OWNER'S MANUAL

DRAGONFLY

40 Swing Wing

Owner's Manual – June 2025 edition

Introduction

We are delighted to welcome you to the family of DRAGONFLY sailors with our warmest congratulations on your new DRAGONFLY 40.

This manual is meant to help you enjoy sailing and understand the comfort and safety of your boat. The manual describes the boat, the equipment and includes maintenance guidance. Before you and your crew take off to sea, we strongly recommend reading the manual carefully to avoid any mistakes and/or damage. Make yourself at home onboard your boat 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 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 40 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 40.

QUORNING BOATS

Jens Quorning
Dragonfly Trimarans

Registration form

Type of boat: Dragonfly 40 Swing Wing (Trimaran sailboat)

CE-certification: Category A / B

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 for DF 40

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

Owner's name and address

Name: _____

Address: _____

City: _____

Country: _____

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: _____

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

DRAGONFLY 40 TOURING

Length overall center hull	12.40	m
Length waterline center hull	11.50	m
Length folded	14.17	m
Length sailing	12.40	m
Beam sailing	8.40	m
Beam folded	4.00	m
Draft	0.70	m
Draft, incl. centerboard	2.20	m
Weight of standard boat, incl. sails and engine	5.800	kg
Max total weight, incl. crew	9.000	kg
Max total weight, excl. crew	7.900	kg
Water tank	220	liters
Holding tank	75	liters
Fuel tank, diesel	150	liters
Engine, inboard standard Diesel	40 / 27	Hp / kW
Engine, inboard optional Diesel	57 / 41.9	Hp / kW
Mast section, carbon	17.00	m
Mast height over water level excl. antennas	18.80	m
Mainsail	65	m²
Self-tacking jib	25	m²
Furling genoa, optional	(33)	m²
Furling Code-0	65	m²
Gennaker	120	m²
Bowsprit fixed length	0.75	m
Unsinkable	Yes	

CE-Design category:	**A**
Max No of persons in category **A** = 895 Kg.	**6**
CE-Design category:	**B**
Max No of persons in category **B** = 1105 Kg	**8**

General specifications

DRAGONFLY 40 ULTIMATE

Length overall center hull	12.40	m
Length waterline center hull	11.50	m
Length folded	14.17	m
Length sailing	12.40	m
Beam sailing	8.40	m
Beam folded	4.00	m
Draft	0.70	m
Draft, incl. centerboard	2.20	m
Weight of standard boat, incl. sails and engine	5,800	kg
Max total weight, incl. crew	9.000	kg
Max total weight, excl. crew	7.900	kg
Water tank	220	liters
Holding tank	75	liters
Fuel tank, diesel	150	liters
Engine, inboard standard Diesel	40 / 27	Hp / kW
Engine, inboard optional Diesel	57 / 41.9	Hp / kW
Mast section, carbon	19.00	m
Mast height over water level excl. antennas	20.80	m
Mainsail	75	m²
Self-tacking jib, optional	(27)	m²
Furling genoa	38	m²
Furling Code-0	80	m²
Gennaker	140	m²
Bowsprit fixed length	0.75	m
Unsinkable	Yes	

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Max No of persons in category **A** = 895 Kg.	**6**
CE-Design category:	**B**
Max No of persons in category **B** = 1105 Kg.	**8**

General specifications

DRAGONFLY 40C ULTIMATE

Length overall center hull	12.40	m
Length waterline center hull	11.50	m
Length folded	14.17	m
Length sailing	12.40	m
Beam sailing	8.40	m
Beam folded	4.00	m
Draft	0.70	m
Draft, incl. centerboard	2.20	m
Weight of standard boat, incl. sails and engine	5,000	kg
Max total weight, incl. crew	8.000	kg
Max total weight, excl. crew	6.900	kg
Water tank	220	liters
Holding tank	75	liters
Fuel tank, diesel	150	liters
Engine, inboard standard Diesel	40 / 27	Hp / kW
Engine, inboard optional Diesel	57 / 41.9	Hp / kW
Mast section, carbon	19.00	m
Mast height over water level excl. antennas	20.80	m
Mainsail	75	m²
Self-tacking jib, optional	(27)	m²
Furling genoa	38	m²
Furling Code-0	80	m²
Gennaker	140	m²
Bowsprit fixed length	0.75	m
Unsinkable	Yes	

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DRAGONFLY 40 PERFORMANCE

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Max total weight, excl. crew	7.900	kg
Water tank	220	liters
Holding tank	75	liters
Fuel tank, diesel	150	liters
Engine, inboard standard Diesel	40 / 27	Hp / kW
Engine, inboard optional Diesel	57 / 41.9	Hp / kW
Mast section, carbon	20.50	m
Mast height over water level excl. antennas	22.30	m
Mainsail	83	m²
Furling genoa	44	m²
Furling Code-0	90	m²
Gennaker	150	m²
Bowsprit fixed length	0.75	m
Unsinkable	Yes	

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Side-view

Dragonfly 40

2020

DRAGONFLY TRIMARANS

Swingwing-system

Dragonfly 40

End of line

End tied to block

Wing stop cable

Prevents folding out too far

Safety cable

Prevents folding in while sailing, to be manually set on-off when folding

Swingwing lines

10 mm Dynema, 34 meter endless

Swingwing cable

Inside trampoline, 6 mm, 483 cm

Rope clutches

Dubble rope clutch in cockpit handlocker

End of line

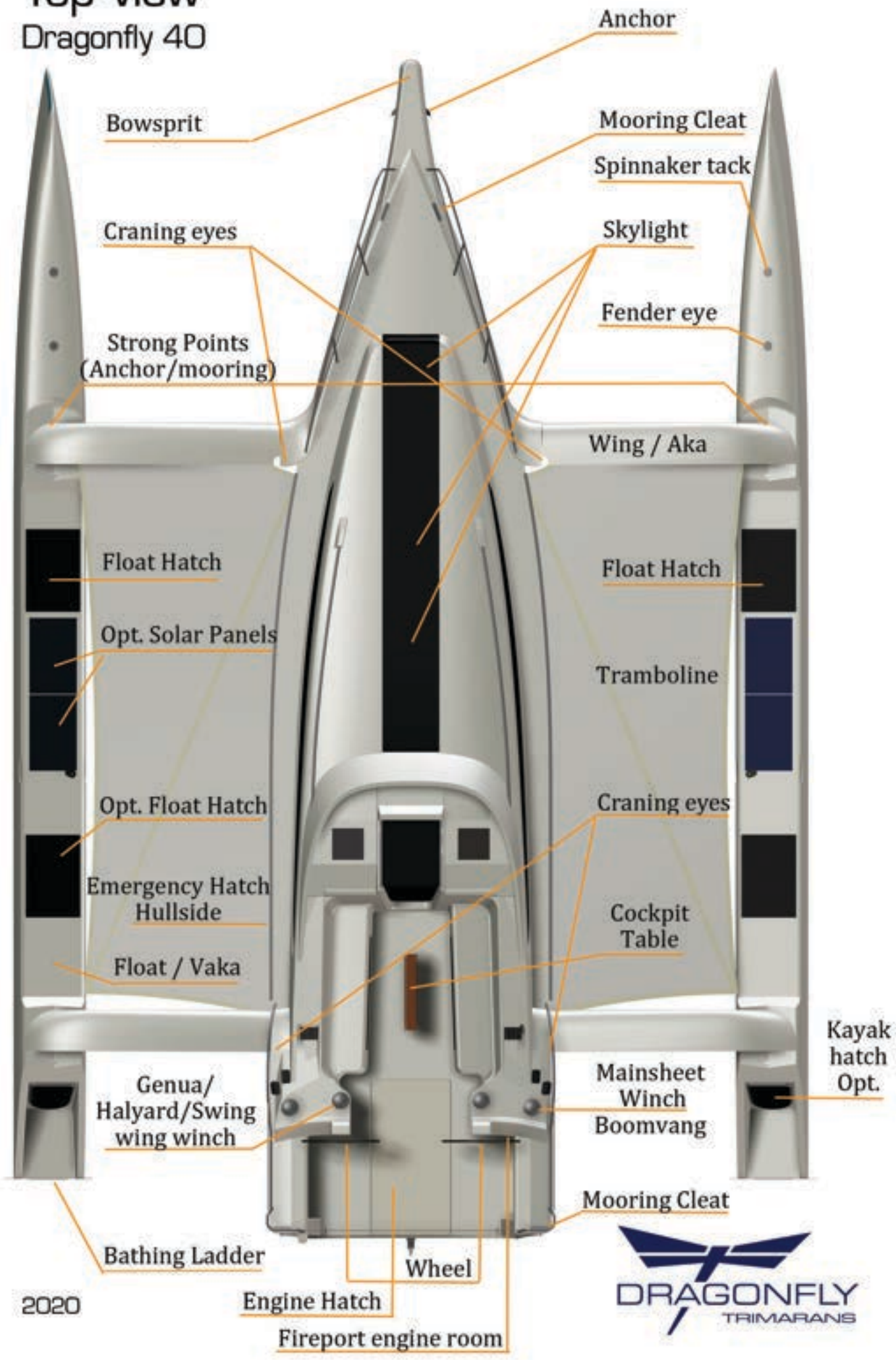
Line tied to hull

Snap shackle

Locks safety cable
- Important !

DRAGONFLY
TRIMARANS

Top-view
Dragonfly 40



2020

DRAGONFLY
TRIMARANS

Lifeline & Jackstay
Hookpoints
Dragonfly 40

Jackstay
Hookpoints

Lifeline
Hookpoints

2020

DRAGONFLY
TRIMARANS

Before you go sailing

CHECK LIST

- Check the weather forecast carefully.
- Check the water tank level.
- Check diesel tank level.
- Check the power on your batteries are adequate.
- Check engine oil (and cooling water on the diesel engine).
- Check and make sure that the water intake filter to the diesel engine is clean and fully functional.
- **IMPORTANT:** When starting up the diesel engine, check and make sure that cooling water is coming out of the exhaust system at the transom (if not, check that sea cork for engine water intake is open – and not blocked). If not, stop the engine.
- Check that you have enough propane/gas for cooking (for longer trips).
- Make sure that all equipment is stowed safely and correctly and has been secured well, also in the floats.
- Check that the water stays, and rigging are fully intact.
- Check that ALL hatches + windows/escape hatch in the aft cabin, are fully and securely closed – especially, on the floats and the kayak hatch.
- The escape hatch in aft cabin must never be locked from inside when the boat is active, but make sure it is closed – but not locked with the red buttons.
- If the boat is new, please note that upon delivery, electronics and autopilot systems are not calibrated in detail when the boat leaves the yard, and GPS Plotter is not supplied with GPS chart chip.

- Regularly check bilges, in all sections of the 3 hulls, for water.

IMPORTANT NOTICE

BEWARE OF THE FOLLOWING

- Make sure that there are always life jackets and/or life preservers aboard for the whole crew – and use them!

- We strongly recommend using lifebelts/harness (Jackstay) outside the cockpit when sailing or even motoring at night.

- No persons are allowed on either trampolines, wings, or floats when sailing offshore in stronger wind conditions of plus 10 knots true wind speed.

- Beware of High tension/voltage cables. Mast height above sea level is up to 24 meters/75 feet – with no antennas.

- For ocean crossings, we recommend carrying a life raft in case of fire.

- For Ocean crossings and long-distance offshore sailing, we recommend all crew to get familiar with the safety hatch in the aft cabin and the function of this. Make sure while sailing that the safety hatch is securely closed but NOT LOCKED with the red buttons on the inside of the hatch.

- In case of capsize, stay calmly inside the boat, and, if necessary, you can get out via the safety hatch in the aft cabin hull side. DO NOT try to dive out elsewhere from the boat, as the risk of getting caught in ropes hanging down in the water is too high.

- When sailing long-distance, make sure that all aboard are aware of the above-mentioned procedures.

- Make sure to have a knife and watertight flashlight accessible both inside and outside the boat.

- For long-distance sailing or ocean crossings, make sure to have up-to-date flares and other safety devices aboard, like Epirp etc. within reach.

- For longer crossings, carry aboard e.g. extra impellers, fuel and diesel filters and belts for the engine, and maybe spare parts and filters for the

water maker, if this is installed aboard. Further, make sure to have good strong batteries for running the boat and a safe sufficient power supply.

- Make sure that all heavy gear inside the floats is tied well down, so this cannot damage and puncture the floats from inside and cause leaking problems.

- Make sure and check that the anchor equipment is secured well and even tie an extra security line on the anchor before you meet rough sea conditions.

- Always check that float hatches are closed while sailing.

- For long-distance sailing, we recommend installing “Jackstay´s”, a safety lifeline in e.g., webbing materiel to hook on to when going on deck. If this is installed, make sure this is installed correctly, so that you do not fall overboard, but stay on the boat in combination that your harness/lifeline is not too long.

- Please be aware that trampolines can be slippery when wet, and/or in cold conditions. Further, the trampolines are extra slippery when not pulled tight enough when folding out the floats.

- Never walk or be on the leeward trampoline, and/or on the leeward float when sailing upwind and beam reach in + 10 knots true windspeed.

- In strong wind conditions, we recommend staying on the center hull only.

- Never sail with the optional Bimini open in stronger winds than 25 knots TWS.

LIFERAFT

The Dragonfly 40 is unsinkable, except in case of fire.

For sailing Offshore, we can only recommend carrying a Life raft on board and most insurance companies insist that this is always on board, please check up with your insurance policy.

Make sure the Life raft meets the standards your insurer asks for in the area you are sailing in, and very important, make sure that the Life raft always has the capacity to carry all crew members on board.

The Life raft can be fixed or stored in several places/positions on the boat:

1) On cabin top just in front of the sprayhood, however this takes away the function of the first cabin top skylight. For this position, fastening points must be installed for this (optional).

2) The best position for long distance sailing is at the back end of the float just behind and inside the optional Kayak hatch. This position is accessible even if the boat is capsized and is also better accessible in case of fire in/on the centre hull.

3) Alternative is also to place the Life raft inside the normal storage in the floats through the deck hatch of the floats and here you have more safety access in case of fire in/on the centre hull.

4) For long-distance sailing where the boat is not folded, the Life raft can also be secured on the Trampolines, but for this you need fastening points on the Trampolines. Again, this is also accessible in case of capsize where you can simply cut away the trampoline to get hold of the Life raft.

Always make sure the Life raft is approved, and that service date does not expire while you are at sea.

In case of an accident, always stay as long as possible on the boat. Remember the boat is unsinkable.

Make sure to maintain and service your 2 standard fire extinguishers on board. One is placed inside the cockpit locker, and one is placed inside the SB sofa/seat aft, and position is marked from outside front seat, also in the cockpit.

MAN OVERBOARD

IMPORTANT – always make sure that the other crew members aboard have been instructed in how to start up the engine and take the sails down and

have been instructed on how to pick up a person, who has fallen overboard – could e.g., be the skipper who fell overboard!

Make sure crew is well informed to use the "man overboard "function on the GPS if this is installed in the electronic system.

Make sure your horseshoe lifesaver or similar products are in good functional condition and that the night light for this is working and it is easily accessible.

Check that you have a long floating line aboard, to throw out to a person in the water, e.g., the mooring lines supplied with the boat when the boat is new, are all floating lines! Floating lines do not get caught in the propeller.

We do not recommend trying to rescue people in the water with sails up. Start the engine and take the sails down, so you have more control.

Be careful that the person in the water does not get close to the propeller on the centre hull.

If you fail to pull up a person aboard, you can also use a halyard, like spinnaker halyard to pull a person aboard by the electrical winch.

A very efficient way to get hold of a person in the water in waves, is to throw a long floating line overboard from the back of the boat, and keep circling around the person in the water, at some stage the floating line will always reach the person in the water.

CONTROLLING THE BOAT

If this is your first multihull, we highly recommend getting some training in controlling the boat while sailing as well as motoring (manoeuvring), to ensure your safety and comfort – **THIS IS VERY IMPORTANT.**

Your dealer will give you this first basic information and instruction. We strongly advise when receiving the boat to get to know the boat well first under easy calm conditions, especially manoeuvring the boat under engine.

Try this out in e.g., open water, by first using a fender or similar floating device and manoeuvring the boat around this floating object, learning how the boat turns, stops and how it manoeuvres in reverse etc. This is a very important exercise.

To make good manoeuvres under the engine, you need to use more power to get the boat to turn etc. and the better you know how to handle the boat – the more fun it is to manoeuvre the boat safely.

This boat is not more difficult to handle than a conventional yacht and, in many ways, easier, but it behaves a bit differently. When the boat is folded, the propeller is very close to the water line, therefore going into reverse is not as efficient as you may expect. Therefore, do not hesitate to use power in reverse. First gently get a good propeller grip in the water and then use more power. This problem is relevant when the wind pushes you from astern.

IMPORTANT: When the boat is in folded position, the boat and propeller is lifted 10 cm (4") higher and, when folded, the propeller has less effect. Test this out well in controlled conditions, so you really get familiar with this. For your information, the standard 40HP engine can motor well against the wind at up to 30 knots true windspeed on flat water and against waves up to 25 knots of windspeed. If you need to motor against stronger winds, we recommend assisting with only a bit of jib to assist (however no sails if the boat is folded).

We recommend starting sailing with max. 4 Beaufort = 20 knots of true wind speed till you feel fully comfortable in controlling the boat.

VERY IMPORTANT: Always before taking the boat out: Pull the centreboard fully down for better manoeuvring, without the centreboard down, the boat cannot make a sharp turn and will drift much quicker, also when powered by engine.

NEVER set sails before both floats are folded OUT to full beam and backstays are set tight, and safety cables are installed on both aft wings.

When folded in, please avoid stronger wind and waves from the side. Max 25 cm waves height when folded in and max 20 m/s (40 knots) wind from the side.

IMPORTANT: Always fold or unfold the boat when facing the wind or even better going downwind.

Never fold the boat on the open water at more than 12 m/s (25 knots) windspeed.

CLASSIFICATION

The DRAGONFLY 40 series is classified according to the CE-standards in category **A** and **B.**

DRAGONFLY 40 is designed for the CE category **A**, Offshore and Ocean trips with max **6** persons aboard, during which the wind may rise to more than max 8 Beaufort on the Beaufort scale = 40+ knots = 20+ m/sec. true wind, and the waves may rise to more than 4 m significant wave height.

For CE category **B**, max **8** persons are allowed on board to max windspeed of 8 Beaufort = max 40 knots = max 20 m/sec of true wind speed, and waves may not rise to more than 4 m significant wave height.

The Dragonfly 40 is certified for the CE by notified organization (body) IMCI No 0609 under the design module Aa – internal factory control and external control of buoyancy, stability, and flotation.

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

For long distance offshore sailing and ocean crossings, we strongly recommend the skipper and crew to be quite experienced sailors.

The Dragonfly 40 can well be sailed singlehanded – but this requires extremely good sailing skills and experience and a 100% reliable and fully tested autopilot.

The boat is unsinkable.

MANOEUVRING AND MOORING RECOMMENDATIONS

IMPORTANT NOTICE

Always wear your life jacket when sailing or even motoring.

In heavy weather, always wear the safety harness on deck.

Make sure to have functional life jackets for the whole crew.

When sailing in windy conditions, stay on the centre hull only.

Minimum four mooring lines of adequate dimensions (min 18 mm x 16 meters) and suitable for the environment should be aboard. These are supplied on delivery.

- Always manoeuvre the boat by the engine in harbour areas – NO sails.
- Take note of wind, waves, and current conditions before you go to sea.
- Protect the boat with suitable-sized fenders when moored.
- Always keep the ropes and other lines well organized.
- Handle the boat at slow speed – in harbour 2 to 4 knots.
- Beware it can be difficult to stop the boat downwind – especially, when the boat is folded in, where the propeller is closer to the water surface.

DANGER

Never try to stop the boat with your foot, your hand, or a boat hook.

When taut:

- Protect the ropes from chafing.
- Take possible tides into account.

- Always tie the fore and aft dock lines from the main hull **ONLY**, folded or not folded.

- Always make sure to use 2 spring lines on the boat alongside a dock.

PRECAUTION

- Be well acquainted with the boat before going sailing in more than 5 Beaufort true wind (22 knots – 12 m/sec).

- Learn to handle the boat well under power and to do safe harbour-manoeuvrings – note that sometimes it can be difficult to stop the boat in reverse downwind.

- Be aware that the boat maybe can capsize in folded condition by winds exceeding +8 Beaufort (40 knots – 20 m/sec). In that case, secure the mast sideways, with e.g., one halyard to each side on the dock. This halyard does not have to be tight at all, just loose/slack so tide is not a problem or unfold both sides minimum 75 cm (3´) each. Please note that this is only necessary in strong sidewind conditions.

- We do **NOT** recommend leaving the boat folded on a mooring or at anchor.

- Never moor the boat folded where wave height can exceed 25 cm.

- Never let the boat dry out in folded position, as the seabed can be angled.

- The boat is unsinkable. If anything should happen, always stay with the boat.

- In capsized position, the boat will stay afloat approx. at the main cabin sofa seat level, if the floats are fully intact and full buoyant.

- By each wing base, you will find a stainless eye for lifelines as well as in the cockpit sides by the helmsman position and by the companionway.

- For longer offshore passages, a life raft is recommended, mostly in case of fire.

- All three hulls have watertight crash bulkhead forward to prevent flooding of the hulls, if e.g., only the very front bow area gets damaged, only the forward section will be partly flooded.

- If a bow thruster is being used – **ALLWAYS** check that there are no lines hanging down in the water, like e.g., the tack line for the bowsprit or mooring lines, and make sure no persons are swimming close to the boat.

IMPORTANT USER INFORMATION

- When folding in or -out in strong winds, slowly motor either into the wind or even better downwind. In both strong wind- and wave conditions, only downwind – make sure to have enough distance to the shore.

- Never keep or motor the boat in folded condition, where wave heights exceed max 10" or 25 cm. Otherwise, the folding system can get damaged and by bigger sideway waves (and wind), the boat can even maybe capsize.

- Be aware that the boat can capsize, if not handled correctly, and sailing instructions are not followed.

- Always start the engine first, before taking sails down, and sails must be fully down and secured well and safe BEFORE folding in the hulls.

SAILING BY AUTOPILOT

- **IMPORTANT:** Depending on the wind and wave conditions, using autopilot in winds exceeding 10 m/secs (+20 knots) true wind is more difficult, and the boat must be sailed much more conservative.

- Autopilot can be used in stronger winds, but only when reefed even more conservatively than informed in our "sail to wind diagram".

- Quorning Boats or dealers cannot be held responsible for any damage or problems caused by sailing when using the autopilot, as the autopilot at times can be unreliable and maybe not fully calibrated or not set correctly by the user.

IMPORTANT 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 season, we recommend shortening all halyards, reefing lines, and Swing-Wing lines by approx. 20 cm/8", but only if you see signs of chafing on the line. After some years, you can, e.g., turn these lines around or change them with new lines. If the lines are changed, make sure to replace lines with the same kind of quality as the lines, very important. Most of these lines on the Dragonfly are Dyneema quality lines.

- We recommend changing the standing and running rigging, every 10 years using the same quality of products. We recommend changing the water stays after 10 years and/or by max 20,000 NM of sailing.

- Mast rigging/diamond tension is set from the factory on new boats, **NEVER** change this setting. This can cause the mast to break.

- Never use shackles or similar on the boats-man chair without back-up line tied for climbing the mast.

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

- Tension on the rigging, please see the rig diagram. The diamond stays must be checked minimum once a year according to tension diagram as well as before making long-distance trips.

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

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

- NEVER wrap the mast in any kind of plastic, as this can cause the paint to bubble up. If covering is needed, use breathable textile materials only.

- *When stepping the mast, **NEVER** secure the mast sideways with only halyards in folding position, as the angle is too narrow – when folded out, it is OK.*

- Regularly check that all shackles and blocks are tight and safe, e.g., when the boat is new and rigged by the yard or dealer, as shackles can quickly become loose.

BIMINI

Never sail with the Bimini (optional) up in stronger winds than 25 knots TWS. Just fold it back to the aft bigger stainless rail and secure it safely and even better install the Bimini cover. If the Bimini is used in stronger winds, this is at the owner's own risk.
The Bimini stainless poles/tubes are not designed to take any other loads than the Bimini itself, so never tie any other lines or equipment to the Bimini poles/tubes.

WHEEL STEERING

The steering cables on the wheel steering are set from the factory – but the cables can become a bit looser over time – and must be tightened a bit again later, simply by the turnbuckle on the cable across the engine room. This is a simple job. Cable must not be too tight, as this makes the steering heavy/hard.

Slack steering cables will make steering by hand unsafe and feels a bit "out of control ".

IMPORTANT: An emergency tiller is available in the cockpit locker and can at any time be installed with the use of no tools. Open the stainless lid by hand at the back of the cockpit in the centre, when this is open, you can simply push down the emergency tiller in position.

For your information, the autopilot will always be fully functional besides the wheel system and besides the emergency tiller system. The autopilot is installed directly on the rudderstock system.

Operating the Swing-Wing system

- **IMPORTANT** – The Swing-Wing system must **ONLY** be used in protected harbour areas. Max. total wave height of 0.25 m / 10". and to be operated at max wind speed 15 m/s (30 knots) when facing upwind or downwind. Wind from the side must not exceed 12 m/s (25 knots) Any use elsewhere at owner's own risk.

- **ALWAYS** use the Swing-Wing system **WITHOUT SAILS**. The sails must **NEVER** be up when the floats are folded in, or when at all operating the folding system.

- **ALWAYS** pack down and secure the sails well **BEFORE** you start operating the Swing-Wing system. Check the furling jib line is closed/blocked.

- **ALWAYS** point the boat into the wind when operating the Swing-Wing system, and, or even better, point downwind in stronger winds.

- Max. boat speed in folded position under power is 6 knots – more speed can damage the folding system.

PROCEDURE - HOW TO FOLD OUT THE FLOATS

1) Take away all the fenders and mooring lines and stow these safely away.

2) Prepare the endless Swing-Wing line by the double halyard stopper on the side of the cockpit marked "FOLD IN" in and "FOLD OUT" and make sure the endless line has no kinks.

3) Take the marked "FOLD OUT" line three turns around the electrical winch in front of the wheel or let the line just go around the mainsail winch in front of the wheel and lead the line to the bigger Genoa/halyard winch closer to you.

4) Point the boat up into the wind. On flat water just under engine by 3-4 knots boat speed for better course control of the boat.

5) Release and open (fully up) the double rope stopper on the cockpit side. The two halyard stopper handles are fixed together, so both lines ("FOLD OUT" + "FOLD IN") will be open at the same time. When you open the

halyard stopper, the float “shoots” about halfway out, so start quickly to activate the “FOLD OUT” line by hand or on the electric winch.

6) The float will automatically start to fold out and you can now activate the electrical winch (**IMPORTANT** - ***always fold only one side at a time***).

7) Keep an eye that lines do not jam between the wings and the center hull. Once again ensure that the endless Swing-Wing line has no kinks. Keep the inhaul line in your hand to prevent kinks, while folding out.

8) If something jams – stop winching immediately.

9) When the Trampoline folding Cable System is close to the aft Wing, please focus and fold out the rest slowly controlled. Check that the trampoline is tight. By continued use of the electrical winch, this can damage the Swing-Wing system, which is why you must winch the last bit out gently (on new boats there is a mark on the Swing-Wing lines that indicates when the floats are pulled fully out and or in).

10) Stop when the trampoline is nicely pulled out and tight or at the marking on the line you pull out. If the trampoline feels a bit too soft – just gently tighten the “fold out” line a bit more. If not already done, we recommend marking the Swing Wing lines when it´s fully tight and pulled out for faster operation.

11) **Now very IMPORTANT**, tighten and pull by hand only the slack of the backstay on the first side that you just folded out.

12) Do the same fold out procedure on the other side - **NEVER at the same time**.

13) Now tighten both backstay lines by the main sheet winch and check that both backstay lines are pulled approx. similar by checking visually the angle of the side stays/backstays – this does not have to be 100% perfect. Tighten the backstays tight to the marking on the line, or, as much as you can easily pull with one hand on the winch handle.

14) **VERY IMPORTANT** – When both sides have been folded out, always remember to secure and **fix the safety cables**. These safety cables are a

vital part of the Swing-Wing system, which you will find at the outer back end of the trampoline, where you install the openable snap-shackle in the vacant steel eye on the forward outer end of the aft wing. This safety cable together with the Swing-Wing outhaul line system will always hold and secure the boat when the floats are fully pulled out. If these safety cables are not installed, the boat can fold in and collapse while sailing.

15) The safety cables are also as backup if someone should by accident open the rope clutch/halyard stopper for the Swing-Wing system or if the Dyneema line for the Swing-Wing system should fail over time.

16) **No persons** are allowed on the floats/amas and wings when operating the folding system. Keep hands away from the wing/hull joint and moving parts.

VERY IMPORTANT:

ONLY FOLD IN OR OUT, ONE FLOAT AT A TIME.

If both floats are folded in and/or out at the same time, there is a possible chance that the mast can fall over forward due to the extra slack in the side stays, when both floats are folded out at the same time with no tension on the side stays.

So, always fold only one float in or out and finish that one side (including pulling the backstay by hand when folding out) before you fold in or out the other side. Make sure also your crew is informed about this important information.

PROCEDURE TO FOLD IN THE FLOATS

Again, face the boat into the wind.

1) First release the safety cables on both port and SB-side at the outer end of the aft two wings. Set and lock both genoa sheets hand tight so the barber haul system does not get jammed if installed or disconnect the barber hauler block system by the openable Black/Yellow ANTAL block. Again, also

check that the furling line to the genoa is closed/locked, so the Genoa cannot furl out again – and the mainsail is packed well and safe down, this is very important.

2) Prepare the endless Swing-Wing line by the double halyard stopper by the cockpit coaming and make sure that the line has no kinks.

3) **IMPORTANT** – Release now the backstay ONLY in the same one side you are folding in; release the backstay slowly by easing the backstay line around a winch before you open the halyard stopper for the backstay, as you can burn your hands on this backstay line. Never open the backstay line under load just on the jammer, release by taking the load off over the winch and then open the halyard stopper and easy slowly and gently.

4) First, take the line marked "**FOLD OUT**" 2 or 3 turns around the electric winch, pull just a bit and you can now easily open the double stopper/jammer and release the line slowly, then you can change line, so the "**FOLD IN"** line now is ready on the e-winch, make sure the barber hauler line and maybe also Code-O sheet lines are free to flow, so these don't jam.

5) The float can now be winched in towards the center hull – make sure that the Swing-Wing lines do not kink, and that the backstay line is **ALWAYS** open and slack and can run freely.

6) The water stays and the trampoline "takes care" of themselves. The trampoline will not get in touch with the water, so it is not necessary to pull them up.

7) **Immediately stop winching** in the float when the float touches the center hull under the wings. Make an indication on the folding lines to remember this position. On new boats it is already indicated on the folding lines when the hulls are completely folded in. But pull slowly in at the end, so you do not overstress the folding lines and the block systems.

8) **IMPORTANT** – Now also close the double rope jammer again before you take the Fold In line off the winch, otherwise the hull folds out again. Now one side is fully folded in.

9) When both floats are pulled in, pull the slack in the backstay lines tight by hand only to take up the slack. Normally this is not necessary.

10) Again, either the boat must face into the wind or even better go downwind. **Never** position the boat with wind and waves from the side.

We can also recommend marking the Swing-Wing inhaul line when this is pulled into the right IN position. This is done on new boats, but as lines are flexible, this can be a bit incorrect and is only an indication.

We are often asked if you can have other boats/yachts tied up alongside in folded position – the answer is normally yes, this ok – but max 3-4 boats of max 45 feet. But only in protected areas like a closed harbour. If you have waves or often waves from bigger powerboats passing by – it is not recommended to have bigger yachts alongside. However, we do not recommend having very heavy Yachts tied up alongside. This also requires that all the boats are moored and tied up correctly.

When tied up alongside a dock – always remember to check if the water locally has tide and if the water level can or will change.

INFORMATION WHEN USING THE SWING-WING SYSTEM

Max tension on the backstays is ONLY what one person can pull by using one hand on the winch handle. Or set to the markings set by the yard on new boats.

Sailing in stronger wind and wave conditions, the leeward backstay line will normally get a bit slack – but only pull this slack in by hand only in the leeward side – never use the winch to leeward, as this can put too much stress and tension on the rigging and cause rigging failure.

The Swing-Wing system must not be operated in winds exceeding 15 m/s or 30 knots true wind speed in open areas and **NEVER** in any side winds exceeding 12 m/s or 25 knots of true wind and max 25 cm / 10" waves.

The boat will stay stable folded in a slip, as long as waves are max 25 cm/10" and wind speeds from sideway direction do not exceed 20 m/s or 40 knots of true wind speed.

If higher winds are expected, either make sure the boat faces into the wind, or secure the mast sideways by a halyard to each side to the dock with 1- or 2-meter slack – or, in worst case (like heavy storm or hurricane warning), take the mast down or move the boat to a place, where it can be folded out. Or take the boat out of the water, take the mast down and secure the boat to the ground in extreme conditions.

NEVER keep the boat folded on a mooring or at an anchor.

NEVER let the boat dry out in a folded position.

NEVER hoist any person up into the rigging when the boat is folded.

NEVER set any sails when folded.

Only use the Swing-Wing system in harbour or wave protected areas.

IMPORTANT

On dry land, **NEVER** fold out by using the folding system only. On dry land, you must push by hand the float approx. 1/3 out, before you winch it out by using the Swing-Wing system. This is because the floats are missing their buoyancy from the water.

When folding in on dry land, it is **VERY important** to hold the "fold-out" line in your hand to control that the float does not fall in/-down by itself when folding in. This can damage the boat, and people around the boat can be seriously injured.

ALWAYS remember to install the safety cables before setting sails. If these are not installed, the boat can collapse while sailing. This is always the Skipper's responsibility.

When you fold in the hulls – remember to take note that the floats go backwards and make the boat about 1.6 meter or 5 feet longer.

Launching the boat

When launching, or handling the boat, for example for transport or winter storage, the lifting eyes and the lifting straps are guaranteed to hold, ONLY when provided from Quorning Boats and used under the following conditions:

2 x SHORTER LIFTINGSTRAPS AFT, AND 2 x LONGER LIFTINGSTRAPS FORWARD

1) Lifting eyes and straps/slings are designed for single crane hook system use only – not for individually use or use elsewhere. Therefore, all four straps to one crane hook = single point lifting.

2) Lifting straps/slings must not be used elsewhere or for other purposes.

3) Make sure that **NO PERSONS** are neither on nor under the boat when craning. If work must be done under the hull, make sure that your extra hull safety support can take the full load of the boat, if the crane or lifting straps should fail. If you are not sure about this, ask professionals.

4) The lifting straps are designed for the boat only – NO crew aboard, and the bilges in all 3 hulls MUST be empty. If the total weight exceeds 8,000 kg/17,500 pounds, these straps and the 4-hoisting lifting eye system on the boat should not be used.

5) No one is allowed on and under the boat while craning.

6) **Before craning** the boat out of the water, make sure to take up and secure the centreboard up haul line and take up the rudder, so the boat can be set down on the cradle or truck.

7) When craning with the lifting straps, the boat **MUST always be in a folded position**. The mast can also stay up – no difference in the balance. The boat can also be lifted when folded out, but this requires the aft lifting straps to be (extended) longer.

8) **IMPORTANT –** before launching the boat (also on a new boat), check that log/speed and depth sounder transducers are fitted correctly in place to avoid flooding the centre hull. Quorning Boats and/or dealers cannot be held responsible for this. This must always be double checked before launching.

9) Also always check that the bilge is dry and that no “new water” enters the centre hull bilge or engine room, before you unhook the crane. Furthermore, do remember to check that the optional kayak hatches are closed back on the floats before launching.

10) A travel lift can be used if this is not too small. First, fold the floats a bit out. The belts should be mounted **ONLY** around the centre hull **forward** of the forward crossbeam and **aft** of the aft crossbeam around the centre hull only. ***Be careful not to get the belt around the sail drive and propeller.***

11) IMPORTANT – If the boat’s own lifting straps are somehow damaged, they must NOT be used. Lifting straps must not be used after 5 years from purchase/new delivery – use otherwise is at your own risk. **Use only original Quick Link** shackles supplied together with the lifting straps or other professional craning equipment.

Sailing tips

MANEUVERING IN HARBOUR

If the water is deep enough, always sail or motor with the centreboard fully DOWN for better manoeuvring and less drifting. The boat manoeuvres basically the same way in the folded- and/or unfolded position. Remember the boat is light, and, by stronger wind, the boat drifts easier than conventional yachts. Please note that it can be difficult to stop the boat when the boat is folded in, especially downwind, because the propeller is now up higher and closer to the water surface.

Get used to manoeuvring the boat by engine, so you feel comfortable – also when motoring, do not motor too slow. You must have enough speed to steer the boat, which normally is 2 or 3 knots. The more you train this motor manoeuvring process, the easier and more comfortable (and fun) you will find handling the boat under power. If the boat is supplied with optional bow thruster, this makes manoeuvring much easier.

BOW THRUSTER

If your boat is equipped with the optional bow thruster, please remember that this is an electric engine and cannot run consistently. Only use it to adjust the bow position. You can use it for max 3 minutes (this is quite some time) – then let it rest for a while to cool down, before using it again. It will automatically shut down when overheated.

Never motor faster than 5 knots with the foldable bow thruster in down position.

When using the bow thruster, there must be NO lines in the water, like e.g., tack line from the bowsprit and mooring lines, as these can get caught in the bow thruster.

When anchoring, we recommend shutting down the bow thruster on the fuse panel, so children cannot play with it (same goes for electrical deck winches).

Also, do NOT swim near the boat when the bow thruster is activated.

For further information, please read the “Owner’s Manual” of the bow thruster.

REPLACEMENT OF RIGGING PARTS

IMPORTANT

Waterstays must be changed every max. 10 years or by max. 25,000 NM of sailing.

Standing rigging on the mast (spreader and diamond stays/cables) must be changed/replaced minimum every 15 years and/or by max 25,000 NM.

The safety cable under the trampoline is to be changed after max. 10 years at the latest.

Side stays from the mast to the floats + forestay should be changed after max. 10 years or by max 20,000 NM of sailing.

Wheel-steering cables, we recommend changing these 6 mm stainless steel cables (7 x 19 quality) every 7 years or by max. 15,000 NM.

Replace the Dyneema halyards in the mast and reefing lines if you see chafing signs into the centre of the core.

This recommendation is meant to be the latest for changing cables, lines, standing rigging etc., but it is still the owner’s ongoing responsibility to always check these vital parts visually.

For easier mounting of new water stays, use special stainless thread oil or thread grease in the thread. For easier adjusting of the water stays, you can fold the wings back about 60 cm (2’) aft and fit the water stays a bit loose at this position and check if they fit hand tight when back in folded out position. You might have to adjust a couple of times to get the right tension.

When changing or ordering new rigging parts and halyards – ALLWAYS make sure to get the very same type of quality on these products – this is of outmost importance! Order your new parts from Quorning Boats/Dragonfly and/or from your local Dragonfly dealer.

NETTING/TRAMPOLINES

Check regularly that the cable in the trampolines is not damaged, as this affects the safety of the boat as well as the lines for the Swing-Wing system. When the boat gets a bit older, check the stitches on the trampoline. We recommend re-stitching the trampolines within 5-7 years and replacing them within 10-12 years from purchase.

STEPPING THE MAST

When stepping the mast, if possible and preferably, one float should be folded out, as it provides more working space and more clearance (slack) to fit the side stays.

You can best fold one side up against the dock, which is the most popular procedure, so the boat is closer to the dock and the mast crane, for stepping the mast.

NEVER step the mast with both floats folded, as it is extremely difficult (basically not possible) to fit the side stays and rigging, as everything is just too tight. One float has to minimum be folded halfway out to fit the side stays.

Remember to secure the rigging bolts in the side stays with Cleves pins and secure also with rigging tape.

Remember to install the backstay lines and blocks before you motor away from the dock and set these backstay lines just easily by hand only, to avoid the mast and rigging to move in the top from side to side.

FORESTAY AND SIDESTAYS

Forestay and side stays are mounted in the same fitting on the upper part of the mast, where the four upper diamond stays are fixed. Each side stay and -forestay is mounted with a 14 mm special Quick-Link supplied by Quorning Boats, that must be tightened very hard with a wrench and best to be secured with normal Loctite glue for better safety.
To assist in mounting the forestay, there is a special plier to hold the head foil up on the forestay cable, so you have better control when installing the forestay.

We strongly recommend getting professional assistance to step and/or to take down the mast, as the rigging can be compared with the rigging from a 45 to 50-foot yacht. Also, for your personal safety.

SETTING THE GENOA ON MANUAL FURLING SYSTEM

Before hoisting the genoa, make sure to roll/furl some furling line up on the furling drum. Turn the head foil anticlockwise, until you have only about 2 meters (approx. 6 feet) line left in the cockpit. Like this, you can furl the genoa at once, when the genoa is hoisted. The luff is mounted in the shackle above the furling drum. Luff tension is adjusted via the jib halyard. The genoa/jib halyard is fixed to the movable swivel at the head foil and the genoa top to the lower part of the swivel. Make sure the boat is folded out on both sides, before setting sails, and the best is to face the boat into the wind (boats with electric furler can just set the sail and forget about furling line).

MOUNTING THE MAINSAIL

The boat is folded out on both sides and facing the wind. The mainsail is placed on one trampoline. Start from the top of the mainsail. Mount the headboard (the top of the sail) into the top double Ronstan batten car on the mast. Then hoist the sail to the next batten fitting and fit the stainless bolt into the next batten car with the nut on top etc. Use key No. 13 for the nuts on the batten cars. There are also some intermediate cars between the battens, where the sail is fixed to the mast with a simple plastic pin. Remember also to fit the two reefing lines in the sail as you hoist and mount the mainsail.

Taking the mainsail off again, never take off the Ronstan batten cars from the mast track, as all the balls will fall out – just loosen the 8 mm nut on the batten car, that is fixed to the batten pocket on the mainsail.

Only set the mainsail in calm wind conditions and boat facing into the wind.

When the mainsail is up, you can easily install the single line Lazy Jack system, which also works as a topping lift to hold up the mainsail boom. The Lazy Jack has only one line, please see a photo of the boat under sail which will show this easily. You need a boatsman's chair to install the Lazy Jack system.

REEFING LINES BACK ON THE BOOM

The reefing lines in the back end of the boom come out from a sheave, Reef 1 on port side and Reef 2 on the SB side. Take the reefing line through the aluminium eye back in the mainsail, then down and through the eyes in the mainsail boom and up again and fasten the reefing line in the aluminium eye on the "outside" of the eye, Reef 2 line through the forward eyes on the boom and Reef 1 through the aft eyes – hereafter, when the reefing lines are pulled through the mainsail boom, you tie the reefing line to and around the aluminium eye, where the same reefing line has just been pulled through. Tie it with a bowline knot, so that you can open it again.

REEFING LINES FORWARD

The reefing lines are installed forward along outside the mast. Check that the reefing lines go through the big stainless eye at the "gooseneck" fitting (mast fitting to hold the boom to the mast). The reefing lines always stay in/-on with the boom – also when the boom is taken away from the mast. When you take the mast down, secure a pilot line on the reefing lines and other lines before you pull these out of the boat under deck. But from where the reefing line comes out of the boom, you lead the reefing line through the aluminium eye in the mainsail luff and down through the stainless eye at the boom fitting on the mast and further down through the block at the mast base and with the pilot line back to the cockpit.

DECK PLUGS

Electrical deck plugs must be greased for better connection and to avoid corrosion. Important is to cover the deck plugs on the deck during the winter season, when the plugs have been taken off, so these do not get any water inside the plugs.

On some DF40, the mast electric cables go through a stainless-steel cap or cover, and connections are under deck, by just pulling down the panel in the rooftop and this will give you access to the electric cables. We also recommend using a rubber sealer inside the stainless cover to make sure for 100% watertight.

We recommend the product Terrostat product from Teroson – RB 2759 or contact Aftersales at Quorning Boats.

Be very careful that the electric cables at the mast base do not get damaged or caught when stepping the mast AND do remember to unscrew these cables from the deck plug connections when taking the mast off the boat.

CENTERBOARD LINES

The centreboard up and downhaul lines must be installed in the mast base of the mast after the mast is stepped and before use of the centreboard. Same goes when you take down the mast – that the centreboard lines are disconnected from the mast base, before craning off the mast

The Dragonfly 40 is a quite big boat and the mast and rigging you can compare to a 45 feet yacht.

We therefore strongly recommend always having professional assistance to set and or take down the mast and rigging.

Craning hookpoint

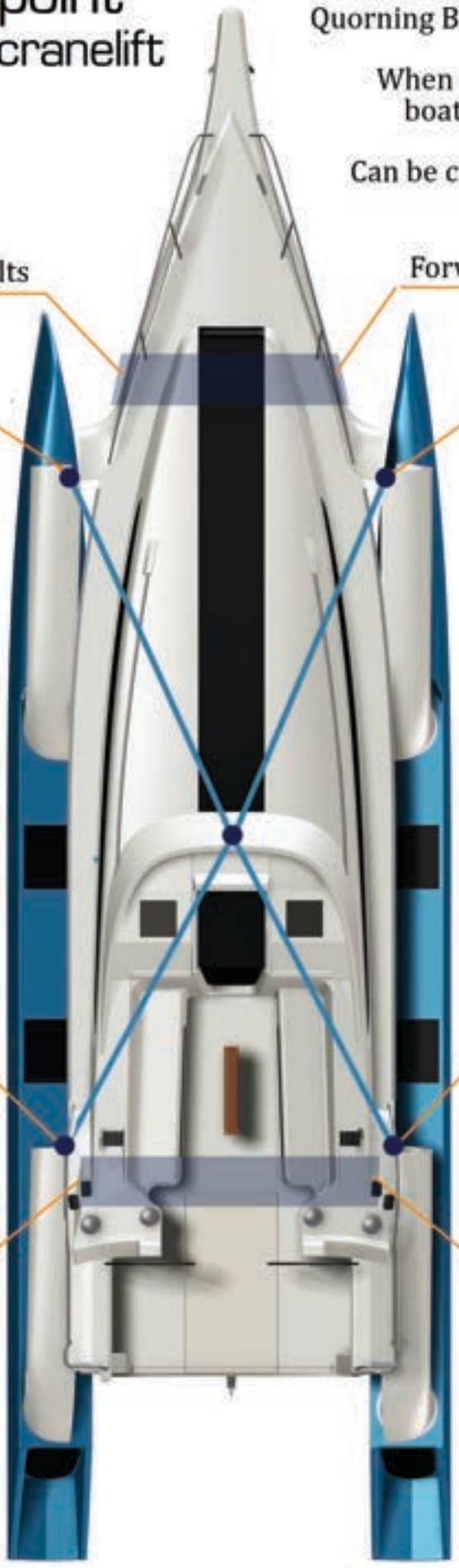
Travellift/Single cranelift

Dragonfly 40

When using lifting straps from Quorning Boats, boat must be folded

When using travellift, fold boat out approx. 20 %

Can be craned with or without mast



2020

DRAGONFLY TRIMARANS

Sail and trim tips

SAIL DIAGRAM - DRAGONFLY 40 TOURING AND ULTIMATE

DIAGRAM OF SAIL AREA TO TRUE WIND SPEED

m/sec.	Knots	Beaufort	Upwind and beam reach
0 – 8	0 – 16	4	Full main + full genoa
8 – 10	16 – 20	5	Main 1 reef + full genoa
10 – 12	20 – 24	5+	Main 1 reef + genoa 1 reef
12 – 14	24 – 28	6	Main 1 reef + genoa 2 reef
14 – 16	28 – 32	7	Main 2 reefs + genoa 2 reefs
16 – 20	33 – 40	8	Main 2 reefs + genoa 3 reefs
20 – 24	40 – 47	9	Main 3 reefs + genoa 3 reefs, upwind sailing only with very good experience
25 – 28	48 – 55	10	Upwind sailing not recommended

Beware that the mainsail has only **two standard cockpit-operated reefs** and that the third mainsail reef is optional on the Touring version and standard on the Ultimate version. 3´rd reef to be set manually and lines are not supplied.

m/sec.	Knots	Beaufort	Downwind lower than 120°
0 – 10	0 – 20	4	Full main + full genoa or spinnaker/Code-0
10 – 12	18 – 22	5	Full main + full genoa or Code-O
12 – 14	24 – 28	6	Main 1 reef + full genoa
14 – 16	28 – 32	7	Main 2 reefs + genoa 1 reef
16 – 20	32 – 40	8	Main 2 reefs (or no main) + genoa 2 reefs (or less)
20 – 24	40 – 47	9	No main + genoa 3 reefs
25 – 28	48 – 55	10	No sails – maybe use of drift anchor or similar

For a new inexperienced crew, we do not recommend sailing in more wind than max 20 knots or 4 Beaufort of true wind, before knowing the boat better!

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. For downwind sailing if "solid" seawater gets over the centre hull bow or float bow – this is the first warning to reduce sail. If the wind is "gusty", make sure to be ready to release the sheets quickly – by holding the sheets in your hands ready to let go.

SAIL DIAGRAM - DRAGONFLY 40 C ULTIMATE AND C PERFORMANCE

DIAGRAM OF SAIL AREA TO TRUE WIND SPEED

m/sec.	Knots	Beaufort	Upwind and beam reach
0 – 8	0 – 16	4	Full main + full genoa
8 – 10	16 – 20	5	Main 1 reef + full genoa
10 – 12	20 – 24	5+	Main 1 reef + genoa 1 reef
12 – 14	24 – 28	6	Main 2 reefs + genoa 1 reef
14 – 16	28 – 32	7	Main 2 reefs + genoa 2 reefs
16 – 20	33 – 40	8	Main 2 reefs + genoa 3 reefs
20 – 24	40 – 47	9	Main 3 reefs + genoa 3 reefs, upwind sailing only with very good experience
25 – 28	48 – 55	10	Upwind sailing not recommended

Beware that the mainsail has only **two standard cockpit-operated reefs** and that the third mainsail reef must be installed manually. Lines to operate the 3 reef is not supplied with the boat from the yard.

m/sec.	Knots	Beaufort	Downwind lower than 120°
0 – 10	0 – 20	4	Full main + full genoa or spinnaker/Code-0
10 – 12	18 – 22	5	Full main + full genoa or Code-O
12 – 14	24 – 28	6	Main 1 reef + full genoa
14 – 16	28 – 32	7	Main 2 reefs + genoa 1 reef
16 – 20	32 – 40	8	Main 3 reefs (or no main) + genoa 2 reefs (or less)
20 – 24	40 – 47	9	No main + genoa 3 reefs
25 – 28	48 – 55	10	No sails – maybe use of drift anchor or similar

For a new inexperienced crew, we do not recommend sailing in more wind than max 16 knots or 4 Beaufort of true wind, before knowing the boat better!

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. For downwind sailing if "solid" seawater gets over the centre hull bow or float bow – this is the first warning to reduce sail. If the wind is "gusty", make sure to be ready to release the sheets quickly – by holding the sheets in your hands ready to let go.

By sailing upwind and if the leeward float is almost pressed down in the water to almost the deck level, this is a good sign and time to reduce sail area.

IMPORTANT – Make sure that you know you can trust your wind speed device information and that you are completely certain that this wind device measures the wind speed in knots and or m/s (meters per second), and carefully check if you see true (TWS) or apparent (AWS) wind speed on the display. It is the responsibility of the skipper to make sure the wind system is calibrated and shows correct information.

IMPORTANT – Asymmetric spinnaker can MAX be used beam reach (like 80-90 degrees TWA) safely up to 5 m/sec or 10 knots of true wind.

CODE-O

Code-O can MAX be used upwind to max 4 m/sec or 8 knots of true wind – use upwind in stronger wind, will damage either the boat and or the Code-O. Beam reach where true wind direction is about 90 degrees, max true windspeed 7 m/sec or 14 knots true wind. Do not exceed these windspeeds and you must respect this information.

For more information about asymmetric spinnaker and Code-O, see further instructions for these sails under “Sailing and Trimming Guide”.

AUTOPILOT SAILING

Sailing by 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 always to keep your sheets and halyards tidy when sailing, because all lines come back to the cockpit. This is a very important safety factor and improves the joy and pleasure of sailing for all aboard.

TRIMMING THE FURLING GENOA

The luff tension is to be adjusted by the genoa/jib halyard. In light winds, of course only little tension just to avoid wrinkles along the luff. In stronger wind, the luff needs more tension, but if you over tense the luff, it can damage the sail and if you lose the luff tension too much, the genoa halyard can be furled around the forestay and damage the forestay and the furling system, which can in worst case also cause the forestay to break. Thus, always keep tension on the jib halyard. Basically, we recommend always to have a tight tension on the furling genoa/jib halyard to avoid the halyard jamming around the forestay.

- **NEVER** tighten the genoa halyard with full load on the genoa sheets.

- **NEVER** reef/furl the genoa with the genoa sheet tight, always ease off the genoa sheet. For even easier furling, go deeper downwind.

Under normal conditions, the genoa car on the cabin roof should be placed in the almost aft end of the track, approx. in the centre of the first aft cabin top hatch. If the genoa “closes” in the aft leach, move the genoa car a bit aft, and if the genoa "opens" further up in the aft leach, pull/move the genoa car a bit forward. You can adjust the genoa car from the cockpit via the genoa track outhaul on the halyard stopper. The genoa sheet goes through the halyard stopper marked as GENOA. The “GENOA” sheet stopper is normally ALWAYS left open and ONLY used and activated if the winch is needed for another purpose when sailing with the genoa.

IMPORTANT – in case you need to put a reef in the genoa, you MUST ALLWAYS also pull the genoa car forward for the right trim. The genoa itself has 3 marks on the foot of the genoa, which is only to indicate 1 + 2 + 3 reef position on the furling genoa.

For Genoa “Reef 1”, the genoa car is pulled approx. 50 to 60 cm = 2' forward on the track, so the genoa car is approx. lining up with the centre og the No.2 skylight hatch.

For Genoa “Reef 2”, the genoa car is pulled further forward approx. to the back of the mast.

For “Reef 3 “, the traveller is pulled forward to the forward end of the track.

This is an indication only. You must always check if the sail sets well. But the main information here is that you must always move the genoa car when reefing/furling the genoa. If not, you can seriously damage the furling system and the genoa as well.

- For your information, only use the genoa barber haul system on beam reach and or downwind and dead downwind for butterfly setup – never upwind.

- To activate and pull out the genoa, always **OPEN**/release the furling line on its jammer/clutch by the starboard side halyards. Then you just pull the genoa sheet, and the genoa will unfurl and be active.

- For electric furler system, only unfurl the sail by using the electric system.

- **ONLY** furl up the genoa when the genoa sheet is released + also the barber haul control line. For easier furling, go more downwind and furl.

ALWAYS make sure that you **NEVER** leave the boat, before the genoa furling jammer/clutch is 100% safely closed, so the genoa in windy condition does not roll out by itself, with no one aboard. This can cause the boat to capsize in a folded position. The electric furler will automatically keep the furling system stopped at the position where it is set.

MAST TRIMMING

The special Dragonfly Carbon mast spreader system is always trimmed and adjusted from the yard, but generally the mast must bend approx. 7 cm in full length, when no sails are set.

DO NOT change the trim on the Diamond stays, as this can/will cause the mast to fail. The mainsail supplied by Quorning Boats is specially designed for this mast curve.

The mast curve looks a bit strange with no mainsail set, as the top of the mast looks like it bends a bit forward, but with full mainsail set, the mast becomes a full nice mast curve. However, when the mainsail is reefed, the mast curve looks a bit strange again but is normal for this type of mast design/construction.

USING THE BACKSTAY

The combined side stay/backstay system has been developed because of the Swing-Wing system to enable easy and quick trimming of the side stay/backstay's tension when folding.

Only start to pull backstays real tight when **BOTH** floats are fully open and secured.

When sailing, ALWAYS set the backstays in both sides to obtain the right tension on the top shrouds (side stays). In light wind, you can set them easily and lock them in their jammers.

In stronger wind (+ 10 knots), set the backstays on the mainsheet electric winch, so they feel well tight. In heavy wind, you set the backstays on the self-tailing winch as hard as you directly can, by turning the winch handle by hand only. Now you can make a mark on the line to follow later – never pull leeward backstay by force under sail. Only pull the slack leeward in by hand.
The backstay´s are marked from the yard if delivery takes place on the water from the yard.

NEVER slack on the backstay lines going downwind, as this can/will damage the furling system and the forestay and the rigging.

BOOMVANG

Downwind sailing, we strongly recommend using the leeward boomvang/preventer for better control of the roach in the mainsail and to prevent the mainsail from chafing too hard on the leeward side stay. Boomvang can also be used as extra safety when making a jibe in stronger winds for better control of the mainsail not to come over too quickly and out of control.

REEFING THE MAINSAIL WITH STANDARD BOOM

Check first the Lazy Jack line is set and secured in its cleat on the SB side of the mainsail boom (the Lazy Jack also works as topping lift to hold up the boom).

Always reef the mainsail when sailing upwind only.

To reef the mainsail, you first loosen/release the mainsail sheet and thereafter the main halyard. It is recommended to make a marking on the main halyard, where Reef 1 and where Reef 2 must be locked or fixed on the rope clutch. The main halyard is loosened/opened and released to its mark, and the reef line is pulled hard so the reefing eye by the luff is approx. 15 cm = 6" above the boom and the mainsail in the back is just touching the mainsail boom.

IMPORTANT – when reefing the mainsail, continue the upwind course by sailing on with the genoa. The reefing line will then automatically reef the luff first and then the leach afterwards. The same procedure applies to Reef 2. After each reef the sail can be packed better with chock cords in the sail for less wind resistance – not a must.

Pulling the reef line, procedure is completed when the reef eye in the aft leach is just touching the boom. Check that the reefing eye forward at the mainsail luff is approx. 10 or max 15 cm (4" to 6") over the mainsail boom. Check that the reefing eye and the reefing line at the luff are not chafing the sail. Normally, it does not, but sometimes you must go up and "arrange" the sail at the luff.

To reef out the mainsail again, you go upwind, release the mainsheet with about 60 cm (2 feet), release the reefing lines and pull up the mainsail like you normally do. Check the reefing lines are running freely. There is some friction in the reefing lines, so the mainsail boom will lift, and this is why you must fix the mainsheet to avoid the mainsail boom from lifting too high.

On the Dragonfly 40 Touring, there are only two big active reef positions in the main sail. For Ocean crossing, we recommend a third reef in the main sail. The DF 40 Ultimate version always has 3 reefpoints standard in the mainsail if the sail is supplied by the yard.

The DF 40 is prepared for 2 reefing systems, so the third reef is a manual. For long distance sailing regarding the 3´rd reef, we recommend preparing a reefing line from the extra third reef on the mainsail down to Reef 2, so you easier can control the third reef by hand. When using the third reef, the conditions are of course not the easiest.

Avoid reefing downwind, as the mainsail can/will be blown past and forward of the side stays and break the battens. Of course, if there is no other way out, you can do it – but this is **NOT** recommended.

There is no way you can reef out again when going downwind.

MAINSAIL

The mainsail needs much more trimming than on a monohull, especially on the mainsheet and boomvang, as the boat has a big speed potential, depending on the wind speed. This calls for concentrated trimming if you want the maximum speed and fun with your boat. Generally, the leach seen from the backend of the mainsail boom end to the mast top must be almost straight, no matter what wind force: the roach must under no circumstances fall out or twist to leeward, unless the boat is overpowered and pressed too hard, and you are forced to open the mainsail. Trimming the main in a breeze takes great effort for maximum performance but makes sailing more fun.

In stronger wind conditions, we recommend opening the main sheet, if the boat feels overpowered and if the rudder loosens its grip and cavitate.

TACKING UPWIND

By tacking upwind against waves – we sometimes recommend, before the tack, easing off the mainsheet a bit to make an easier tack – if the mainsail is too tight – the boat will, after the tack, too quickly go into the wind again and it is hard to finish the tack procedure.

Here it is also vital that the genoa is pulled tight again quickly on the new course. This takes a bit of practice and important is to tack WITHOUT backing the genoa/jib. Over a short time, backing the genoa/jib when tacking will damage the sail quickly, and, on a trimaran, it is not needed to back the Genoa/jib. If you find this difficult, we can only recommend making one reef in the genoa/jib and the tacking will go much quicker and smoother with the smaller and handier headsail.

If you stall (stop) the boat after a tack, it also helps to ease off the mainsail sheet quickly, and the boat builds up speed again. If the boat starts to go backwards after a tack, then immediately turn the rudder blade reverse to windward (the opposite way as normal), this helps the bow to bear off the

wind again and get wind into the genoa again. Do not turn the rudder to normal before the boat starts moving forward again.

MAINSAIL FOOT TRIMMING

At the yard, we normally set and adjust the foot in only ONE and always the same position approx. 7 cm (3″) curve on the foot. The curve at the foot has only very little effect. MUCH MORE important is to focus trim on the mainsheet and the boomvang/preventer and make sure the sail sets well further up. This is 100 times more important for boat speed.

MAINSAIL LUFF TENSION

In light wind, you set the main halyard easy only to avoid "wrinkles" in the luff of the mainsail, which also has the effect that you easier can help the mainsail flip over when tacking or gibing, so that the battens are turned right for the new tack. We would here recommend accepting a few wrinkles in the mainsail luff.

In medium air, the main halyard is tightened even harder, so the wrinkles in the mainsail are gone and the luff looks nice and straight.

IMPORTANT – In stronger winds the main halyard is tightened quite hard to flatten the sail and to avoid wrinkles in the luff – luff wrinkles can sometimes not be avoided. By tensing the mainsail luff upwind in winds exceeding 6 m/s (12 knots), you must always ease off the main sheet while tensing the luff. In stronger wind conditions, wrinkles in the luff cannot be avoided 100% and these are ok and acceptable. This has very little negative effect, and again, it is much more important to focus on the mainsheet and preventer system to make a fast mainsail trim.

When sailing with the sprayhood up, the mainsail boom can touch the sprayhood if the mainsail luff is too slack.

If for example you are anchoring or beaching for a short time with the main sail set, then loosen the main halyard a bit to release the tension in the mainsail luff, and the mainsail will get flat and not so easy catch the wind. However, we cannot recommend keeping up the mainsail while at anchor.

In stronger wind conditions, wrinkles cannot be avoided in the mainsail luff, just too must power – BUT you can e.g., use the Reef No. 2 line at the luff by

tying the Reef 2 line to the webbing/ring in the mainsail and use the Reef 2 line as a Cunningham – this way, you can control the luff of the full mainsail better.

If you have wrinkles where the battens are, often this can be solved by tightening the batten, this is done in the luff by the batten pocket fitting with a screwdriver.
Just tighten the batten maybe 10 or 15 mm.

IMPORTANT – when jibing in stronger wind conditions, make sure to make a fully controlled jibe, pull the mainsheet fully into the centre, as you jibe. After jibing, very quickly ease off the mainsail sheet again and set the boomvang/preventer again. If you are not careful when jibing in strong winds, you can damage the mainsail or even break the sail battens, and even in worst case, damage the rigging.

When jibing, always be careful the main sheet lines do not catch on the winches and the cockpit table.

ASYMMETRIC SPINNAKER/GENNEKER SAILING

Sailing with the asymmetrical spinnaker is a fantastic third dimension in sailing, which a lot of people often dread, caused by bad earlier monohull experiences. On a trimaran, asymmetric spinnaker sailing is fun and a comfortable adventure. A trimaran is downwind not rolling over from one side to the other, and the spinnaker pole is non-existent. With a little practice, you can handle the spinnaker alone, but always handle it with respect!!! If you respect the spinnaker and use it with reason, it is great – also when cruising.

SPINNAKER SHEET

Is set from the cockpit to the block on the outer top middle pad eye and block of the aft wing and directly on the inside of the top shroud/side stay to the spinnaker eye named “Clew” on the spinnaker and “inside” between the spinnaker luff and the forestay and or Code-O to the other side. This is best and prevents the sheet from falling in the water in front of the boat and in the worst case also can get jammed by the centreboard. Also install the tack line from the bowsprit in the spinnaker corner named “Tack” on the spinnaker.

SETTING THE SPINNAKER

Go downwind by 160-170°. Make sure the normal furling genoa is rolled out to give more wind shade and to avoid the spinnaker twisting around the forestay. You can best set the spinnaker either from the leeward trampoline or directly from the leeward float hatch, where the spinnaker is normally stored. Make sure the lines run correctly, that the spinnaker halyard for example is not twisted round the forestay or the diamond spreader. IMPORTANT - keep sailing downwind and hoist the spinnaker in the sock behind the mainsail in the big "wind shade" downwind.

CAUTION: If you feel any resistance hoisting the spinnaker sock, stop pulling immediately and check it is not jammed behind the mainsail and or the spreader. Pull up the spinnaker sock to the spinnaker halyard sheave box and then pull or set the slack of the spinnaker sheet, so the spinnaker does not get air too early. Do not pull tight, and now pull up the sock, when the sock is about halfway up – pull out the tack to the bowsprit and fix the tack line – then pull up the rest of the sock and fix the line you pulled up the sock with on the cabin top handrail. Now the spinnaker sock is fixed at the top.

Then luff up a bit with the boat to approx. 140°, and when the spinnaker fills up with air, roll up the genoa. It is very important that your spinnaker fills first, or you will find yourself furling the spinnaker into the genoa. It never pays sailing with both genoa and spinnaker at the same time.

JIBING WITH SPINNAKER

Go fully downwind like 170-175 degrees and KEEP the mainsail where it was, DON'T pull over the mainsail yet – pull over the spinnaker sheet and spinnaker clew, so you now see the spinnaker clew about 3 meters (6 feet) on the windward side and keep pulling the spinnaker sheet and now SLOWLY jibe the mainsail, while you keep pulling the spinnaker sheet – you will see that it works perfectly. Important is to start pulling over the spinnaker before you jibe the mainsail.

If you sail alone – pull the spinnaker full to windward before you jibe the mainsail.

For downwind sailing like 160-170°for longer time, we recommend pulling the tack of the spinnaker to windward, by using the windward genoa (optional) barber hauler line that you find on the foredeck of the float. Fix the barber

haul line to the tack of the spinnaker and with the barber hauler, you can now release the tack line and pull the spinnaker to windward to the windward float, but downwind make sure to have 60 to 70 cm distance between the float bow deck and the spinnaker tack. The tack line you can now leave loose. Only use this system for longer distance downwind.

Sailing downwind is a perfect course, if you line up the Windex arrow with the leeward Windex marker/arm (the Windex have two arms facing back). This way, you will find that you are sailing basically 160° downwind – which is the best you can do, when the spinnaker is pulled to the windward float.

TAKING DOWN THE SPINNAKER

NEVER sail with the spinnaker without the main sail!!! It can become very difficult and dangerous to get the spinnaker down without the wind shade behind the mainsail.

If the wind increases, it is a bit more difficult to take down the spinnaker. Practice can eliminate this problem. Prepare the spinnaker halyard and tack line and the sheets, so these lines can "run" out without any problems.

Bear off down to full downwind, ease out the mainsheet and fix the mainsail boom with the preventer/boomvang. Now pull the leeward active spinnaker sheet tight in and behind the mainsail – and you will see that the spinnaker completely has no wind and no pressure because of the wind shade from the mainsail.

Now release the bowsprit tack line completely off first, and the spinnaker easily flies back and automatically behind the mainsail like a flag. Yes, and even in stronger winds, it will do this. Now, from the trampoline netting you pull down the sock close behind the mainsail. This is a very easy safe operation and there is no stress.

Like this, you can control the spinnaker – easily and elegantly. Now the sock is pulled down, and you can ease off the spinnaker halyard and pull the spinnaker and sock down. Do not ease off faster, than it is pulled down controlled, so it does not drop into the water.

- **NEVER** ease off the leeward spinnaker sheet when taking it down.

- **IMPORTANT** – **ALWAYS** jibe "between" forestay and luff of spinnaker.

Spinnaker sailing is great and fun, BUT and again BUT – always make sure you have enough water and space to leeward coastline, so you always have plenty of space to go more downwind, if the wind increases or changes, so you always have enough water and space to go downwind and take down the spinnaker in no stress. If you don't have enough water and space to leeward, this can get you into a lot of trouble. This is the only real important thing to always make sure that it is ok when sailing with the spinnaker – enjoy it!

Normally, we recommend a downwind course of approx. 160° with a jibing angle of 40°. In stronger winds, it pays off well to go even deeper downwind. For longer downwind course, pull up the centreboard halfway or even full up.

If you are sailing like 110-120 degrees TWA and you feel the boat is overpowered with then spinnaker up, BEAR OFF and turn downwind quickly and the boat will quickly depower and lose energy. **THIS IS VERY IMPORTANT INFORMATION.**

CODE-0

This is a fantastic but VERY powerful sail. Only use this upwind in light air like upwind in max 4 m/s (8 knots) true wind speed. Upwind in light airs, you will only be able to point best like 55° TWA, and when tacking upwind, you always must furl the sail in – tack – and furl out again.

Going upwind, you need to sheet close to the main hull on the "inside" aft beam there is a pad eye here for the Code-0 and or even better on the lifting eye for craning.

IMPORTANT – The CODE-0 is fixed on the steel pad eye on top and front of the bowsprit. **Never set the Code-0 in the tack line.**

Use the Code-0 halyard, which is just above the forestay – the next halyard up is ONLY for spinnaker.

MANUAL FURLING CODE-0

Set the Code-0 luff tight and make sure to immediately install the endless furling line system, which you lead back on the boat and fix this with the

chock cord onto and around the back aft mooring cleat. When the endless furling line is in position – make sure to fix the one furling line in the Code-0 furler cleat on port side aft main hull, that now is furling the Code-0. This is very important, so you avoid the Code-0 to furl out when not needed.

To furl out the Code-0, just release or open the furling line cleat and pull the Code-0 sheet – and you are now sailing.

Going beam reach on longer distance, maybe use both sheets on the same side. This way, you have one sheet in the Code-0 sheet block and the other sheet in the spinnaker block, and, like this you can better adjust the sheeting more open or closer – works well.

ELECTRIC CODE-O

For the electric Code-O system, this is just too easy to operate, where you must furl it out and in by the two electric Code-O control buttons.
When furling out, you must focus to just furl it out, so the sail is fully open – not more – not less.

When furling in the Code-O is very easy, but make sure the sheets are running freely as it only takes 15 seconds to furl this big sail. Wherever you stop furling the electric Code-O, the sail will stay in that position, no further locking is needed.

FURL IN THE CODE-0

NEVER furl the Code-0 when going up into the wind – **ALWAYS** furl the Code-0 in when going downwind – this makes it much easier and safer. Again, remember for the manual system to "lock" the furling line cleat when furling is completed.

To make the furling system work better overtime – ***always furl the Code-0 in the same direction***, as this is better for the torsion Code-0 luff line. If the Code-0 has UV-protection, make sure to furl clockwise so the UV-material protects the sail.

For longer distance sailing upwind, we do recommend taking down the Code-O and if you go upwind in very strong wind conditions. Take the code-O fully down and stow it safely inside the float.

ANCHORING

The anchor bracket is designed for an anchor of maximum 21 kgs. If the anchor and anchor system is installed from the yard, a safety backup line system is installed to lock and secure the anchor when not active. Make sure to release this safety line before you activate the anchor.

Make sure that the optional electric anchor winch (windlass) is designed for the size of chain and/or rope that you are using.

PRECAUTION – Always check the weather forecast before anchoring.
Thereafter, check the depth, current, nature of the seabed and for possible local tides. Make sure you have enough space to swing around 360°.

By beaching or drying out the boat, beware of rocks and stones. ONLY beach or dry out the boat on clean horizontal sand. This is always the skipper's responsibility.

When anchoring, we recommend securing the anchor line and/or chain to one of the front mooring cleats and best is to also make a bridle, which you can fasten on the U-type big stainless pad eyes on the front of each forward wing. Using a bridle prevents the boat from "fishtailing". This bridle is each side approx. 7-8 meters long. This anchor bridle system is also available from your dealer or us.

- **ALWAYS** anchor in well protected areas with enough space for other boats!!

- Note that multihulls have more windage than conventional yachts. By anchoring off the stern, the engine should be stopped to prevent the anchor line from getting into the propeller.

The anchor is quite close to the bow, so be careful the last bit when the anchor comes out of the water and up to the anchor fitting, as you can damage the centre hull bow.

When using anchor and chain via windlass in +10 knots windspeed, we recommend using a chain hook with a line, so the windlass is not in function. The electric anchor windlass is not designed to hold strong force. Please read the manual for the windlass – windlass is optional and therefore not installed on all boats.

Centreboard and kick-up-system

The centreboard has been constructed in such a way that even the slightest touch of ground, makes it kick-up automatically via the special release cleat on the port side cockpit. After this has been released, you need to put it back in position, just by pushing the folding cleat down by force, and it will go back in active position again.

Generally, when using the boat by engine or sail, we always recommend pulling the centreboard all the way down. On a longer course beam reach, halfway down will also do fine, and sailing downwind, pull it fully up in normal conditions. In stronger winds, never pull it more than halfway up.

IMPORTANT – do remember to lower the centreboard before going upwind again. Under sail pressure you CANNOT adjust the centreboard either up or down and you will have to either luff into the wind or bear off to dead downwind to adjust the centreboard.

By trying to pull the centreboard down while sailing, you can break the blocks or control lines to the centreboard system. The yard and or your dealer will not take any responsibility for any damage to the downhaul system, as this can only get damaged if used wrongly.

The centreboard is fully down when you see the marked position on the downhaul line.

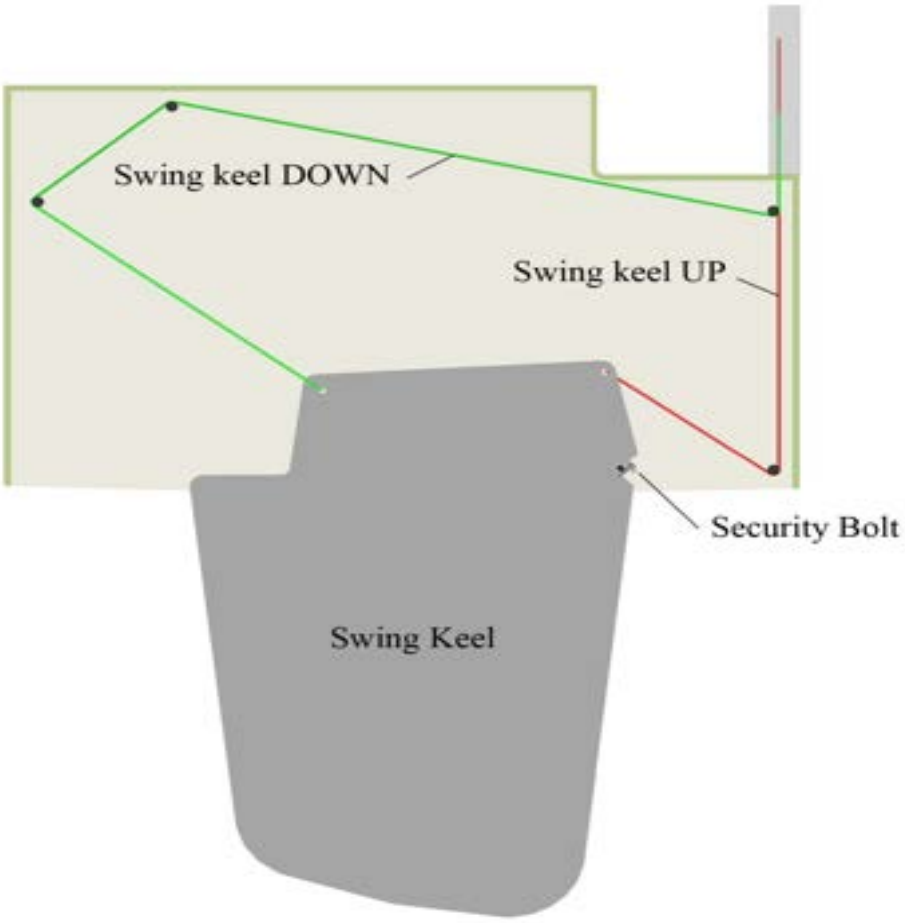
Always make sure that the "board up" line is released before and when pulling the centreboard down.

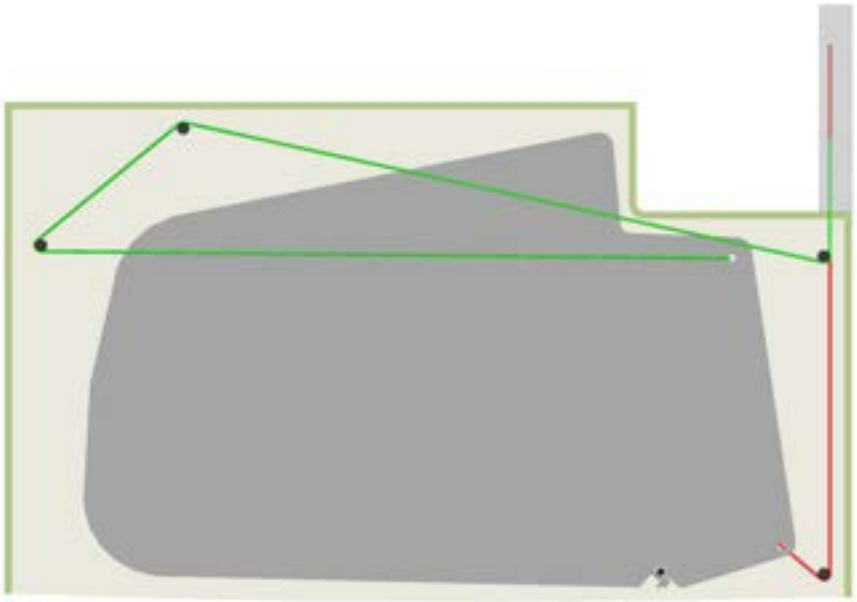
When craning the boat, remember to pull the centreboard up and lock the “board up” line in the rope stopper.

To take out the centreboard, the boat must be in a crane. Lift the centreboard up and unscrew the stainless bolt on the front of the centreboard. Now, you

can lower the centreboard slowly and the centreboard will drop out of the centreboard casing. Please see the drawing on the next page.

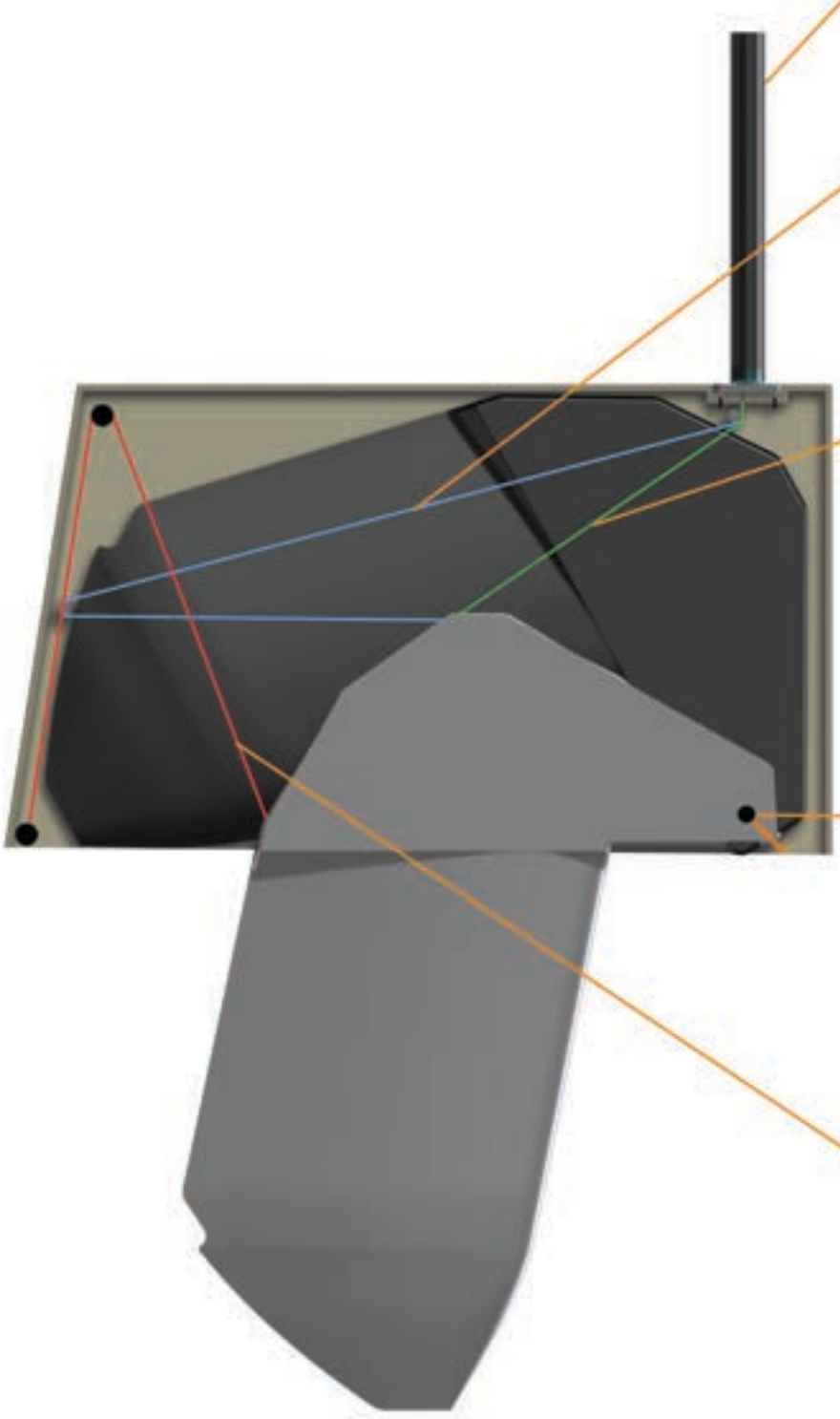
To install the centreboard is the same procedure in reverse. The centreboard weight is approx. 90 kg, so it takes 2 people to lift it.


Swing keel DOWN
Swing keel UP
Security Bolt
Swing Keel



Centerboard-system

Dragonfly 40



Mast support

Lines going to deck through mast support

Board down line

8 mm dynema - 6 meter long. Connected to 10 mm polyster line over deck,9 meter long

Board up line

8 mm dynema - 11 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

Stopline

8 mm Dynema

,2.5 meter long

2020

DRAGONFLY TRIMARANS

Rudder system

The rudder also has a kick-up system. Thus, by hitting the ground, the rudder will always automatically kick up. The downhaul line and release cleat are placed in the smaller aft portside cockpit floor locker.

IMPORTANT – Always make sure that the rudder is in a fully down position, otherwise the rudder gets hard weather helm. To pull it hard down, take the rudder downhaul line up to the SB winch and pull the rudder downhaul line a bit hard and secure and push by your fingers the rudder downhaul line into the cleat, while it is under load. **NEVER USE ELECTRIC POWER ON THE WINCH** but pull it gently and slowly semi-hard down by using only winch handle.

Maybe mark the line, so you can easily visually check that the rudder is always fully down. Again, this is very important.

Do regularly check that the downhaul line is ok and not damaged. The rudder system is NOT designed to be used while sailing in no other position than fully down. Otherwise, the rudder system will bend and become loose and could be damaged.

To pull up the rudder, first release the downhaul line and pull the thinner lifting line that is placed next to the downhaul line. Also, regularly check the bolt, where the rudder is bolted to the rudder head, to see that this nut is tight, but not too tight, so the rudder cannot move.

Always make sure that the rudder downhaul line is always ready to release with no kinks and no knots on the line and that the line can run freely so the rudder can kick-up freely.

When e.g., beaching the Dragonfly, just beforehand release the downhaul line fully, so the rudder goes up by itself when it touches the ground and then pull it up, it is a big rudder and not designed to go easy up and down like on a dinghy.

The automatic quick release cleat can be adjusted lighter and/or harder, if needed.

If the rudder is bolted too tight on the lager center bolt, it can be difficult to move it up and down – just bolt it easily tight, so there is no slack sideways in the rudder.
If you are forced to sail a short distance with the rudder a bit up – this is only possible by sailing only by Genoa – NO MAINSAIL, take the mainsail down, otherwise the rudder system will get damaged due to overload.

EMERGENCY TILLER

The Dragonfly 40 has an external emergency tiller to be fitted just over the rudderstock, on the backend of the cockpit floor. The emergency tiller can be found in the cockpit locker.

Important information: If the cable steering system fails, just for your information, the automatic pilot system will still work like normal as this is not a part of the Wheel steering system.

Before any longer journey, please make a visual check of the hole steering system like the chain, blocks, and cable system. We recommend changing the cable steering cables every 5 years or at the latest by every 20.000 NM. The steering cables are made of 6 mm 7x19 stainless wire/cable.

If the wheels feel to have too much play, just tighten the turnbuckle placed just above the main diesel engine. Don't tighten it too hard, it must be a bit slack, so the wheels feel nice to control.

IMPORTANT:
The rudder is NOT designed to be sailing with the rudder up, always keep the rudder in fully DOWN position.

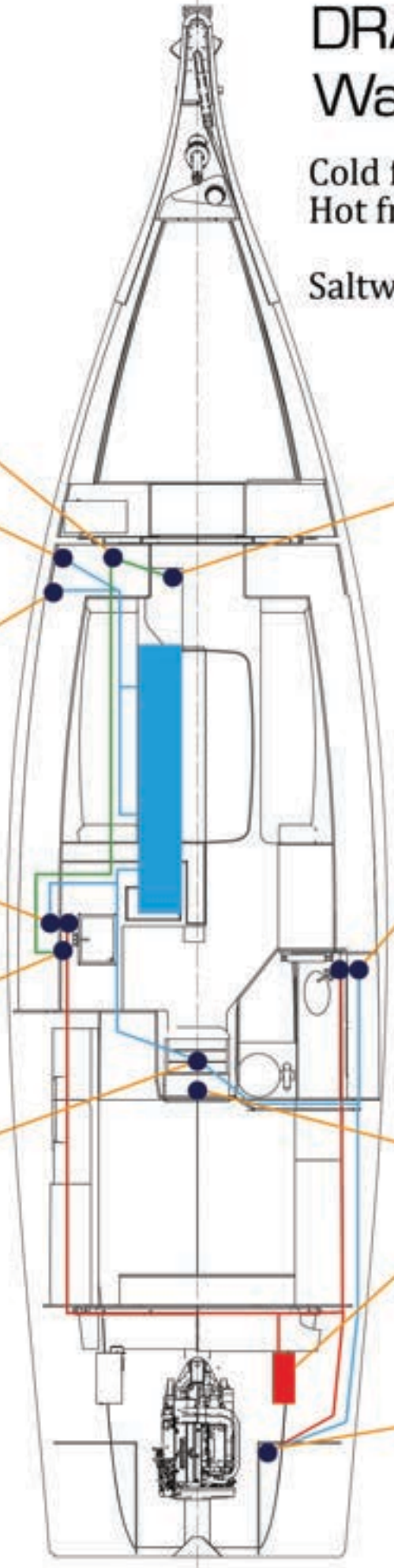
If you must sail over longer shallow water, and you must be sailing with the rudder like halfway up, this is only possible when taking the mainsail down for neutral balance of the boat.

The rudder blade itself has a draft of 1.5 meters below the waterline.

DRAGONFLY 40
Water systems

Cold freshwater in blue
Hot freshwater in red

Saltwater in green (optional)



12v saltwater pump

Airvent for watertank
on hullside

Freshwater deckfill
capacity: 220 L

Saltwater intake
via seacork

Kitchen faucet
Hot and cold

Saltwater faucet

Toilet faucet
Hot and cold water

12v waterpump
To be activated from
main swicth panel

Toilet shower
drain pump

Hot water boiler
Heated by engine and
shorepower 220/115v

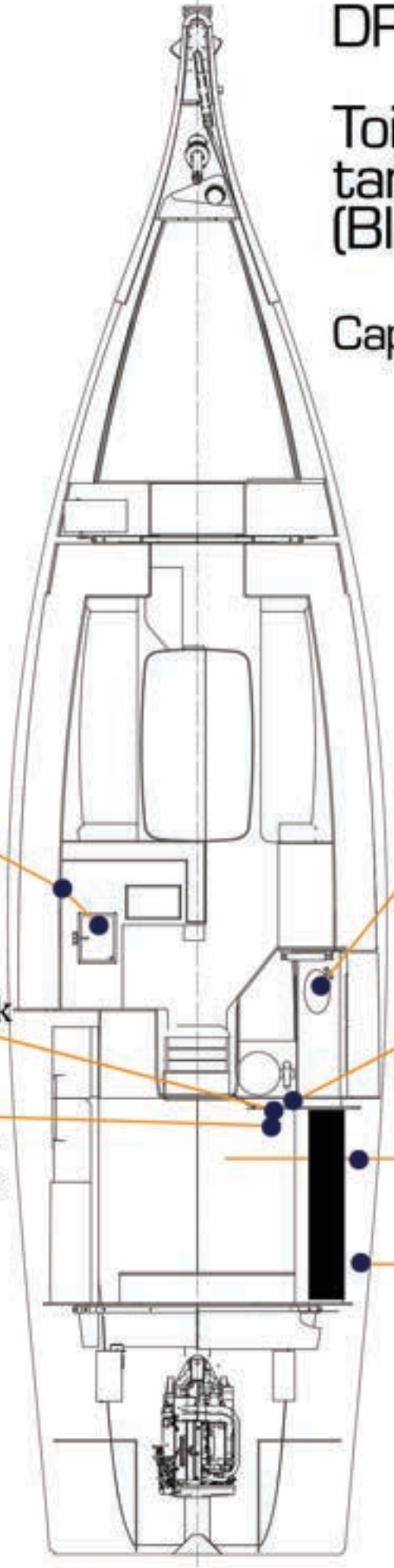
Cockpit shower
Hot and cold

DRAGONFLY
TRIMARANS

DRAGONFLY 40

Toilet and holding tank system (Blackwater)

Capitcy: 80 L



Kitchen sink outlet
Above waterline

Toilet sink outlet
Above waterline

Toilet intake seacork

Electrical toilet pump
(optional)

Empty valve
2" seacork under aft cabin.
To empty holdingtank for a few minutes and always remember to close again.
Only open and empty holding tank at open sea.
Always check tank level.

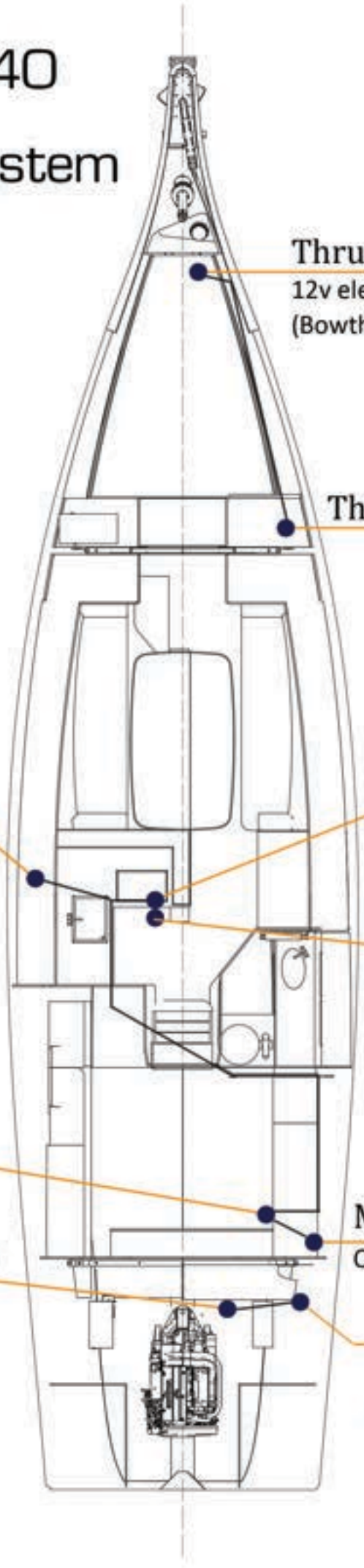
Airvent
On hullside

Deck outlet

DRAGONFLY TRIMARANS

DRAGONFLY 40

Bilge pump system



Thruster bilge pump
12v electric, automatic bilge pump
(Bowthruster + bilge pump optional)

Thruster bilge outlet

Main bilge pump outlet
Electric bilge pump outlet, above waterline

12v main bilge pump
Electric bilge pump, manual on switchboard + automatic

Hand bilge pump
Hose starts here in main bilge

Hand manual cockpit bilge pump
By SB cockpit seat aft

Manual bilge outlet
Outlet above waterline

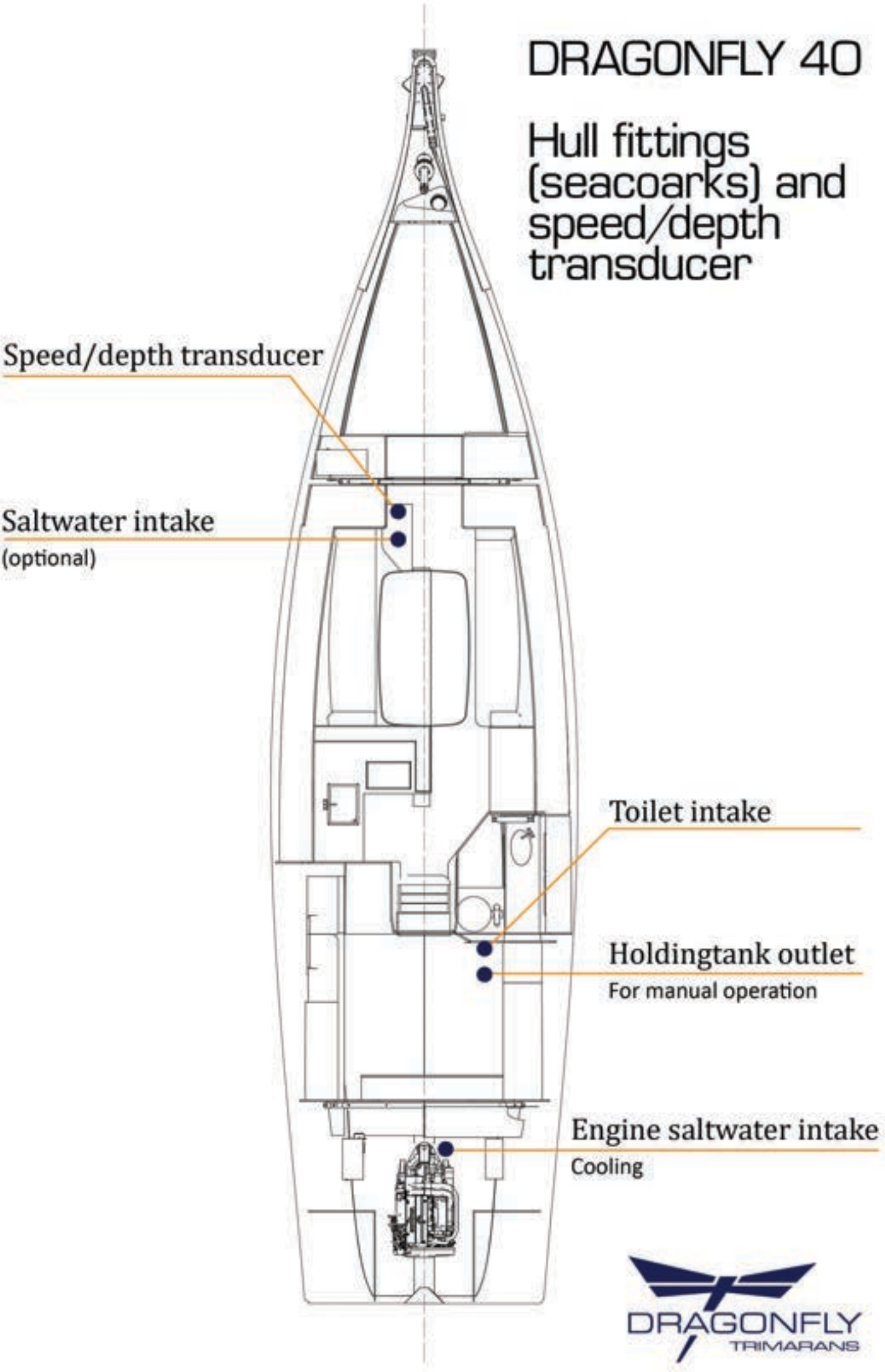
Enginge bilge pump
12v electric bilge pump, manual on switchboard + automatic

Outlet
Water from engine bilge pump, Above waterline

DRAGONFLY TRIMARANS

DRAGONFLY 40

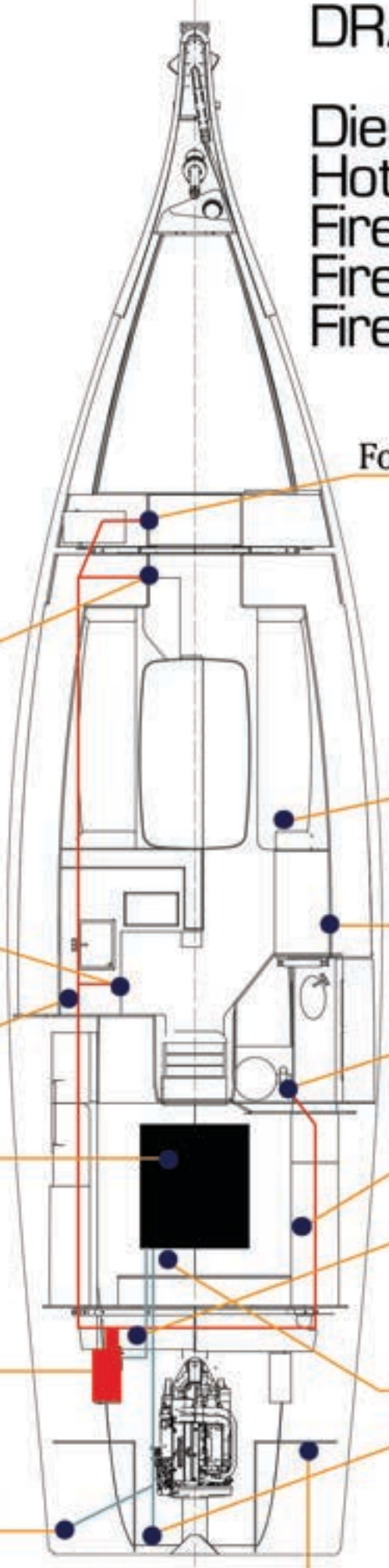
Hull fittings (seacoarks) and speed/depth transducer



DRAGONFLY TRIMARANS

DRAGONFLY 40

Diesel system
Hot air system
Fire extinguisher
Fire heat alarm
Fire port



Forward cabin hot air

Main cabin hot air

Fire extinguisher

Control panel hot air

Primary hot air
Always open

Fire heat alarm

Toilet hot air

Diesel tank 150 L
Made in stainless steel
Under aft cabin

Fire extinguisher
in cockpit locker

Aft cabin hot air

Diesel heating unit
(optional)

Diesel engine stop valve

Diesel deckfill
Cockpit floor aft

Diesel tank air vent
Outside hull

Fire port for engine room below wheel

DRAGONFLY
TRIMARANS

Gas-system (propane)

The Dragonfly 40 is standard equipped with a double gas burner stove and a 3 Kgs steel EU norm gas cylinder placed inside the wheel stand. Optionally it can be equipped with a gas oven above the kitchen sink. *Some boats are built with other stove and oven types which are not reflected in the following information.*

The folding glass lid over the gas stove must never be removed and must stay open while cooking, to get direct flames, but also to protect the wooden interior.

For safety reasons please make sure to **close the valve** on top of the gas bottle when you are done using the gas stove at the galley.

When replacing a gas cylinder, make sure to **connect the hose system correctly** to avoid leakage.

The gas system is leak tested by the yard and a gas leak test sheet is supplied with the boat on delivery.

Beware that some countries and local areas have restrictions that require a professional inspection of the gas installation.

It is always the owner´s/skippers' responsibility to follow the local restrictions as required gas inspection and to have this done before the active approval expire. The gas system is by Quorning Boats built and installed according to EU regulations.

If you need to bring extra gas cylinders on board for longer sailing trips, make sure to store them carefully so they cannot move around and never inside the cabins in the centre hull.

If the optional Gas oven is installed, please read the owner's manual of the gas stove carefully. When using the grill function, never use it for more than maximum 15 minutes and always open the oven door and secure it with the pull-out steel plate with a magnet to keep it open. The pull-out steel plate you will find inside the oven on the top by the opening.

ALWAYS stay near the gas oven when using the grill function and the oven.

Never use the gas stove or -oven with closed doors and hatches and make sure to have airflow and ventilation in the main cabin when using the gas systems.

Maintenance and product information

Engine type: _____

Engine No: _____

Gelcoat hull colour: _____

Gelcoat deck colour: _____

Gelcoat non-skid colour: _____

Propeller: *Type* _____ *Size* _____

House bank batteries: _____

Engine battery: _____

Epoxy barrier under water: _____

Antifouling brand: _____

Mast colour No: _____

INFORMATION ABOUT PRODUCTS USED FOR DRAGONFLY

The Elm woodwork in the cabins is varnished with two-part satin varnish. To varnish again, sand with grit 240 or finer sandpaper. You can use either one or two components varnish with satin finish. Two-part varnish is best.

Dragonfly is built in both hand-laid and vacuum infused reinforced fiberglass and polyester/vinylester resin combined with 15-20-25 mm PVC closed cell sandwich foam core (main bulkheads in 50mm foam core), which do not absorb water. Therefore, the boat is unsinkable.

For repairs use ONLY products on polyester/vinylester basis. Epoxy can be used in an emergency but cannot be cosmetically improved later with gelcoat.
If repairs are done where gelcoat finish is not needed (like under waterline) or if the finish needs painting – epoxy resin is well to be recommended.

Before any lamination repairs are done, the repaired area must be completely clean, sanded, and dry.

By delivery of a new boat from Quorning Boats, the yard does not calibrate electronic equipment in detail, only standard calibration.

It is always the responsibility of the skipper/owner to ensure that all the electronics are functional and calibrated and reliable.

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.

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.

THRU-HULL FITTINGS AND SEA VALVES

- The sea valves are closed when the handle is across the sea valve.

- An annual visual inspection of all sea valves on the boat should be performed to ensure they appear normal. There should always be two clamps on the hoses attached to sea valves below the waterline.

- An annual manual physical test should be performed to ensure all sea valves are functional and can be closed by hand without the use of tools.

- It is recommended that sea valves are always closed on the boat and only opened when in use.

- It is recommended to replace thru-hull fittings and sea valves when the boat is 15 years old.

MAINTENANCE

Dragonfly 40 Touring, Ultimate, Performance (built since 2020), and all C-version (built since 2022).

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 40 Touring, Ultimate, and Performance (built since 2020), and all C-versions (built since 2022).

- Waterstays - every maximum 10 years or 25.000 NM.

- Side stays and forestay cables in Stainless Steel – every maximum 10 years or 20.000 NM.

- Fiber Side stay cables (DF 40C and sometimes ordered optional on other boats) to be replaced after 7 years and or max 20.000 NM.

- Diamond stays on the mast should be changed after 15 years at the latest, or, by max 25.000 NM.

- Beam stop cable to forward, outside beam under trampoline – every maximum 10 years.

- Halyards and Dyneema lines need regularly visual check for wear and tear.

- Steering cables – every maximum 7 years or 15.000 NM. Regular visual control is strongly recommended, especially before planning longer trips.

- Safety cables – every maximum 15 years. Regular visual control is strongly recommended.

The above list of exchange intervals is the recommendations from the Dragonfly Yard, and it is not an extension of the 2-year warranty given 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.

IMPORTANT: Always check very carefully that you replace cables with the same type of cable quality if not ordered/replaced by the Dragonfly Yard.

RIGGING

Always visually check the rigging, halyards, reefing lines, water stays and rudder down line, as well as the cables and lines operating the Swing-Wing system.

Minimum once a year, shorten all halyards, reefing lines, and Swing-Wing lines by approx. 25 cm, only if you see chafing on the lines. After some years, you can turn them around or replace the lines.

Visual check of all cables is still required before and when changing the rigging. 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 or Code-0 halyard may block the forestay, which can cause failure of the forestay.

When changing to new parts and rigging systems – ALLWAYS make sure to use the very same kind of products and or order these parts from Quorning Boats Aftersales.

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

Tension on the rigging, please see the 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 can cause the mast to break.

GENERAL INFORMATION

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

NEVER wrap the mast in any kind of plastic, as this will cause the paint to bubble. If wrapping is needed, use breathable textile. Best to leave it open.

TRAMPOLINES

On all Dragonfly's, we recommend re-stitching (sewing) along the stitching/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 note this is a recommendation and it is still always the skipper's responsibility to regularly check the condition of the trampolines. This is quite important for the safety of you and your crew.

FLOAT DECK TEFLON PAD RINGS

The white 5 mm Teflon pad rings on the float deck needs 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 by the one bolt in each end of the Wing/beam.

QUICK-LINKS

Over the years, Quorning Boats has used the riggings links, so-called Quick-Links, in the Dragonfly production quite often. When replacing these, it is of the 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/loads. If you are not sure about this, please contact your local dealer or the Dragonfly Yard.

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 occurring due to 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.

TO STORE THE BOAT ON LAND

The best possible storage on land is to order from our yard either a steel cradle and/or a steel trolley, where the boat can rest on the four reinforced positions under the waterstay hull fittings on the centre hull. Only store the boat in folded position on the Dragonfly Trolley, folded out puts too much load on the front car hook.

Quorning Boats also offer the design of the steel cradles for free, so you can have these made locally.

If storage on land is not possible with the designed steel cradles/Trolley, we recommend resting the centre hull on wooden blocks or pallets on the centreboard casing, you will see it facing down under the centre hull. Only support the boat in the centreline of the centre hull.

IMPORTANT: Make sure the main load is on the centreboard casing.

Thereafter, backup with wooden blocks or pallets forward and aft on the centre hull.

For sideway stability – ONLY SUPPORT the floats with wooden block or pallets, best under the forward beam and or the forward deck hatch – use also carpet or similar, to protect the hulls and antifouling.

IMPORTANT NOTICE:

We do not recommend storing the boat folded on land with the mast up. If the mast must stay up – the boat must be folded out.

The hulls are very fragile, and it is very important that you and/or your boatyard follow our recommendations and guidelines on how to store the boat on land.

Be careful not to store the boat on land, where high tide or seasonal flooding can reach the boat.

Never store or transport the dragonfly 40 on monohull cradles, this will never work as this is not designed for folding trimarans.

BY ANY DAMAGE TO THE BOAT

Contact your dealer or the yard for instructions if you have any questions.

If not, you could endanger your safety and/or maybe even lose your warranty. In serious matters, contact your insurance company.

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 - half an hour.

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

HOW TO MAKE GELCOAT REPAIRS

1. First sand the actual repair with grit 80.

2. Then sand the area around it with grit 180-240.

3. Apply gelcoat with 2 or 3 layers.

4. When completely dry sand it down with 120-240, thereafter with 400 - 500 – 800 – 1,200 sandpapers.

5. After that 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 into a bucket with water.

GENERAL SERVICING

- Clean the boat, blocks, halyard stoppers and sheets well in freshwater regularly.
- Lubricate blocks every 2-3 months.
- Clean all tracks frequently, where travelers are functioning. Also, the mast track.
- Min. once a year clean and grease the winches and check the springs.
- Always keep the sails covered when not in use to protect them from the sun.
- 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 when the boat is + 3 years old. Best in the fall, when they have time.
- Have the engine serviced min. once a year and according to the manufacturer.
- Be sure to have antifreeze cooling on the engine cooling system in cold climates.
- Check that all sea corks are working well minimum 4 times a year.
- Empty water- and holding tank before the winter.
- Empty the hot water boiler before the winter.
- Check the engine oil.
- Change the engine pump cooling water system impeller.
- Check diesel fuel filter.
- Check zinc on the propeller and sail drive.

- When the boat is not used for some time e.g. like over winter, fill up the diesel tank 100% - and ask locally if diesel needs special extra Bio treatment.

- Make sure always to keep the rings on the float decks clean. Often rinse this with just water. If they start squeezing (making noises), spray these with Teflon type spray every now and then.

- Check that all lines look to be ok.

- Check that the handles on the deck hatches are not loose. If so, just tighten the screw on the "inside" of the handle.

- Check the seams on the trampolines and the cables on the trampolines and the Swing-Wing system are ok. Any sailmaker can repair the trampolines.

- Always make sure to have power on the batteries. Never let them go below 10.5 V. Check how your exact type of battery can be stored best over winter or when the boat is left alone for a longer time – this is very important.

Please note that this is only our simple and basic service recommendation on what to check and service – there might be other special products on your boat that also need attention and service like watermaker, air conditioner etc.

ENVIROMENT AND TOILET WASTE

The boat is sailing on our beautiful blue planet, so please take good care of it.

Never spill/waste Diesel into the seawater, always be careful when you fill up the Diesel tank, always have rags and/or paper towels ready to clean the Diesel pistol and be extremely careful not to overfill the Diesel tank.
If you happened to spill/waste Diesel into the sea, please contact the local authorities.

HOLDING TANK (BLACKWATER) AND GREYWATER

Always check the local requirements for emptying your holding tank to land or sea.

Whenever possible, always use the Marina Black/Greywater pump out station.

To pump out to sea, you for sure must be on open waters and normally minimum 12 NM offshore, but again make sure to check the local restrictions on this, as this will be different from country to country and even down to local restrictions.

Normally **NO** black or grey water must be let out on lakes.
To empty the holding tank, you just open the bigger seacock in the aft cabin on starboard side forward under the mattress, and the holding tank will automatically empty by itself.

Please take note that the seacock can be sealed/blocked at the seacock handle if local law requires this.

NEVER EMPTY YOUR HOLDING TANK CLOSE TO SHORE.

Also always check local restrictions if you can let out greywater (like from your kitchen/galley and/or shower).

For used engine oil and or other liquids, used batteries etc. also always follow local instructions for waste and or Recycling for these products.
Never throw waste or trash into the sea, only organic products.

Only clean antifouling in places designed for this. When sanding and applying antifouling, protect the ground.

Help us to keep the Blue Planet clean and Blue 😊.

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.

ANTIFOULING

Main hull - First, wash the bottom of the boat with freshwater. If necessary, wash with high-pressure. Let it dry out and apply antifouling with a lacquer roll – maybe sand the antifouling surface first.

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, 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, batten cars are greased with Teflon type spray or e.g., the best is Mc-Lube from Harken.

Wash and rinse the batten cars well, incl. the mast track.

MAST, BOOM, SPREADERS ETC.

Mast, boom, and head foil must be washed and cleaned. If you do not immediately succeed in cleaning the aluminium, you can use rubber compound polish cream.

CLEANING UP FOR THE WINTER

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 opening the zip on the back of the cushion.
   - For washing or dry-cleaning, check which material your cushions are made of before cleaning.
   - It is best to store the cushions in dry surroundings.
   - If the cushions stay inside the boat – set them up vertically.

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, you can turn it over.
   - Every year all halyards and reefing lines can be shortened approx. 25 cm only if you can see chafing marks.

6) The water tank must be emptied and cleaned. It is easily accessible to the port side main cabin by the centreboard casing under the sofa floor.

7) During the winter, open all lockers for better ventilation and make sure that the boat is well ventilated.

8) The engine:

   - Please contact your local engine dealer.

9) The marine batteries can stay in the boat over the winter. But it is better to charge them fully before the winter and check them once a month. Never let the batteries lose power, these must never go below 10.5 V. Some batteries are best with no frost, so please check if your batteries are OK with minus 0 degrees Celsius.

10) Dry out the hulls completely to avoid frost damage and check all bilges in all three hulls are dry, also the forward and aft bilges in the floats.

11) Make sure that the 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 or plastic type cover, make sure it does not touch the boat and hulls, as this might scratch the boat badly.

12) Flush the holding tank several times and empty this before you haul out the boat – best min. two times.

Any damage to boat, gear, sails, or instrumentation should be fixed in the fall/autumn, as everybody gives the best service at that time of the year.

IMPORTANT NOTE:
NEVER wrap painted boats/hulls in plastic, as this will cause the paint to bubble.

NEVER use bigger flat type fenders for longer time (one or two days is ok), as this can cause the paint to bubble up, due to the moisture that builds up between the bigger flat fenders and the hull side.

It is also very important for winter storage that you do not make a type of tent where heavy moisture can build up, in this case the warranty will not back it up.

This only goes for painted hulls whereas standard Gelcoat finish is not so sensitive to moisture, but we still recommend respecting our recommendations.

INFORMATION ON THE INBOARD ENGINE

- Check zinc on the sail drive and propeller every 6 months.
- The sail drive/engine rubber gasket must normally be changed every 7 years, but please also check the engine Service manual and with local mechanic.
- Service the engine according to the manufacturer's service program.
- Always check that the engine gets cooling water by checking visually that the exhaust has water coming out when starting up the engine.
- Always keep a spare impeller, drive belt and oil and diesel filter on board.
- Check the level of oil in the engine and sail drive as well.
- Check the level of cooling water in the engine and the plastic bowl.
- Always make sure to have antifreeze in the cooling water in cold climate.
- Have a professional mechanic to check and maintain the engine and respect the service program.

When you are motoring and you start sailing, most engine manufacturers recommend when you stop the engine, to after the engine has stopped, put gear handle in reverse just shortly to make the folding propeller to fold in, and after that put the gear handle in NEUTRAL.

This is strongly recommended by most diesel manufacturers and if not, you may lose the warranty on your engine sail drive system, to make sure of this, please read your owner's manual for your main engine.

IT IS ALWAYS

THE OWNER'S AND/OR THE SKIPPER'S RESPONSIBILITY

TO CHECK THE CONDITION OF THE BOAT AND GEAR

AT ALL TIMES, TO ENSURE THE SAFETY OF THE BOAT AND CREW.

If you respect what is informed here in this Owner´s Manual, you will enjoy and understand the boat even more.

We wish you some great and fantastic sailing and cruising with your Dragonfly 40.

Quorning Boats ApS

DRAGONFLY TRIMARANS DENMARK

Rope diagram

DRAGONFLY 40 ULTIMATE

Text	Material	Qty.	Diameter	Length in metres
Main sheet	Polyester	1	10 mm	50 m
Backstay	Dyneema	2	8 mm	20 m
Genoa Sheet	Polyester	1	14 mm	38 m
Genoa Furler	Dyneema	1	10 mm	23 m
Selftacking Jib (optional)	Dyneema	1	10 mm	20 m
Code-O Sheet	Polyester	1	10 mm	50 m
Asymmetric spinnaker sheet	Polyester	1	10 mm	56 m
Barberhaul	Polyester	2	10 mm	22 m
Tack line	Dyneema	1	10 mm	23 m
Swing Wing line	Dyneema	2	10 mm	30 m
Centerboard UP	Dyneema	1	8 mm	11 m
Centerboard Down lower line	Dyneema	1	8 mm	8 m
Centerboard Down deck line	Polyester	1	10 mm	9 m
Preventer/boomvang	Polyester	2	10 mm	20 m
Lazy-Jack	Polyester	1	6 mm	30 m
Lazy-Jack on spreader	Polyester	2	8 mm	9 m
Mooring lines	Polyester	4	18 mm	16 m
Main halyard	Dyneema	1	10 mm	68 m
Genoa halyard	Dyneema	1	10 mm	42 m
Spinnaker halyard	Dyneema	1	10 mm	50 m
Code 0 halyard	Dyneema	1	8 mm	65 m
Reef 1	Dyneema	1	8 mm	28 m
Reef 2	Dyneema	1	8 mm	50 m

Please note this information on lines is as how the boat is setup and designed today, this may can change in the future.

*When you change lines on the boat it is of **OUTMOST** importance that you change the lines to the same kind of quality as installed on the boat.*

Updated: July 2020

Rope diagram

DRAGONFLY 40 PERFORMANCE

Text	Material	Qty.	Diameter	Length in metres
Main sheet	Polyester	1	10 mm	50 m
Backstay	Dyneema	2	8 mm	20 m
Genoa Sheet	Polyester	1	14 mm	38 m
Genoa Furler	Dyneema	1	10 mm	23 m
Self-tacking Jib (optional)	Dyneema	1	10 mm	20 m
Code-O Sheet	Polyester	1	10 mm	50 m
Asymmetric spinnaker sheet	Polyester	1	10 mm	56 m
Barberhaul	Polyester	2	10 mm	22 m
Tack line	Dyneema	1	10 mm	23 m
Swing Wing line	Dyneema	2	10 mm	30 m
Centerboard UP	Dyneema	1	8 mm	11 m
Centerboard Down lower line	Dyneema	1	8 mm	8 m
Centerboard Down deck line	Polyester	1	10 mm	9 m
Preventer/boomvang	Polyester	2	10 mm	20 m
Lazy-Jack	Polyester	1	6 mm	34 m
Lazy-Jack on spreader	Polyester	2	8 mm	10,5 m
Mooring lines	Polyester	4	18 mm	16 m
Main halyard	Dyneema	1	10 mm	71 m
Genoa halyard	Dyneema	1	10 mm	44 m
Spinnaker halyard	Dyneema	1	10 mm	50 m
Code 0 halyard	Dyneema	1	8 mm	65 m
Reef 1	Dyneema	1	8 mm	34 m
Reef 2	Dyneema	1	8 mm	56 m

Please note this information on lines is as how the boat is setup and designed today, this may can change in the future.

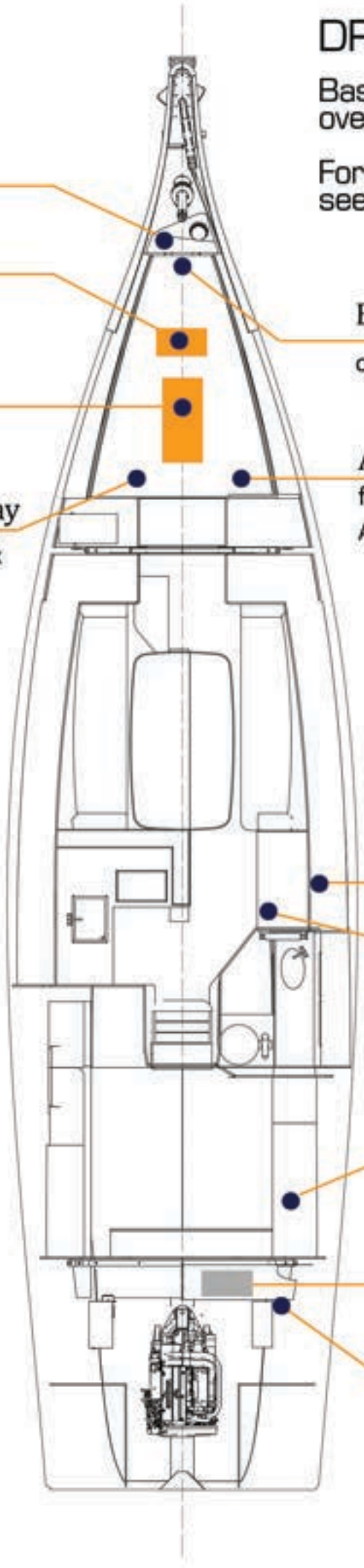
*When you change lines on the boat it is of **OUTMOST** importance that you change the lines to the same kind of quality as installed on the boat.*

Updated: March 2023

DRAGONFLY 40

Basic electric system overview

For more detailed information see electric diagram



Shorepower cable

Anchorwell

Shorepower

charger/ inverter

House battery bank

HFI, shorepower relay

Main system breaker box for 220 or 110v systems

Bowthruster system

optional under V-berth

Automatic fuse for

furler (optional)

Anchorwinch (optional)

Main switch panel

Aux. 12v main switch

Engine Main switch

In cockpit locker

Main battery

220/110v socket for hot water

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 in a safe place onboard and hand it over to the new owner if you sell the boat!!

Warranty

INBOARD ENGINE REGISTRATION

Your inboard engine has been registered from the yard to the engine manufacturer or importer. For warranty and/or service, contact your local engine dealer.

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.*