

LAGOON 500

User's guide



www.cata-lagoon.com

We share a common passion for the sea: we, LAGOON, as boatbuilders and you, who want to live out your enthusiasm for the ocean.

We are delighted to welcome you to the great family of LAGOON boat owners and we would like to congratulate you on your purchase.

This instruction guide is intended to help you to enjoy your boat in comfort and safety. It includes the boat specifications, the equipment provided or installed, the systems on board and tips on her use and maintenance. Read this manual carefully before you put out to sea so that you can make the most of her and avoid any damage and difficulties. Read it and familiarize yourself with the vessel before using it.

We are always aiming to bring you the benefits of the latest technologies, new equipment and material, as well as our experience, and therefore the boats are regularly improved. It is for this reason that the characteristics and information are not contractual and may be modified without prior warning and without mandatory updating of this manual.

This owner's manual has a general purpose and it may mention some equipment or accessories or deal with some points or questions that are not relevant to your own boat; if in doubt, refer to the inventory that you received on delivery of your boat.

Our network of LAGOON authorized dealers is available to help you get acquainted with your boat and is best qualified to take care of her maintenance.

For your comfort and safety if this is your first vessel or if you are changing to a new type of boat with which you are not familiar make sure that you obtain experience in preparing and handling before "taking command" of the vessel. Your dealer, international sailing association or yacht club will be able to recommend local sailing schools or professional instructors.

Although everything possible has been planned and designed with the safety of the boat and its users in mind, remember that sailing is highly dependent on the weather conditions and the sea state, and that only an experienced and fit crew, handling a well-maintained boat can sail satisfactorily.

The sea and wind conditions that correspond to design categories A, B and C are changeable and are still susceptible to the risk of unusually large waves or strong gusts of wind. Total safety cannot therefore be guaranteed, even if your boat meets the requirements of a category.

Always consult the weather and shipping forecasts before taking your boat out to sea. Make sure that the sea and wind conditions forecast correspond to the category of your boat, and that you and your crew are able to handle the boat in these conditions.

The sea and the water are not Man's natural environment and we must respect their laws and their strength.

Adapt the use of your boat to her condition, which deteriorates with time and use.

Any boat, however well built, may be severely damaged if incorrectly used. This is not compatible with safe sailing. Always adapt the speed and direction of your boat to the sea conditions.

The 'COLREG' international regulations for the prevention of collisions at sea, published by the International Maritime Organization, specify the rules relative to steering and courses, navigation lights etc. throughout the world. Make sure that you know these rules and that you have a leaflet explaining them on board.

In many countries, a license, an authorization or training certificate will be required.

Make sure you have the necessary legal authorization before you use your boat.

Always ensure an experienced professional carries out the maintenance of your boat, installs any accessories and makes any small modifications. The written authorization of the builder or his legal representative is compulsory for modifications that alter the specifications of the boat, in particular the vertical arrangement of forms (installing a radar, modifying the mast, changing the engine etc.).

For essential or optional equipment (engine, electronics etc.) refer to their respective manuals supplied with your boat.

Users of the boat are advised that:

- The entire crew must be properly trained.
- The boat must not carry a load heavier than the maximum load recommended by the builder, in particular the combined weight of food supplies, equipment not supplied by the builder and people on board. The weight carried by the boat must be properly distributed.
- The water in the bilge must be maintained at a minimum.
- Stability is reduced when you add weight to the upper sections.
- In the event of heavy weather the hatches, lockers and doors should be closed to minimize the risk of water entering.
- Stability may be reduced when towing another boat or when lifting heavy weights using the davits or the boom.
- Breaking waves are a serious danger to stability.
- If your boat is equipped with a liferaft, read the instructions carefully. All the proper safety equipment must be carried on board (harnesses, flares, liferaft, etc) according to the type of boat, the country in which it is used, the weather conditions, etc.
- The crew must be familiar with the use of all the safety equipment and all emergency safety procedures (MOB, towing etc.).
- All people on deck must wear a life jacket or a buoyancy aid. Please note that in certain countries it is compulsory to wear a certified buoyancy aid at all times.

Keep this user's guide in a safe place and pass it on to the new owner if you sell the vessel.

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Navigation

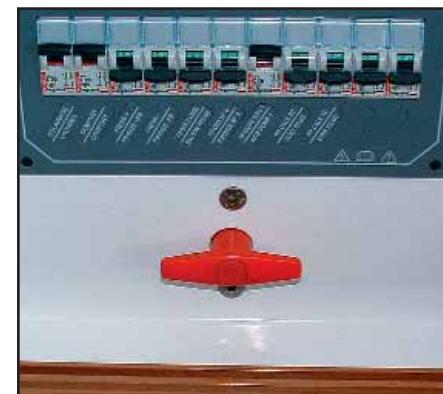
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GETTING UNDERWAY



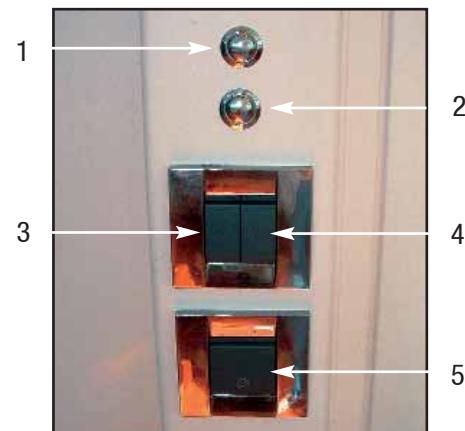
**BLOCKING OF
SLIDING DOOR**



MAIN POWER SWITCH

NAVIGATION

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**ENTRANCE LIGHT
SWITCHES**

- 1 - Outside courtesy light switch (optional extra).
- 2 - Rear panel backlight switch (optional extra).
- 3 - Saloon ceiling light switch.
- 4 - Cockpit ceiling light switch.
- 5 - Saloon ceiling light switch.

■ Getting underway

The sliding door can be locked in three different positions: closed, ajar (airing position) and open.

A latch on the doorframe enables locking from inside the saloon.

RECOMMENDATION

While sailing lock the sliding door shut.

RECOMMENDATION

When entering the saloon be careful of the step leading into the galley.

Proceed to switch on the main power of the vessel by activating the circuit breaker (ON position) located under the different electrical panels to the right of the entrance and then turn on the different accessory switches (see ELECTRICITY chapter).

Check the charge rate of the batteries, the water level in the tanks and the fuel level (see ELECTRICITY and MOTORIZATION chapter).

Carry out the inventory of compulsory safety equipment and instruct the crew concerning its location and operation.

DANGER

Remember to disconnect the shore power supply before casting off.

■ Navigation visibility

The international regulations to prevent collision at sea (COLREG) and course regulations make mandatory a permanent and proper surveillance and the respect of priority.

Make sure there is no other boat in your way.

Visibility from the steering station may be obstructed by the following:

- Load and load distribution
- Sea conditions, rain, spray, fog or darkness.
- Lights on inside the boat.
- People and mobile equipment in the helmsman's field of visibility.



ENGINE BATTERY SWITCHES

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1 - Battery coupling switch and circuit .

2 - Port engine circuit breaker.

3 - Starboard engine circuit breaker.

■ Navigation under engine

Before starting the engine:

- Ensure that the fuel valves are open.
- Open the valves for the engine cooling systems.
(see MOTORIZATION chapter).

To start the engines, refer also to the manufacturer's manual.

• NORMAL ENGINE START

Activate (ON position) the main power switch (saloon entrance) and then the circuit breakers for the starboard engine (starboard engine compartment) and port engine (port engine compartment).

- Disengage the reverse gear (to allow acceleration in neutral).

Proceed in the following order:

- Start the port engine first.
- Then start the starboard engine.

After starting the engine check for cooling water running out of the exhaust and observe the color of exhaust gases.

• STARTING ENGINES WITH BATTERY COUPLING CIRCUIT

In case one of the engine start batteries is not working :

- Engage (position ON) the battery coupling switch.
- Start the motor whose starter battery is not working.
- Disengage (turn OFF) the battery coupling switch.

Note : in the standard configuration, the engine batteries are each charged by their respective motors.

WARNING

Never switch off the ignition or the electrical system when the engine is running.

• NAVIGATION

When using the engine, avoid making noise and wake near other users.

Respect speed limits.

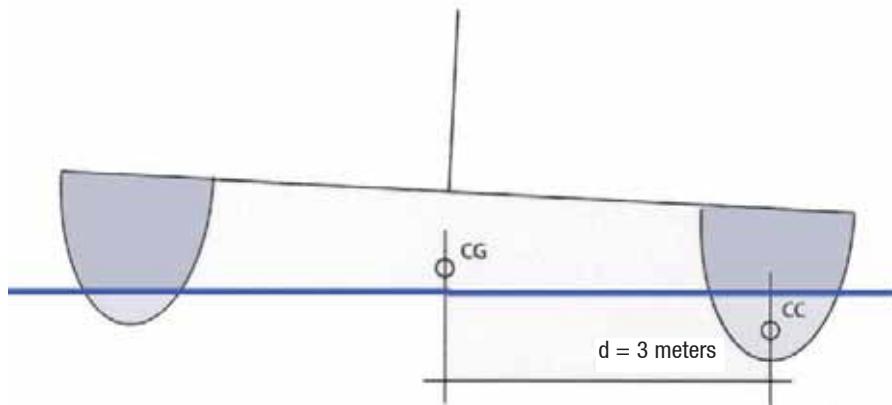
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NAVIGATION

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RIGHTING MOMENT



CATAMARAN
Weight of vessel: 10 tons

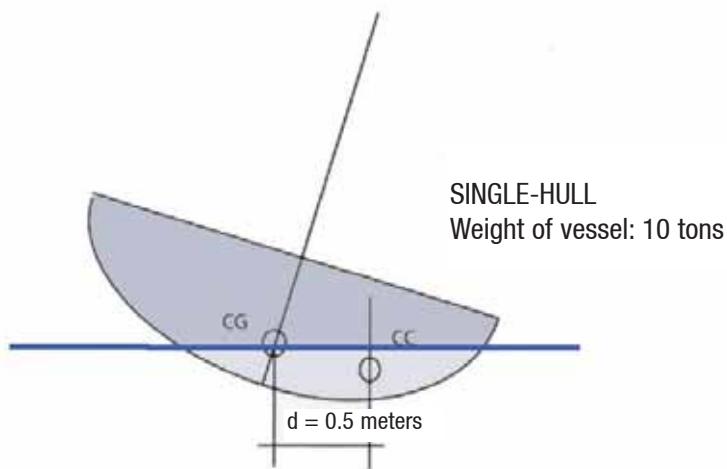
Illustration showing the difference between the righting moments of a single-hull vessel and a catamaran of 10m length.

d: distance between centre of buoyancy and centre of gravity.

RMmax: weight of vessel x d
(RMmax : maximum righting moment)

RMmax single-hull : 10 tons x 0.5 meters
: **5 tons X meters**

RMmax catamaran : 10 tons x 3 meters
: **30 tons X meters**



■ Navigation under sail

• BEWARE

A catamaran presents 6 times greater heel resistance than a single-hull vessel. In terms of ship design we speak of righting moment (multiplication of the vessel's weight by the transverse distance between the centre of gravity and the centre of flotation (or buoyancy)).

See illustration opposite.

This fact has real consequences for the handling and sail-trimming of a catamaran.

The fact that the boat will not heel over could conceal an excessive sail surface area in use, which could be dangerous for the crew and the vessel. It is therefore essential to constantly monitor the real windspeed and to trim the sail area as a priority according to this speed.

These latter adjustments are valid in calm seas. In rough seas one should take the precaution of reducing 10% earlier in terms of real windspeed. Generally speaking, it is essential to constantly look to relieve the vessel rather than to put it under stress.

One should always look for the sail angle of attack to be headed to the apparent wind and for the sails not to be over-trimmed so that the airflows leaving the rear of the sail are parallel to each other, that is to say they do not create turbulence behind the sail.

Failure to follow the above recommendations can be dangerous for the boat and the crew, and the manufacturer cannot be held responsible in the event of an accident.

- CLOSE HAULED TRIMMING (between 75 and 50° to real wind)

Windspeed given in apparent wind

- **From 0 to 16 knots:** full sail; main sail traveler 30cm above the boat center, main sail trimmed with a slightly opened leech (boom centered).

The genoa jib is trimmed to near the spreader, the genoa traveler is placed so that the angle of the genoa sheet forms a straight line with the clew and the luff, at 40% of its height.

- **From 16 to 20 knots:** full sail; the main sail traveler moves up to 60cm above boat centre, main sail trimmed with a slightly more open leech (boom still in line: so the sheet will have to be slackened). The genoa traveler does not change position but adjust the sheet so that the leech is 10cm from the spreader.

- **From 20 to 26 knots:** 1 reef, full genoa; the main sail traveler comes back to 30cm above boat center.

The genoa traveler does not change position but the sheet is slackened slightly so that the leech is 20cm from the spreader.

- **From 26 to 30 knots:** 1 reef, 75% of the genoa, the main sail traveler goes to 60cm above the boat's center.

The genoa traveler remains in place or moves slightly forward but it is adjusted so that the leech acts as a propeller, the upper part dumping air out in strong wind conditions.

- **From 30 to 36 knots:** 2 reefs, 60% of the genoa, the main sail traveler returns to the 30cm above center position, the boom is slackened to fly 50cm leeward.

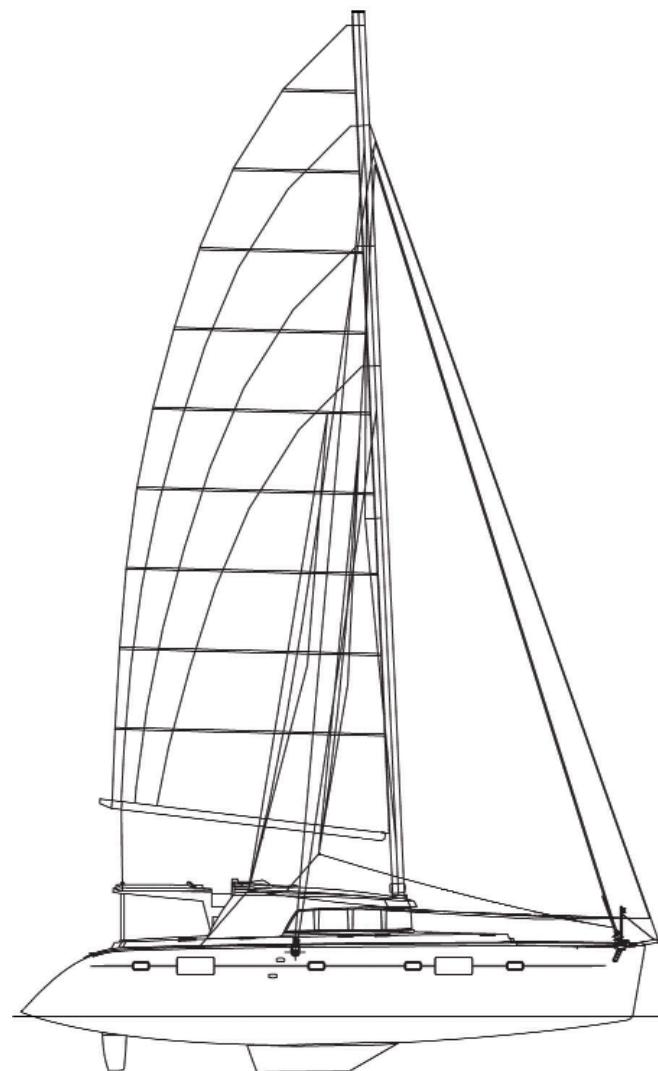
The genoa traveler is moved slightly forward, the adjustment remains the same.



SAILS

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SURFACE AREA OF MAIN SAIL

Main sail high: 93m².
Main sail 1 reef: 75m².
Main sail 2 reefs: 60m².
Main sail 3 reefs: 43m².

- **From 36 to 45 knots:** 2 reefs, 40% of the genoa. The main sail traveler is dead center and the boom veers 1 meter to leeward. The genoa traveler moves forward slightly, the sheet is slackened to open wide in strong wind conditions.
- **From 45 to 55 knots:** 3 reefs alone (either storm sail or lie to), traveler in the center, main sail out by 1meter. The boat will be more at ease scudding in this weather.
- **Over 55 knots:** lie to, drag anchor or, preferably, scud bare poles.
- CLOSE REACHED TRIMMING (between 75 and 130° to real wind)
 - **From 0 to 23 knots:** full sail; the traveler is positioned between 1 meter from center up to the end of the track depending on the wind angle, the sheet is slackened so that the boom is veering out anything from 50cm in calm weather to 2 meters when the wind is forceful. In every case no more than one batten should be allowed to chafe the shroud at the fastest speeds. The genoa jib is slackened so that its average attack angle is head on to the apparent wind.
 - **From 23 to 28 knots:** 1 reef, all the genoa. The adjustments are identical.
 - **From 28 to 33 knots:** 2 reefs, 80% of the genoa. The adjustments remain identical.

- **From 33 to 38 knots:** 2 reefs, 60% of the genoa. The adjustments remain identical.

- **From 38 to 45 knots:** 3 reefs (or main sail lowered and a little more genoa), 40% of the genoa. The adjustments remain identical.

- **From 45 to 55 knots:** main sail lowered, 40 to 30% of the genoa, sufficiently trimmed so as not to flap.

- **Over 55 knots:** scudding, depending on the sea conditions the dockside lines can be looped round behind the vessel and attached on the opposite side to act as a brake.

WARNING

Your boat is designed to sail without the need to climb onto the roof for any maneuvers. It is dangerous to climb or stay on the roof particularly in the event of gibing. Keep children under close supervision.

WARNING

Because the radar antenna is mounted forward of the mast, please take care during tacking and jibing manoeuvres when the genoa is deployed in order to avoid damage to the radar.

RECOMMENDATION

Under sail put all engine controls in neutral to avoid any damage to engines (with fixed propellers).



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- REDUCING SAIL

The boat is fitted with 3 reefs.

Reefs no.1 and no.2 are automatic, reef no.3 is traditional.

The luff eyelet of reef no.3 is fitted with a strap with a snap shackle to clip on to the eye bolt on the boom.

Reefing of reefs no.1 and no.2:

- 1 - Head the boat into the wind.
- 2 - Haul taut the topping lift.
- 3 - Slacken the main sail sheet.
- 4 - Slacken the main sail halyard and then trim reef line no.1 or no.2, as needed, until the reefing blocks which correspond to the luff and the main sail leech are a few centimeters from the boom.
- 5 - Close the line camcleat of the respective reef.
- 6 - Hoist taut the main sail halyard.
- 7 - Slacken the topping lift and take in the main sail sheet.

Follow the lowering and raising of the sail with the help of the head downhaul.

Reefing reef no.3:

Repeat steps 1 to 3 as before, then:

- 4 - Slacken the main sail halyard then trim reef line no.3 until the main sail leech block is a few centimeters away from the boom.
- Clip the snap shackle on the luff eyelet of reef no.3 onto the eye bolt located on the boom.
- Take up the slack in the lines of reefs no.1 and 2.
- Repeat steps 5 to 7 as before.

Refer to the running rigging diagram (chapter on RIGGING AND SAILS) for identification of ropes.

RECOMMENDATION

Make sure that the sliding fairleads under the boom are perpendicular with the eyelet on the reef line to be used.

For safety, the reef line used should always stay on the winch with 3 turns around the gipsy.

In the case of putting in reef no.3 open the cleat so that the tension is taken up by the strap clipped to the eyelet intended for this purpose, then re-close the camcleat for greater safety.

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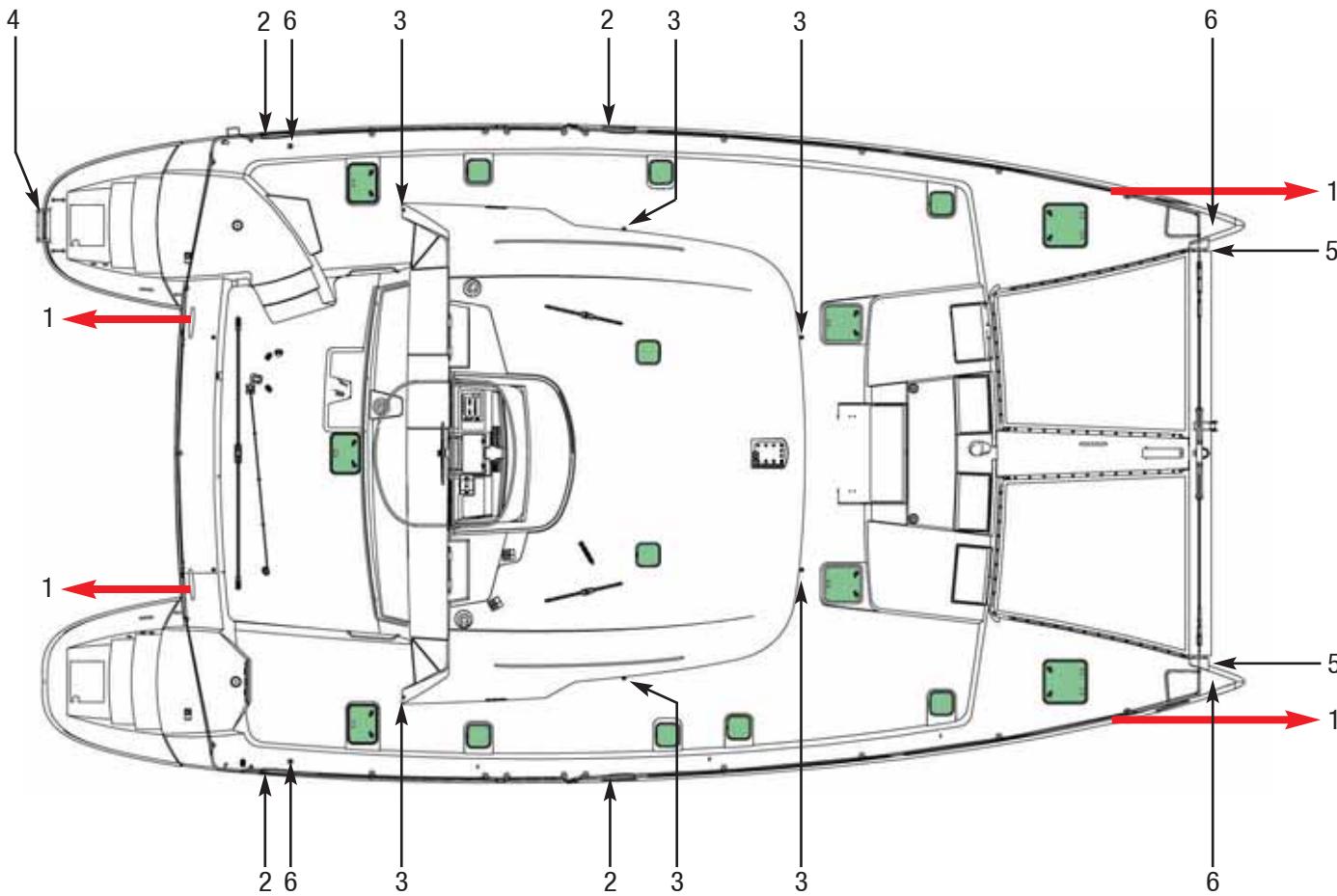
- NAVIGATION WIND ASTERN

- Do not fall off more than 150° to the apparent wind.
- Put the traveler out as far as possible and slacken the sheet slightly.
- Make sure the main sail does not touch the shrouds; the rubbing of the battens will wear the material and cable very rapidly.
- Keep main sail + jib up to 15 knots speed and put in one reef or more if the accelerations are sudden and strong or if sea conditions deteriorate.

DECK LAYOUT

NAVIGATION

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1 - Midship cleat for towing.

2 - Midship cleat.

3 - Jackline fastening.

4 - Swimming ladder.

5 - Anchor bridle fastening.

6 - Padeye/spinnaker/gennaker sheet block.

■ Dockside

A sufficient number of dockside lines of a size suitable for the environment should be on board for mooring your boat.

- Always maneuver your boat using the engine.
- Make allowances for currents and wind when handling your boat.
- Protect your boat properly with suitably sized fenders.
- Always keep the dockside lines clear and stored away.
- Maneuver at a reduced speed.

DANGER

Do not try to stop the boat with your foot, your hand or a boat hook.

AFTER MOORING

- Protect the dockside lines from chafing with plastic sleeves.
- Allow for tide variations if necessary.

WARNING

Do not let the hull's large plexiglass windscreens come into contact with fenders or hawsers: surface damage would be irreparable.

■ Towing

TOWING

Tow another boat at a reduced speed and as smoothly as you can. Be particularly careful when throwing or catching the towing line (it

may catch on the propeller).

NB: Stability may be reduced when towing a boat.

BEING TOWED

- Keep steering your boat and ensure you stay in the wake of the towing boat.

■ Anchoring

As a rule, set the anchor in at least 3 times the water depth.

RECOMMENDATION

Before anchoring check the depth of water, the power of the current and the nature of the sea bed.

• PREPARATION OF ANCHORING (illustrations following page)

- Install the bridle by fixing it to the chain plates located at the ends of the fore beam.
- Put the bridle through the stem bow roller.
- Shackle the bridle to the central cleat during the lowering of the chain.

• ANCHORING

- Point your boat into the wind and at zero speed.
- Pay out the chain while reversing slowly.
- Secure the anchor chain on the bridle.
- Lead out the chain until the bridle becomes taut.



ANCHORING



**FIXING THE BRIDLE TO
THE FORWARD BEAM**



**RUNNING THE BRIDLE
THROUGH THE BOWROLLER**

NAVIGATION

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**BRIDLE SHACKLED
TO THE CHAIN**



**WINDLASS
SWITCH**

WARNING

All anchoring maneuvers using the electric windlass should be carried out with one or two port engines running.

Activate the windlass from the steering station or by the control found in the windlass locker.

If the port engine is not functioning, the windlass can work on service batteries (if available).

N.B.: The batteries can be recharged via the generator (option) if the engines do not start.

- HOISTING ANCHOR

- Ensure the chain is properly set on the chain gypsy.
- Slowly advance the vessel using your engine (do not use your windlass to advance the boat).
- Release the bridle from the chain.
- Lift the anchor completely.
- Visually check the final meters until the anchor makes contact with the davit.
- Check the position of the anchor on the stemhead fitting.

In the case of electrical failure use the winch handle on the windlass to lift anchor.

WARNING

Windlass operations are dangerous:

- Always keep the anchor line clear and unencumbered.
- Always proceed with care, using gloves and always wearing shoes.
- Make sure that no-one is leaning on the windlass when the control is activated.

1

NAVIGATION

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DAVITS



FIXING DAVIT HOOKS



DAVIT BLOCKERS

NAVIGATION

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**PULLING UP TENDER
WITH WINCH**

■ Davits (optional extra)

WARNING

No one should be on board the tender during manoeuvres carried out with the davits.
Moor up the tender during maneuvers.

• INSTALLING A TENDER ONTO THE DAVITS

- Fix the davit line hooks to the forward and aft of the tender.
- Close the blockers found on the davits.
- Pull the bow of the tender up to halfway using the cockpit winch.
- Repeat the operation for the stern.
- Alternatively raise bow and stern until the tender comes into contact with the davits.

• LAUNCHING A TENDER FROM THE DAVITS

- Ensure that the blockers on the davits are closed.
- Thread the davit rope attached to the stern of the tender around the winch (minimum of three turns).
- Open the blocker and let the line feed out until halfway.
- Close the blocker.
- Repeat the operation for the bow.
- Alternatively lower stern and bow until the tender comes into contact with the water.

WARNING

When under sail remove the tender engine and store it on board the boat.
Fasten the tender according to sea conditions.

WARNING

The davits are designed to support a maximum load of 350 kg and a tender of maximum 4 m length.

■ Environment

RECOMMENDATION

Like us, you love the sea: help us to safeguard it; do not pollute!

Do not discharge oil into the sea.

Take every precaution to prevent hydrofuel overflow when filling the engine tank.

When in port, only use the onboard WC if it is equipped with organic waste reservoirs.

The use of detergents is implicated in the destruction of marine plant and animal life. Choose fully biodegradable cleaning products.

Do not throw plastic bags and bin bags into the sea. Use the bins provided for this purpose at ports.



Winter storage

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LAYING UP.....25

**PROTECTION AND
MAINTENANCE.....25**

BLOCKING THE BOAT ASHORE

WINTER STORAGE

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■ Laying up

- Take ashore all the ship's documents, any lines that are not used for mooring, galley equipment, supplies, clothes, safety equipment, batteries and gas bottles.
- Check the safety equipment, check expiration dates and have the liferaft overhauled.
- Take advantage of the laying up to draw up a complete inventory of equipment.

• BLOCKING THE BOAT ASHORE

Preparing the hull:

- A large rectangular wooden block of 1m in length and a tire to be placed under the stern, across the keel.
- A steel jackstand of a minimum of 1m in height which will be placed under the forward part of the forward bulkhead.

Make sure that the aft part of the keel is well-chocked (on its block) before very carefully lowering the forward section onto the jackstand.

■ Protection and maintenance

• INTERIOR

- Drain all the fresh water hoses and rinse them with water and vinegar (do not use a chlorine based product).
- Lubricate and close all the water inlet valves and thru-hull fittings. Rinse and completely drain the heads bowls and pumps.
- Retract the sounder and speedometer sensors.
- Seal air inlets as much as possible.
- Install an air dehumidifier in the salon and leave the cabin and storage unit doors open (lockers, ice boxes).
- Air the cushions outside for as long as possible before returning them to the boat, placing them upright on one side to limit contact surfaces.

• EXTERIOR

- Thoroughly rinse the hull and deck.
- Lubricate all mechanical and mobile parts with Vaseline (bolts, hinges, locks etc.).
- Protect all lines and dockside lines against chafing.
- Protect the boat to the highest degree with fenders.
- Make sure the boat is properly moored.

N.B.: The trampoline and ropes are sensitive to U.V. Protect them as much as possible.



WINTER STORAGE

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RECOMMENDATION

This list of recommendations is not exhaustive. Your dealer can advise you and carry out the technical maintenance of your boat.

- ENGINES

RECOMMENDATION

Winter storage of the engines is the domain of professionals. Storage conditions will depend on whether the boat is stored afloat or ashore.

- ELECTRICITY

There exists a way of leaving the manual bilge pumps in operation after the switching off the main power.

Refer to the ELECTRICITY chapter, BATTERY CHARGER paragraph and the PLUMBING chapter, WATER SYSTEM DRAINAGE paragraph.

2



Launching

3

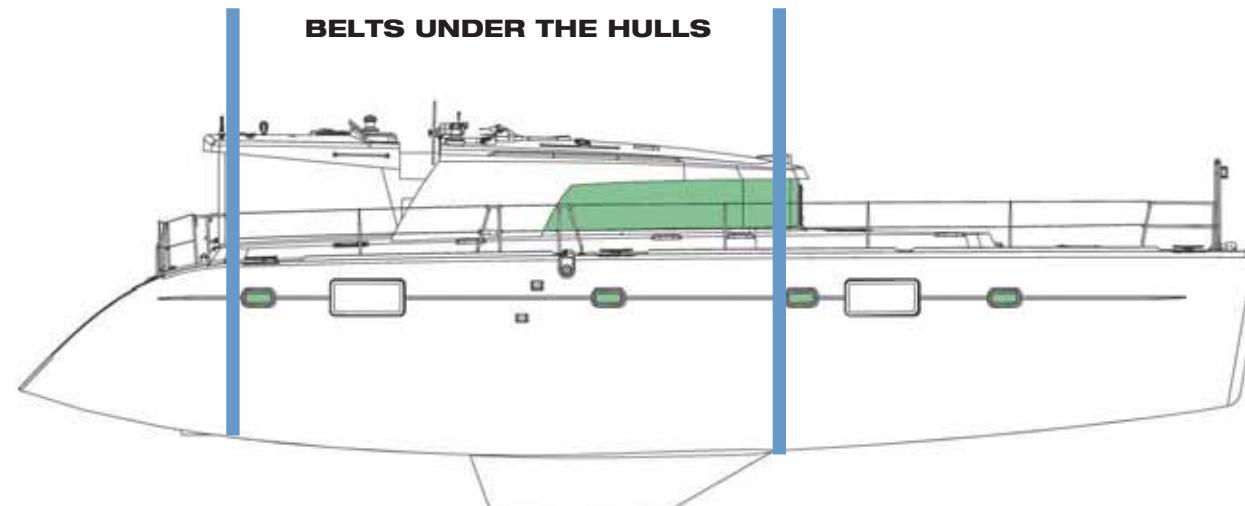
RECOMMENDATIONS **31**

STEPPING THE MAST..... **33**

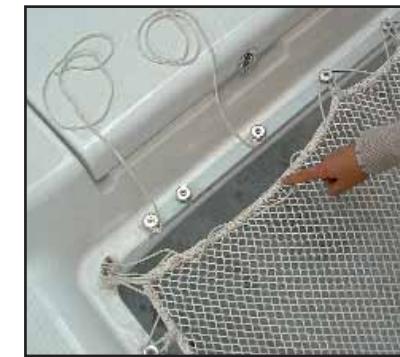
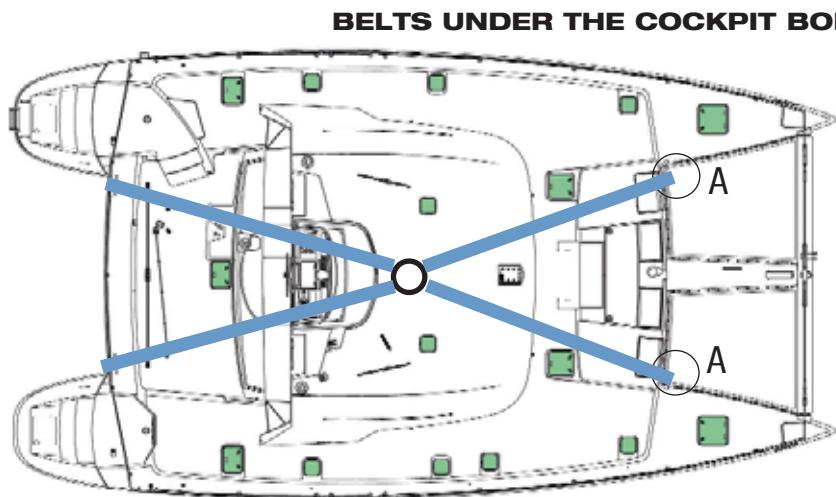
POSITIONING THE HOISTING BELTS

LAUNCHING

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The straps should be placed at the bulkheads (mast and engine compartments).



**A: CROSS-THREADING
OPENING**

■ Recommendations

A lot of skill and care is required to commission your boat for the first time.

The future proper functioning of your boat and its equipment depends on the quality of the commissioning operation.

In order to validate the warranty in the event of the failure of certain equipment, the initial launch and equipment tests must be carried out by your LAGOON dealer or agent.

RECOMMENDATION

All future maintenance should be carried out with the greatest care by professionals.

If the LAGOON boatyard is not involved in maintenance operations, your guarantee will not cover any incidents linked to handling errors.

• BEFORE LAUNCHING

- If your boat is to be fitted with a sounder and speedometer, allow for the relevant fittings and their installation.
- Check the water intake strain box for cleanliness.
- Check the engine and reduction gear oil levels (refer to engine manual).
- All the optional accessories should be sealed with paste.
- Retract the speedometer into its housing (it may be damaged by the handling belts).
- Turn off all the water inlet and drain valves (sink, washbasin, heads and engine).

• HOISTING

Tie off the vessel fore and aft with fenders.

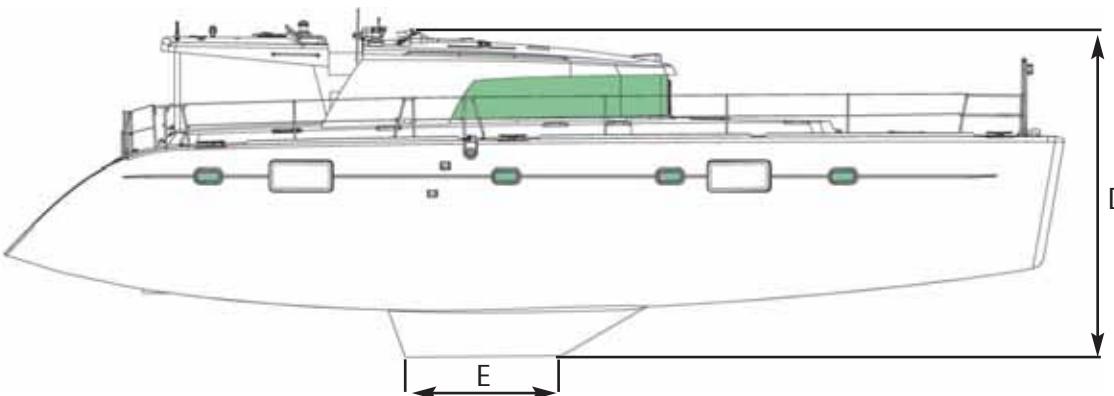
Prepare:

- 2 straps (length: 12m, working load: 10 tons).
- 4 slings (length: 15m, working load: 5 tons).
- Position the straps under the nacelle near each hull; place two wedges forward to protect the trampoline bar; tie up the two straps behind to the winch on the deck.
- Attach the 4 slings to the straps.



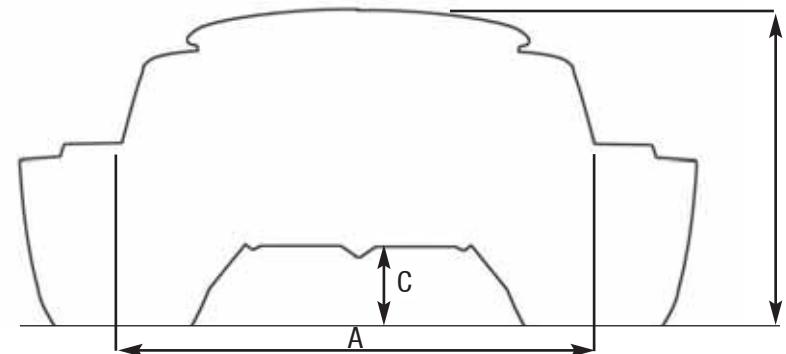
PACKING

SUPPLEMENTARY INFORMATION IN THE GENERAL FEATURES CHAPTER



LAUNCHING

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Size	Designation	Reference (m)
A	Width between the two hull centers	5.86
B	Height clearance (without mast or appendix)	3.46
C	Waterline height under cockpit	+/- 1
D	Vessel height on its keels (without mast or appendix)	4.86
E	Length of keels	2.20
	Length of boom	7.16
	Length of mast	22

- Put it slightly under tension; the sling hooks should be situated at the boat's centre of gravity, either in the longitudinal centre or plumb with the shroud chainplates in the transverse plane.

Hoist gently, and control the movement of the boat with dockside lines.

DANGER

Do not stay on board or under the boat during hoisting.

RECOMMENDATION

Never place belts or fenders in contact with the large glass sections on the hulls.

- AFTER LAUNCHING

- Check the sounder and speedometer fittings for tightness if necessary.
- Open the valves and make sure that they are watertight.

Before starting the engine, refer to the GETTING UNDERWAY and MOTORIZATION chapters.

■ Mast stepping

If later you have to step the mast anywhere other than at your LAGOON dealer, proceed as follows:

- BEFORE MAST STEPPING

- Protect the mast against possible chafing by the crane hook and cable.
- Tie down the shrouds and all the riggings to the base of the mast with lashing long enough to guide the mast heel when stepping the mast.
- Protect the spreader end fittings and the roller furler drum.
- Pass round the mast a line of about 1.50m with an eye and thimble at both ends and covered with rags; pass this line under the second level of cross trees.
- Link together both thimbles (in front of the mast) with a shackle large enough to receive the crane hook.
- Raise the whole until it is taut under the spreader bases.

- DURING MAST INSTALLATION

- Take the necessary steps to avoid damaging the mast head equipment.
- Use the backstay and lashing at the base of the mast to control the handling.
- Engage the electrical harness in the mast base.
- Ensure the base of the mast bears fully on its base plate.



LAUNCHING

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LAGOON 500

- AFTER MAST STEPPING

- Lubricate all the turnbuckles (see recommendations in the RIGGING chapter).
- Tension the rigging (refer to RIGGING chapter for settings).
- Reconnect the electrical cables in the junction box at the base of the mast located behind the gas locker (see ELECTRICITY chapter).
- Check very carefully that the turnbuckle fixing pins are well locked and protect them with adhesive tape.
- Push up the boom and repeat all the manoeuvres.

RECOMMENDATION

Re-adjust the mast after a few miles.

- DISMASTING

Proceed by carrying out the operations described for mast stepping in reverse order taking care to mark the line locations with labels.

RECOMMENDATION

Before all dismasting operation, remember to disconnect the electric cables.

Pull gently while guiding the cables.



Hull & deck

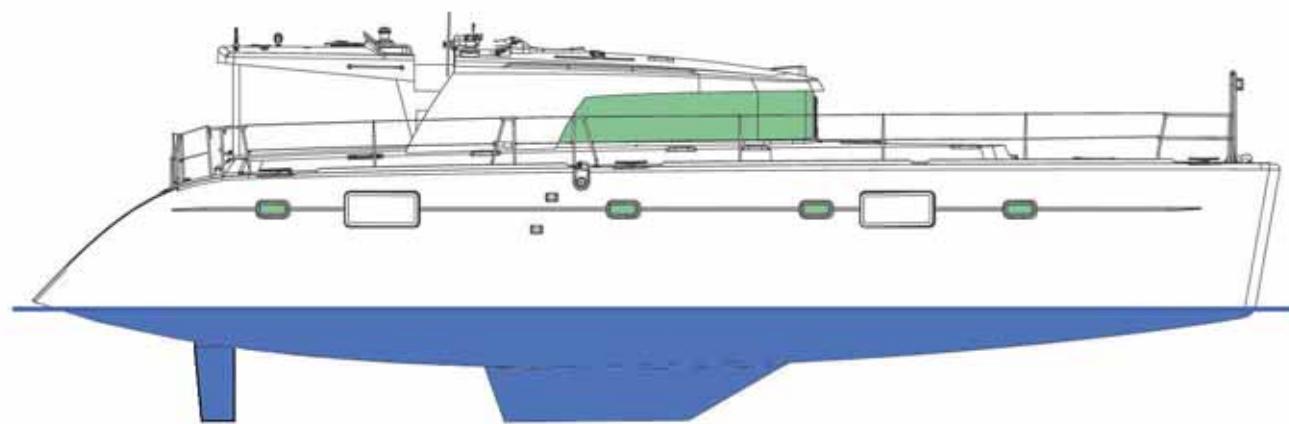
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CLEANING THE BOTTOM

HULL
& DECK

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Submerged area (including appendices): 75m².

■ Construction

The LAGOON 500 is made of balsa wood composite and resin infused with the quadraxial fiberglass fabric, carbon fiber reinforcement and plywood resin-reinforced.

The deck is made of a balsa wood composite with plywood and aluminum inserts where the deck fittings are installed. The deck-to-hull joint is glued and reinforced with rivets.

■ Maintenance

The materials and equipment of your boat have been selected for their high quality and performance and for their ease of maintenance. However you must carry out a small amount of maintenance in order to protect your boat from external elements (salt, sun, corrosion...)

Clean your boat preferably on wharf with fresh water.
Use as few cleaning agents as possible.
Do not use solvents or aggressive detergents.
Do not discharge cleaning products into the sea.

RECOMMENDATION

We strongly advise against the use of pressure washers.

Do not use hot water or steam.

Regularly brush the deck with a degreasing cleanser and fresh water.

DECK FITTINGS

- Thoroughly rinse all your equipment with fresh water.
- Periodically lubricate blocks, sheaves, turnbuckles, winches, tracks and travelers with water-repellent grease.
- Stainless steel that is showing small spots or blisters of rust should be cleaned and polished with a chrome and steel renovator.

EXTERNAL TEAK FITTINGS/TECK DECK

Regularly clean all exterior wood with fresh water using a sponge (if necessary some gentle soap may be added).

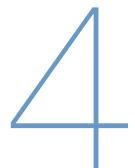
PLEXIGLASS

- Rinse Plexiglass with fresh water.
- Polish with a soft cloth soaked in liquid paraffin.
- Use polishing paste to remove scratches.

■ Cleaning the bottom

Applying a tin-free anti-fouling paint every year will avoid the need for tedious and frequent careening. An epoxy undercoat is recommended. You are reminded that any sanding before applying antifouling paint attacks the gel coat and impairs its effectiveness.

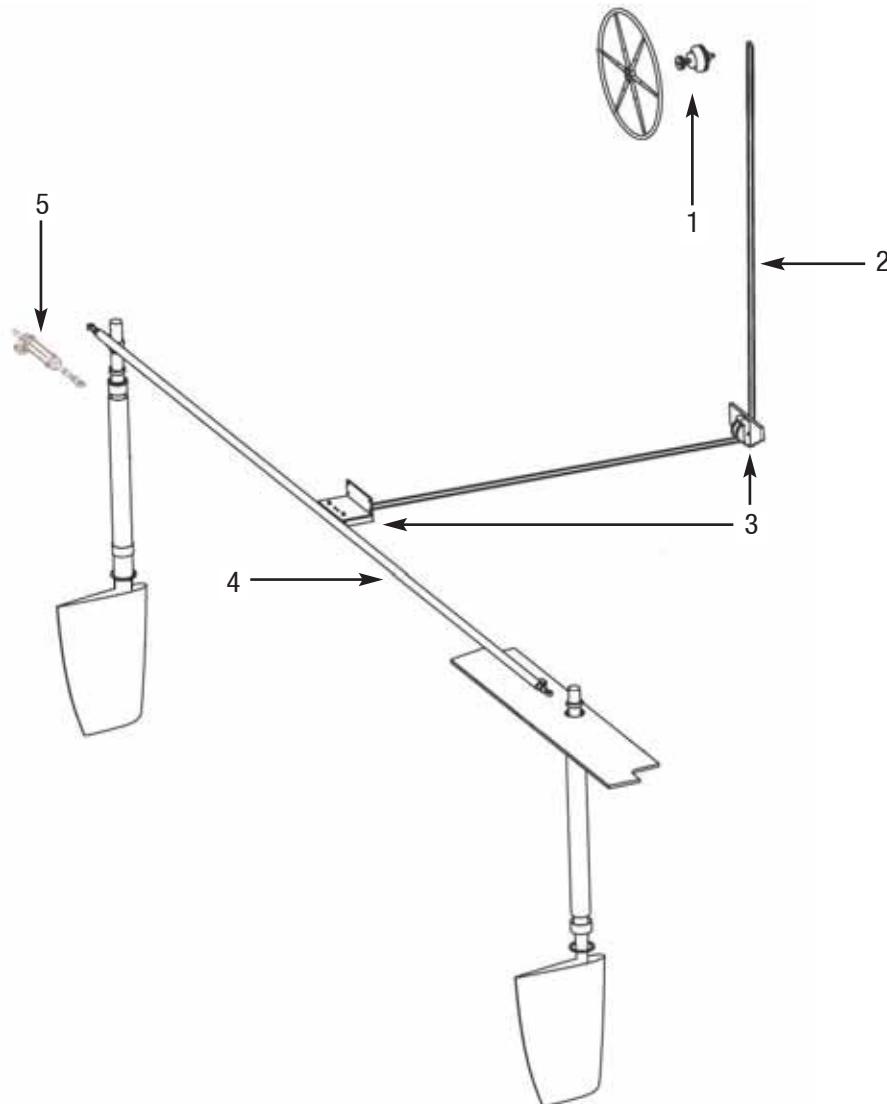
Polishing will restore your boat's original shine. If a persistent and isolated problem arises, contact your dealer.



STEERING GEAR

HULL
& DECK

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- 1 - Toothed gear.
- 2 - Cables.
- 3 - Deck organizer.
- 4 - Connecting rod.
- 5 - Autopilot ram (optional).



**CABLE TENSION
SYSTEM**

■ Repairing the gel coat

Gel-coat color code: RAL 9016.

PROPORTIONS

Our products contain an accelerator, you simply need to add the catalyst (colorless liquid). The usual proportion is 2%.

The gel setting time (working time) is about 30 minutes, complete hardening takes about 10 hours.

WARNING

Please respect the following conditions for successful repairs:

- Dry weather.
- Temperature between 15° C and 25° C.

APPLICATION

- To fill a blister hole or a scratch, sand and clean the area with acetone.
- Prepare the necessary amount of gel coat, preferably on a glass plate.
- Apply the product with a spatula or a nib in a layer thick enough to enable further sanding.
- In order to even out minor touch-ups on smooth surfaces, stick cellophane tape (or better, Mylar tape) on the freshly applied gel coat.
- Remove sellotape after hardening.
- To obtain a high shine finish, sand with extra fine paper and water, then polish.

STORAGE

Store gel coat components in a cool, dry and dark place.

The components can be kept for a maximum of 6 months. Polyester products are flammable, so take the usual precautions.

CLEANING YOUR TOOLS

Clean your tools with acetone.

DANGER

The catalyst is a dangerous product:

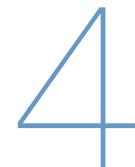
- Keep it out of reach of children.
- Avoid contact with the skin and mucous membrane.
- In the event of contact, wash with soapy water and rinse thoroughly.

■ Steering gear

The steering system is accessed via the engine compartment, by removing the ceiling on the aft beam side of the aft cabins.

- Regularly check tightening.
 - Do not overtighten the steering cables.
 - Lubricate all elements with grease.
- Treat nylon, ertalon or Teflon bushings with WD40 only.

Proper settings results in gentle steering resistance, without hard points and without looseness.



HULL
& DECK

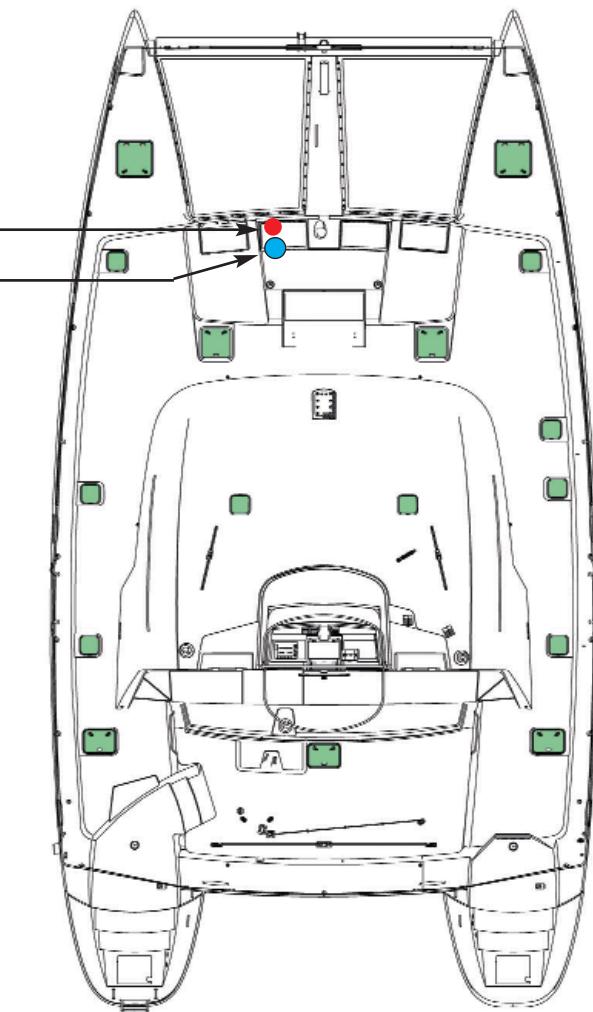
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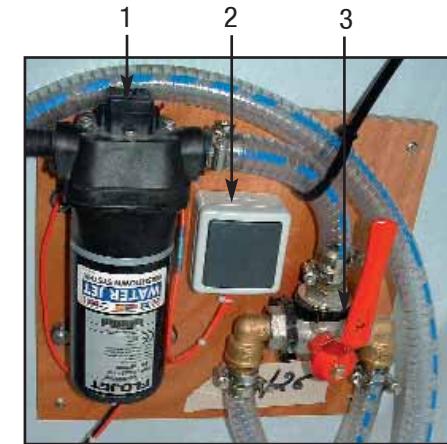
DECK WASH PUMP

HULL
& DECK

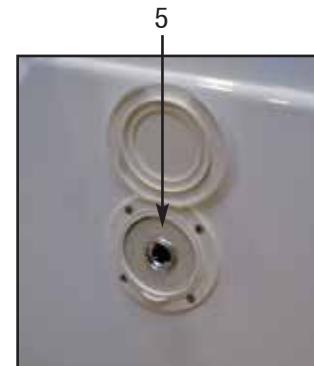
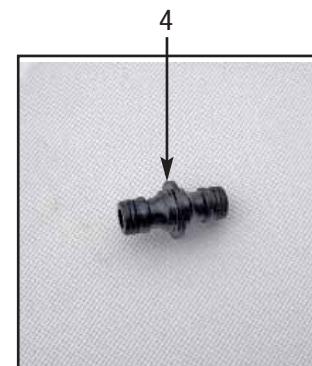
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LAGOON 500



- 1 - Deck wash pump (12V).
- 2 - Power switch.
- 3 - Selector valve for fresh/ sea water.
- 4 - "Gardenna" type nozzle.
- 5 - Connector for deck wash hose.



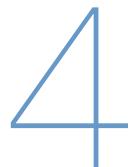
■ Deck wash pump (optional extra)

The deck wash pump is located in the forward port cockpit locker.

It supplies sea or fresh water from the port tanks (access to the selector valve through the forward port cockpit locker).

It is switched on at the electrical panel on the COMFORT group (zone 2) and then by using the switch next to the pump.

Squeeze the plastic body of the socket to connect or disconnect the "Gardenna" type nozzle.



Layouts

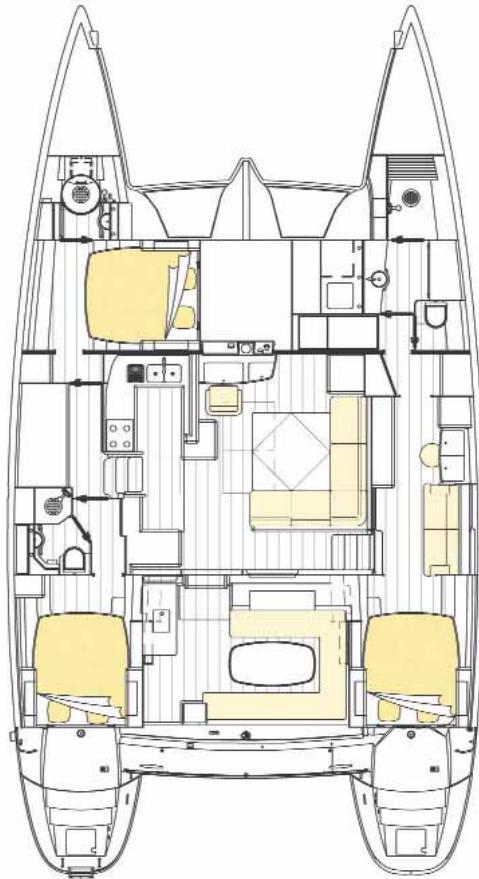
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LAYOUTS

LAYOUTS

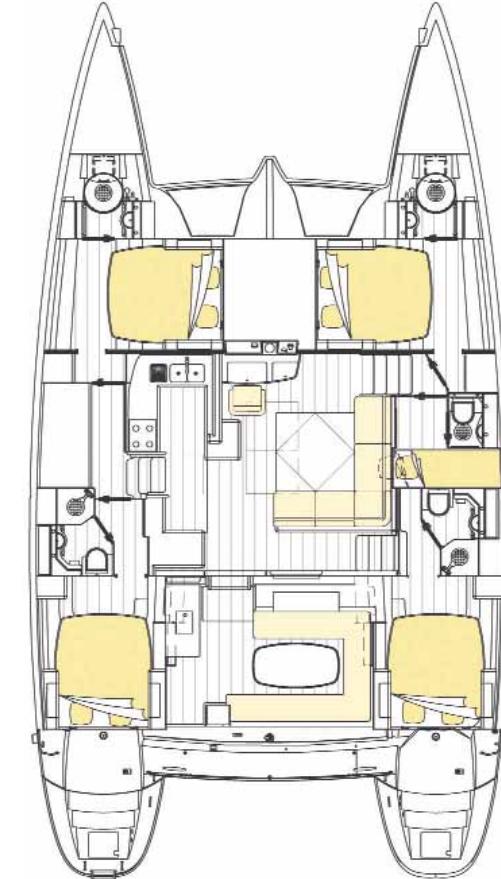
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3 cabin version.



4 cabin version.



5 cabin version.

■ Interior maintenance

- Take advantage of nice weather to air the sofa and berth cushions.
- Stand the cushions vertically if you leave the boat for a prolonged period.
- Use sun shades to protect the inside of the boat from UV rays.
- Ensure sure the bilges are clean and dry.

- INTERIOR VARNISH

- Rinse interior varnish with fresh water mixed with spot removing furniture shampoo.
- Polish interior varnish with chamois leather.

RECOMMENDATION

**Use as few cleaning agents as possible.
Do not discharge cleaning products into the sea.**

■ Fabrics

ADVICE: Mark each cover and foam pad when dismantling for easy identification.

- STAIN REMOVAL

- Remove as much of the stain as you can with the blade of a knife (starting from the edge and moving towards the centre).
- Dab with a clean cloth.
- Remove the stain using a clean cloth dipped in solvent. Never pour solvent directly onto the stain.

- Rub with a clean, dry cloth.
- Brush the fabric against the grain.
- Vacuum the fabric when dry.

PVC AND COATED FABRICS

- Use a sponge and soapy water (household soap).
- For persistent stains, dab with a cloth soaked in white spirit, do not rub.

RECOMMENDATION

For PVC fabrics do not use solvents or solvent based products.

JACQUARD 100% POLYESTER / DRALON

If the fabric cannot be removed:

- Go over it with the vacuum cleaner.
 - Clean with synthetic foam (see the product's instructions for use).
- If the fabric can be removed:
- Handwash at 30° with standard washing powder.
- Both types of fabric can be dry-cleaned. Remove stains as soon as possible with a damp cloth.



COCKPIT TABLE - DECK HATCH

LAYOUTS

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**STOWING OF
COCKPIT TABLE**



LOCKING OF DECK HATCH

(Left-hand handle button in open position)
(Right-hand handle button in closed position)

COTTON JACQUARD

- Dry clean.
- Do not iron.
- Do not use bleach.
- Remove stains with fractionated petrol.

ALCANTARA

- Wash in warm water with pH neutral soap.
- Allow to dry naturally.
- Dry clean with perchloroethylene.

LEATHER

- Use a leather cream for day-to-day care.
- Do not use detergent.
- Do not use silicone based products.
- Clean with a sponge and soapy water.
- Remove ball point pen marks with methylated spirit.
- Remove grease stains by applying an absorbent powder (e.g. talcum powder).

■ Cockpit table

The cockpit ceiling is used for stowing the outside table.

To install the cockpit table release the ceiling and remove the table while being careful of movement of the boat.

■ Portholes and deck hatches

The portholes and deck hatches are equipped with latch systems to keep them in a closed position.

At mooring intermediate opening positions allow for airing of the boat.

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LAYOUTS

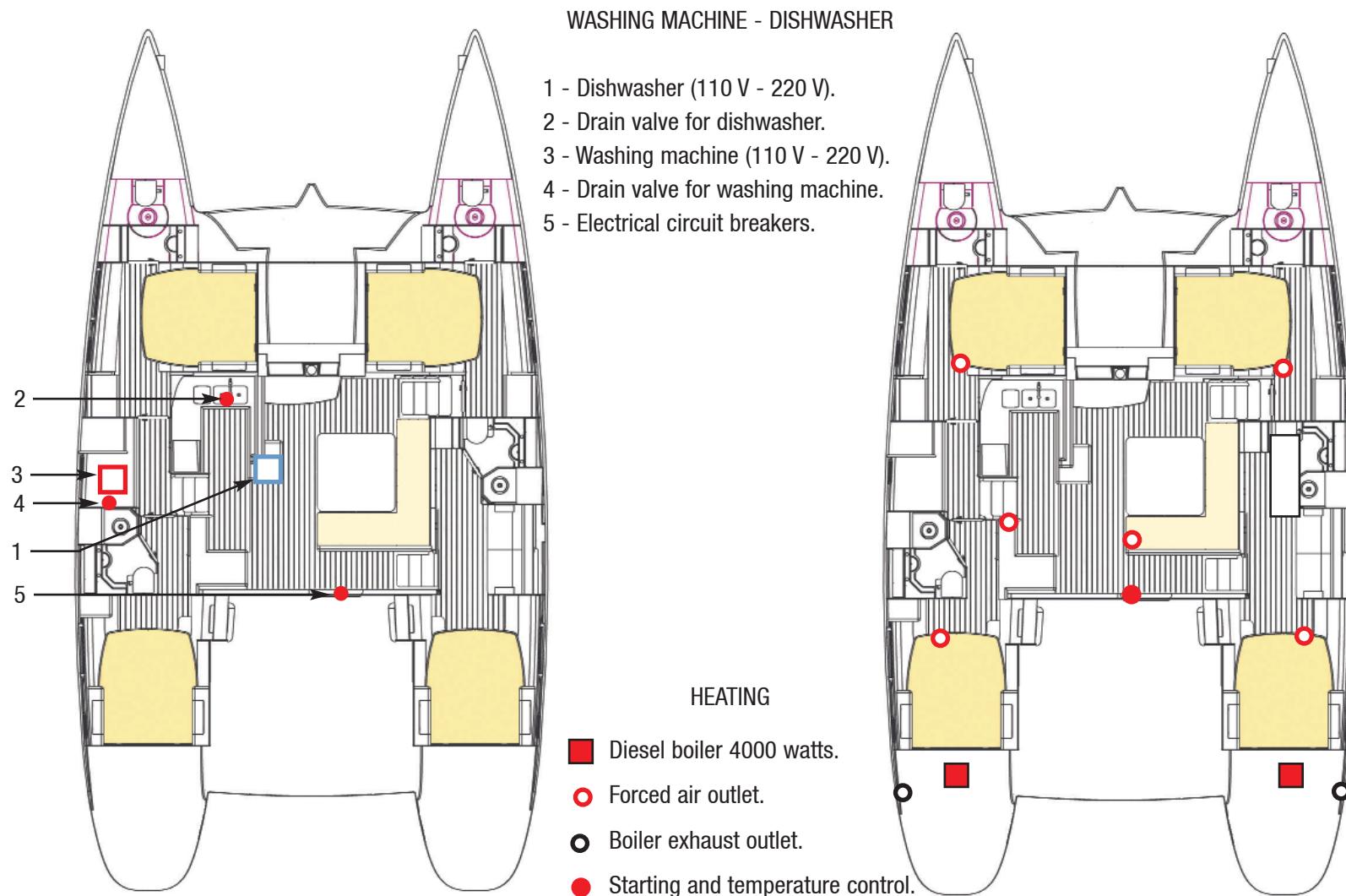
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WASHING MACHINE - DISHWASHER - HEATING

LAYOUTS

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■ Washing machine - dishwasher (optional extras)

- Make sure that there is sufficient freshwater before using the washing machine or dishwasher.

- Open the water supply and drain valves of the respective machine.

Water supply:

Washing machine: on the fresh water valve manifold on the port hull.

Dishwasher: on the fresh water valve manifold on the port hull.

Drainage:

Washing machine: on the waste water valve manifold on the port hull.

Dishwasher: connected to the galley sink drains.

- Connect the wharf power supply or start the generator (see ELECTRICITY chapter).

- Select the relevant circuit breaker for the machine being used on the protection board.

- Switch on the relevant machine.

For use and maintenance of the washing machine or dishwasher refer to the relevant instruction guide.

■ Heating (optional extra)

The heating system works on 12 V on the COMFORT group.

The boiler is supplied with diesel from the port tank.

To operate the system:

- Turn the COMFORT switch to ON. (zone 2)
- Turn on the heating with the control located next to the light switch in the saloon.
- Adjust to the required temperature.

For use and maintenance of the heating refer to the instruction guide.

5

LAYOUTS

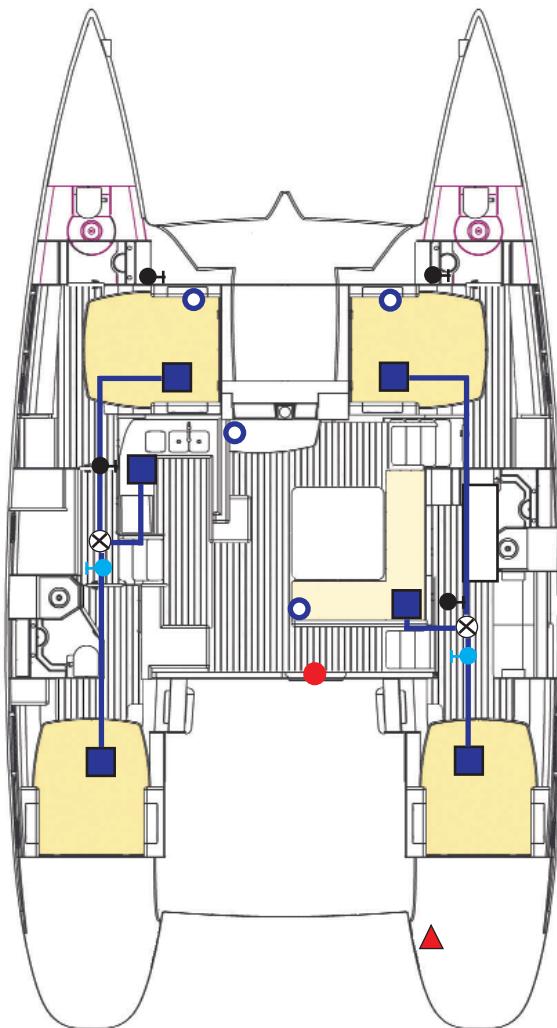
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AIR CONDITIONING

LAYOUTS

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POWER: 4800 BTU for the 3 and 4 cabin versions.
5500 BTU for the 5 cabin version.

- Compressor.
- ⊗ Sea water pump.
- Water supply valve for pumps.
- Drain valve for compressor.
- Air outlet.
- Electrical fuse protection.
- ▲ Wharf power supply no.2.



**SEAWATER PUMP FOR
AIR CONDITIONING**

■ Air conditioning (optional extra)

The air conditioning system works on 110 V - 220 V.

To operate the system:

- Open the pump water supply valves (one in each hull for the supply of several compressors).
- Open the compressor drain valves.
- Connect the no.2 wharf power supply or start the generator (see ELECTRICITY chapter).
- Position the air conditioning selector on the general electricity panel (zone 6 on the electrical panel) to WHARF or GENERATOR.
- Activate the main switch for the air conditioning duct (zone 5 on the electrical panel).
- Start the water circulation pumps (switch).
- Operate the air conditioning units on the electrical panel. Wait 10 to 15 seconds between the starting of each unit (zone 5 on the electrical panel).
- Adjust to the required temperature and ventilation on the air conditioning controls in the respective areas.

For use and maintenance of the system refer to the instruction guide.



Electricity

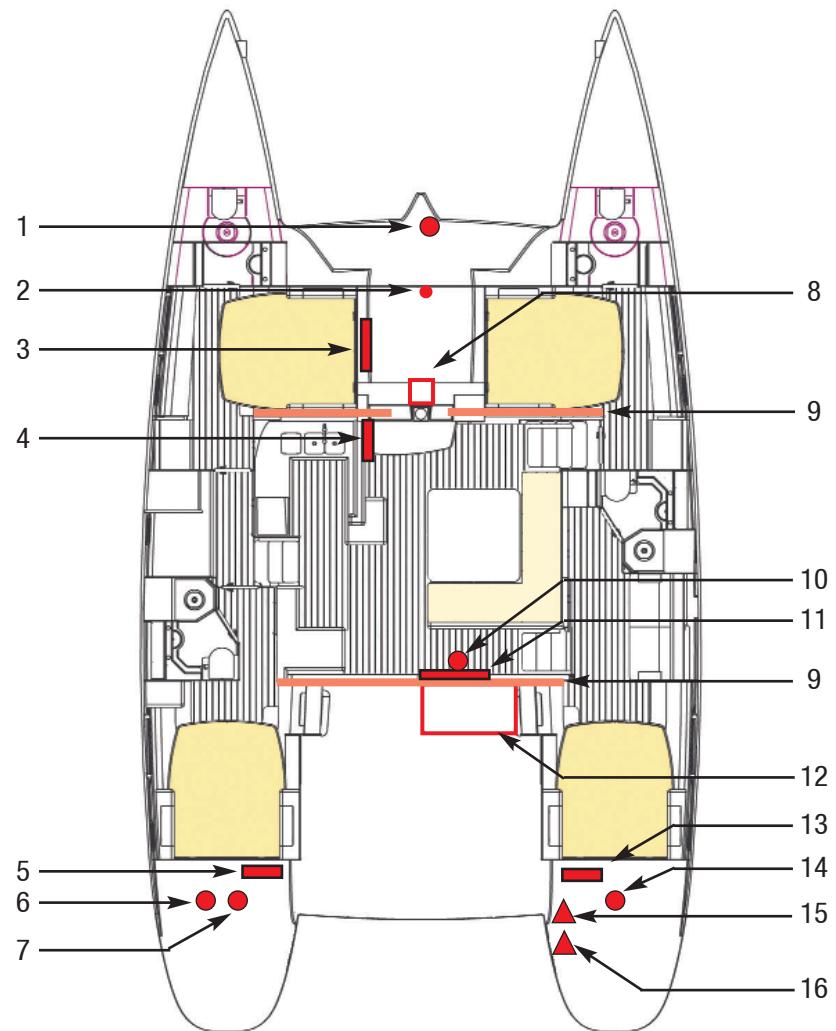
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ELECTRICS LAYOUT

ELECTRICITY

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Locations are the same for the other layouts.

- 1 - Windlass.
- 2 - Windlass control relay.
- 3 - Generator panel and battery.
- 4 - Electrical navigation panel.
- 5 - Port engine batterie.
- 6 - Port engine circuit breaker.
- 7 - Battery coupling switch and circuit.
- 8 - Mast connection box.
- 9 - Conduit for optional extras.
- 10 - 12 V Mains switch.
- 11 - 12 V and 110 V - 220 V electrical panel.
- 12 - Service compartment.
- 13 - Battery coupling switch and circuit.
- 14 - Starboard engine circuit breaker.
- 15 - Wharf power supply plug.
- 16 - Wharf power supply air conditioning.

■ Batteries and circuit breaking

The electricity onboard is 12 V DC.

The electrical system consists of service batteries. The batteries supply power to all the functions on board (see SPECIFICATIONS chapter for battery capacity).

For safety, a battery coupling circuit (coupling switch located in the port engine compartment) allows one to start an engine whose start battery is defective.

Engine batteries are each charged by their respective motors.

The boat is fitted with a manual circuit-breaker system.

The mains power for the 12V circuit is switched on by activating the manual circuit breaker (ON position) in zone 2 of the electrical panel to the right of the entrance.

• MAINTENANCE

Keep the batteries charged (essential to ensure longevity).

It is possible to operate with the battery store charged to 80% on the condition that the batteries are charged weekly to 100%.

Never run batteries down below 70% of their nominal capacity.

Use the battery charger when in a marina to ensure you begin each trip with properly charged batteries.

A battery monitor (DC meter on the electrical panel) enables control of the charge, voltage and depletion rate of the service batteries, engine batteries and of the generator (optional extra). For its use see the instruction guide.

Always check the battery and charge system condition before you put out to sea.

Keep the batteries clean and dry in order to avoid premature wear. Have the acidity level of the battery checked if left unused for a prolonged period.

Tighten and maintain the terminal connectors by lubricating them regularly with Vaseline.

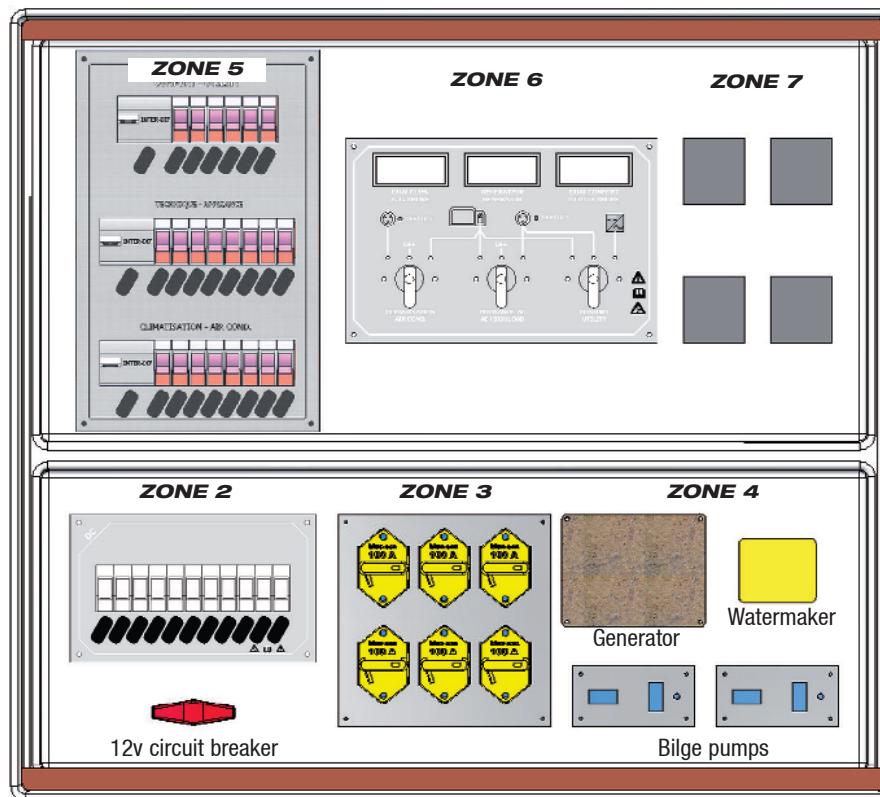


WARNING

A damaged battery will never recover its original capacity.

The service batteries should be charged to their maximum.

ELECTRICAL PANELS



ELECTRICITY

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12 V ELECTRICAL PANEL SWITCH - ZONE 2			
COMFORT Grey water pump Electrical toilets Deck wash pump	LIGHTING Lighting all areas Ventilator 12 V socket Cigar lighter	WATER PUMP BILGE PUMPS	REFRIGERATION GANGWAY NO.1 REFRIGERATION GANGWAY NO.2 REFRIGERATION SALOON REFRIGERATION COCKPIT



- ELECTRICAL NAVIGATION PANEL / ZONE 1:

(see following page)

Control gauge for 2 freshwater tanks (mark 1: port - mark 2: starboard).

Control gauge for 2 diesel tanks (mark 1: port - mark 2: starboard).

Navigation lights switch.

Electronics switch.

Battery monitor: enabling observation of consumption, charge condition and voltage of the service batteries, emergency batteries and the generator battery.

- GENERAL 12 V ELECTRICAL PANEL / ZONE 2:

Groups together the different 12 V functions on board: boat mains switch, etc.

Main 12v circuit breaker.

- 12 V PROTECTION PANEL / ZONE 3:

Protection panel for the winch and windlass switches (standard or optional).

- CONTROL PANEL / ZONE 4:

Control and/or starting panel for watermaker, generator and immersion pumps.

- 110 V - 220 V PROTECTION PANEL / ZONE 5:

This zone groups together 3 "units" of 110-220 V circuit breakers and equipment.

Each of these units has a main circuit breaker and several specific breakers.

COMFORT

This starts up the 110 V - 220 V devices and equipment attributed to this unit.

POWER

This is for switching on the 110 V - 220 V devices and equipment attributed to this unit.

AIR CONDITIONING

This is dedicated to the air conditioning for the starting of compressors and cooling pumps.

- 110 V - 220 V SELECTION PANEL / ZONE 6:

Voltmeter (gives voltage of each unit).

Selector panel for 110 V - 220 V electricity sources (wharf, generator or wave inverter) for the operation of onboard devices and equipment.

COMFORT SELECTOR: enables use of the devices grouped together on the comfort unit of zone 5 using 110 V - 220 V from the generator, wharf supply or the wave inverter (automatic starting of the wave inverter when selected).

POWER SELECTOR: enables use of the devices grouped together on the zone 5 power unit using 110-220 V from the generator or wharf supply.

AIR CONDITIONING SELECTOR: enables use of air conditioning and starting of compressor and pumps - air conditioning unit in zone 5 - either by the generator or from wharf supply.

- LOCATION OF INDICATOR LIGHTS FOR CHARGERS AND WAVE INVERTER / ZONE 7

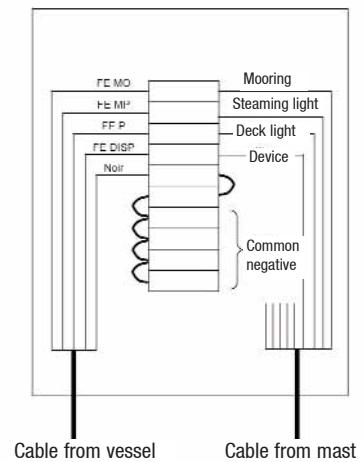
ELECTRICAL NAVIGATION PANEL - LIGHT CONNECTIONS

ELECTRICITY

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LIGHT CONNECTIONS



■ Low voltage alarm

A visual and audible alarm ensures a minimum 12 V supply to the service batteries.

The alarm sounds if the service batteries fall to a value of 11.8 V.

WARNING

**The power alarm is set to the lowest threshold for the service batteries.
Continuing to use the service batteries without recharging them will cause serious and irreversible damage to the batteries.**

■ Operation of 12 V circuit

RECOMMENDATION

Never leave the boat unattended when the electrical system is switched on (except the safety equipment directly connected to the battery and protected by a circuit breaker).

In the event that an electric appliance is not receiving power, check:

- The main power supply.
- The switches and circuit breakers on the line.
- The relevant electrical unit.

WARNING

Never carry out work on an electrical device that is under voltage.

RECOMMENDATION

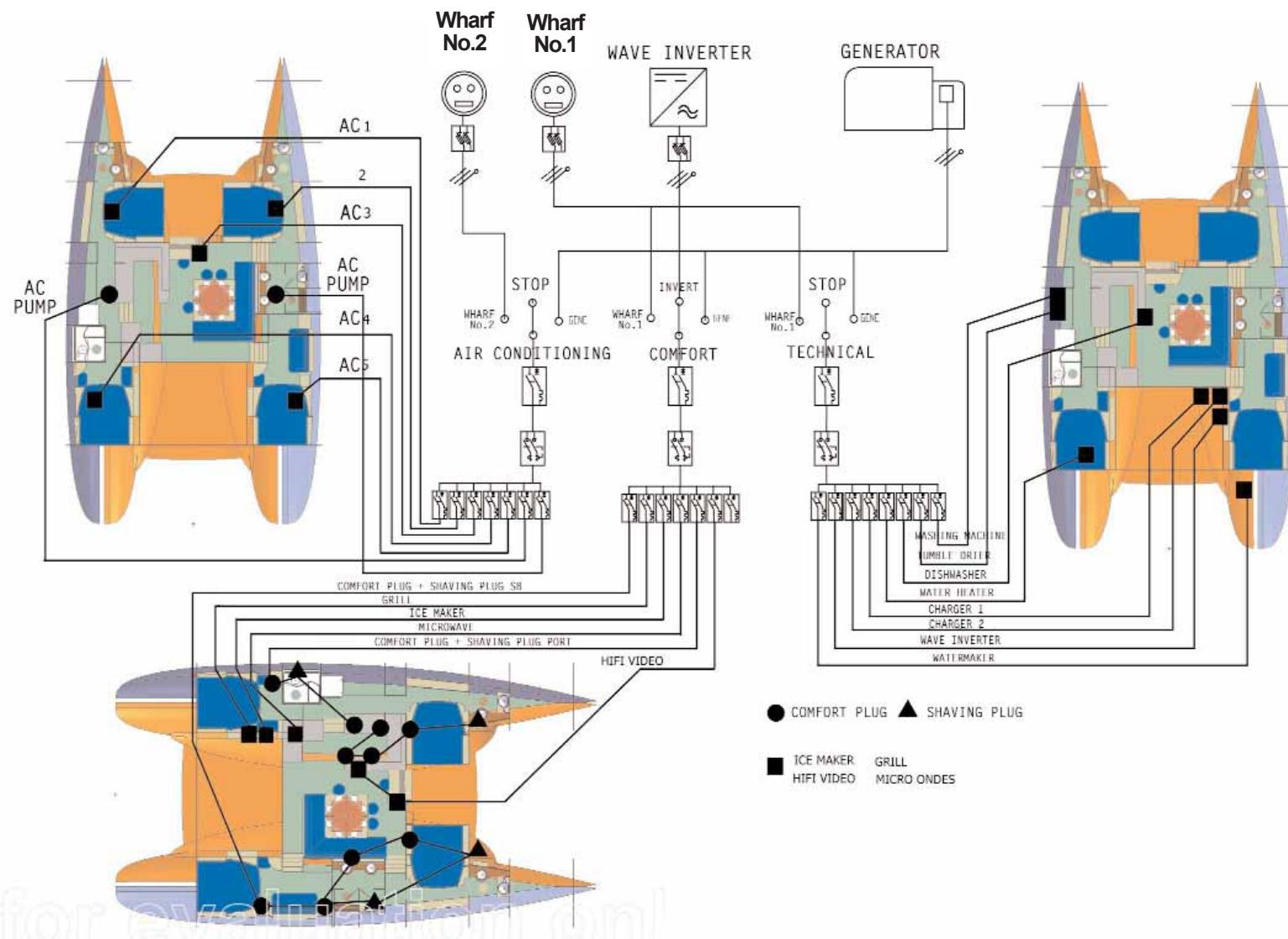
- Never modify an electric fixture or the relevant layouts yourself.
- Call in a technician skilled in marine electricity to carry out any electrical modifications.
- Never change the breaking capacity (amperage) of the overcurrent safety devices.
- Never install or replace any electric appliances (or any electrical equipment) by components exceeding the capacity (amperage) of the circuit (wattage for bulbs).



MAIN 110 V - 220 V WIRING DIAGRAM

ELECTRICITY

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■ Circuit 110 V - 220 V

• SWITCHING ON DEVICES FUNCTIONING ON 110 V - 220 V

To use appliances that work on 110 V - 220 V (washing machine, water-maker, etc.), proceed as follows:

- Make sure that the apparatus is on OFF at the general electrical panel (zone 5).
- Switch to the 110-220 V source (start the generator or plug into the wharf power supply).
- Select this source on the electrical panel for it to supply onboard electricity (zone 6).
- Switch on the circuit breaker for the appliance to be used (washing machine, watermaker, etc.) on the electrical panel (zone 5).

Once these operations completed switch on the appliance using its own controls.

To start up devices on 110 V - 220 V, wait for 10 to 15 seconds between each unit start up (in order to allow the generator to stabilize and to deliver the necessary power for switching on).

• SWITCHING OFF DEVICES FUNCTIONING ON 110 V - 220 V

To stop appliances working on 110 V - 220 V (washing machine, water-maker, etc.), proceed in the following manner:

- Stop the apparatus using its own controls.

To stop 110 V - 220 V equipment wait 10 to 15 seconds between turning off each device (in order to allow the generator to stabilize).

- Turn off the switch of the appliance being used at the electrical panel.
- Turn the 110 V - 220 V selector to OFF mode (generator or wharf power supply).
- Stop the generator or unplug from the wharf power supply.

WARNING

Before turning the 110 V - 220 V selector to OFF make sure that no other appliance is working (danger of an electric arc which could destroy the switch and damage the generator).

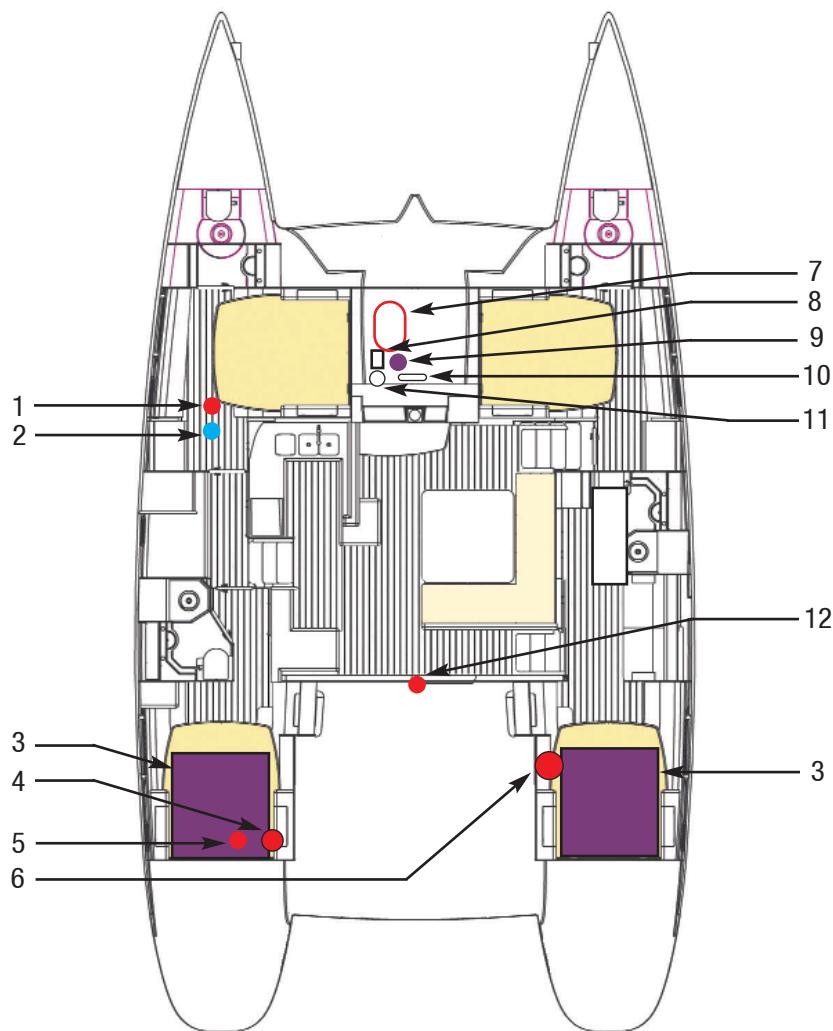
• PROTECTION

Connect the metallic covers or boxes of the electric appliances that are installed to the protective conductor of the boat (green conductor with yellow stripes).

GENERATOR - DIESEL OIL TRANSFER PUMP

ELECTRICITY

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- 1 - Sea water intake valve for generator.
- 2 - Sea water filter for generator.
- 3 - Fuel tanks.
- 4 - Fuel choke pump for generator supply.
- 5 - Fuel valve for generator supply.
- 6 - Pull-switch for transfer fuel tank.
- 7 - Generator.
- 8 - Starting battery for generator.
- 9 - Fuel filter for generator.
- 10 - Generator exhaust pipe.
- 11 - Air extractor for generator compartment.
- 12 - Start control for generator.

**PULL-SWITCH
FOR TRANSFER**



■ Generator (optional extra)

• GENERATOR

The generator is located in the main locker in the forward cockpit. Its function is to re-supply the batteries via the chargers and to supply 110 V - 220 V electricity on board.

The generator is operated either on the generator itself or by the control on the electrical panel (zone 4) after opening of the fuel valve (port aft cabin) followed by the sea water cooling valve (access under the floor in the forward port cabin).

RECOMMENDATION

As the generator is located above the waterline, we recommend that the water pump impeller be changed at each scheduled maintenance revision.

Concerning use and maintenance of the generator refer to its instructions.

• PULL-SWITCH FOR TRANSFER (OPTIONAL EXTRA)

Use the pull-switch found at the foot of the starboard berth to change over from one tank to the other.

■ Battery charger/wave inverter (optional extra)

The charger(s) and the wave inverter are located in the service compartment (see photo in the appendix).

The wave inverter starts automatically when the function is selected (zone 6).

The battery charger can be used with wharf supply or with the generator in use.

- With the POWER SELECTOR switch to WHARF or GENERATOR (zone 6).
- Switch on the charger(s) with the circuit breakers on the electrical panel (zone 5).

Concerning use and maintenance of the chargers refer to their instructions.

N.B.: The battery chargers can stay running even when the boat has been disconnected on 12 V.



CHECKING CONNECTIONS

Checking the connections is part of the regular maintenance of the boat.

Follow the schedule of maintenance checks below for the electrical elements which carry these stickers.



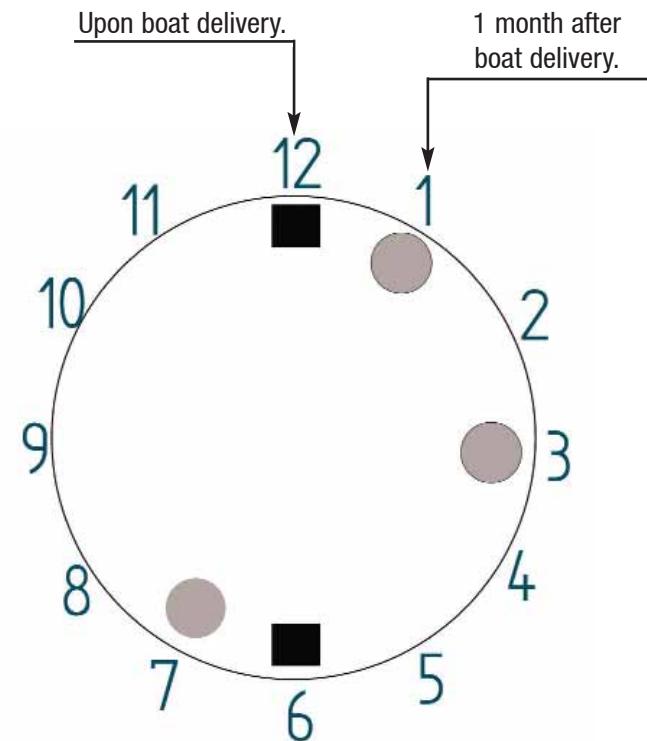
Check the 1st, 3rd and 7th months of the first year.



Check every 6 months for the following years.

ELECTRICITY

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■ Wharf supply

DANGER

Never leave the extremity of a boat/wharf power supply cable hanging in the water - it could create an electrical field liable to injure or kill any nearby swimmers.

RECOMMENDATION

In order to reduce the risk of electric shock and fire:

- Before you plug in or unplug the boat/wharf power supply cable, switch off the shut off device connected on the wharf supply side.
- Connect the boat/wharf supply cable in the boat before connecting it to the wharf power supply socket.
- Unplug the boat/wharf supply cable on wharf first.
- Close the wharf socket cover.
- Do not modify the connections of the boat/wharf supply cable.

• POWER OF WHARF SUPPLY

	110 V	220 V
WHARF SUPPLY NO.1 COMFORT	32A	32A
WHARF SUPPLY NO.2 AIR CONDITIONING	50A	32A

■ Mast wire harness

During mast-stepping insert the cables through the base of the mast.

The connection is made at the junction box on the mast bulkhead in the forward cockpit locker.

■ Electronics

Do not install electronic instruments or repeaters less than 1.5m away from the radio loudspeakers, if your boat has them.

Do not place the autopilot compass less than 0.5 m away from the electrical harnesses.

Recommended location: under the floor in the forward starboard cabin at the end of the berth.

RECOMMENDATION

For your electrical requirements, we recommend you consult a specialist or one of our network of technicians.

• ELECTRONICS PACKS (OPTIONAL EXTRAS)

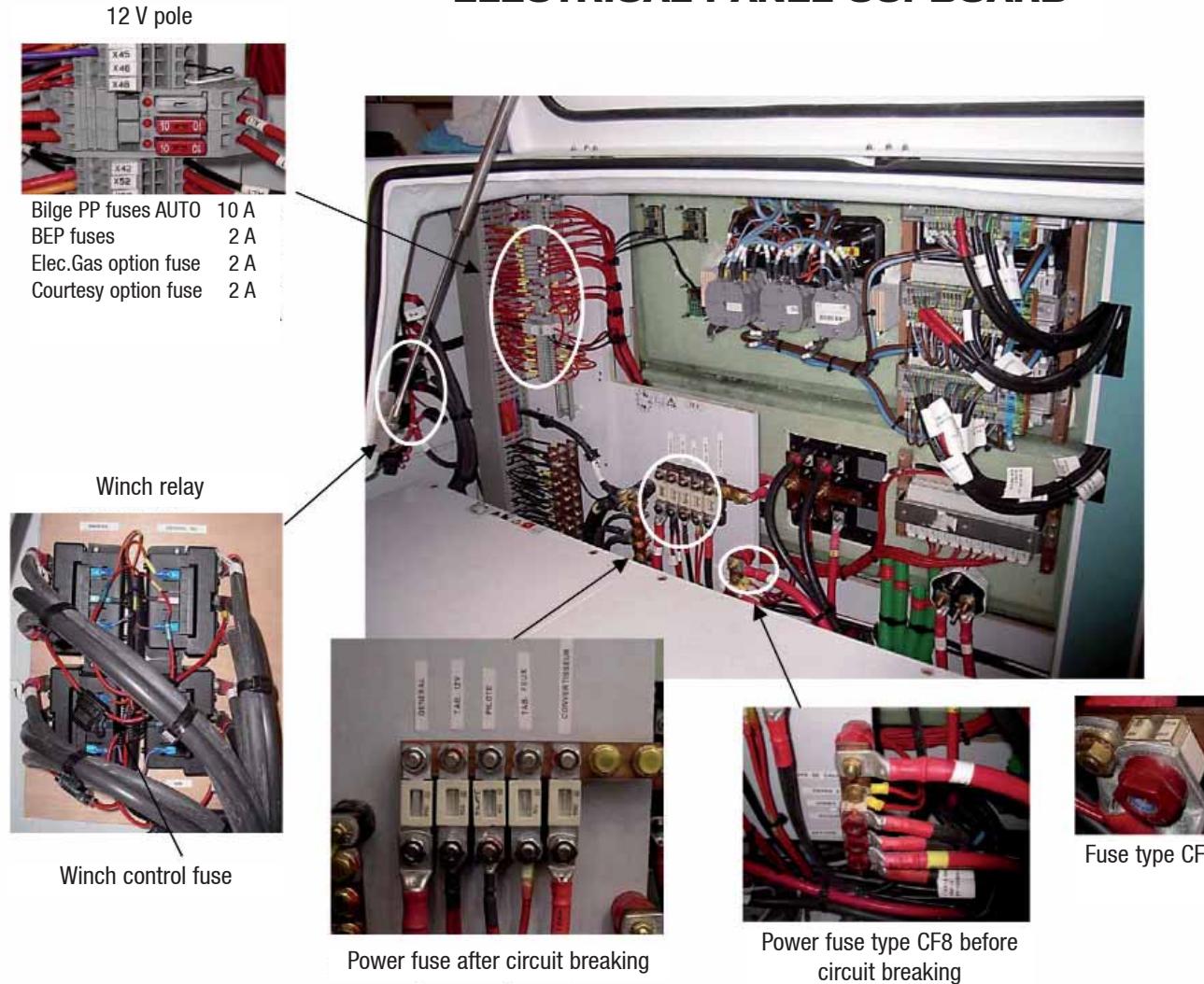
Different electronics packs are offered on option.





- 1 - Charger no.1 (optional extra). 4 - Autopilot calculator (optional extra).
2 - Charger no.2 (optional extra). 5 - Service battery set.
3 - Inverter (optional extra).

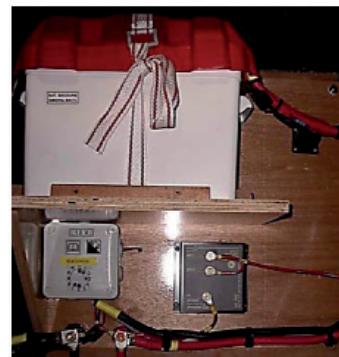
ELECTRICAL PANEL CUPBOARD



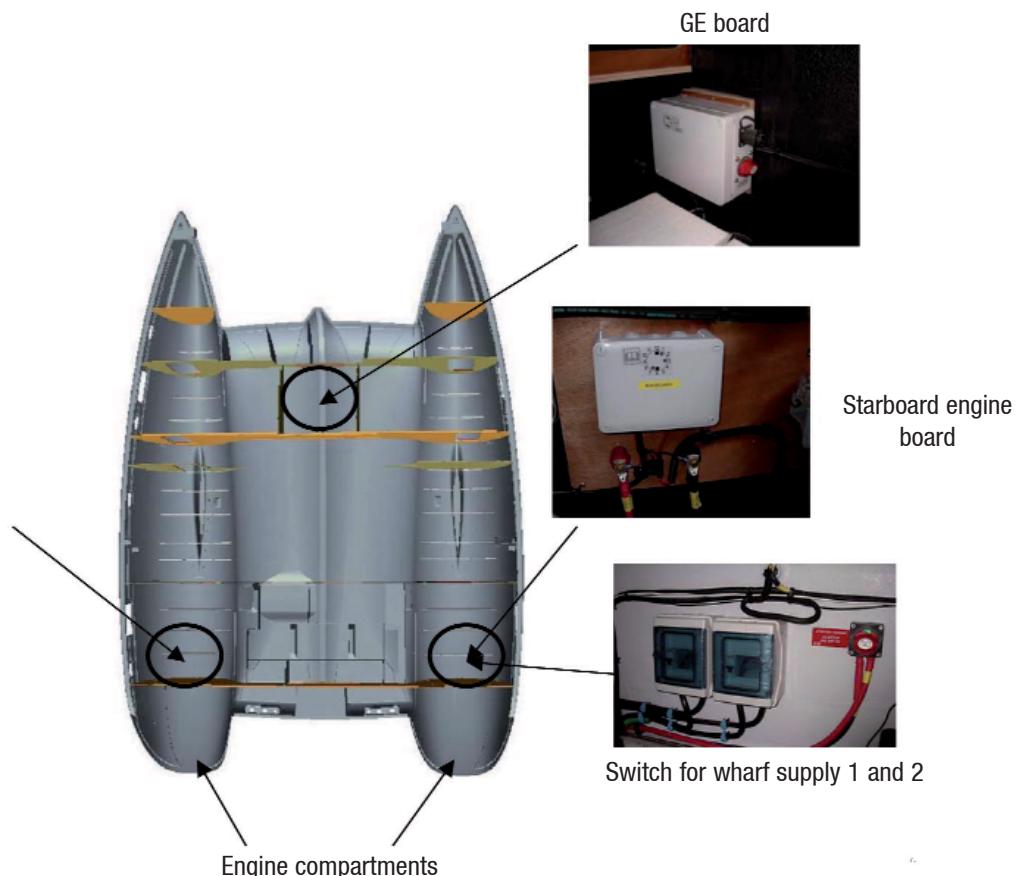
LOCATION OF MOTOR AND GENERATOR (GE) ACCESSORY BOARDS

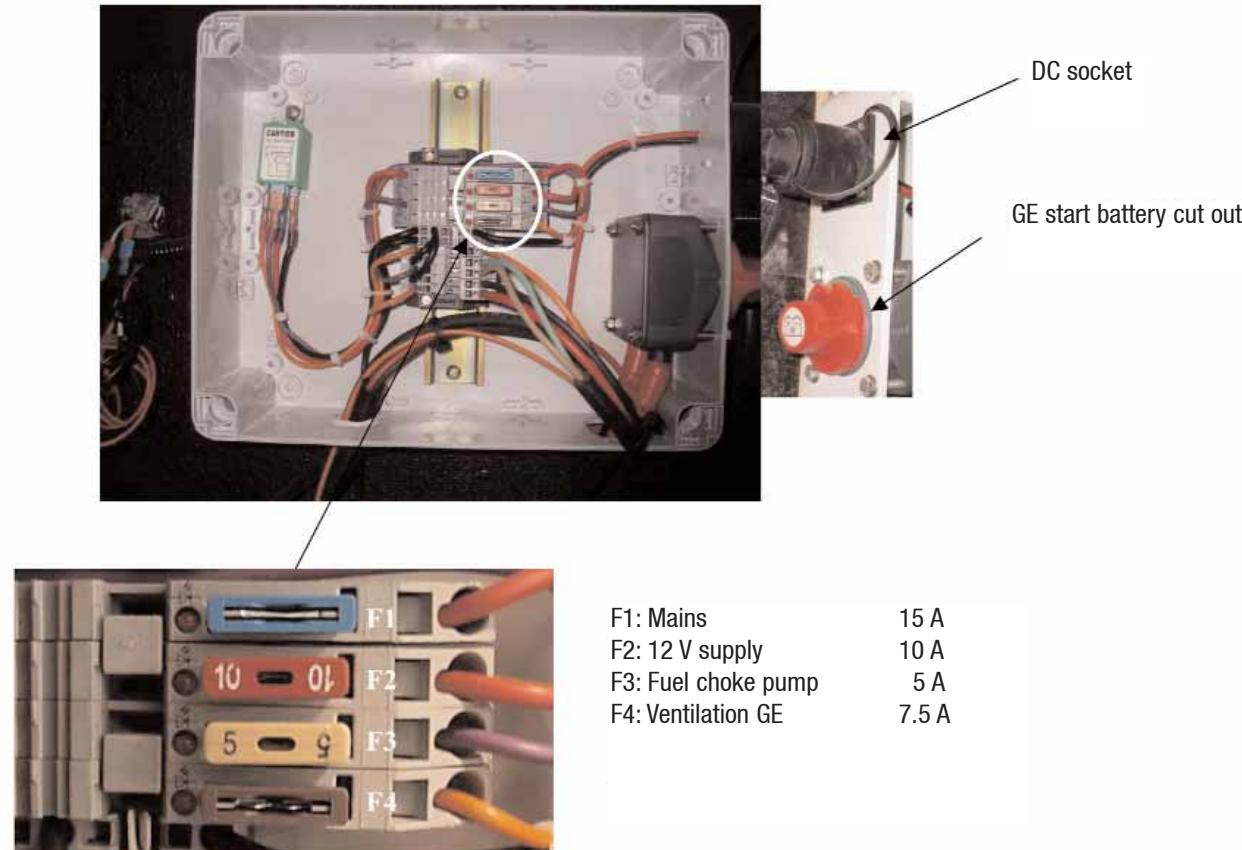
ELECTRICITY

70



Port engine board



GE ACCESSORY BOARD

ENGINE ACCESSORIES BOARD STBD

ELECTRICITY

72



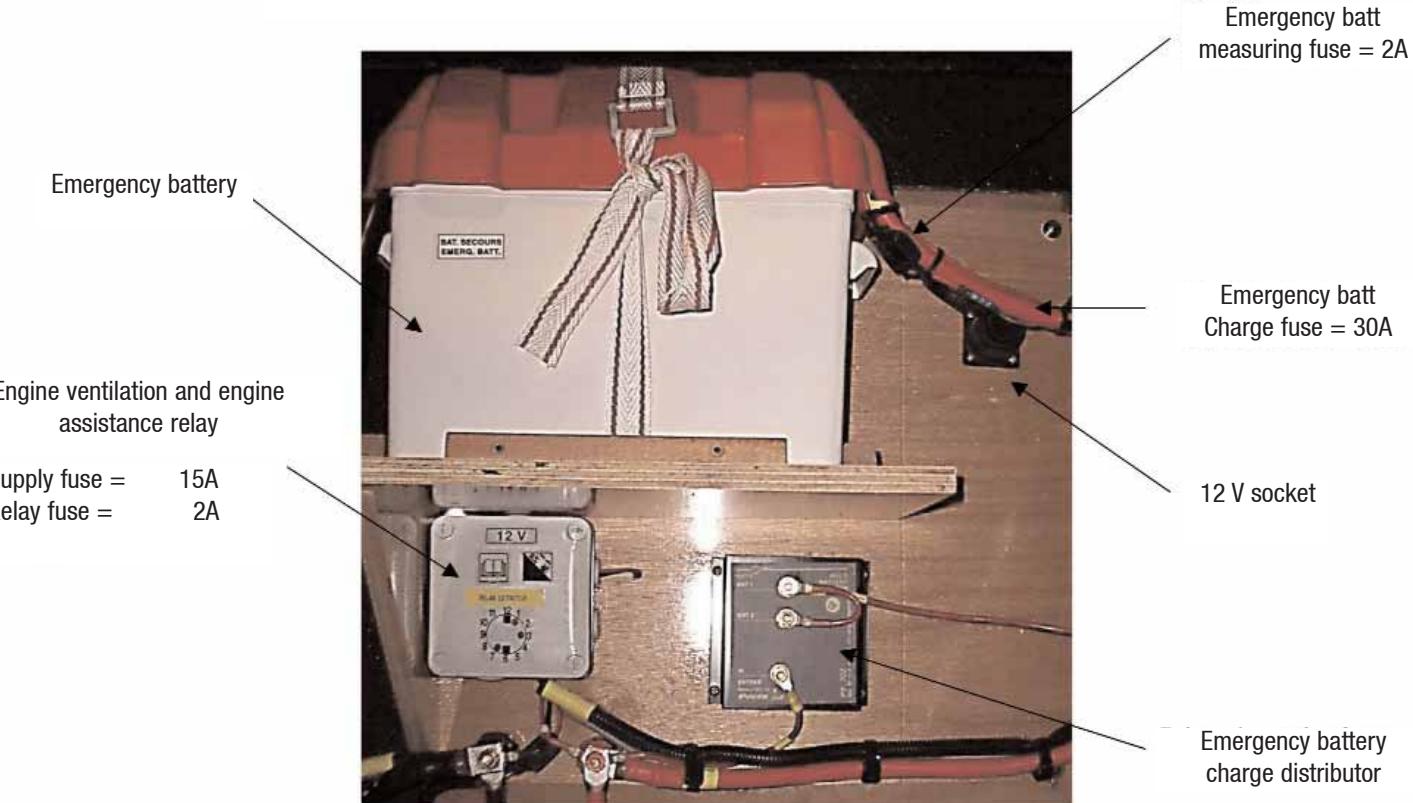
Engine ventilation and engine assistance control relay

Supply fuse = 15 A
Relay fuse = 2 A





ENGINE ACCESSORIES BOARD PORT



APPENDIX

110 V - 220 V AC CIRCUIT BREAKERS

ELECTRICITY
74

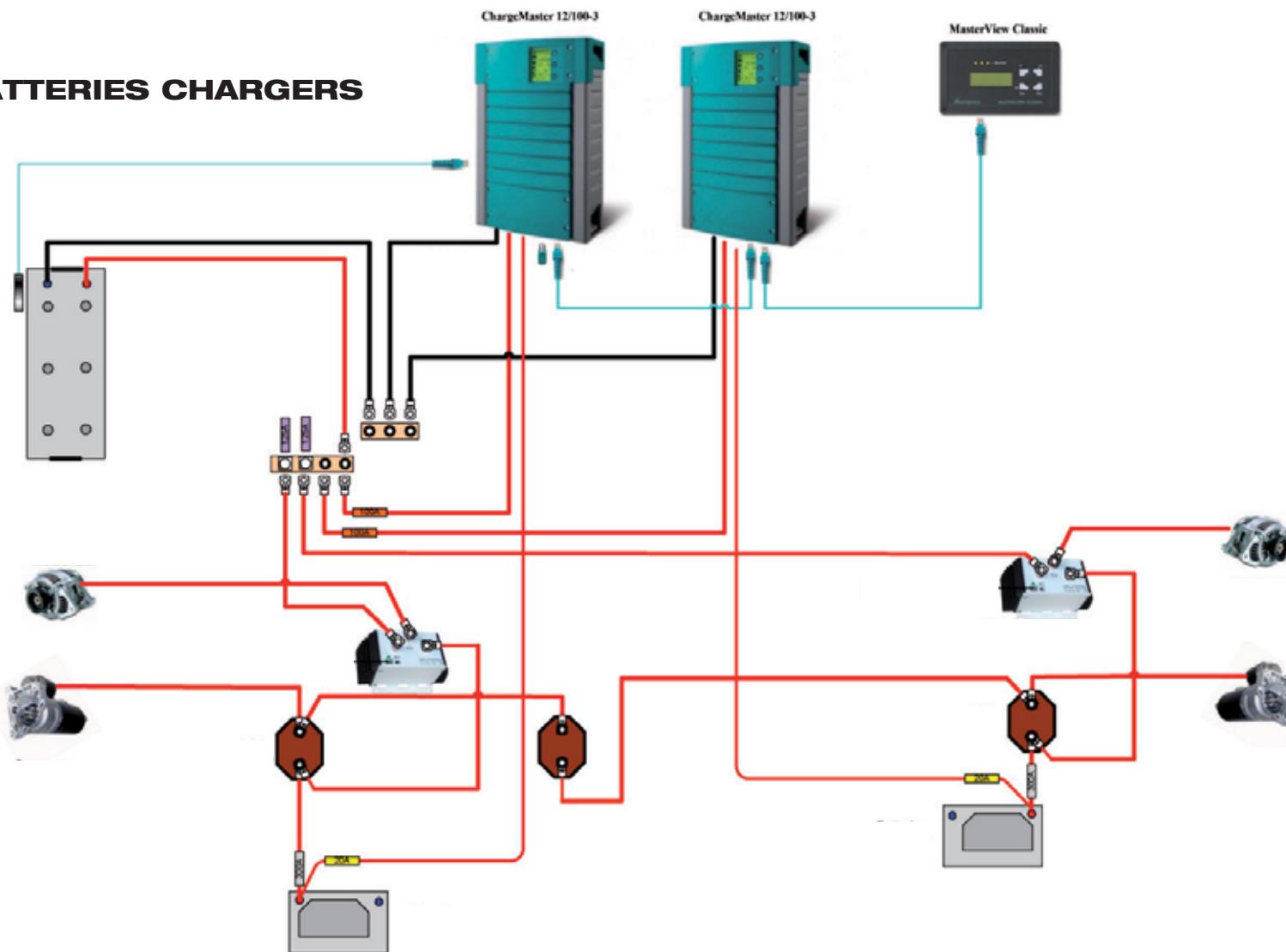


Wharf No. 2
Air Conditioning:
220 V = 32 A
110 V = 50 A



APPENDIX

BATTERIES CHARGERS



Plumbing

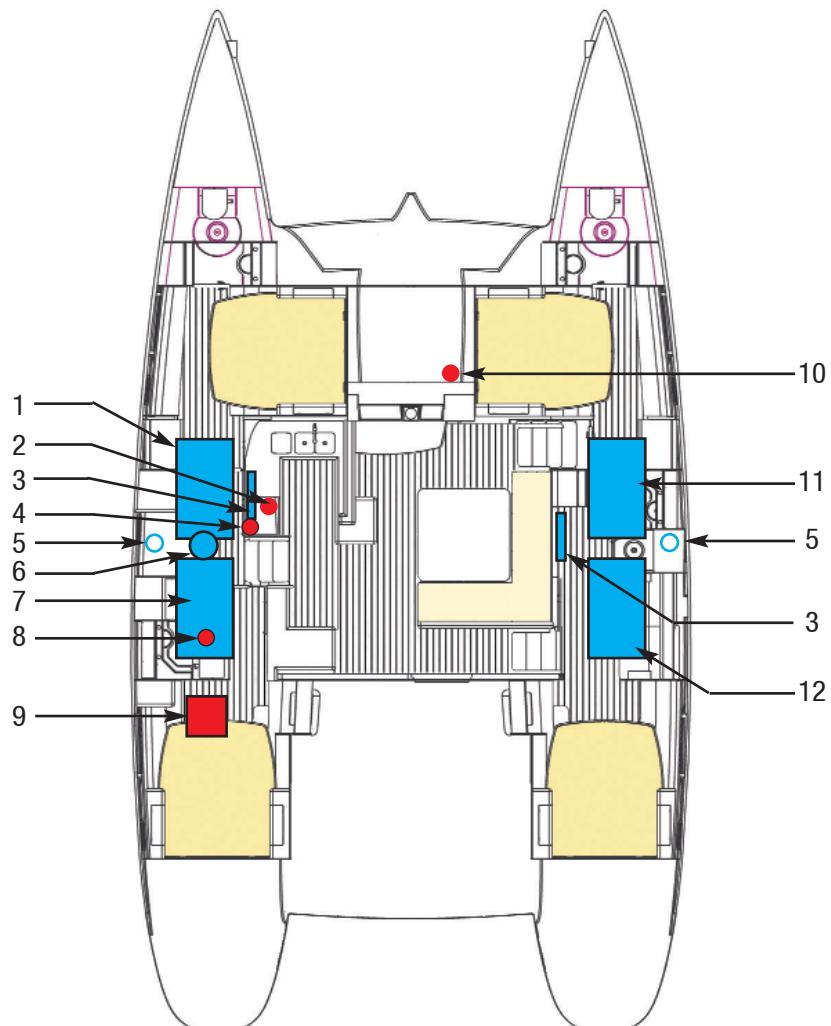
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WATER TANKS	79
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FRESHWATER AND GAS

PLUMBING

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Locations are the same for the other layouts.

- 1 - Forward port.
- 2 - Gas tap.
- 3 - Distribution manifolds.
- 4 - 3-way tank selection valve Stbd or Port.
- 5 - Deck filler.
- 6 - Water pump + expansion chamber.
- 7 - Port aft tank.
- 8 - Cold water system valve.
- 9 - Water heater.
- 10 - Gas regulators in forward cockpit locker.
- 11 - Forward starboard tank.
- 12 - Aft starboard tank.

PORT DISTRIBUTION TERMINAL PANEL



■ Water tanks

• FILLING

In order to prevent any handling mistakes, never fill the water and fuel tanks at the same time.

During filling, avoid handling contaminants near the fillers.

Open and close the filler caps with the suitable key.

Check the filler cap seals for condition during filling.

The tanks are fitted with overflow outlets and vents.

Never insert the water filling hose deep down into the system in order to prevent any over-pressure in the systems.

The two tanks one in each hull are connected by gravity.

• MAINTENANCE

RECOMMENDATION

- Monitor the quality of the filling water.

Check that the water is drinkable.

- The tanks can be sterilized using a Clonazione tablet (available from the pharmacy).

- In the case of long periods of inactivity purify tanks and piping using the appropriate treatment.

Inspection points are provided on tanks and from which it is possible to clean the inside.

N.B.: The capacity of the fresh water tank or tanks indicated on the SPECIFICATIONS page may not be completely useable depending on the trim and load of the boat.

■ Freshwater system

The water pump is switched on at the 12 V electrical panel in zone 2. The 3-way valve enables selection of water system supply from the starboard or port hull tanks.

For optimization of use of fresh water completely use up one tank's supply before switching over to the other.

RECOMMENDATION

- Never operate the water system equipment when the valves are closed or when the tanks are empty (the electrical equipment may be damaged).

- Check the condition of the water filters (refer to manufacturer's instructions).

- Close the valves of empty tanks.



■ Gas system

Refer to SAFETY chapter.

Refer to "FRESHWATER AND GAS" diagram.

When changing the gas bottle, refit the cap in place on the regulator threaded section (to avoid corrosion).

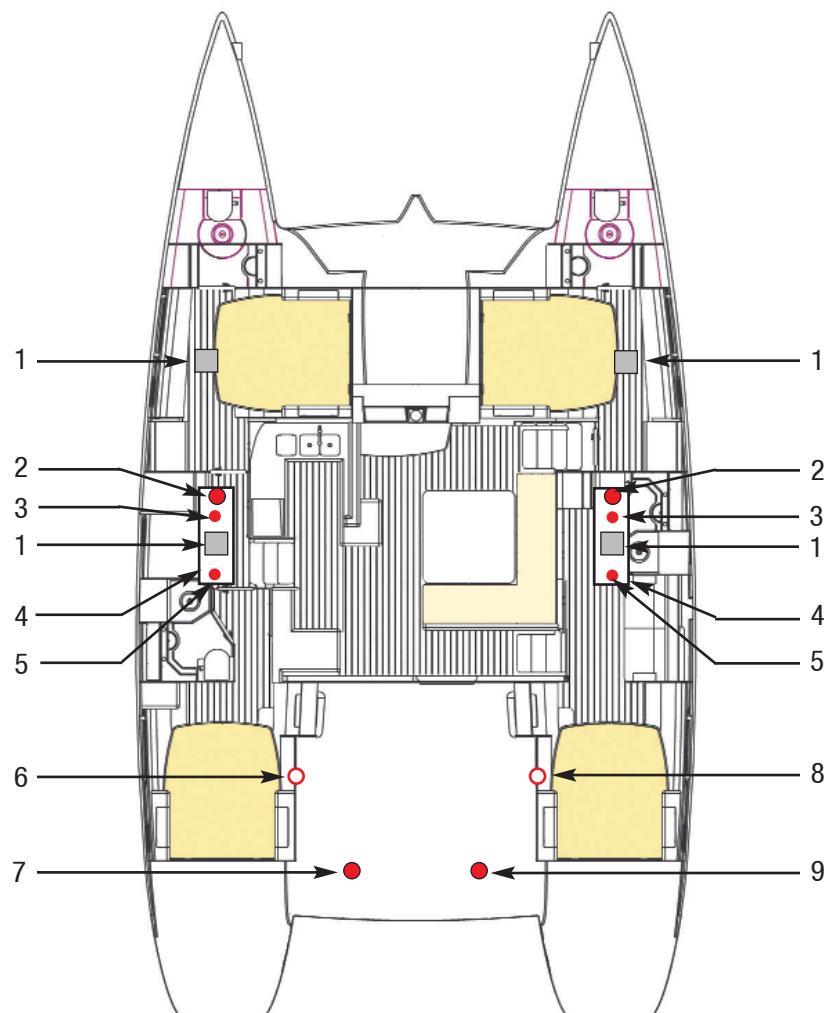
RECOMMENDATION

Shut off the gas safety valve and the regulator tap when the stove is not in use.

DRAINAGE SYSTEM

PLUMBING

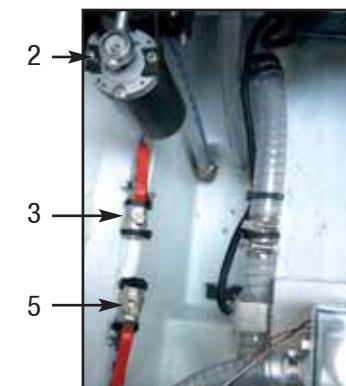
80



Locations are the same for the other layouts.

- 1 - Sump reservoir.
- 2 - Electric bilge pump.
- 3 - Drain valve forward compartment.
- 4 - Hull sump.
- 5 - Drain valve for engine compartment.
- 6 - Manual port hull bilge pump drain.
- 7 - Manual port hull bilge pump.
- 8 - Manual starboard hull bilge pump drain.
- 9 - Manual starboard hull bilge pump.

HULL SUMP



SUMP RESERVOIR



■ Water system: drainage

A main sump well is located under the floor of each hull.

It is drained by:

- A manual cockpit bilge pump.
- A manually and automatically activated electric pump (electrical panel, zone 2 + flying bridge).

N.B.: The electric pump operates automatically even when the 12 V system is switched off.

The fore compartments and the engine bilges are watertight. A hose equipped with a valve enables water that enters accidentally to run into the sump. These valves are located under the floor in fore and aft cabins, near the sump, and remain closed when not in use.

Normally these remain closed.

• MAINTENANCE

- Regularly check that the valves and thru-hulls are watertight and operate correctly.
- Close the valves when the water system is not in use.
- Visually check water pump flow.
- Check the tightness of hose clips and flexible pipe connections, check the condition of the seals.
- Periodically ensure that the strainers and bilges are perfectly clean.

RECOMMENDATION

Immediately switch off the electric system if a pump starts running when all the water supplies are turned off.

- Check the system and neutralize the problem.

WARNING

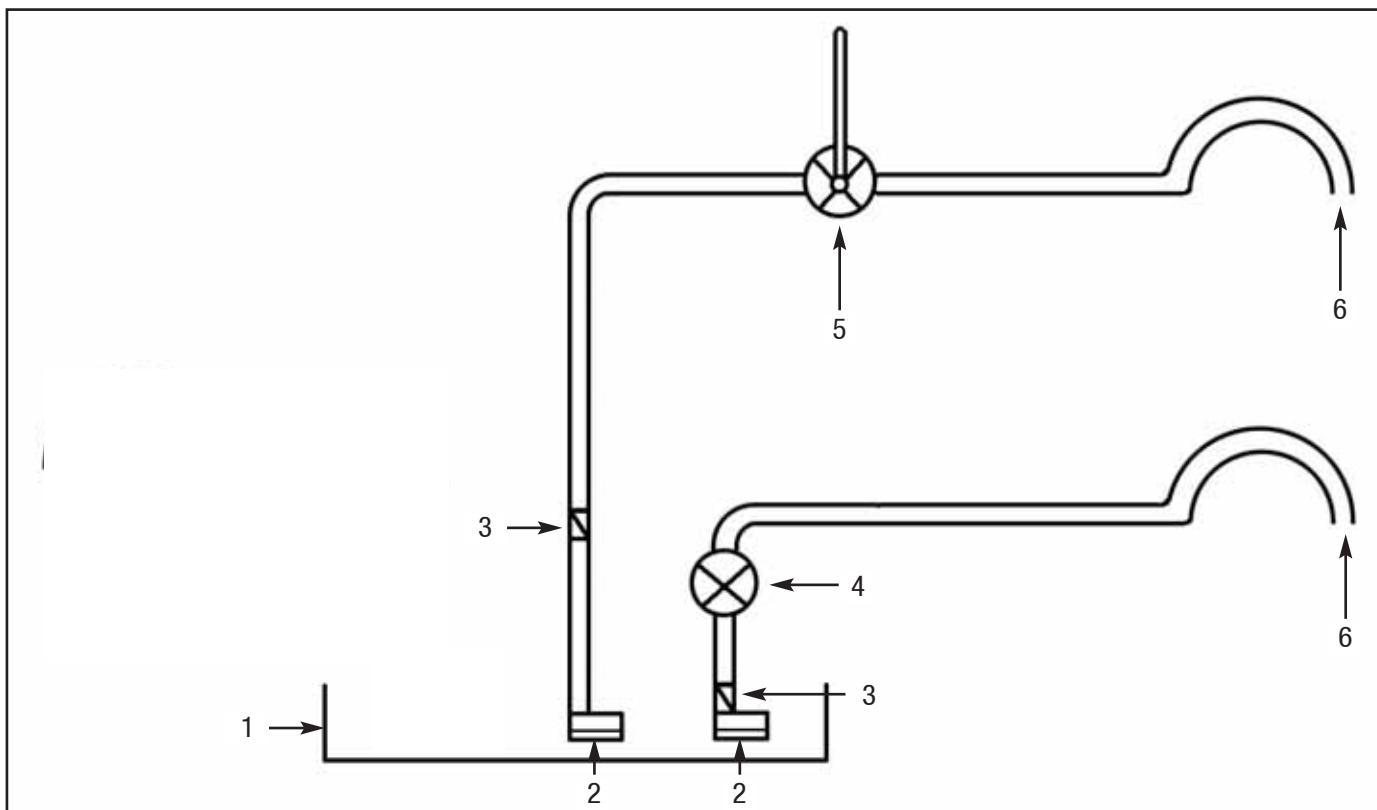
The bilge pump system is not designed to provide buoyancy for the boat in the event of damage.
The bilge pump system is designed to drain water from sea spray or leaks but absolutely not to drain water entering through a hole in the hull as a result of damage.



MAIN WATER DRAINAGE SYSTEM DIAGRAM

PLUMBING

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1 - Sump drain.

2 - Strainer.

3 - Anti-return valve.

4 - Manually and automatically activated electric bilge pump (control in zone 2 of electrical panel).

5 - Manual bilge pump in cockpit.

6 - Drainage outlet

■ Sanitary equipment

• USE OF WASHBASINS AND SHOWERS

Waste water from the bathrooms drains to a sump pump reservoir which activates a float switch inside and is automatically pumped overboard (switched on at the electrical panel zone 2, COMFORT switch).

In the event of a breakdown in the automatic system, use the switch to action the pump manually (underneath the sink).

Regularly clean filters.

RECOMMENDATION

When you are in a marina, use the club-house sanitary facilities (if provided).

The waste holding tank must be used in marinas or countries where the discharge of waste waters is prohibited.

• USING MARINE TOILETS

Before you use the heads, check that the water intake and draining valves are open.

To empty the bowl:

- Set the control lever of the pump slantwise (FLUSH).
- Activate the pump.

To dry toilet bowl:

- Set the lever to vertical (DRY)
- Activate the pump.



ELECTRIC TOILETS

Make sure that the valves are open.

The electric toilets are switched on from the electrical panel on the COMFORT grouping (zone 2).

To rinse the toilet, choose either freshwater or seawater by turning the valve in the appropriate direction underneath the sink.

Concerning use and maintenance of electric toilets refer to their instructions.

In order to avoid clogging the heads, use absorbent paper only.

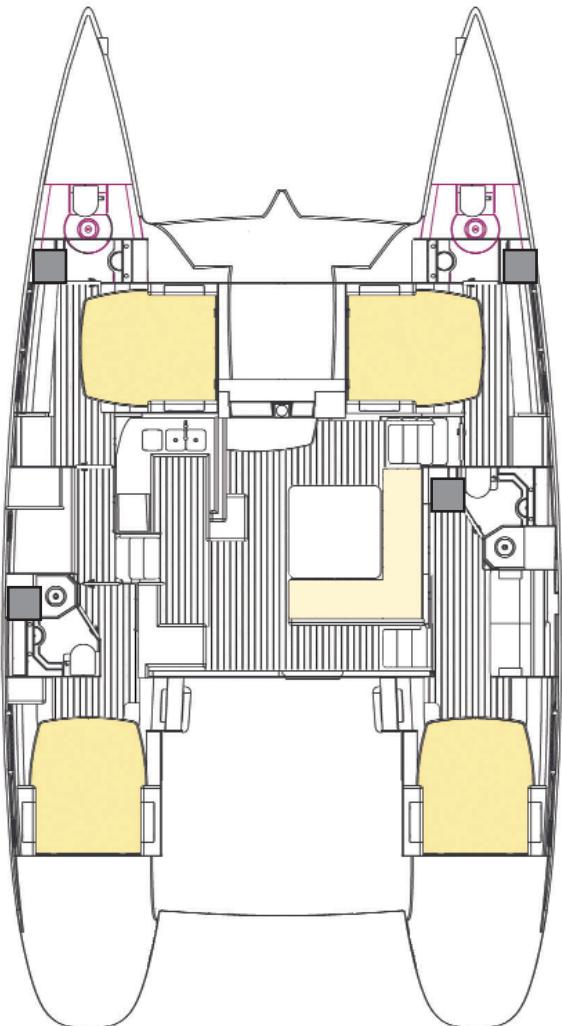
Rinse the heads regularly with fresh water.

Close the valves after each use (particularly when the boat is left unattended).

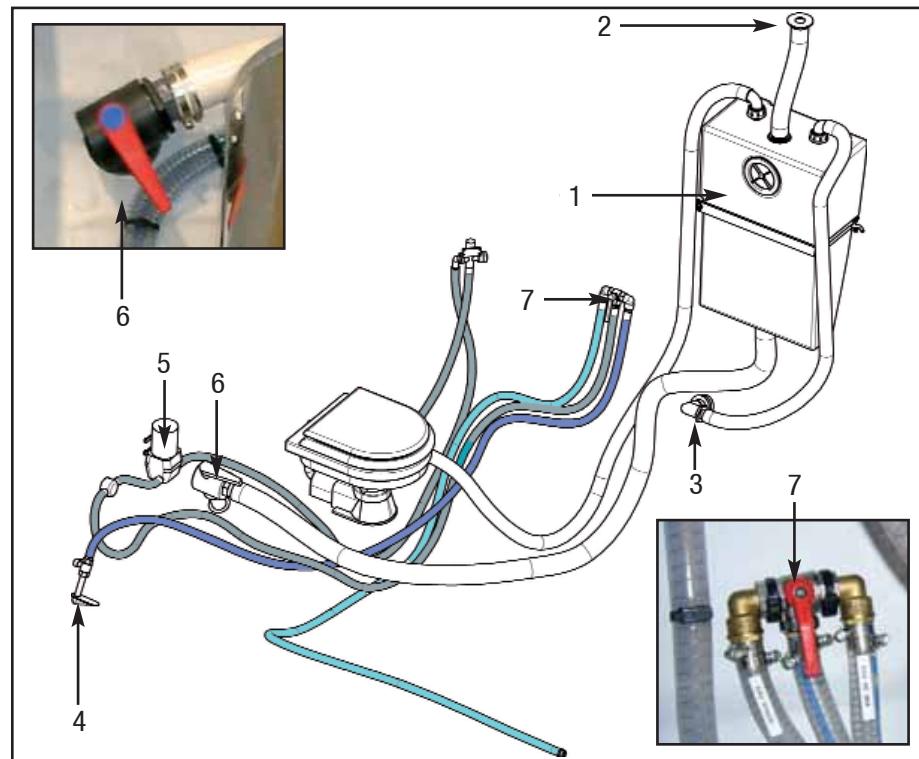
WASTE HOLDING TANKS

PLUMBING

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**WASTE WATER TANK SYSTEM
(PRESENT WITH ELECTRIC TOILET OPTION)**



- 1 - Waste holding tank.
- 2 - Deck pumpout fitting.
- 3 - Vent.
- 4 - Sea water intake strainer.

- 5 - Electric pump.
- 6 - Drainage valve on hull.
- 7 - fresh or sea water valve.

The heads are fitted with waste water tanks.

Before use ensure that the drain valve on the bowl is closed in order to avoid any inadvertent discharge (valve is closed when the valve handle is perpendicular with the pipe).

To empty the tank:

- In an authorized zone open the drainage valve to empty out by gravity.
- In marinas equipped with an organic waste aspiration system, insert the aspiration hose into the tank through the deck pumpout fitting. Start the aspiration pump.

WARNING

Find out about current law in your country or marina relative to discharging waste water into the sea.

The filler caps are opened and closed with an appropriate key.

When the tank has been emptied, check the cap seal for condition then close the filler.

To rinse out the system, fill the tank with fresh or sea water, then empty.

Only use domestic cleaning products.

The tanks must be empty when the boat is moored in negative temperatures.

RECOMMENDATION

For the protection of the environment, do not discharge the contents of the waste holding tanks near the wharf.

RECOMMENDATION

Use the pump system at ports or marinas to empty the waste holding tanks.



Motorization

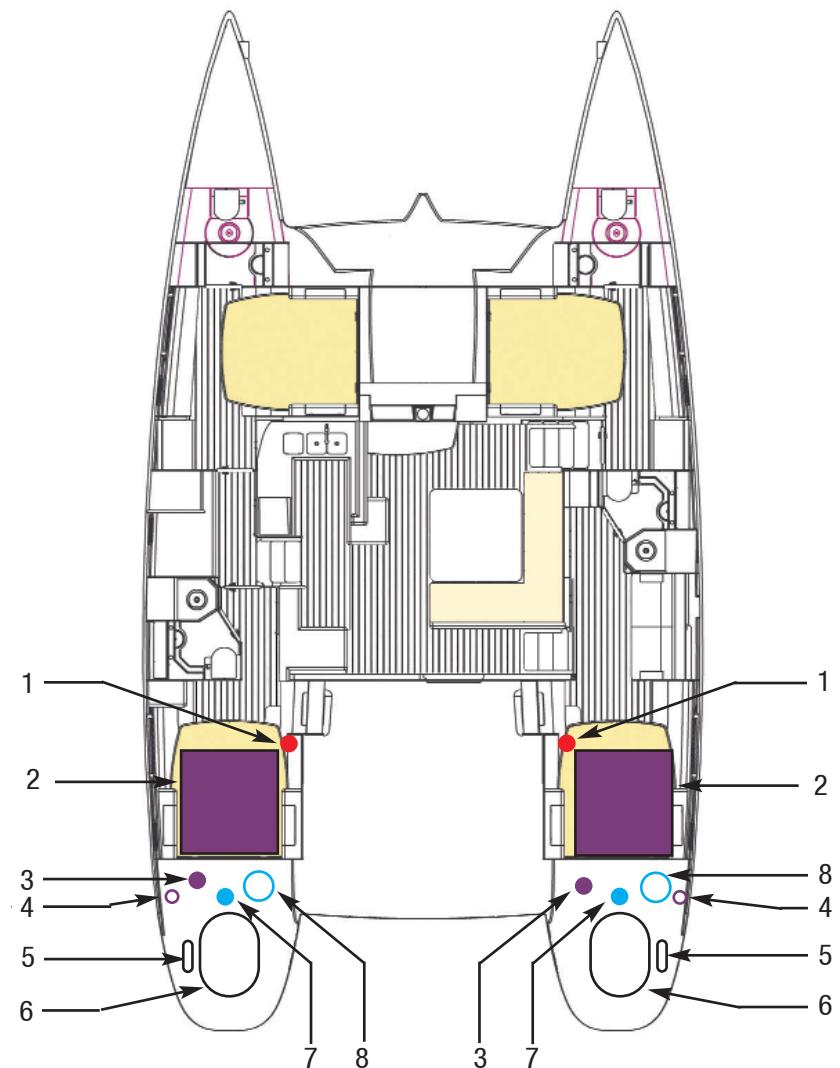
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IMPLANTATION MOTORIZATION

MOTORIZATION

88



- 1 - Fuel isolation valve.
- 2 - 480 L fuel tanks.
- 3 - Fuel filter.
- 4 - Fuel fillers for diesel tanks.
- 5 - Exhaust pipe.
- 6 - Engine.
- 7 - Sea water filter.
- 8 - Expansion tank.

LAGOON 500

■ Fuel tanks

The boat is fitted with two tanks (one in each hull).

Each one is filled separately.

Each one has its own gauge on the electrical NAVIGATION panel zone 1 (mark 1: port - mark 2: starboard).

• FILLING

In order to prevent any handling mistakes, never fill the water and fuel tanks at the same time.

During filling, avoid handling contaminants near the fillers.

Open and close the filler caps with the suitable key.

Fill the tanks using the two fuel fillers.

In order to protect the deck from possible fuel splash, wet the area around the filler with sea water before you remove the filler cap.

In case of splashes, rinse the deck thoroughly (after refitting the filler cap).

DANGER

Stop the engine and do not smoke while filling fuel tanks.

• MAINTENANCE

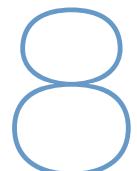
- Regularly check the condition of the O-ring of the filler (in order to prevent water entering the tanks).
- Do not shut the fuel valves after each use (except in the event of prolonged absence).
- Keep the fuel tank as full as possible (to avoid condensation).
- Every 5 years clean the tank to remove any sludge deposits.
- Every year check the condition of the fuel system (hose, valves, etc.).

RECOMMENDATION

Have a professional carry out any work on damaged parts of the fuel system.

N.B.: The capacity of the fuel tanks indicated on the "Specifications" page may not be completely useable, depending to the trim and load of the boat.

Always keep a reserve of 20 % of fuel.



ENGINE INSTALLATION (PORT COMPARTMENT)



- 1 - Fuel filter.
- 2 - Expansion tank.
- 3 - Exhaust hose.
- 4 - Sea water engine intake valve.

- 5 - Electro-mechanical assistance for Volvo reverse control.
- 6 - Engine.
- 7 - Engine start battery.

MOTORIZATION

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■ Fuel filter

Problems with the engine may have various causes, one of which is dirty fuel.

The injection pump may break down if there is water in the system. Water in the fuel is a result either of condensation caused by an insufficiently filled tank or by a filler-cap either not being closed properly or with a damaged seal.

In order to prevent any water infiltration, the fuel runs through two filters.

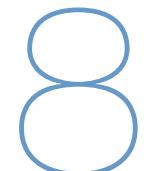
- The first filter is on the pipe that joins the tank to the engine, it has the functions of a water decanter and pre-filter.
- A second filter is an integral part of the engine, its role is to filter fuel very finely. For information about maintenance and replacement, please refer to the engine manual.

Drain by undoing the knurled screw at the base of the decantation bowl (but not removing it).

Allow to flow into a box till the fuel looks clean.

Carry out this operation several times a year.

Change the pre-filter at least once a year (for access, remove the bowl).



FUEL VALVE / ENGINE WATER VALVE

MOTORIZATION

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**FUEL VALVES
AFT PORT CABIN
ENGINE AND GENERATOR**



ENGINE WATER INLET

■ Engines

RECOMMENDATION

Read carefully the instructions provided with your boat.

WARNING

Never run the engine when the boat is out of the water.

• ACCESS TO ENGINE

Access to the engines is through the companionway hatches.

RECOMMENDATION

Stop the engine before opening the hatches.

Should you need to access an engine while it is running:

- Stay away from belts and mobile parts.
- Be careful to avoid catching clothing, long hair or rings in the engine.
- Wear appropriate clothes (gloves, hat etc.).

• ENGINE WATER INLET

The water inlet valves are essential for the operation of the engine. These valves must be open before the engine is started (risk of rapid deterioration of the exhaust pipe and of major damage to the engine).

- Keep the strainer under the hull as clean as possible.
- Brush the strainer when the boat is overhauled.
- Do not cover the strainer with antifouling paint.

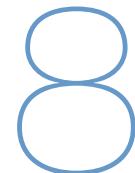
ADVICE: Get into the habit of checking immediately after starting the engine that water is expelled with the exhaust gases.

If no water is expelled:

- Stop the engine immediately.
- Check that the valve is open.

Close the water inlet valve if the boat is left unattended for a prolonged period.

Inspect and clean the water filter regularly.



ANODES

MOTORIZATION

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ANODE
(On hull, under water line)

- FUEL

Do not wait until the fuel tanks are almost empty before refueling (the system may stop due to lack of fuel).

Ensure you have enough fuel before sailing.

- MAINTENANCE

Refer to the manufacturer's manual provided with your boat.

Be careful to avoid any spillage of fuel or oil.

Check the color of exhaust gases. In the case of excessive white or black smoke, consult an engine specialist.

■ Instrument panel

The instrument panel contains all the checking functions of the engine and it does not require any special precautions (refer to the engine manual).

■ Propellers and anodes

The propellers supplied as a standard with your boat are the result of tests carried out jointly with the engine manufacturer.

RECOMMENDATION

Do not change the propellers without a specialist's advice.

Remove the foldaway propellers at the end of each season, dismantle them and clean them carefully.

Grease the thrust bearing surfaces and teeth.

Check that the propeller blades move easily.

If necessary, install new anodes (on hulls and base plates).

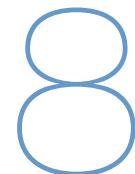
Replace anodes before they are 50% corroded.

RECOMMENDATION

Ensure that the base plate anodes have good metal contact with the transmissions.

Never paint the anodes.

Assemble the propellers before relaunching the boat.



Rigging & sails

9

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RUNNING RIGGING TABLE

Identification of ropes	length (m)	diameter (mm)	type
Reef 1	29	14	spectra
Reef 2	40	14	spectra
Reef 3	35	14	spectra
Main halyard	75 (covered)	12	dyneema core
Spi/gennaker halyard (optional)	52	14	dyneema core
Gennaker sheet (optional)	2 x 32	14	polyester
Genoa halyard	48	14	dyneema core
Mainsail topping lift	54	12	polyester
Genoa sheet	2 x 20	14	polyester
Mainsail sheet	37	14	polyester
Mainsail traveler	2 x 20	10	polyester
Genoa furler	42	10	polyester
Lazy jack	60	10	polyester

■ Standing rigging

• SETTINGS

Your mast will have been pre-set both by the boatyard and by the mast manufacturer during the first masting.

However, after a few sea trips, the mast should be reset once the cables have "given" to their full length.

Proceed as follows:

- Slacken the lower shrouds.
- Tighten the topping lift or use the main sail halyard in its place.
- Loosen off the lazy-jacks.
- Take up the upper and lower diamonds, evenly in order to obtain a straight profile. The mast should now curve evenly towards aft in the transversal plane of the vessel.
- The forestay is pre-adjusted to have an angle of 2.6° to aft.
- Tension the backstays by tightening the rigging screw bodies with a 30cm pipe (check that the mast head is centered).
- Take the tension back up in the lower shrouds by turning the turnbuckles by hand.
- Take the lazy-jacks back up.
- The mast should remain curved towards aft.

Under sail with a 20 knot apparent cross wind, it is normal for the leeward rigging to be slightly slack; if necessary, thread a shock cord between the upper and lower shrouds at 'eye' level to stop any flapping.

• MAINTENANCE

Before each trip, carefully inspect the mast from top to bottom.

Periodically check the tension of the rigging and the lock nuts or pins for tightness (you should check them for the first time after a few days sailing in all types of weather).

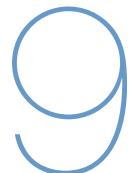
Secure and lubricate the turnbuckles with tallow, graphite grease or other (never use silicone).

Check the tightness of the turnbuckles.

Inspect the turnbuckles for possible wear (due to chainplate chafe if the rigging is slack).

Change any shroud or stay with severed wires or kinks.

Regularly check the chainplates for wear.



DANGER

To hoist a crew member up to the top of the mast, make a bowline with the halyard directly on the boson's chair ring (never use the halyard shackle or snap shackle).

Do not hoist a crew member when sailing in heavy weather.

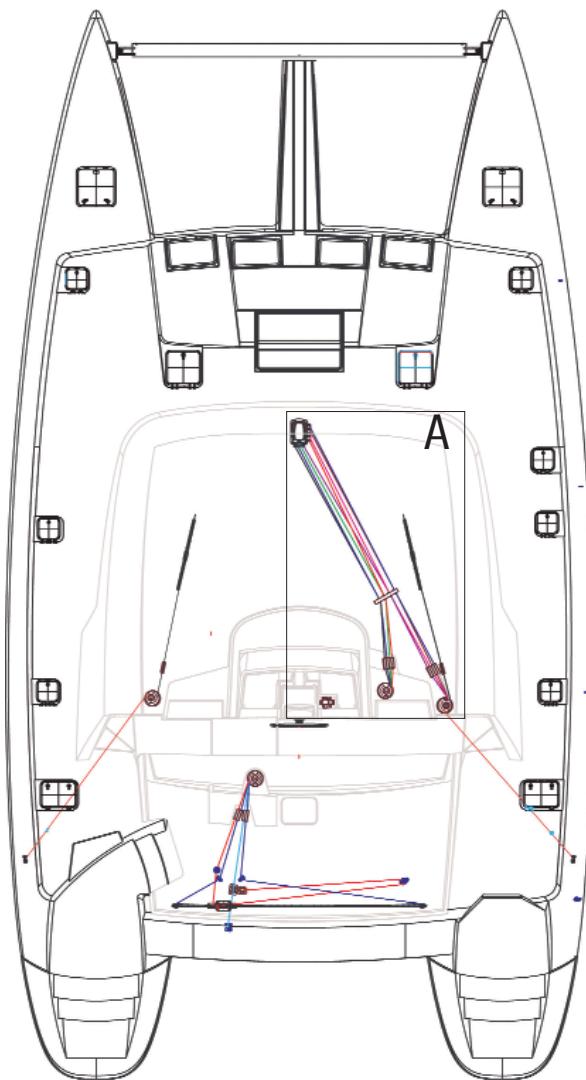


ADVICE: Your LAGOON dealer can carry out all maintenance operations.

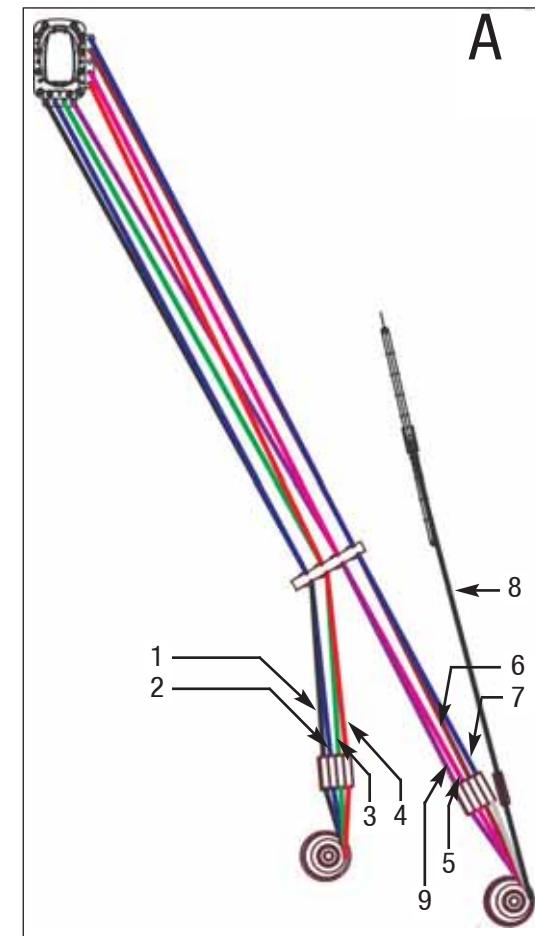
RUNNING RIGGING

RIGGING
& SAILS

100



- 1 - Reef 1
- 2 - Reef 2.
- 3 - Reef 3.
- 4 - Main sail halyard.
- 5 - Spinnaker halyard (optional).
- 6 - Genoa halyard.
- 7 - Mainsail Topping lift.
- 8 - Genoa sheet.
- 9 - Head downhaul for main sail.



■ Running rigging

Lubricate the sheaves with silicone. Replace any distorted or dented sheaves. Inspect the sheave pins at the top of the mast once a year. Regularly check the jam cleat jaws for condition. Inspect the halyards for wear and condition. Regularly clean the blocks (excess grease, corrosion spots). Lightly lubricate the block axles. Avoid untimely gybes in order to reduce premature wear on the sheets and attachment points.

■ Winches

Avoid line jamming during winch handling. Do not leave lines loose on the winches - fasten them on cleats. Adjust the winches on taking delivery of your boat (rinse them regularly during the season). The winches should rotate freely; they need an overhauling when slight seizing is noticed.

- MAINTENANCE

Carry out complete maintenance of the winches regularly, before and during the sailing season.

- Take the drums apart to clean them.
- Lubricate the drums with a film of white grease or Teflon to reduce the friction and to fight off corrosion (this type of grease is clean, non toxic and biodegradable).

WARNING

**Refer to the manufacturer's instructions to remove and refit the winches.
Improper refitting may result in accidents (e.g. crank handle kick).**

RECOMMENDATION

A winch drum is designed to have a minimum number of turns necessary so that it does not slip and that the stress is not passed on to the self-tailing mechanism.

Make at least 3 or 4 turns on the winch.



WARNING

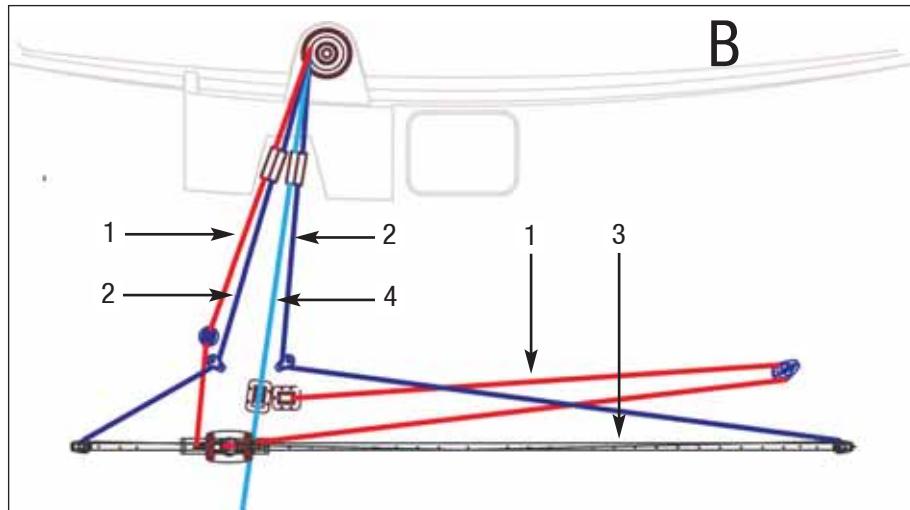
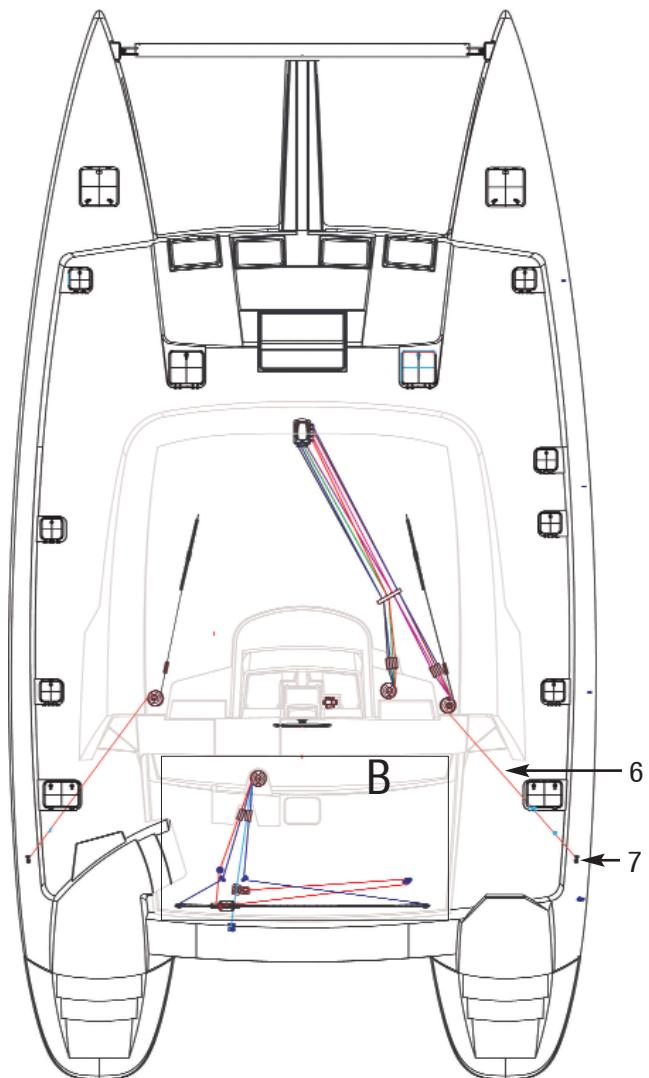
**Keep hands away from the electrical winches (optional extra) when they are in use.
Close the switch covers after use.**



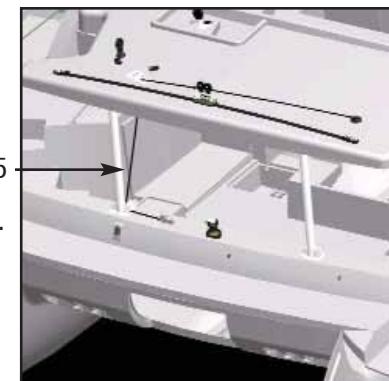
RUNNING RIGGING

RIGGING
& SAILS

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- 1 - Mainsail sheet.
- 2 - Back and forth traveler for mainsail sheet.
- 3 - Traveler track for mainsail sheet.
- 4 - Genoa furler.
- 5 - Mainsail sheet circuit from the flying bridge.
- 6 - Gennaker/spi sheet.
- 7 - Fixing plate for Gennaker/Spinnaker block.



■ Sail Setting

• GENOA FURLER

Before getting under way, take advantage of a windless period to hoist the genoa.

Pre-roll the drum by hand to set the furling line on it.

Be careful of the way which the drum winds: The UV band should be on the outside.

- Secure the head and halyard to the swivel. Secure the tack to the drum and sheets to the clew.

- Insert the bolt line into the hole and hoist it, taking care not to tear it.

- Tighten the halyard sufficiently but hoist it less taut than a sail on a normal stay.

Hoist it until the horizontal creases disappear (adjust the tension of the luff after a few miles at sea).

- Before you furl the genoa, remove the ring that is used to guide the luff tape. Keep the ring in a safe place and replace it before any handling (lowering etc.).

- Pull on the line from the cockpit to furl the genoa.

Never force it in case it seizes when you furl or unfurl the head sails. Check that no halyard is caught up in the furler and that the sail is not too taut.

MAINTENANCE

- Rinse the drum and swivel regularly.
- Lubricate the bearings if recommended by the manufacturer.
- Unrig the sails if your boat is not to be used for a prolonged period.

• MAIN SAIL

To hoist the main sail:

- Head into the wind.

- Slacken the main sail sheet.

- Hoist the sail taking care that the battens do not catch up on the Lazy Jacks.

• GENNAKER

Before getting under way, take advantage of a windless period to hoist the Genoa.

- Fix the chain swivel to the gennaker head.

- Fix the take up drum to the tack.

- Attach the take up drum to the spar with a snap shackle.

- Fix the halyard to the head chain swivel.

- Hoist the gennaker.

WARNING

After chocking it, remove the gennaker halyard from the starboard winch and lash it to the cleat.



Use the take-up drum stopper to furl or unfurl the gennaker.

WARNING

At certain speeds the gennaker can hide the forward navigation light.

GENNAKER

RIGGING
& SAILS

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**FIXING THE GENNAKER
HAYARD TO THE HEAD
CHAIN SWIVEL**



**GENNAKER
TAKE UP DRUM**



**RETURN BLOCK FOR
GENNAKER SHEET**



**GENNAKER SHEET
PASSAGE**

SHEETS

- Fix the sheets to the gennaker sheet point.
- Thread the sheets outside of the stay and shrouds and over the jacklines.
- Fasten the sheet return blocks to the chainplates.
- Lead the sheets back to the Genoa sheet winches.

WARNING

De-rig the gennaker when not in use (danger of damage through UV rays and accidental unfurling).

■ Sails

How long a sail lasts mainly depends on how regularly it is maintained.

Advice: At the end of the sailing season, and if possible before winter, take your sails to a specialist to for proper maintenance and repairs

When sailing, trim the sails properly in accordance with the stresses in order to reduce harmful strains on the fabric.

Prevent tears and wear: protect against chafing from accessories with rough surfaces (protection for spreaders, stanchions etc.).

Between sea-trips, slacken the halyard (for the sails on furler) and the mainsail outhand.

Ensure you have a sail maker's kit and a manual so that you may carry out emergency repairs until you can seek the assistance of a sailmaker.

• CLEANING AND MAINTENANCE

Rinse the sails with fresh water from time to time and dry without delay in order to avoid the formation of mildew.

Do not dry the sails by hoisting and letting them flap (when the sails flap the seams become worn and the sails may be torn by the rigging).

To remove grease spots: Use trichloroethylene and rinse immediately with water.

• STORAGE / FOLDING

Avoid storing wet sails to prevent mildew from forming.

Accordion fold the sail parallel to the foot, then roll it up to the dimensions of the bag.

• PROTECTION

UV rays are harmful to polyester and nylon.

If the sails remain on the mast, even for 24 hours, protect them with a cover or a protective material placed on the leech and foot of the furled sails.

Our network of agents offers accessories selected by the yard to meet your needs.



Safety

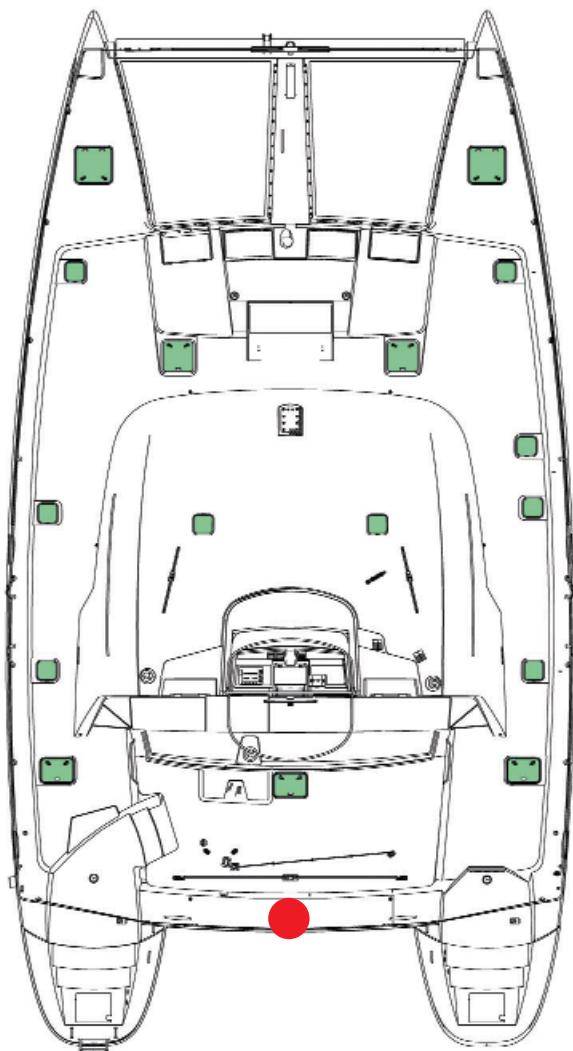
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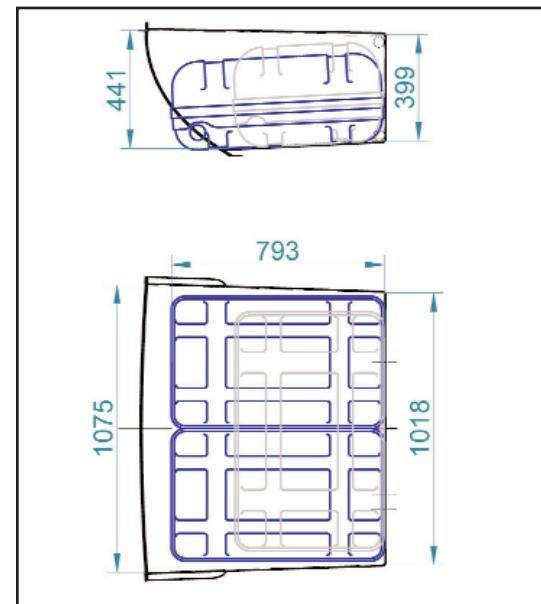
LOCATION OF LIFERAFT

SAFETY

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DIMENSIONS OF BIB LOCKER IN MM



■ Safety equipment

WARNING

The inventory of compulsory safety equipment corresponds to a standardized category.

- Before you sail, carry out a check of the compulsory safety equipment.
- Attach jack-lines to the deck and underneath the nacelle body (close to the manholes).
- Do not exceed the number of people on board indicated in the "Specifications" chapter.
- Without taking account of the number of people, the combined weight of the people and equipment on board should never exceed the maximum load recommended by the manufacturer.

RECOMMENDATION

Close the deck hatches and fore portholes before leaving the dock or anchorage.

• LIFERAFT

The liferafts are located in the aft beam.

Two liferafts for 6 and 8 people respectively are provided (14 people for Category D).

For boats equipped for 10 people, a second liferaft must be provided for the maximum number of people on board (14 people).

RECOMMENDATION

Before setting sail, read the liferaft launching instructions carefully.

10

SAFETY

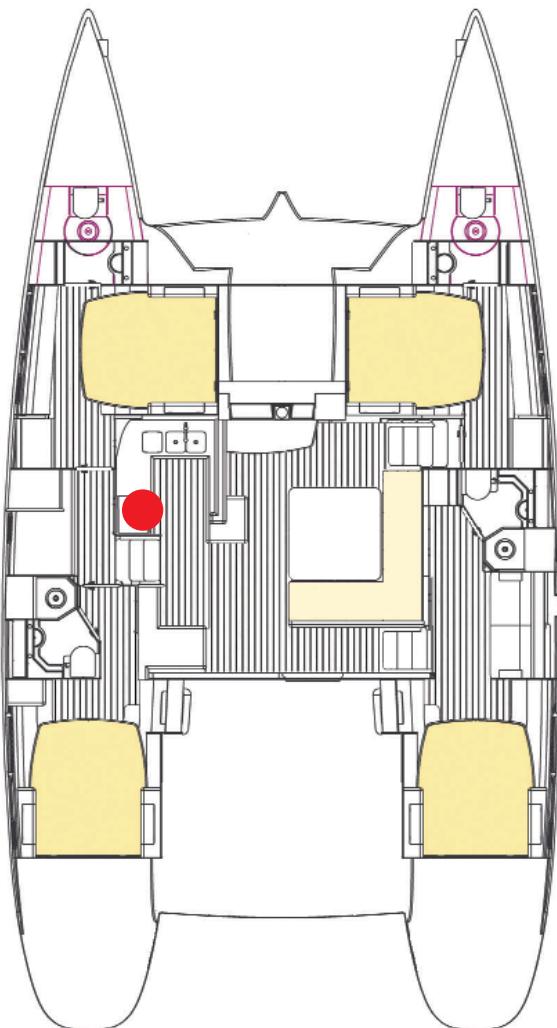
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GAS VALVES

SAFETY

110



GAS VALVES
(Locker to right of oven)

■ Gas system safety instructions

Gas bottles are located in the main locker in the forward cockpit. Bottles are of 13kg type (butane) in line with current standards in your country.

Close the system and gas bottle valves when the appliances are not in use.

Close the valves before changing the gas bottle and immediately in the event of an emergency.

Never leave an unattended appliance in use.

Do not fit or store flammable materials above the stove (curtains, paper, napkins etc.).

Do not use the oven or stove as back-up heaters.

Never obstruct access to the components of the gas system.

Ensure that all appliance valves are closed before you open the gas bottle or hose valve.

If you smell gas or find that the burners have gone out (although appliances cut off automatically if the flames go out), close the appliance valves. Ventilate the boat to evacuate any residual gas. Find the cause of the problem.

Test the gas system regularly in order to detect any gas leaks.

Check all connections using soapy water or a detergent solution, closing all appliance valves and opening the gas bottle valve.

If you detect a leak, close the gas bottle valve and repair it before you use it again.

WARNING

- Do not use a solution containing ammonia.
- Do not use a naked flame to detect leaks.
- Do not smoke, and do not use a naked flame when changing the gas cylinder.

The appliances use oxygen from the cabin and release flammable gases. Ventilate your boat when using the appliances.

Do not obstruct the air vents and at least leave the door open.

Lock the gimbals when not in use in order to avoid damage to the gas hose when sailing.

Keep the valves of empty gas bottles turned off and the gas bottles disconnected.

Keep protective guards, lids, covers and caps in their correct places. Store any spare and empty gas bottles on the deck or in a locker with exterior ventilation.

Do not use the gas bottle storage compartment to store other equipment. Store the gas bottles in their proper compartment only.

Regularly check and replace the rubber tubing that links the gas bottle to one end of the circuit and the stove to the other, according to the current norms and regulations in your country.

Pay particular attention to maintaining in good condition the screw thread of the gas bottle where the regulator is located. Check the condition of the regulator every year and change it if necessary. Use regulators which are identical to those already fitted.

Have any repairs carried out by a skilled technician.

10

SAFETY

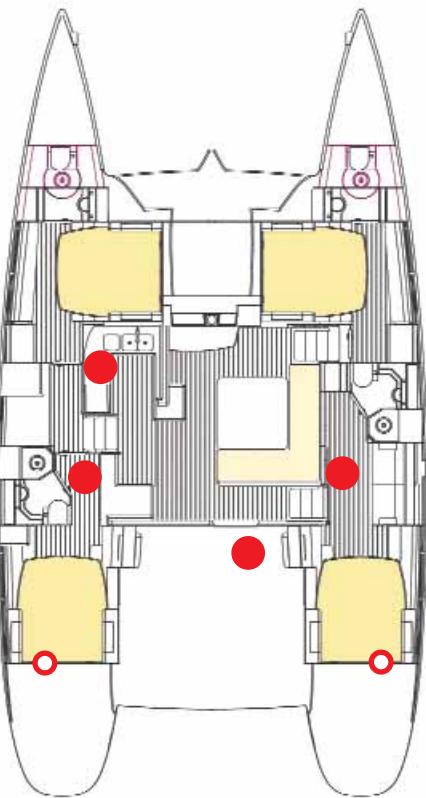
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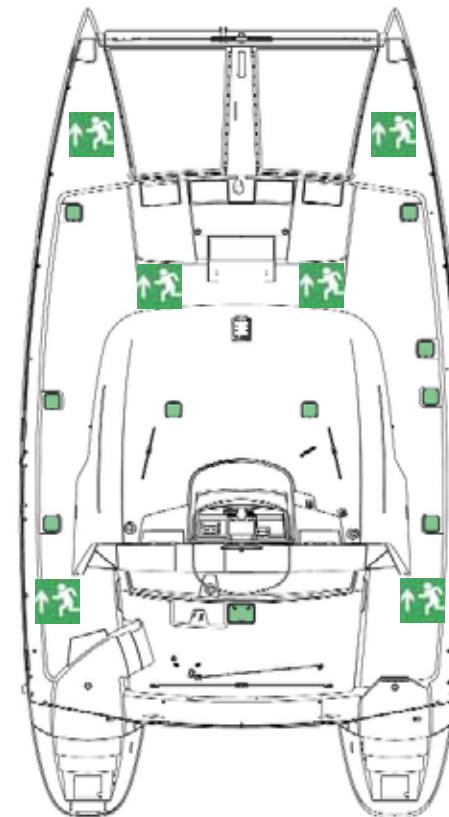


SUGGESTED LOCATIONS OF THE FIRE EXTINGUISHERS

- Other locations are possible, an extinguisher should be found within 5m from any berth.
- An extinguisher must be positioned within at most 2m from each extinction access hole.
- An extinguisher or a fire blanket (ISO 1869) must be located less than 2m from any open flame appliance.
- An extinguisher must be located less than 1m from the steering station.
- The extinguishers must be easily and quickly accessible for use, inspection or maintenance without the need for tools or for dismantling any part of the boat including drawers and shelves.



- Extinguisher
- Emergency exit
- Engine compartment fire access hole



■ Fire Extinction

WARNING

The boat is delivered without extinguishers; you are responsible for applying your country's fire safety laws (number of extinguishers, capacity, type and location).

For best use of the extinction access hole it is recommended that you equip yourself with 6KG ABC type extinguishers fitted with a hose. The extinguishers must be within easy reach and kept away from any potential fire source.

Procedure in the event of fire in the engine compartment bilge:

- Stop the engine.
- Switch off power and cut off fuel supply.
- First push down button and then project the extinguishing substance through the extinction hole situated on the partition of the aft cabin behind the headboard of the berth.
- Wait one minute before approaching.
- Open the access hatch to carry out repairs.

WARNING

Keep an extinguisher on hand in case the fire should start again.

It is the responsibility of the owner or skipper:

- To have the extinguishers checked according to the instructions given.
- To replace any empty or expired extinguishers with others of an equal or a greater capacity.
- To ensure the extinguishers are accessible when people are on board.

And also inform the crew of:

- The location of the extinguishers and how to use them.
- The location of the extinction holes in the engine compartments.
- The location of the emergency exits.

10



WARNING

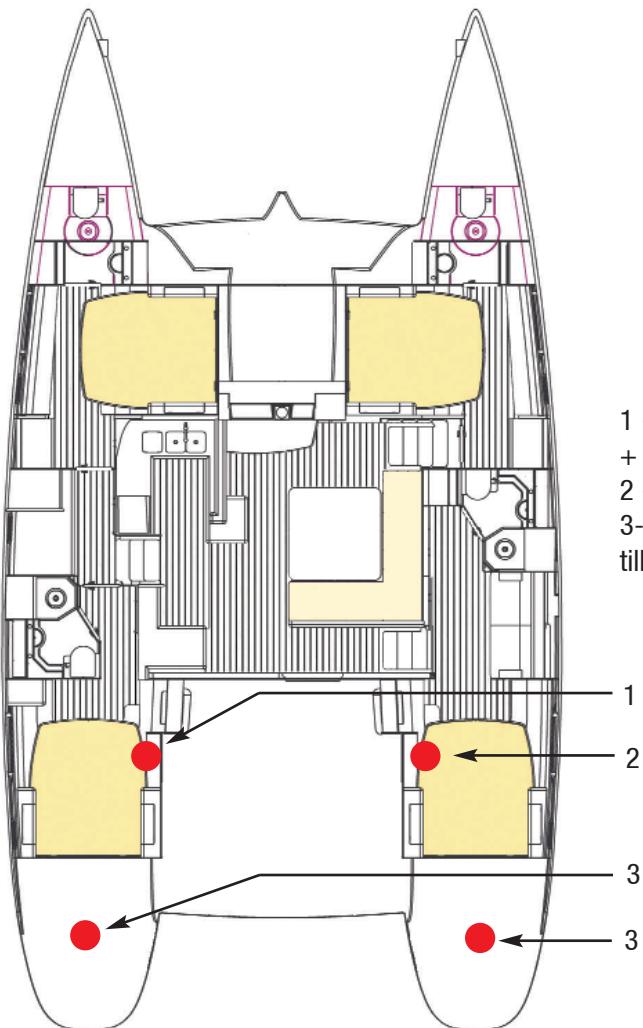
Never:

- **Obstruct access to the emergency exits.**
- **Obstruct the safety controls (fuel valves, gas valves, power switches).**
- **Obstruct access to the extinguishers placed in lockers.**
- **Leave the boat unattended when a stove or heater is in use.**
- **Use gas lamps on the boat.**
- **Alter any of the boat's systems (electricity, gas or fuel).**
- **Fill up a tank or change a gas cylinder when an engine is running or a stove or heater is on.**
- **Smoke while handling fuels or gas.**

FUEL VALVES / EMERGENCY TILLER

SAFETY

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- 1 - Fuel valve for port engine + generator.
- 2 - Fuel valve for port engine.
- 3- Deck plates for emergency tiller.



FUEL VALVES



EMERGENCY TILLER

Keep the bilge clean. Check regularly for the presence of fuel or gas vapor.

Use only compatible spare parts for extinguishers. Spare parts should have the same specifications or be technically equivalent relative to their resistance to fire.

Always attach the curtains with their snap fasteners when the gas cooker is in use.

Flammable products should not be stored in the engine compartment. Non-flammable products stored in the engine compartment should be attached to prevent them from falling on the machine and obstructing access.

WARNING

Use only Carbon Dioxide (CO₂) extinguishers to fight electrical fires.

Evacuate the immediate area after discharging the product to prevent asphyxia, and ventilate before entering.

MANUAL BILGE PUMPS

The manual bilge pumps are located along the sides of the aft cockpit bench.

■ Emergency tiller

The emergency tiller is located in a locker. It must be easily accessible.

To operate the tiller:

- Use a winch handle to unscrew one of the emergency tiller deck plates located on the first step of the rear transom.
- Insert the tiller into the rudderstock, ensuring it is fully engaged in the square.

RECOMMENDATION

The emergency tiller is only designed for sailing at a reduced speed in the event of wheel failure.

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SAFETY

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**■ Bilge pumping****ELECTRIC BILGE PUMPS**

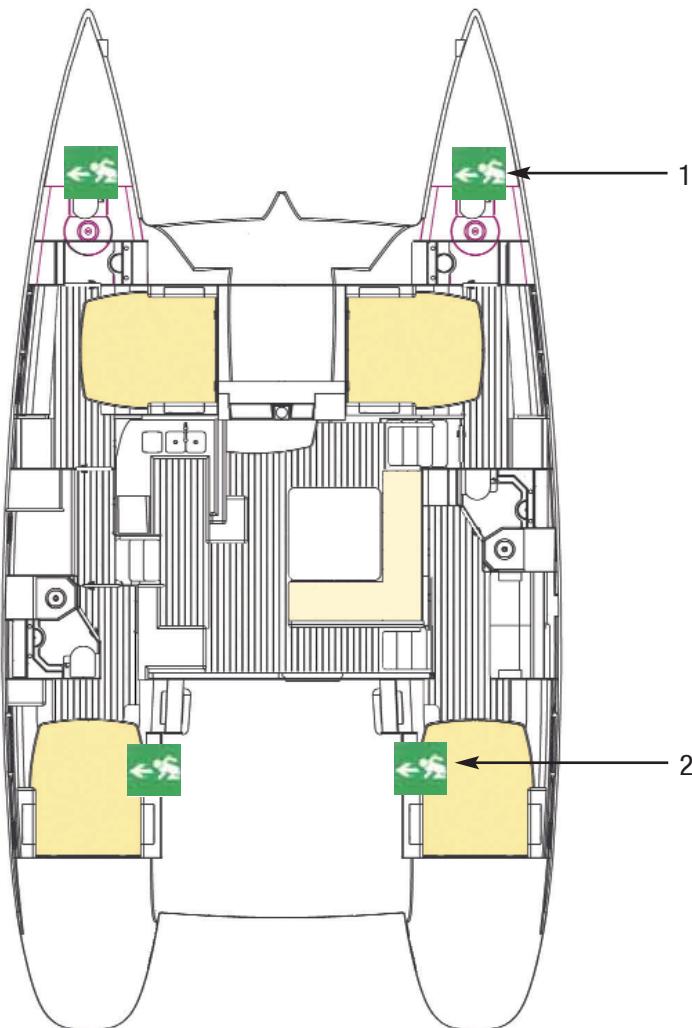
The electric bilge pumps for the sump operate automatically.

See PLUMBING chapter.

ESCAPE HATCHES

SAFETY

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- 1 - In the inner bows in the case of the optional extra of fitting out this space.
- 2 - In the aft cabins.



■ Capsizing

IN THE EVENT OF CAPSIZING:

Escape hatches are fitted in the aft cabins

- and in the inner bows in the case of the optional extra of fitting out this space.

They can be opened both from the inside and the outside.

The security bar (anti-theft device) is released automatically in the event of the vessel capsizing.

The liferafts are accessible on the transom (see the beginning of the chapter).

If the problem persists, contact the builder or your nearest supplier.
If you are using a propeller with fold-away blades, read the manufacturer's use and maintenance instructions carefully.

■ General points

- Find and warn all members of the crew before maneuvering the vessel.
- Carry out maneuvers carefully and always with footwear.
- Do not move around on the aft area of the flying bridge.



■ Engine

- Never start the engine when the boat is out of the water.
- Never turn the propellers when the boat is out of the water.
- Be careful not to cut yourself on the sharp edges of the propellers.
- Be careful not to injure yourself when opening or closing the blades.

- Stop the engine before diving or swimming around the boat.
- The propeller blades are sharp and can cause major damage when rotating.
- Never attempt to release a fishing net or line caught in the propeller when it is rotating.

- Before setting sail, check that the propellers are working in both fore and aft positions.
- In the event of unusual noises or vibrations emanating from the propellers, stop the engines immediately.

General Specifications

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DESIGN CATEGORIES

■ Category A

This boat is designed for sailing in winds exceeding force 8 on the Beaufort scale and in waves of a significant height of 4m or more, and is to a large extent self-sufficient. Unusual conditions such as hurricanes are excluded.

You may encounter such conditions when you sail long crossings, for instance transoceanic passages, or close to the wharf when not protected from the wind or waves over a stretch of several hundred nautical miles.

■ Category C

This boat is designed for sailing in winds that may exceed force 6 on the Beaufort scale and in waves of a significant height of 2m or less. Such conditions can be encountered in exposed inshore waters, in estuaries or in coastal waters in moderate weather.

■ Category B

This boat is designed for sailing in winds not exceeding force 8 on the Beaufort scale and in waves of a corresponding height (significant height of 4m or less).

These conditions may be encountered out to sea or near the coastline when you are not protected from the wind and waves over several dozen nautical miles. These conditions may also be encountered in inshore waters of proportions sufficient to give waves as high as those mentioned above.

■ Category D

This boat is designed for sailing in winds not exceeding force 4 on the Beaufort scale and in waves of a corresponding size (occasional waves of 0.5m maximum).

Such conditions can be encountered in sheltered inshore waters and in coastal areas in good weather.

- N.B.:

The significant height of a wave is the average height of the upper third of the wave. This corresponds approximately to the height of a wave as assessed by an experienced observer. Some waves will be twice as high as this value.



GENERAL SPECIFICATIONS

■ Vessel

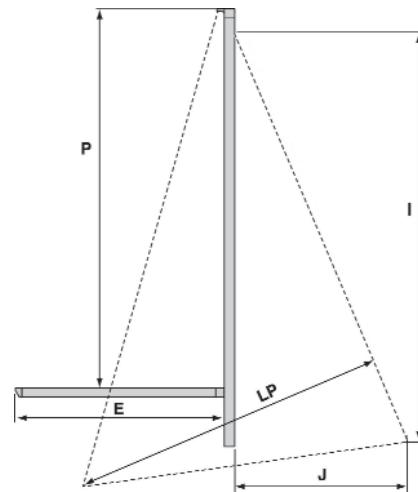
Length overall.....	15.54 m / 51'
Length on the waterline.....	14.93 m / 49'
Main beam	8.53 m / 28'
Height	23.77 m / 78'
Draught	1.40 m / 4'59"
Light displacement.....	17160 kg / 37838 lbs
Theoretical maximum load displacement	20600 kg / 45423 lbs
Authorized maximum load.....	3000 kg / 6615 lbs
Including the weight of the people authorized on board (75kg per adult), supplies, liquids (fresh water and fuel) in fixed, completely full tanks, additional loads, optional equipment, liferaft and the scope for load.	
Water capacity	4x240 l / 4x63.4 US gal
Fuel capacity.....	2x480 l / 2x126.8 US gal
Refrigeration unit capacity.....	330 l / 87.2 US gal
Battery capacity (standard version)	6 x 140 Ah (12 V)
Capacity of engine batteries	2 x 50 Ah (12 V)
Maximum engine power	2 x 75 CV

CE category	Number of persons
A.....	14
B.....	14
C.....	16
D	40

■ Sails

Sail area close hauled.....	160.00 m ² / 1722 sq.ft
Battened mainsail	93.00 m ² / 1001 sq.ft
Furling genoa.....	67.00 m ² / 721 sq.ft
Asymmetric spinnaker (optional extra)	190.00 m ² / 2045 sq.ft
Gennaker (optional extra)	145.00 m ² / 1560 sq.ft
Storm jib (optional extra).....	8.00 m ² / 86 sq.ft

I.....	19.862 m / 65'16"
J	5.369 m / 17'61"
P.....	20.150 m / 66'10"
E.....	6.947 m / 22'8"
LP.....	6.466 m / 21'21"



1
1

GENERAL
SPECIFICATIONS

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YOUR LAGOON 500

NAME OF BOAT:

OWNER'S NAME:

VERSION :

ADDRESS:

DELIVERY DATE:

.....

REGISTRATION NUMBER:

.....

DOOR KEY NUMBER:

Emergency contact tel no. / address

HULL NUMBER:

MAKE OF ENGINE:

ENGINE KEY NUMBERS:

STARBOARD ENGINE SERIAL NUMBER:

STARBOARD TRANSMISSION SERIAL NUMBER:

PORT ENGINE SERIAL NUMBER:

PORT TRANSMISSION SERIAL NUMBER:



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PERSONAL MEMORANDUM

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