter long

Pulley

Turning block

Board up line

6 mm dynema - 9 meter long

Pivot point

Locked around the pivot point by a locking bolt. 100 mm Allen screw 12 mm. Can be removed from underneath when board is up

Endstop

When board is down a knot on “board up line” prevent the board from going to far down. Very important

2017

DRAGONFLY TRIMARANS

Rudder system

The rudder also has a kick-up system, so by hitting the ground the rudder will kick up and become loose. The rudder will only come loose to avoid bigger damages. If you are sailing on shallow waters, the rudder blade can be lifted to higher positions. The higher position the rudder blade is in the less you can push the boat, because the rudder blade will start to cavitate earlier as the main hull comes more out of the water. For full control keep the rudder blade in the deepest position as possible.

IMPORTANT – Be sure that the rudder is always fully down in position, otherwise the rudder gets hard weather helm and hard to steer.

- Regularly check the downhaul line for twists, jams, or damages. If you can see any sign of damage on the 6 mm line, this must be replaced immediately. The rudder is not designed to be used while sailing in the described positions above. But no matter the position, please make sure that the rudder is pulled fully into the rudder fitting. If the rudder is not in the correct position the rudder system can risk being bended and be loose or even break off.

- To pull up the rudder up, release the downhaul line, push the rudder blade backwards and force it out of position. Hereafter you are able to lift to one needed position. Once it is placed in the wished position pull full tension on the downhaul line again. Here it is allowed to GENTLY use the winch on the cabin top to pull tension.

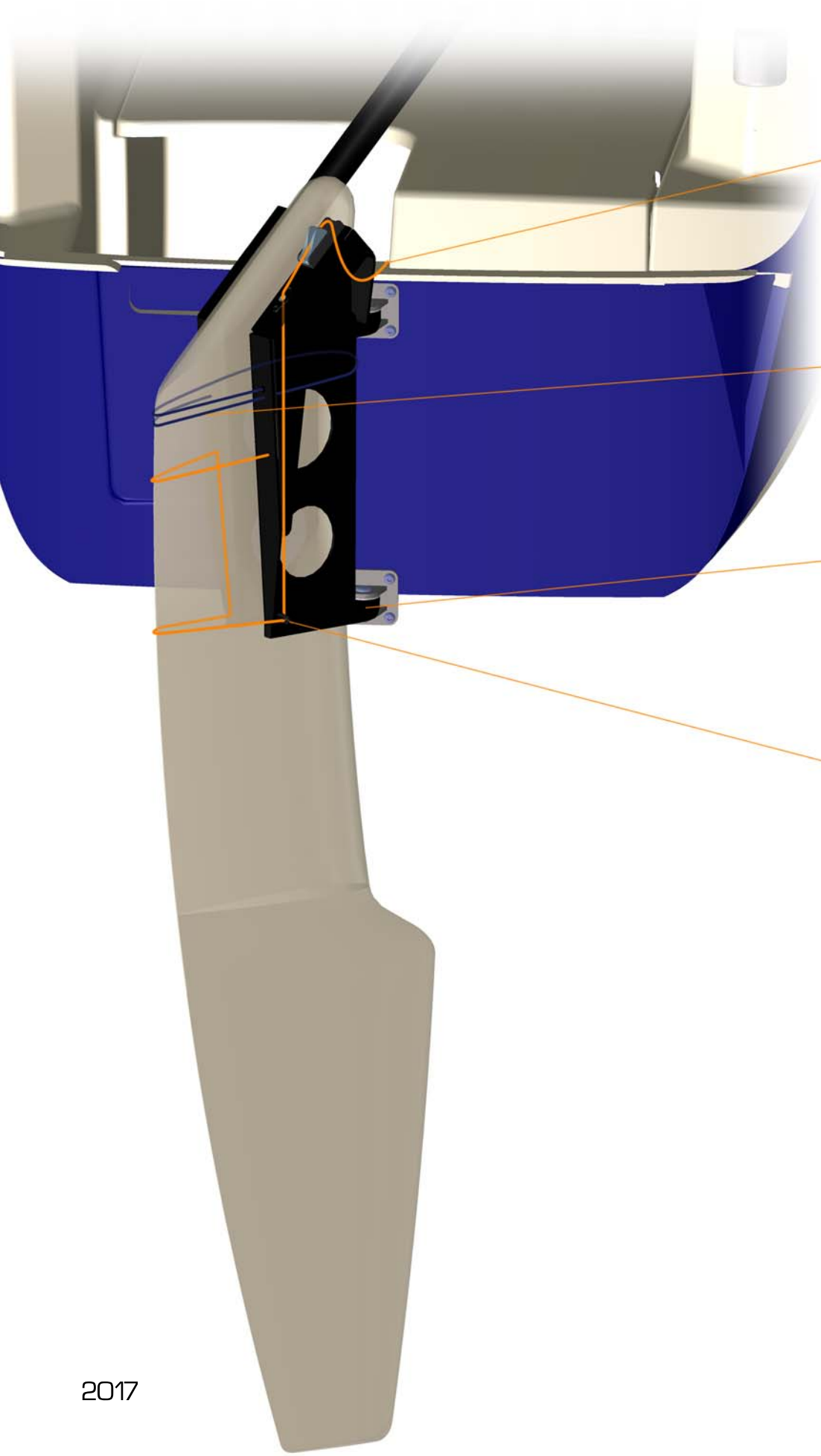
- Regularly check the bolt where the rudder is bolted to the rudder head (key no 19).

- Always make sure that the downhaul line is always ready to release without twists, jams, or knots on the line and that the line is led into the aft locker.

When beaching the Dragonfly 25, bring the rudder to the highest position and go to the beach by engine. Raise the engine before you go on the beach to avoid hitting the ground. Regarding the centreboard just release the downhaul on centreboard and it will come up by itself or pull it up in the up-haul line by hand.

Rudder-system

Dragonfly 25



Rudder down line

4 mm thick dynema - 9 meter long, use winch to tighten

Rudder Support

Elastic line

Bushing

Changerble bushing

Steel eyes

The rudder down line goes through three steel eyes

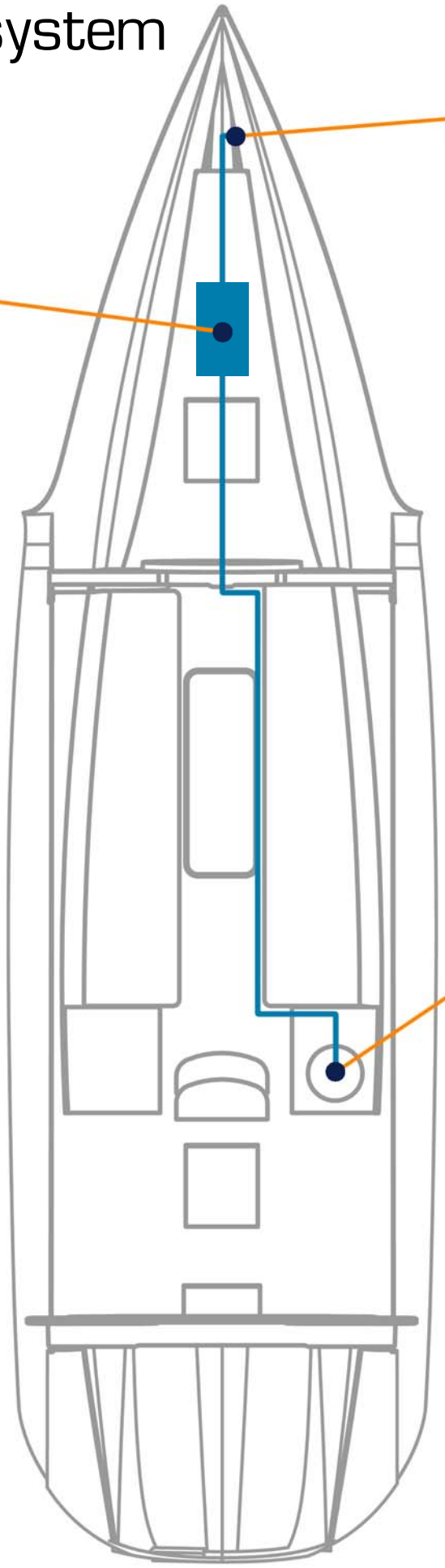
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DRAGONFLY TRIMARANS

Freshwater-system

Dragonfly 25

Optional



Filling

Deck fill for freshwater on foredeck

Water tank

50 L freshwater tank, flexible

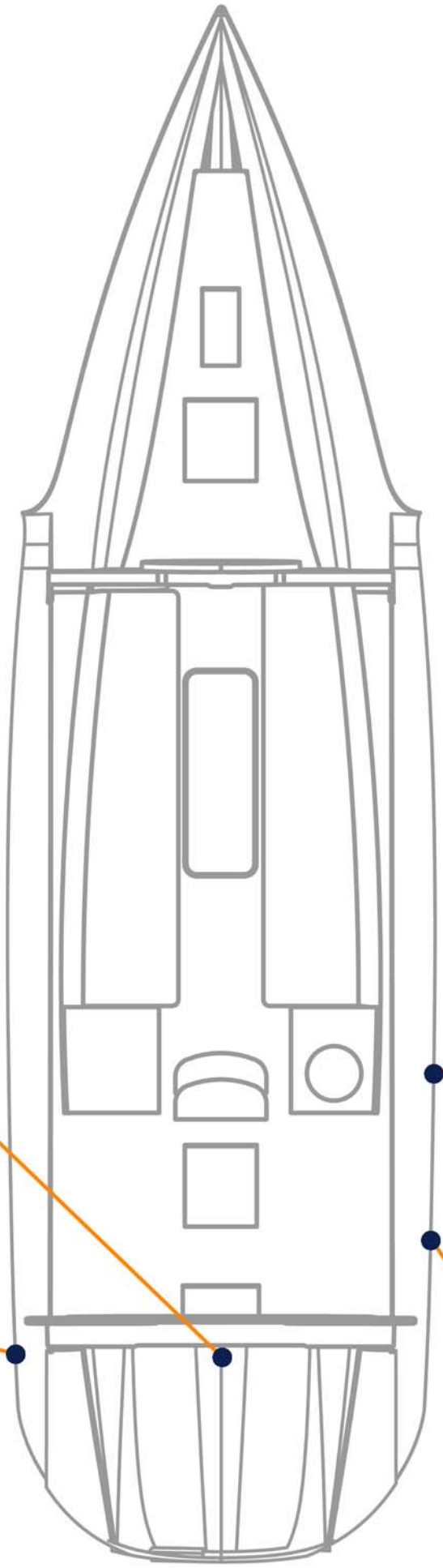
Galley faucet

Fresh cold water in the galley via manual pump

DRAGONFLY TRIMARANS

Hull-fittings

Dragonfly 25



Transducer

Speed/depth trans-ducer

Manual pump

Drain from the manual bilgepump, above waterline

Drain galley sink

Above waterline

Emergency hatch

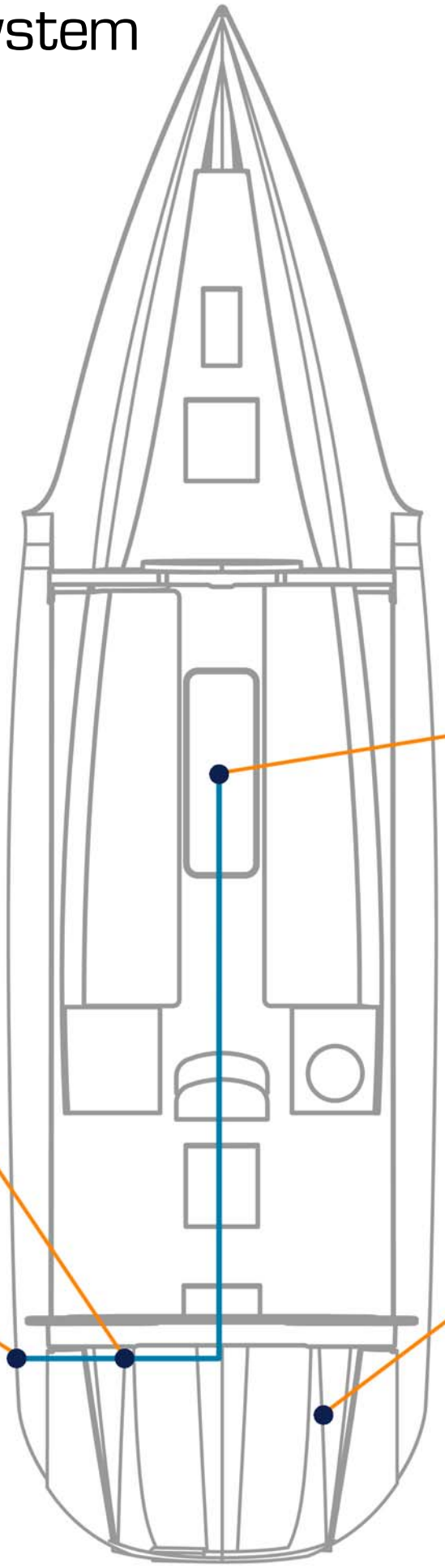
On freeboard, contains flares and emergency equipment. Openeble from in- and outside

2017

DRAGONFLY TRIMARANS

Bilgepump p-system

Dragonfly 25



Pump intake

Water intake for bilge-pump, access in cabin floor

Manual bilgepump

Bilgepump accessible from steering position in cockpit

Outlet

Outlet of water from the manual bilgepump, above waterline

Portable pump

Small portable hand-pump, in cockpit locker. To be used in centerhull and in floats

2017

DRAGONFLY TRIMARANS

Maintenance and product information

Hull ID-No.: _____

Engine type: _____

Engine No: _____

Gelcoat hull colour: _____

Gelcoat deck colour: _____

Gelcoat non-skid colour: _____

Stripe work colour: _____

Epoxy barrier under water: _____

Antifouling: _____

Mast colour RAL-No.: _____

INFORMATION ABOUT PRODUCTS USED FOR DRAGONFLY

WOODWORK

The woodwork in the cabin is varnished with two-part satin varnish. To varnish again, sand with grit 180 or finer sandpaper. You can use either one or two-component varnish with satin finish, but please note that a lot of the panels are laminate not wood!

COMPOSITE

Dragonfly is built of hand-laid, reinforced fibre glass and polyester combined with 10-15 mm PVC-sandwich foam core with closed cells, which do not absorb water.

For eventual repairs, use only products on polyester basis. Epoxy can be used in an emergency, but cannot be cosmetically improved later with gelcoat, as you can with the polyester products.

ELECTRONICS

Any changes made to the electric systems on the boat that are not aligned with the original electric diagram for this specific boat will ensure that Quorning Boats cannot be held responsible for any damage og problems with the electric systems.

For all technical systems, we refer to the manufacturer's manuals supplied with the boat, or available online. We strongly recommend that every skipper reads these manuals before taking command of the yacht.

Electronic equipment is not calibrated by the yard.

BATTERIES

When replacing the onboard batteries, **ALLWAYS** replace them with the same type, brand, and size of batteries. The electronic system on your boat is set up and designed especially for the type of batteries installed specifically on this boat.

For Lithium batteries change – ***always*** contact a professional, as this technology changes quickly over a short time and new calibration software might be needed. Never install fluid batteries.

For normal acid or AGM batteries we NEVER recommend going below 12 V current and from this stage start charging the batteries by the main engine and or alternative charging systems and to seriously shut down other electric systems that are not essential for navigating.

For Lithium batteries we NEVER recommend going below 13.1 V, as from this stage the whole power system will shut itself down and from this stage charging the batteries by the main engine and or alternative charging systems and seriously shut down other electric systems that are not essential for navigating.

SPRAYHOOD, COCKPIT TENT AND BIMINI

Please take note that the sprayhood and cockpit tent is **ONLY** designed to be used under normal conditions and is **NOT** designed as a cover or protection for winter storage nor protecting the boat during windy and stormy conditions and by heavy snow or rainfall conditions.

MAINTENANCE

Dragonfly 25 Touring and Sport

To inform and illustrate recommended service, maintenance, and refitting on an older Dragonfly, we have drawn this general information sheet. Rough elements, like strong winds and wave conditions, strong saltwater and UV do have some impact on the boat after a long sailing life.

We strongly recommend servicing and changing vital parts on your boat according to our recommendations. This information overrules any other former information you may have, as the following is based on updated knowledge.

EXCHANGE INTERVALS FOR STRUCTURAL PARTS

Dragonfly 25 Touring and Sport (built since 2015)

- Waterstays, side stays and forestay – every maximum 10 years or 15.000 NM.
- Beam stop cable to forward, outside beam under trampoline – every maximum 15 years.
- Diamond spreader stays on the mast – every maximum 15 years.
- Structural Dyneema lines, as in backstay, trampoline, and safety cable – every maximum 7 years.
- Safety cables – every maximum 15 years. Regular visual control is strongly recommended.

The above listing of exchange intervals is the recommendations from the Dragonfly yard and is not an extension of the 2-year warranty committed from when the boat was new.

From January 2024 we engrave the Dragonfly logo including a production year, on all rigging terminals on structural wiring such as waterstays, side stays and diamond cables, to make it easier for you as a customer to follow the above recommended exchange intervals.

RIGGING

Visual check of all cables is still required when changing the rigging. When trailering the boat, we strongly recommend focusing on side stay cables, as these easily bend when stepping the mast. Bended side stay cables near the terminal may cause the side stay cable to break.

On all Dragonfly's, please regularly check the forestay cable in the top by the terminal. When furling, the spinnaker halyard may block the forestay, which can cause failure of the forestay.

TRAMPOLINES

On all Dragonfly's, we recommend re-stitching (sewing) along the seams of the trampolines every 6-7 years (in climates with strong UV, every 5 years). Normally, our clients change their trampolines after 10-12 years use. Please follow the recommendations regarding exchange intervals of Dyneema lines above.

FLOAT DECK TEFLON PAD RINGS

The white 5 mm Teflon pad rings on the float deck need to be changed every 13-15 years – this is neither critical nor structural. For easy change of these pads/rings, you just bolt off the floats from the wings.

QUICK-LINKS

Over the years, Quorning Boats has used the riggings links, so-called Quick-Links, in the Dragonfly production. When replacing these, it is of utmost importance to purchase links of same high quality or similar products carrying same strength (working load). Many products look the same, but do not carry the same strength.



1 The above picture shows a Quick-link from Peguet that is used on all Dragonfly's.

PAINTING

Caution for all painted surfaces on the boat and mast.
Painted surfaces may not be covered with Plastic or other non-breathable materials, as water and condensation cannot be lead away from the painted surfaces, and these are not able to dry.

When water is stuck between the Paint and a non-breathable or non-ventilated material, blisters can occur between the paint and the gelcoat or the carbon sections of the mast.

Due to these circumstances, the permanent use of Ex. Matt-Fenders cannot be recommended, as water and Condensation can also get stuck between these and the hull, and lead to blisters in the Paint.

Quorning Boats cannot be held responsible for Blisters in the paint occurred due covering the painted surfaces with non-breathable materials.

ORDERING PARTS

Original parts can be ordered at Quorning Boats at aftersales@dragonfly.dk
Common spare parts can be shipped within two weeks, whereas special parts and/or custom-made parts usually are served within 6-8 weeks.

IMPORTANT – Parts ordered at Quorning Boats Denmark, will be produced in originally designed materials. Should you choose to order from other suppliers, please check that the same kind of materials are used – especially on the waterstays and other rigging parts, where stronger Dyeform cables are needed.

BY ANY DAMAGE TO THE BOAT

Contact your dealer or the yard for instructions. If not, you could endanger your safety and/or lose your warranty.

GELCOAT REPAIRS

IMPORTANT – Successful repairs require dry weather and a temperature between +15° to max 30° c.

- The ratio of hardener is min 2% and max 3%

- The gel setting time is approx. 20 min to half an hour.

- Never work in direct sun when applying gelcoat or any resin repairs.

How to make gelcoat repairs:

1. Sand the actual repair with grit 80.

2. Sand the area around it with grit 180-240.

3. Apply gel coat by 2 - 3 layers.

4. When completely dry sand it down with 120-240, thereafter with 500 – 800 – 1,200.

5. Polish with rubber compound and finally wax the whole area.

IMPORTANT:

Use lots of ventilation, gloves, glasses, and a dust mask!

Keep children away!

WARNING:

- The catalyst is a dangerous product and should not be left within children's reach.

- Avoid contact with skin.

- In case of contact, wash with soap water and rinse liberally, in the worst case contact a doctor.

Clean all tools with acetone, never leave larger quantity mixed with hardener alone, as this can start to burn. Poor into other steel cans or best into a bucket with water.

GENERAL SERVICING

- Regularly clean the boat, blocks, halyard stoppers and sheets well in freshwater.

- Lubricate blocks and easy locks every 2-3 months. Ex McLube from Harken is an excellent product for this.

- Clean all tracks frequently where travellers are functioning. Also, the mast track if possible.

- Min once a year clean and grease the winches and check the springs. Important here to use correct winch grease.

- Always keep the sails covered when not in use to protect them from the sun and dirt.

- Keep the sails dry and rinse regularly with freshwater. If sails get damaged immediate repair is required

- Let a sailmaker check the sails once a year. Best in the fall or off season, when they have best time.

When sailing on saltwater, we strongly recommend rinsing the boat with freshwater after each sailing trip. This will over time make sure that blocks and lines work better, and it will help avoiding rust building up on the stainless.

All stainless used throughout the boat is the very high-quality a4 or 316, but this does not 100 % prevent very light rust stains from building up on the surface. This light rust is cosmetic only and does not weaken fittings or bolts. Rinsing the boat after each sail will help avoiding this problem. Especially by boats in warm and salty water we strongly recommend rinsing the boat.

SPRING CLEANING

EXTERIOR

Wash and wax the boat (do not wax the non-skid areas).
Waxing is not needed, if the boat was waxed just before the winter storage.

INTERIOR

Clean the boat everywhere with a vacuum cleaner and best with a rag from a bucket of warm water.

ANTIFOULING

Main hull - First, wash the bottom of the boat with freshwater. If necessary, wash with high-pressure. Let it dry fully out and apply antifouling with a lacquer roll – best is to sand easy the antifouling surface first. You need approx. 3 litres.

This information does not apply for boats with Coppercoat.

The centreboard normally has enough antifouling for the first 3 to 4 seasons. You will then have to lift the boat with a crane or place the boat on some car tyres and turn it from side to side to clean and antifoul the centreboard.

Coppercoat only needs high-pressure cleaning, and if the boat stays in the water, clean the Copper coat surface 2 or 3 times a year by hand with e.g., a sponge to clean pots. Use the green “sanding” part on the sponge or sandpaper grit 180 or finer.

BLOCKS, BATTEN CARS ETC.

It is recommended that all blocks, wheels, and easy locks are greased with Teflon spray, especially the easy locks – this should preferably be repeated a few times through the season.

MAST, BOOM, SPREADERS ETC.

Mast, boom, and head foil must be washed and waxed to keep the sails clean. If you do not immediately succeed in cleaning the aluminium, you can use polish cream.

WINTER PRESERVATION

You are recommended to wash the boat completely clean, wax and polish all surfaces except the non-skid areas and not inside the boat. But only wax if you have like + 10 degrees Celsius.

1. Make sure to take off the sails, sprayhood, and cockpit tent. Wash and rinse out dirt and salt. Everything must be completely dry, before stowed away for the winter and kept in a dry place.

2. Cushions: for cleaning cushions, you can remove the cover by unfastening the zip on the back of the cushion. For washing or dry-cleaning, check which material your cushions are made of

3. Various steel wires can be washed in warm soap and water, rinsed clean, dried, and afterwards wiped with an oilcloth.

4. All ropes and blocks should be washed in warm soap and water, rinsed and dried.

5. Rigging and boom: make sure all lines and halyards are intact. Should a halyard have a failure at the end, turn it over. Every year all halyards and reefing lines should be shortened approx. 25 cm.

6. The water tank must be emptied and cleaned – is located under the front bunk.

7. The outboard engine: please contact your local dealer, but have it serviced and run the engine in fresh water to get all the salt out of it.

8. The marine battery is removed from the boat and discharged, then you recharge the battery and store it like the cushions and sails in a nice dry place. A good thing for the battery, is, during the winter to "drain" the battery and charge it again, e.g., two times during the winter.

9. Dry out the hulls completely to avoid frost damage in all bilges/compartments.

10. Make sure that ventilation is good before storing the boat for the winter. The best thing to do is to store the boat indoors for the winter period, if you use a canvas cover make sure it does not touch the boat as it may scratch it.

11. **Never** cover the mast with plastic – this will create blisters between the carbon mast and the paint. Quorning boats cannot be held responsible towards blisters on the mast.

Any damages and lacks on boat, sails or instrumentation should be fixed in the autumn; everybody gives the best service at that time of the year.

INFORMATION ON THE RIGGING

- Always check the rigging, halyards, reefing lines, water stays and rudder down haul line, as well as the cable operating the Swing Wing system in the aft wing.

- Minimum once a year shorten all halyards, reefing lines and Swing Wing lines by approx. 25 cm. after some years turn them around or replace the lines

- Side stays and forestays should be changed latest after 10 years or by max 15,000 nm.

- Diamond stays on the mast should be changed latest after 15 years or by max 20,000 n.

- We recommend changing the 6 mm swing wing cable in the aft wing every max. 5 years.

- Never use shackles or similar on the boatman chair

- **Never** climb the rigging when the boat is in folded position.

- Tension on the rigging, please see rig diagram.

- Never change the tension on the diamonds without checking tension with a tension meter according to rig tension diagram, changing the rig tension cause the mast to break.

- Never drill holes in the carbon mast section without asking your local dealer or Quorning boats beforehand

- Never wrap the mast in any plastic, as this can cause the paint to bubble. If wrapping is needed, use breathable textile.

- Wash the mast track with soap and water before stepping the mast.

Rope diagram

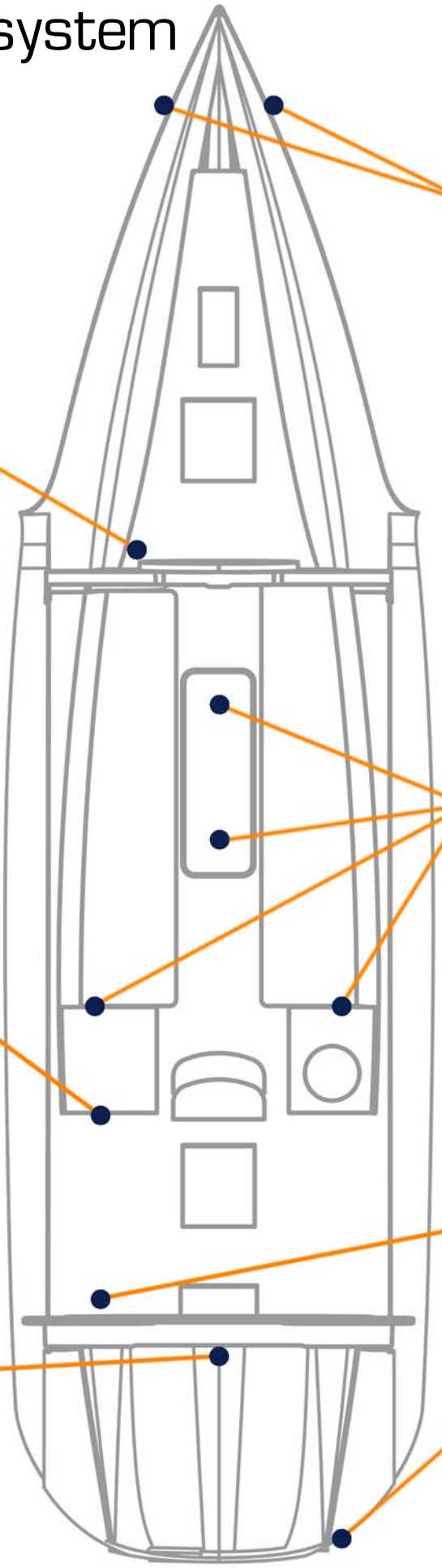
Dragonfly 25 Sport Version

Text	Material	No of lines	Diameter	Length in metres
Main sheet	Polyester	1	8 mm	28 m
Backstay	Polyester	2	6 mm	17 m
Dyneema – eye splice in both ends	Dyneema D-Pro	2	8 mm	5.2 m incl. eye-splicing
Jib sheet	Dyneema	1	6 mm	22 m
Main traveller	Polyester	1	6 mm	15 m
Bowsprit outhaul	Dyneema	2	4 mm	3 m
Swing Wing line	Dyneema	2	7 mm	21.5 m
Jib furler	Dyneema	1	4 mm	12 m
Rudder downhaul	Dyneema	1	4 mm	4 m
Centerboard up	Dyneema	1	6 mm	9 m
Centerboard down	Dyneema	1	6 mm	9 m
Tackline bowsprit	Dyneema	1	6 mm	15 m
Spinnaker sheet	Polyester	1	7/8 mm	34 m
Code-0 sheet	Polyester	1	7/8 mm	34 m
Lazy Jack	Polyester	1	6 mm	11 m
Lazy Jack on spreader	Dyneema	2	4 mm	3 m
Mooring lines	Polyester	4	12 mm	10 m
Main halyard	Dyneema	1	7 mm	41 m
Spinnaker halyard	Polyester	1	8 mm	30 m
Code-0 halyard	Dyneema	1	8 mm	30 m
Mast preventer	Polyester	1	6 mm	5.5 m
Mast controller (boom)	Dyneema	1	6/7 mm	4.5 m
Reef I	Dyneema	1	6 mm	21 m
Reef II	Dyneema	1	6 mm	32 m
Mast lowering line	Polyester	1	8 mm	20 m

12V Electric-system

Dragonfly 25

Optional



Running lights

LED

Cabin lamp

LED light

Cabin lighting

4 LED spots

12 V board

Main switch board

Standard battery

Varta 30 AMPS AGM

Transducer

Speed/depth transducer

Stern light

LED

DRAGONFLY TRIMARANS

Owner’s list

First owner:

Name: _____.

Address: _____.

City: _____.

Country: _____.

Date of purchase: _____.

Second owner:

Name: _____.

Address: _____.

City: _____.

Country: _____.

Date of purchase: _____.

Third owner:

Name: _____.

Address: _____.

City: _____.

Country: _____.

Date of purchase: _____.

**KEEP THIS MANUAL SAFELY ONBOARD AND PASS IT ON TO ANY NEW OWNER IF THE BOAT IS SOLD. THE ONLINE OWNER’S MANUAL ON OUR WEBSITE IS ALWAYS THE LEGALLY BINDING VERSION; HOWEVER, IT DOES NOT INCLUDE BOAT-SPECIFIC ORIGINAL PAPERS.*

Warranty papers

RAYMARINE AND ELECTRONICS

If Raymarine or possible other electronics has been mounted on your boat, Quorning Boats has registered the serial numbers according to your hull number for warranty.

HOW TO PROCEED BY WARRANTY CLAIMS ON ELECTRONICS

You must contact your local Raymarine or whatever brand of electronics is used directly, referring to your instrument registration.

RAYMARINE

Please contact your national agent or Raymarine distributor. They will be able to inform the nearest Raymarine Service.

Please take note that only basic and standard calibration has been made on your electronic system from the yard.

GPS is not delivered with detailed electronic charts from the yard.

VICTRON

The Victron system has been locked in 'User' mode by Quorning Boats ApS to prevent accidental and unwanted changes to the configuration.
The Victron system can be unlocked to 'Installer' mode. Installer has additional privileges and once changed from default requires a password.
The password to unlock 'User' mode can be requested by contacting Quorning Boats ApS directly.

Disclaimer *– If the Victron system is unlocked, Quorning Boats ApS disclaims any responsibility in connection with setup, configuration and functionality.*

VRM – VICTRON REMOTE MONITORING

Victron remote monitoring has been activated on all Victron devices delivered with your Dragonfly Trimaran from the Yard. The Dragonfly Yard is committed to protecting your data and complying with data protection laws like GDPR. The Dragonfly Yard states that:

- Your personal data is not sold, tracked, or shared without your permission.
- Data is primarily collected to improve the boats' functions and services.
- Data collected from the boat, diagnostics, info etc. is not associated with your identity by default.