CE

51

Owner's manual

LAGOON

CONSTRUCTION NAVALE BORDEAUX

VERSION 1 - NOVEMBER 2022

D3155V

CONTENT

CE

CONTENT

1

Dear Sir/Madam,

You have just taken delivery of your new LAGOON, and, first of all, we thank you for the trust you have shown in buying a boat of our brand.

A LAGOON is made to last: from its design to its construction and eventually to its launching, every boat, including the smallest details, is considered with the very care it deserves in order to ensure you the years of joy you expect.

This manual is intended to help you enjoy your boat in safety. It includes many details about the boat's specifications, the provided or installed equipment and also information on how to use it. Read it carefully and familiarize yourself with the boat before sailing.

This Owner's manual is not a course on safety at sea or good sailing sense. If this is your first boat, or if you are changing to a new type of boat that you are not familiar with, both for your comfort and your safety, we would advise you to obtain some training before taking the helm of your new boat. Your retailer, your national sailing or motor boat federation or your yacht club would be delighted to inform you about the local sailing schools or skilled instructors in the area.

Make sure that the forecast wind and sea conditions match with the build category of your boat, and that you and your crew are capable of sailing your boat safely in such conditions. Even when your boat is suited, the sea and wind conditions corresponding to the build categories A, B and C may vary from heavy storm for the A category to severe conditions for the C category. These situations, during which you may experience exceptional waves and gusts, are therefore dangerous and only an experienced crew, well trained and prepared, is able to sail a boat, provided it is properly maintained.

This Owner's manual is not a course in maintenance and repair. Should you have any difficulty, please contact your builder or representative. If a maintenance manual is provided, do not hesitate to use it.

Always ask an experienced professional to carry out any maintenance on your boat, or to install further accessories or make any modification. Any modifications which may alter the safety specifications of the boat have to be estimated, carried out and documented by qualified people. The builder cannot be held liable for modifications that would not have been approved.

Please note that, in some countries, a sailing license or authorisation is required or specific regulation has to be observed.

Always keep your boat correctly maintained and take into account damage due to time or, if applicable, due to an intensive or inappropriate usage of the boat. Any boat, however solid it may be, may be severely damaged if not sailed properly. This is not compatible with a safe sailing experience. Always adapt the speed and the direction of the boat to the sea conditions.

If your boat is fitted with a life raft, read its user's guide carefully. The crew must have at their disposal on board all the safety equipment (life jacket, harness, etc. corresponding to the boat type, weather conditions, etc. This equipment is mandatory in certain countries. The crew must be familiar with the use of all the safety equipment and with the emergency safety procedures (MOB, towing, etc.); sailing clubs and schools organise training sessions on a regular basis.

It is recommended that everybody wears appropriate safety equipment (life jacket, individual buoyancy aids) when they are on deck. Please note that, in some countries, always wearing a buoyancy aid in conformity with the local standards has been made compulsory.

The users of this boat are informed that:

- All crew members have to be properly trained;

- Any boat, however solid it may be, may be severely damaged if not sailed properly. This is not compatible with a safe sailing experience. Always adapt the speed and the direction of the boat to the sea conditions.

- Do not sail at maximum speed in areas of dense traffic or in case of reduced visibility, strong winds or high waves. Reduce the speed and the wake of the boat, in respect of others and also as a measure of safety, both for them and for yourself. Respect the speed and wake limits when zones are defined.

- Respect the priority rules set by the navigation regulations and laid down by the COLREG.

- Make sure that you always maintain a sufficient distance to stop or steer the boat in order to avoid a collision.

KEEP THIS MANUAL IN A SAFE PLACE AND PASS IT ON TO THE NEW OWNER IF YOU SELL THE BOAT.

COMMENTS ON HOW TO READ THIS MANUAL

The various warning statements used throughout this guide break down as follows:

DANGER

Warns you about the existence of an extreme hazard that is very likely to induce serious or fatal consequences if the appropriate precautions are not taken.

WARNING

Warns you about the existence of a hazard that may have serious or fatal consequences if the appropriate precautions are not taken.

ATTENTION

Warns you about safety practices or draws your attention to dangerous practices that may hurt people or result in damage to the boat, its components or the environment.

ADVICE-RECOMMENDATIONS

Shows a recommendation or a piece of advice to take the appropriate actions or manoeuvres adapted to what you are thinking of doing.

Some information or drawings in this manual may show details that differ slightly from your own boat; all the essential information, however, remains the same. Depending on the requirements, any changes made will appear in the manual's later editions.

As part of our ongoing commitment to the continuous improvement of our products, CNB LAGOON reserves the right to modify their design, outfitting or equipment as it deems necessary.

For this reason, boat characteristics and details are not contractual and may be modified at any time, with no prior notice and no updating obligation.

This owner's manual has been produced in several languages. French is the reference language and shall prevail.

2. Specifications

2.1 ■ IDENTIFICATION SHEET OF YOUR BOAT

- SHIPBUILDER'S 'S NAME .. Construction Navale Bordeaux
- MODEL ..... LAGOON 51
- BUILD CATEGORY..... A
- MAIN PROPULSION .....SAIL
- MAXIMUM RECOMMENDED POWER..... 160 CV .....(117.6 Kw)
- CERTIFYING ORGANISATION NUMBER CE0607

CATEGORY	WAVE HEIGHT (m)	WIND FORCE (BEAUFORT)
A	> 4	> 8
B	≤ 4	≤ 8
C	≤ 2	≤ 6
D	≤ 0.5	≤ 4

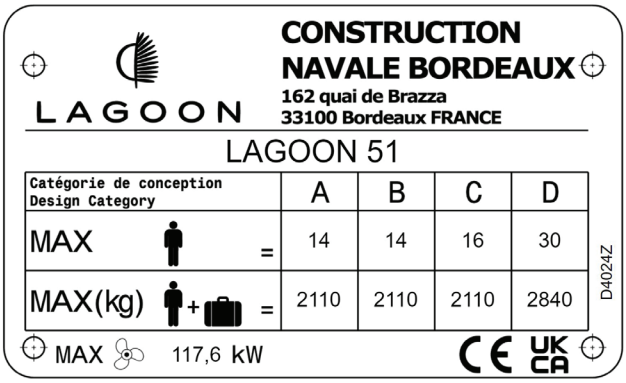
MAXIMUM NUMBER OF PEOPLE RECOMMENDED PER BUILD CATEGORY:

CATEGORY	MAXIMUM NUMBER OF PEOPLE
A	14
B	14
C	16
D	30

WARNING

Do not exceed the recommended maximum number of people. Regardless of the number of people on board, the total weight of people and equipment must never exceed the maximum recommended load.
Always use the seats or seating provided.

2.2 ■ SHIPBUILDER'S PLATE



The manufacturer's plate is attached to the starboard helm console.
It must never be removed from the boat.

2.3 ■ DIMENSIONS

LENGTH OF THE HULL (HL)	15.35 m*
HULL BEAM (HB)	8.10 m*
MAXIMUM LENGTH (maxL)	15.60 m**
MAXIMUM BEAM (maxB)	8.10 m
MAXIMUM ALLOWABLE DRAUGHT	1.40 m
MAXIMUM AIR DRAUGHT UNLADEN VESSEL	23.10 m

* According to ISO 8666.
** Includes stern door and optional bowsprit.

2.4 ■ LOAD

M_{LC} Unladen boat weight (kg) 19697
M_{MO} Sailing at the minimum sailing requirement (kg) 20132
M_{LDC} Maximum load displacement cat. A (kg) 29014

MAXIMUM LOAD DISPLACEMENT (ISO 12217)

Category A	Category B	Category C	Category D
28194 kg	28194 kg	28194 kg	29014 kg

REAL LOAD CAPACITY
(maximum load ISO 14945 - Plate - June 2021)

Category A	Category B	Category C	Category D
2360 kg	2360 kg	2360 kg	3180 kg

MAXIMUM RECOMMENDED LOAD = maximum load displacement - unladen vessel

The recommended maximum load includes the weight of all the people on board, all the supplies and personal belongings, and all the equipment not included in the unladen vessel weight.

TOTAL WEIGHT OF LIQUIDS: 1693.20 kg (fuel + fresh water)

WARNING

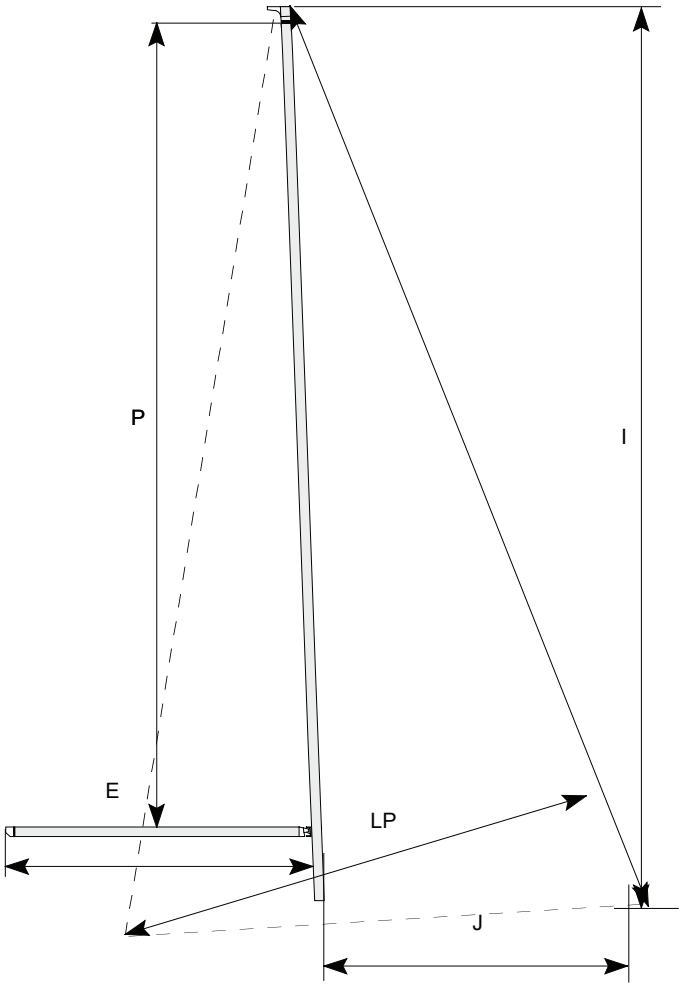
When loading the boat, never exceed the maximum recommended load.
You should always load the boat with care and distribute the loads in the best possible way to preserve the theoretical trim (more or less horizontal). Avoid placing heavy loads in the upper storage space.

2.5 ■ RIGGING AND SAILS

2.5.1 ■ Sail characteristics

Standard aluminium mast

SAIL	SURFACE AREA		Dimensions
MAINSAIL	89 m²	I	17.20 m
SQUARE TOP MANSAIL	98 m²	J	4.648 m
FURLING GENOA	51 m²	P	17.383 m
CODE 0	95 m²	E	8.20 m



2.5.2 ■ Maintenance of the rigging

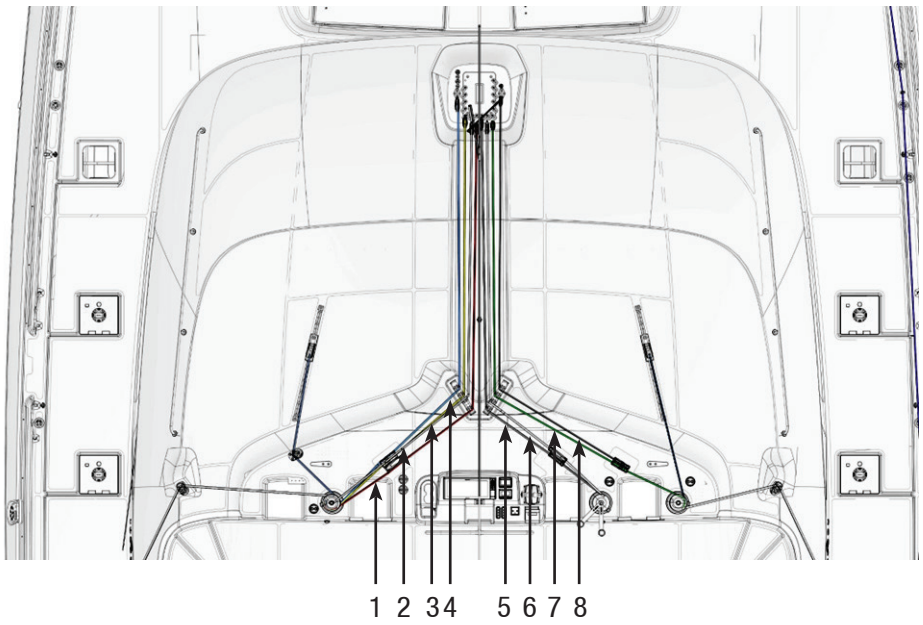
ADVICE-RECOMMENDATIONS

Regularly check the standing and running rigging, at least once a year.

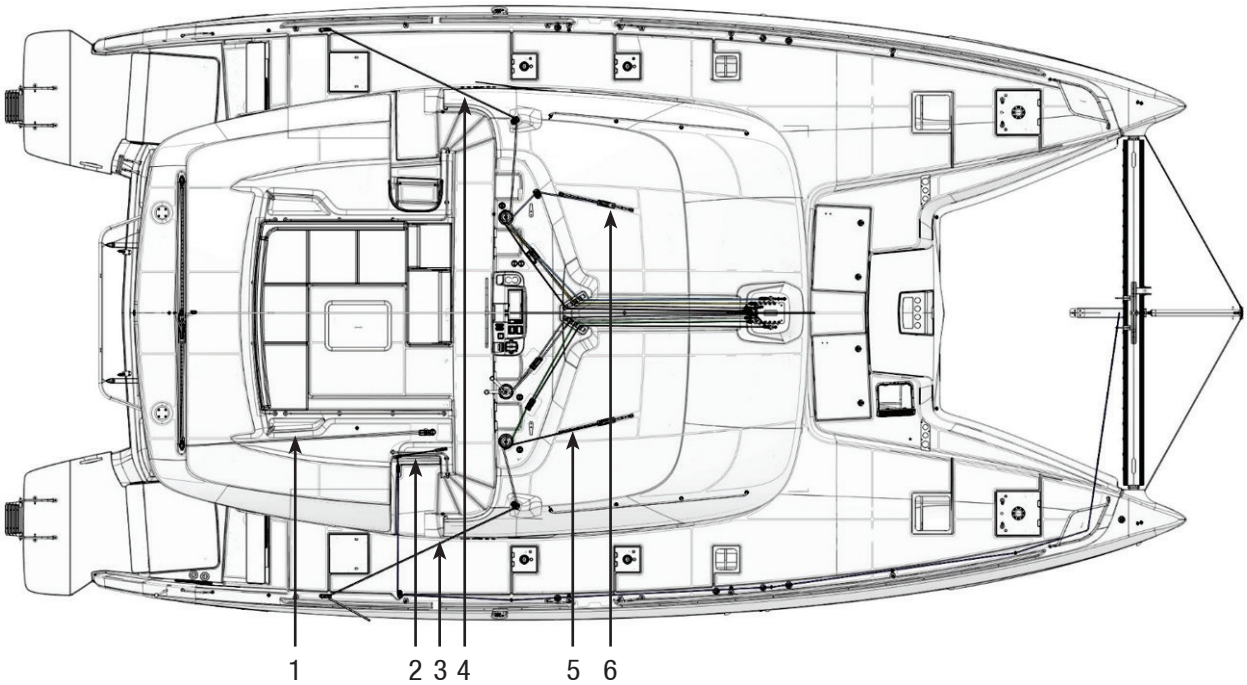
Regarding metal cables:
- Have them changed as soon as the first "rust-spot" appears.
- Check for corrosion, particularly at connections with the turnbuckles.
- Check that the end fittings and the turnbuckles are in good condition.

Regarding synthetic ropes of halyards, sheets, mooring lines, etc.:
- Have them changed as soon as the first signs of wear and tear or chafing appear.
- Check the other parts of the rigging, sheets, mooring lines, etc. on a regular basis, and replace them if they have suffered wear and tear.

2.5.3 ■ Handling diagrams



1 - Reef 3.
2 - Code 0 spi halyard.
3 - Reef 2.
4 - Genoa halyard.
5 - Mainsail sheet.
6 - Mainsail halyard.
7 - Reef 1.
8 - Topping lift.



1 - Main sail carriage line port and starboard.
2 - Manual genoa furler line.
3 - Spi sheet / code 0 starboard.
4 - Spi sheet / code 0 port.
5 - Genoa sheet starboard.
6 - Genoa sheet port.

SHORTENING THE SAILS

ATTENTION

Any adjustment differing from these instructions may cause the mast to rupture. IN PARTICULAR, THE 100% GENOA WITH 2 REEFS IN THE MAINSAIL MUST BE ABSOLUTELY AVOIDED.

MAX. TRUE WIND

FORCE 1-4	knots 16	SAILS Mainsail 100% Genoa 100%	
FORCE 5	knots 21	SAILS Mainsail 1 REEF Genoa 100%	
FORCE 6	knots 27	SAILS Mainsail 1 REEF Genoa 75%	
FORCE 7	knots 33	SAILS Mainsail 2 REEFS Genoa 50%	
FORCE 8	knots 40	SAILS Mainsail 3 REEFS Genoa 25%	
FORCE 9	knots 47	SAILS Mainsail 3 REEFS Genoa 0%	

3. Safety

3.1 ■ RISK OF FIRE OR EXPLOSION

3.1.1 ■ Risks

The main risks are related to the propulsion system (§ 4.1) and the electrical system (§ 4.4).
Please refer to the appropriate sections.

3.1.2 ■ Fire fighting equipment

Portable extinguishers with hose fittings: to be provided by the owner;
You are responsible for enforcing compliance with the national legislation of the flag under which you are sailing. The boat, when sailing, must be fitted with portable extinguishers with hose fittings.

DANGER

Before unloading, cut the engines and the fans.

ADVICE-RECOMMENDATIONS

We advise you to provide at least 1 extinguisher within 5 meters of each berth, within 2 meters of the engine compartment's extinguisher access port, within 2 meters of every appliance using an open flame and, eventually, 1 extinguisher within 1 meter of the helm station. We recommend a total capacity of at least 8A/68B for all portable extinguishers, each of them with a minimum capacity of 5A/34B. CO_2 fire extinguishers must be used for galley or electrical fires and must be equipped with hose fittings.

The boat is delivered without portable fire extinguishers with hose fittings for engines, generator and installations.

Be sure:
- To fit the boat with extinguishers in compliance with the regulations of the country where your boat is registered.
- To have the extinguishers checked in accordance with the instructions given.
- To refill or replace the extinguishers with similar equipment if the extinguishers have been used or are out of date.
- Make sure that the extinguishers are accessible when people are on board.
- To protect the deck, the owner/user of the boat must provide at least 1 fire bucket fitted with its lanyard, to be stored where it is readily to hand.

Before making any sea trip, show the crew:
. Where the extinguishers are and how they work,
. Where the emergency exits are.

ESSENTIAL RULES OF PRUDENCE
Never:
- Obstruct access to the emergency exits.
- Obstruct safety controls (fuel valves, gas valves, power switches).
- Obstruct the access to the extinguishers placed in cupboards or lockers.
- Leave the boat unattended when a stove or heater is in use.
- Use gas lamps in the boat.
- Alter any of the boat's systems (electricity, gas or fuel).
- Fill up a tank or change a gas bottle when an engine is running or a stove or heater is on.
- Smoke while handling fuels or gas.

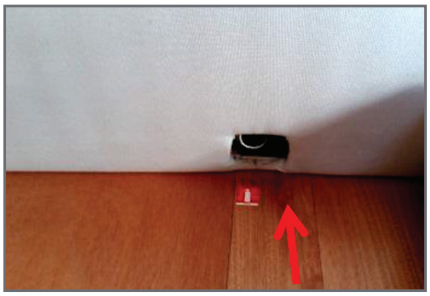
Operating instructions for the fixed fire-fighting system:
- Make sure that all persons have evacuated the engine compartments.
- Check that the access to this area are closed.

Fire in the port or starboard engine compartments:
1 - Switch off the ventilation to the engine compartment concerned.
2 - Remove the mattresses from the beds of the aft cabins to access the engine compartments.
3 - Cut the fuel supplies in the port and starboard cabins.
4 - Remove the partition plugs.
5 - Operate the fire extinguisher through the hole in the partition.

Fire in the Generator compartment:
1 - Switch off the ventilation to the Generator compartment.
2 - Remove the mattresses from the beds of the aft cabins to access the engine compartments.
3 - Cut the fuel supplies in the port and starboard cabins.
4 - Open the forward cockpit port hood to access the generator room.
6 - Remove the partition plug.
7 - Operate the fire extinguisher through the hole in the partition.

Fuel supply to engine and generator

Access to the engine compartment plug



Access to the generator compartment plug

ATTENTION

Having fire fighting equipment checked on a regular basis, according to the frequency indicated on the equipment.
Replace any portable fire extinguishers that have passed their use-by date or that have been discharged, with devices of an identical or superior extinguishing capability.

EQUIPMENT LOCATION

Portable extinguishers and fire blankets (not supplied)

When in service, this boat must be fitted with portable extinguishers that have the following extinguishing capabilities, and that must be installed in the locations described below.

Portable extinguisher locations are shown on the following pictogram:

When in service, this boat must be fitted with a fire blanket designed to protect the cooking appliance and/or galley, installed at the following location: close to the cooking appliance.

When in service, this boat must be fitted with portable extinguishers that have minimum extinguishing capabilities of 5A/34B, located immediately next to the helm stations.

Recommended location to install the fire extinguisher with hose fitting.
The door of the closet or the opening part of the confined space must feature the appropriate ISO symbol.

Location of the smoke detectors (installed in the forepeaks when these areas are fitted out).

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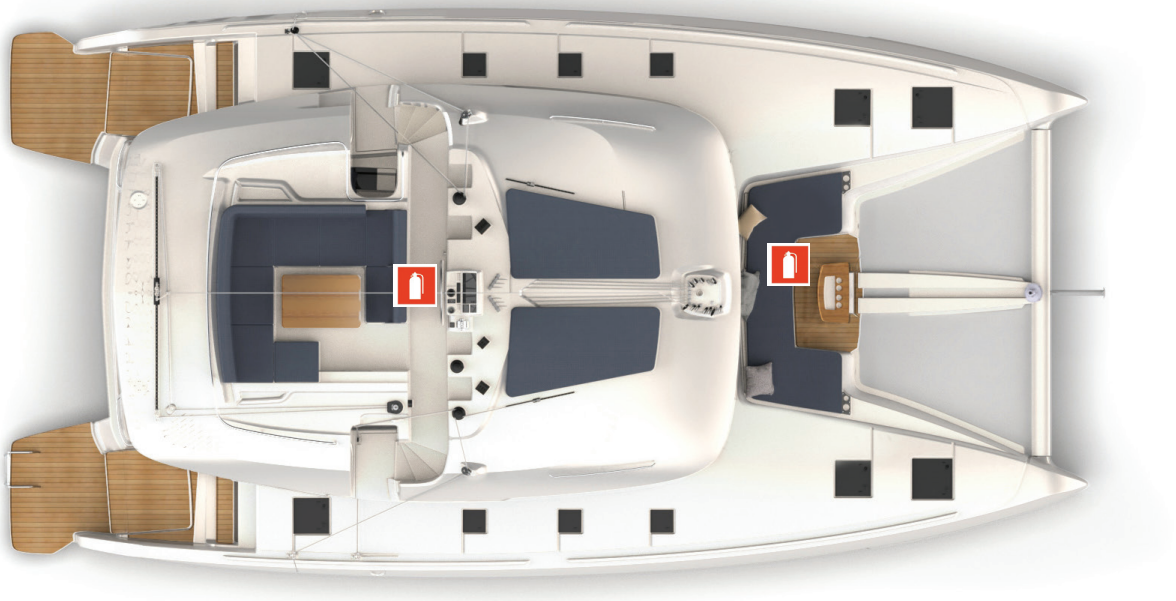


3.1.3 ■ Emergency exits

The recommended emergency exits are indicated on the diagram below:

Emergency exit

LAGOON 51 emergency exits are as follows:
All versions:
- Main bay window
- Forward deck panel (access via stainless steel rungs on partition)
- Forward port cockpit deck panel (access via removable step on the berth)
- Aft starboard cockpit deck panel (access via removable step on the berth)
- Aft port cockpit deck panel (access via removable step on the berth)

Version 4 cabins / 4 private head and shower compartments, and version 6 cabins / 4 private head and shower compartments:
The emergency exits shown above, plus:
- Forward starboard cockpit deck panel (access via removable step on the berth)

3.1.4 ■ General

- Do not install free hanging curtains or any other textile next to or over cooking appliances or any other open flame devices.
- Make sure that the bilges remain clean, and check regularly that there are no fumes or leaks of fuel and gas.
- Do not store flammable products in the engine compartment.
- Do not leave the boat unsupervised when using cooking and or heating devices.
- Do not smoke while handling fuels or gas.

- Make sure that fire fighting equipment can be reached easily when people are on board.

Inform the crew of:
- the location and operation of fire fighting equipment.
- the location of discharge outlets in the engine compartment.
- the location of routes and exits.

- Should you replace components of the fire extinction system, only proper components with the same designation or with equivalent technical capacities and fire resistance should be used.
- Any non-flammable products kept in the engine compartment must be stored in such a way that they cannot fall on the machinery, or block the entrance or exit of the engine compartment.
- Do not block the passageways leading to exits, or the hatchways.
- Do not block safety controls such as: fuel stopcocks, gas valves, electrical system switches.
- Do not block the access to the portable extinguishers stored in the cupboards.
- Do not use gas lamps in the boat.

- Do not alter any equipment on board (especially the electrical, fuel and gas systems) nor allow unqualified people to alter any of the boat's equipment.
- Do not fill up the fuel tanks or replace the gas bottles when the engine is running or when cooking or heating devices are in use.

Fire fighting equipment maintenance

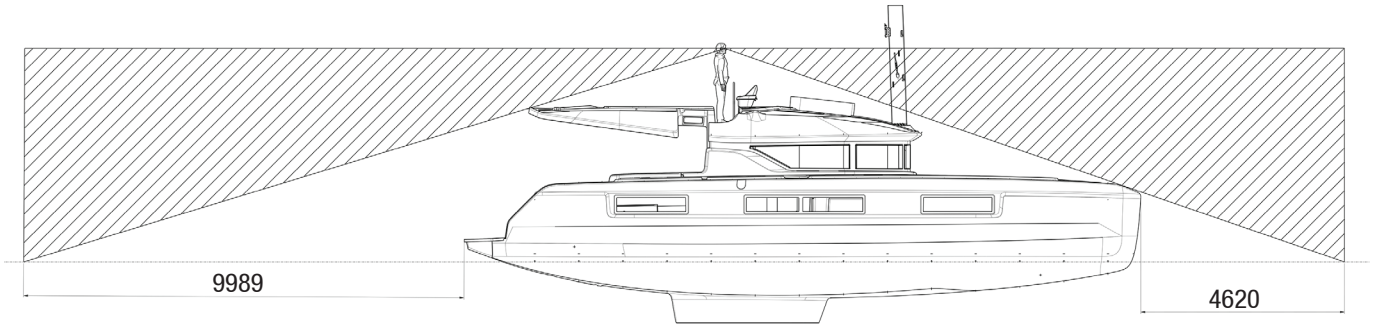
The owner / user is responsible for:
- Having fire fighting equipment checked on a regular basis, according to the frequency indicated on the equipment.
- Replacing any portable fire fighting equipment that has passed its use-by date or that has been discharged, with devices of an identical or superior extinguishing capability.
- Having any fixed extinguishing systems that have passed their use-by date or that have been discharged, filled up or replaced.

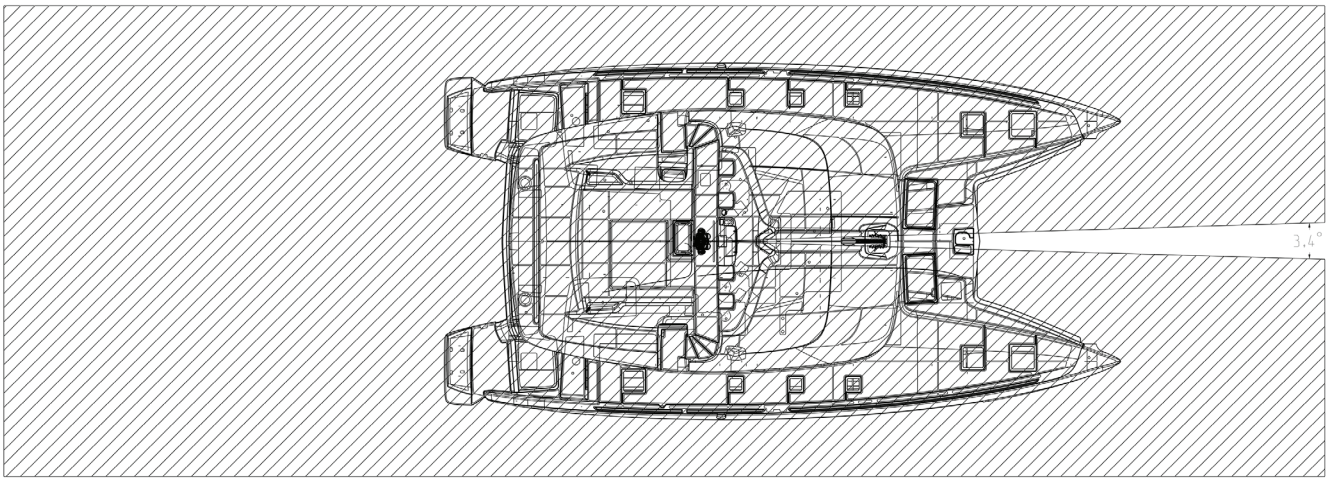
3.2 ■ VISIBILITY

Visibility from the command post may be hindered because of extreme leaning due to the boat's trim or due to other factors linked to one or several of the following conditions:
- Load and load distribution
- Speed
- Sea conditions
- Rain and spray
- Darkness and fog
- Lights on inside the boat
- Position of the upper and lateral awnings
- Non-fixed persons or equipment located in the helmsman's field of view
- In motor-driven boats, rapid acceleration or transition from drive-limit to hydroplaning
- Angle of the trim regulator with regard to the engine (for the boats equipped)
- Angle of the trim regulator with regard to the hull (for the boats equipped)
- Sailing heel, the sails reducing visibility leeward (genoa, staysail, code 0, spinnaker).

The internal regulations governing the prevention of collisions at sea (COLREG) and course regulations require permanent and proper supervision and the observance of priority. Compliance with these rules is essential.

VIEWING ANGLES WITHOUT THE SAILS





3.3 ■ STABILITY, DANGER OF INFILTRATION

3.3.1 ■ Openings in the hull

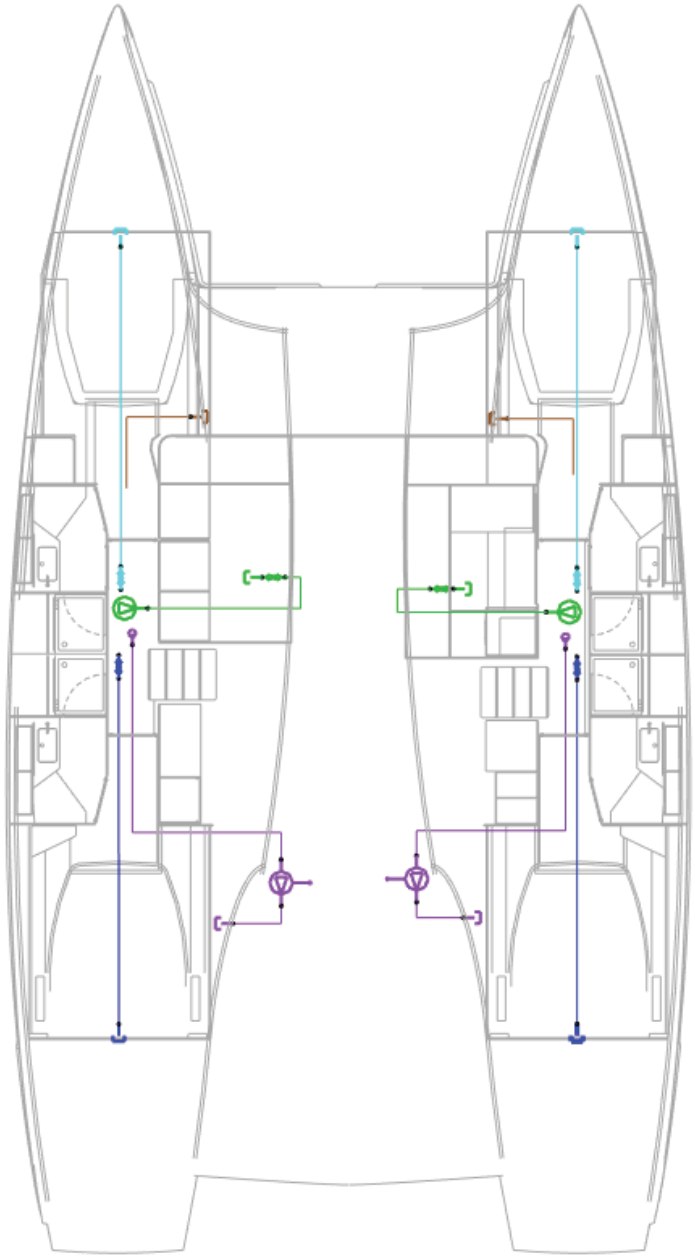
ATTENTION

While sailing, keep every porthole, window and removable door closed.

ATTENTION

Keep hull valves, cockpit drain valves, drain holes and other opening/closing systems in the open or closed position, as necessary, in order to minimise risks of infiltration.
Where necessary, provide the use instructions for this equipment.

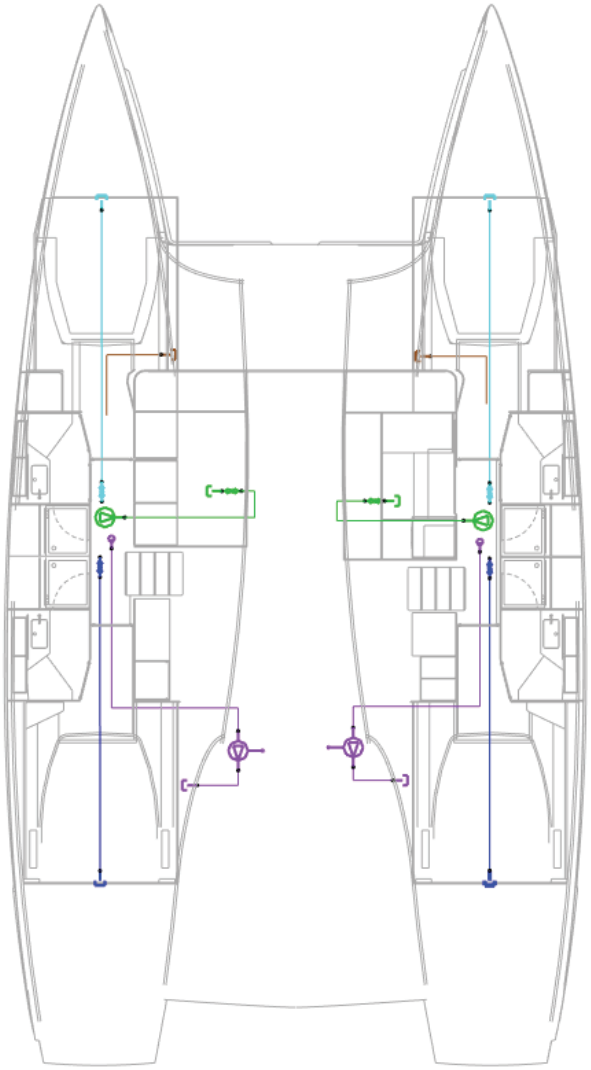
VALVES AND SEA-COCKS FITTINGS

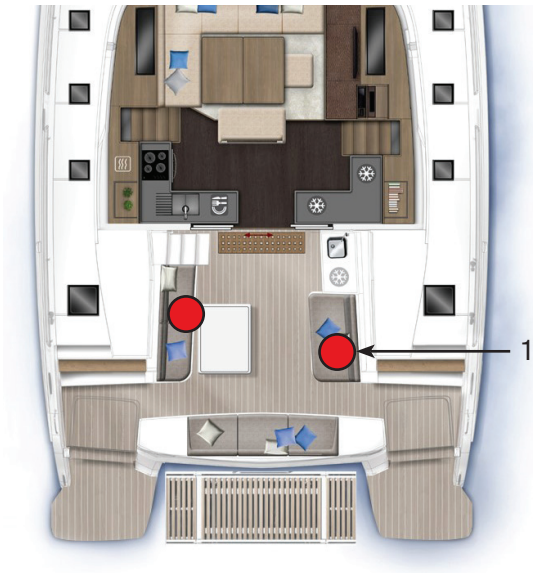


3.3.2 ■ Bilge and Drainage Pumps

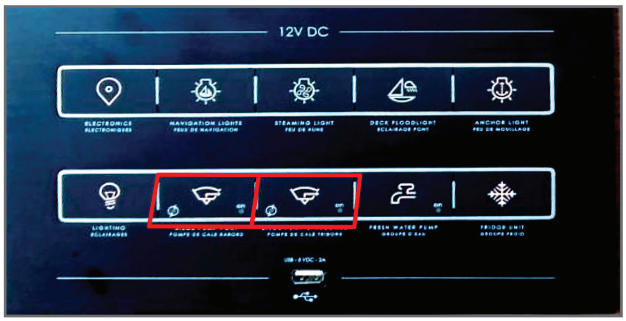
The LAGOON 51 bilge system consists of:
- Two electric bilge pumps on the central sumps at keel level.
- Two manual bilge pumps on the central sumps at keel level.
- Drainage management of the engine hold and front compartments is ensured via pipes equipped with valves at the sumps.

The chain locker is a watertight zone sealed off from the boat. It is accessible by an emergency panel to be kept closed except for work on the chain.
It is emptied via two scuppers above the waterline under normal conditions.





Using the manual bilge pump (Item 1):
The manual bilge pumps are activated from the port and starboard sides of the cockpit.
The pumping lever must be stored at its intended location under the cockpit centre hood.



Using the electric bilge pumps:
The electric bilge pumps are controlled from the main galley table, with the forced operation control of each bilge pump also on the port helm console.

For each of the two electric pumps, on the main electrical panel:
- Forced operation of the pump is controlled via the "MANUAL" switch.
- An audible signal sounds when the high level sensor is reached (at the main switchboard AND at the helm console).

WARNING

The bilge pumps system is not designed to control water entering the boat through breaches in the hull.

ADVICE-RECOMMENDATIONS

Do not let the pumps run empty. This may cause damage to the pumps.
The water in the bilges must be kept at a minimum.
Make a regular, visual check to ensure each bilge pump is operating correctly.
Check that pump suction strainers or points are not blocked by debris.

ATTENTION

Check on a regular basis that each bilge pump is operating correctly .
Clean pump suction strainers or points of any debris which may obstruct them.
If there are watertight partitions separating the forward and aft valve points, these should be closed under normal conditions and opened only in order to drain off water from the main bilge.
On boats where a bilge pump is not required, the user/ owner is responsible for making sure there is at at least one bucket / bailer on board equipped with a device that prevents it being lost overboard.

Capacity of an electric bilge pump: 45 L/min
Capacity of a manual bilge pump: 0.9 litre / cycle or 40 litres / minute

ATTENTION

When the cut-offs are OFF the bilge pumps are disconnected and off.

3.3.3 ■ Stability and buoyancy

Stability is reduced when upper storage spaces are loaded.
Stability may be reduced when another boat is towed or when heavy weights are lifted with the davits or the boom.
Compartments marked as being air pockets must not be pierced.
If your boat is certified as unsinkable, it is capable of bearing its passengers, even in the event of infiltration.
Any change in the arrangement of on-board weight (e.g. by adding an elevated fishing platform, a radar, a furling mast, engine replacement, etc.) may have a significant impact on the boat's stability, trim and performance.

ATTENTION

Never sail a boat with a negative trim adjustment (low stem) at high speed. This may cause the boat to heel over and therefore cause an instability in the turns.
Use a negative trim when going from limit speed to hydroplaning speed, and at lower speeds in the chop.
Breaking waves represent serious hazards, both for stability and water infiltration. Fasten the doors and hatchways in the event of rough seas.

ADVICE-RECOMMENDATIONS

Reduce your speed before making tight turns in order to avoid losing control.
In heavy weather conditions, close hatchways, lockers and doors in order to minimise the risk of water infiltration;
Keep bilge water to a minimum.

3.3.4 ■ Righting the boat after capsizing

If the boat capsizes:
- Break the emergency panels located in each hull with the specific hammer provided.
The hammers are located under the starboard and port hatchways.

A hammer is also located outside in the liferaft compartment in case of evacuation from outside boat.

3.4 ■ PREVENTION OF MAN OVERBOARD

Deck areas which are not considered part of the working deck, and which should not be used when sailing are hatched on the diagram on the next page.

Regularly check the lifelines:
Regarding metal lifelines, check for the appearance of rust-spots and corrosion, particularly at connection points.
Regarding synthetic lifelines, have them changed as soon as the first signs of wear and tear appear due to chafing or UV.

The lashing at the ends of the lifelines is used to adjust their tension.
A textile lifeline has a lifetime of between 5 and 7 years depending on the boat's sailing programme and area.
Have all lifelines checked annually to identify any signs of wear and tear or chafing.
After 7 years or in the event of chafing, the lifelines MUST be replaced.

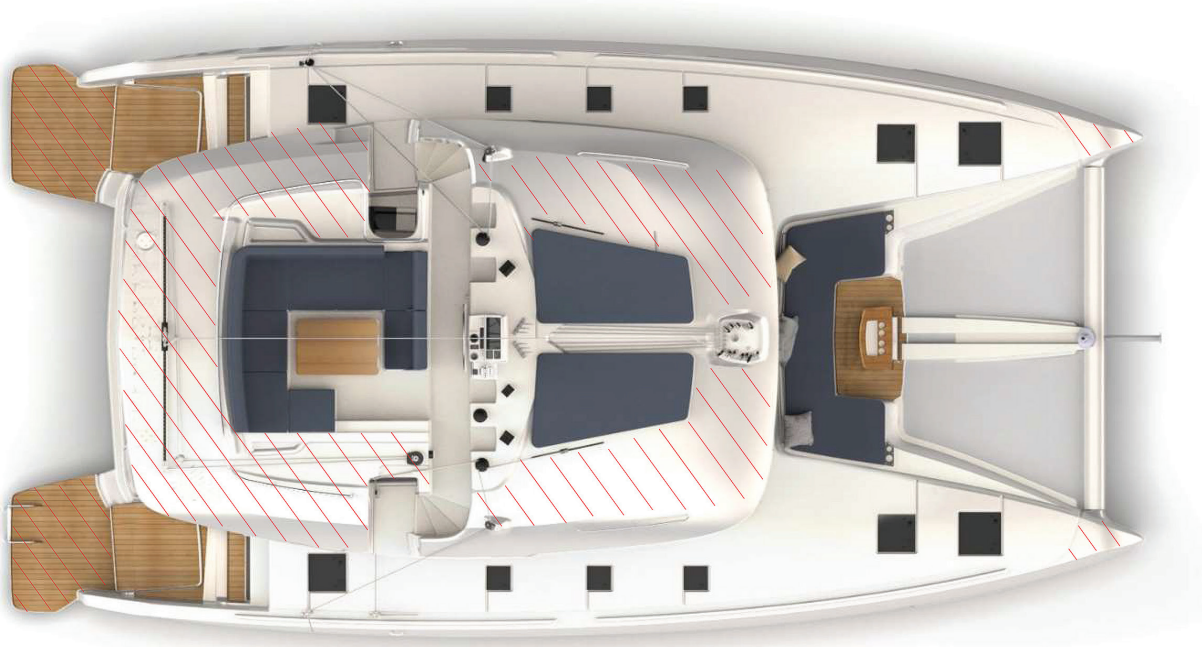
- Rinse the lifelines in fresh water after sailing.
- Textile lifelines can be removed when wintering the boat to protect them against UV.
- Make sure that you label each lifeline correctly to be sure of repositioning it correctly when re-installing it.

3.5 ■ RE-BOARDING METHODS

The swim ladder is stationed on the starboard aft skirt; this tilts aft into the water.

3.6 ■ DEFINITION OF WORKING DECK AREAS

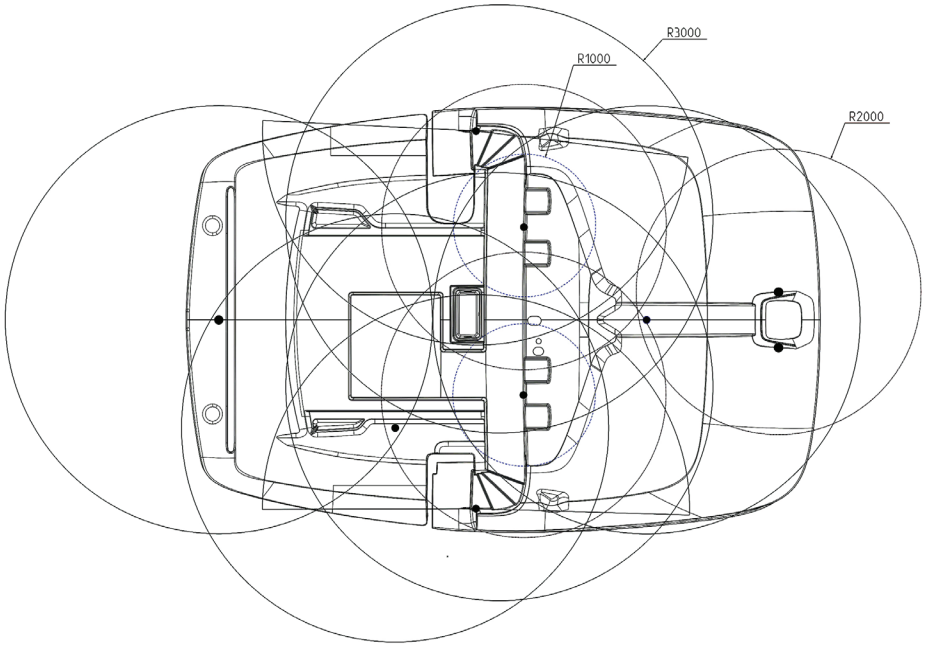
The areas shown on the sketches below correspond to the areas not included in the working deck area, and areas that are out of bounds when sailing.
These areas are not fitted with any form of human protection to prevent people falling overboard.



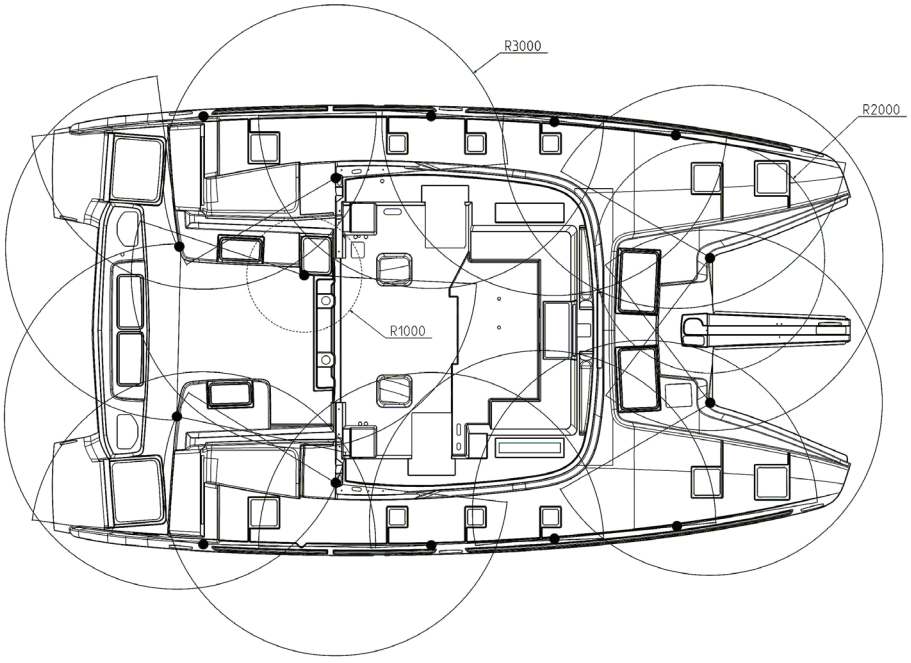
3.7 ■ EMERGENCY EQUIPMENT

This paragraph describes the location of emergency equipment (to be supplemented with your own safety equipment if desired).

FIXED STRONG POINTS FOR LIFE LINES FLYING BRIDGE

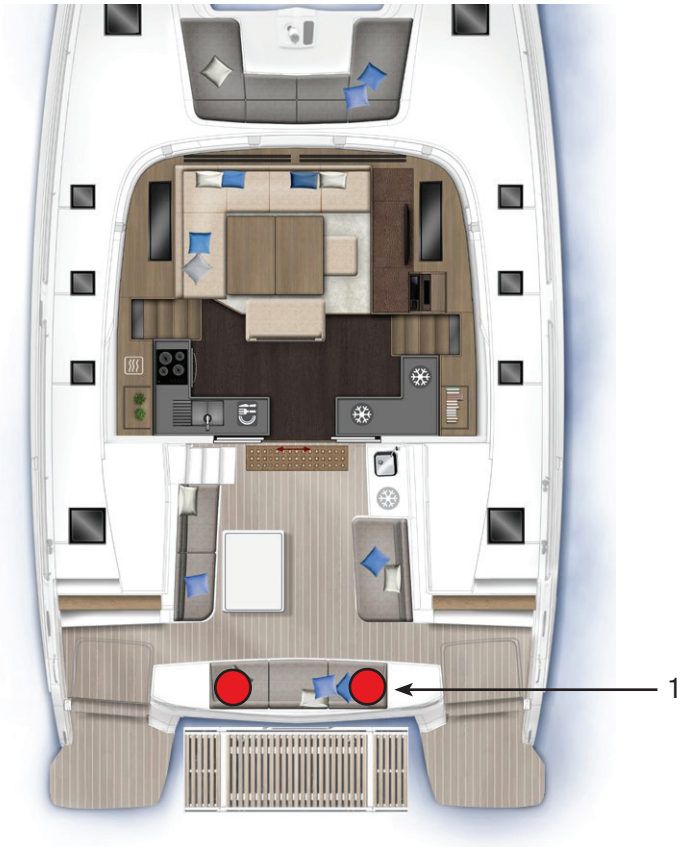


FIXED STRONG POINTS FOR LIFE LINES



SAFETY

Location of liferafts The 2 liferaft compartments (Item 1) are accessible from above and below the hull in case of capsizing.
NEVER climb into the liferaft housing.
Read the user manuals carefully.



4. Equipment

For more information on the fitted devices, please refer to the manuals attached to the boat documentation.

4.1 ■ MOTORIZATION

4.1.1 ■ Directions for use

WARNING

Stop the engine. Do not smoke when filling up the fuel tanks.

Beware of loose fitting clothing, hair, rings which may get caught up. Wear appropriate clothes (gloves, hat, etc.).

ATTENTION

Do not install on this boat an engine that is heavier or more powerful than the one recommended: this may affect the boat's stability.

Avoid any contact between flammable products and hot parts of the engine.

It is not recommended to work on or next to moving parts (engine, line shaft, etc.).

If work is needed, stop the engine and or the rotation of the line shaft before working on one of these parts.

ADVICE-RECOMMENDATIONS

For outboard engines fitted with a jerrican, fill up the portable tank outside the boat in a well ventilated area, well away from any fire risk.

Fuel stored somewhere other than in the tanks (jerricans, feed tanks, etc.) must be stored in a well-ventilated room.

Before starting, ensure that the engine hold is clean and dry. Any trace of fuel in the bilges should make you postpone your departure.

Locate the extinguisher access port which would allow you to put out a fire in the engine hold.

For boats equipped with a petrol engine, ventilate the engine compartment using the engine blower during 4 minutes in order to evacuate any possible petrol fumes.

Some models come with a fixed extinguisher system that can be used to put out a fire in the engine hold. Check out the location of its trigger switch and make sure you know how it works (see 3.1.2). It is necessary to ventilate the engine hold after triggering.

Check that ventilation openings are clear of any obstruction.

Check that the seawater cooling system is circulating correctly.

Check the condition of fuel pipes on a regular basis.

Do not block or modify the ventilation system.

Before starting, make sure that:

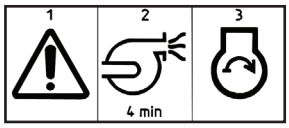
- the engine control is not engaged
- the cooling system's water inlet valve is open, and check that there is some water actually coming out of the exhaust when the engine has started (water may be mixed with exhaust gas in case of wet exhaust).

Before starting, clean up any fuel spillages on the deck that may occur when filling up.

Plan ahead for deterioration in fuel pipes.

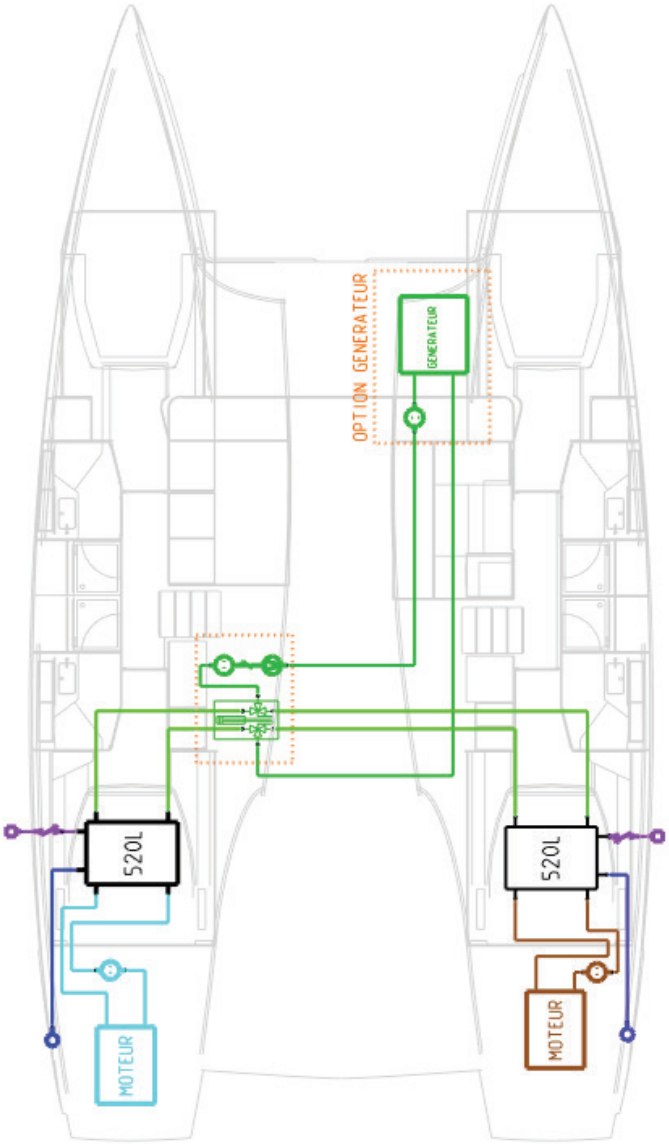
Fuel hoses must be replaced by hoses bearing the same markings.

Key to symbols:



1: Caution
2: Ventilate for four minutes
3: Switch on

4.1.2 ■ Fuel tanks: 2 x 520 litres GAS OIL



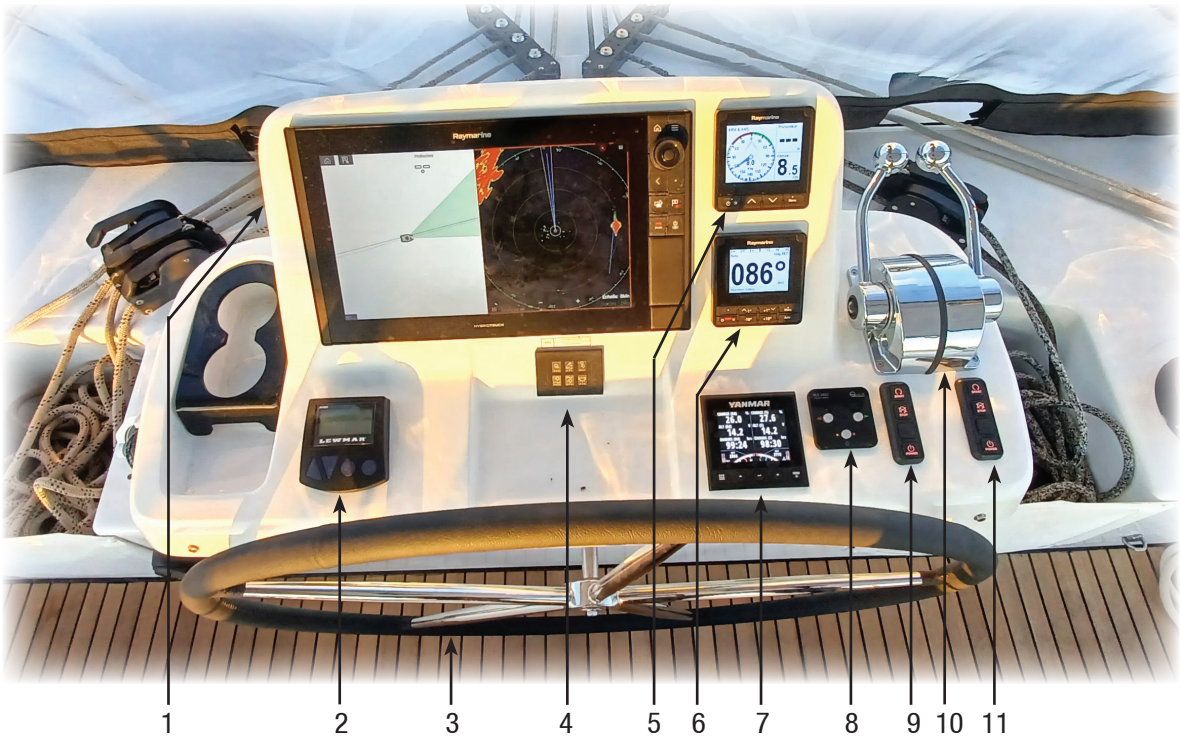
The valves are coupled so that the engine and the generator consume and discharge to the same tank.

There is no direct transfer between the two tanks.

ATTENTION

The tanks may contain zones of leftovers that the pumps cannot reach due to the boat's trim or the design of suction tappings.
You are advised to maintain a 20% fuel reserve.

4.2 ■ HELM STATIONS



1 - 16" screen for electronics (option).
2 - Chain meter (option).
3 - Wheel steering system.
4 - 6-key panel.
5 - Screen/repeater for electronics (option).
6 - Screen/repeater for electronics (option).
7 - Engine display (option).
8 - Bow thruster control (option).
9 - Port engine starter panel.
10 - Engine controls.
11 - Starboard engine starter panel.

4.3 ■ STEERING SYSTEM

4.3.1 ■ General description

The steering system is hydraulic.

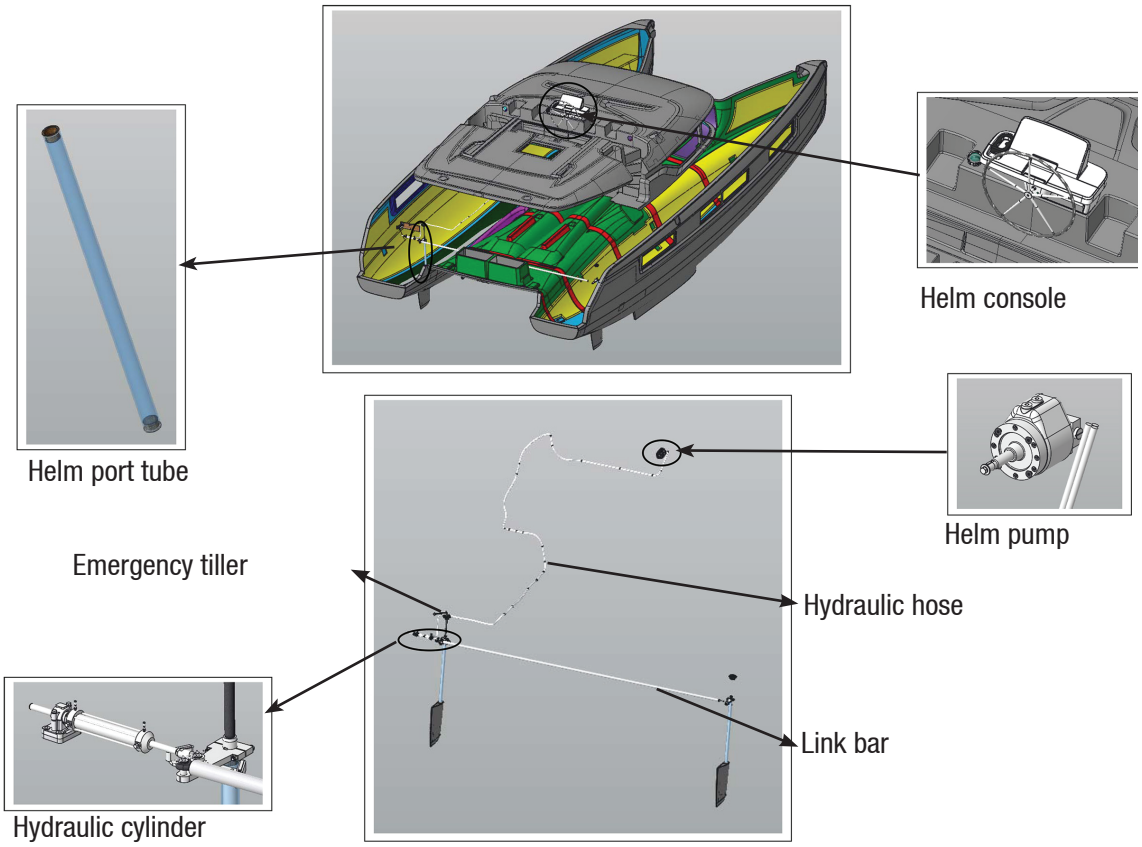
ADVICE-RECOMMENDATIONS

It is recommended to always use the oil provided by the supplier or, at the very least, an oil with a viscosity of ISO 22.

ATTENTION

Never use the helm actuator as a starboard forepeak access step.

4.3.2 ■ Identification of component parts



4.3.3 ■ Maintenance

- Make sure that there are no leaks at the level of the connections, or anywhere else in the circuit as a whole.
- Change the return filter cartridge after every 3,000 hours of operation.
- Change the suction filter strainer after every 3,000 hours of operation.

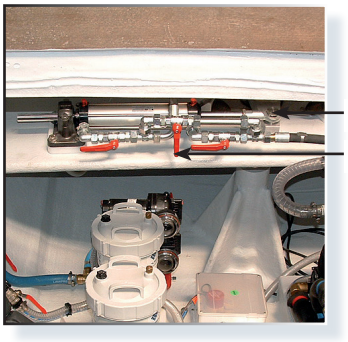
To access this strainer, unscrew the 4 nuts holding the suction flange, then remove the flange, tube and strainer assembly.

- Unscrew the used strainer.
- Screw in the new strainer.
- Refit the suction flange and its retaining nuts.
- When changing the cartridge, drain the circuit preferably according to the oil's appearance.
- Drain the fitted tank and, therefore, the manual pump(s).
- To get the oil flowing rapidly, remove the tank's fill plug and that of the manual pump.
- Screw in the new cartridge.
- Fill the fitted tank up to its maximum level, using HM32 oil.
- Once this level has been reached, close the fitted tank using its leaktight plug.
- Complete the level of the manual pump(s) and replug the fill hole.
- Check the engine brushes.

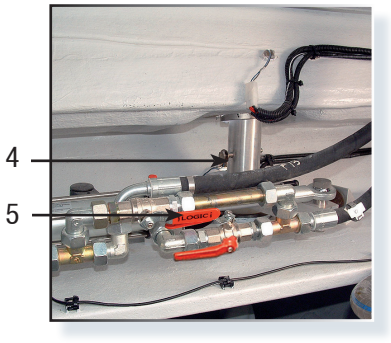
4.3.4 ■ Emergency system

Boats fitted with a steering wheel have an emergency tiller. Make sure this tiller can be easily reached at all times.

The emergency tiller is stored in the port engine hold, and must remain easily accessible at all times.
- To deploy the tiller:
  - Use a winch handle to unscrew one of the emergency tiller covers found on one of the aft skirts.
  - Fit the emergency tiller into the rudder shaft, making sure that it is pushed down properly.
  - Place the actuator valve in the engine hold on the relevant side in the by-pass position. This isolates the rudder from the helm system.



1 - Steering actuator.
2 - Steering actuator valve.
3 - Emergency tiller.
4 - Screw + nut for tiller.
5 - Actuator valve in by-pass position.



ADVICE-RECOMMENDATIONS

Hydraulic fluid must be non-flammable or have a flash point of at least 157 °C.

4.4 ■ ELECTRICAL SYSTEM

ATTENTION

Never work on a live electric circuit.
Never modify the boat's electrical circuit or the relevant diagrams: all installations, modifications cleaning and maintenance must be carried out by a technician qualified in marine electricity.
Never modify the specifications of appliances protecting against overloads.
Never install or replace electrical equipment or appliances with new components exceeding the permissible circuit amperage.
Do not leave the boat unsupervised when the electrical system is powered up, excepting the automatic bilge pump and the fire and burglar protection systems.

4.4.1 ■ Electrical panel and circuit - 12 V

DANGER

In order to avoid short-circuiting between the two poles of the battery, do not store any conductive objects next to the batteries (metallic tools, etc.).

WARNING

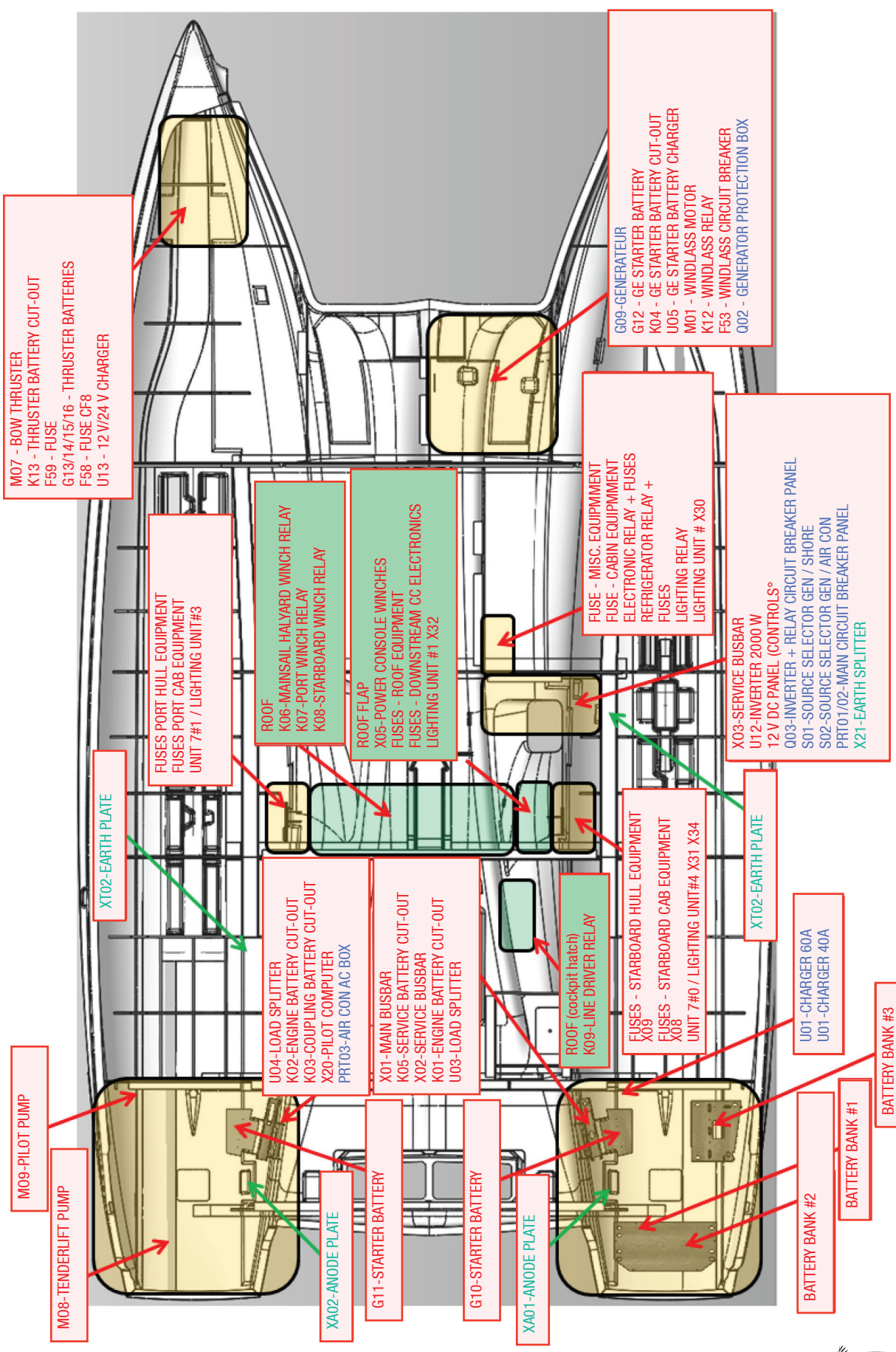
Do not block the battery ventilation vents: some of them release hydrogen, which could be an explosion risk.
Do not leave the boat unsupervised when the electrical system is under power, excepting the automatic bilge pump and the fire and burglar protection systems.
Never install or replace electrical equipment or appliances by new components that exceed the circuit's amperage.
Never modify an installation. Ask a technician skilled in marine electricity to do so.
When charging, connecting or disconnecting the batteries, switch off the battery cut-outs.
Batteries have to be handled with care. In the event of electrolyte projection, abundantly rinse the part of the body which has been affected and consult a doctor.

ATTENTION

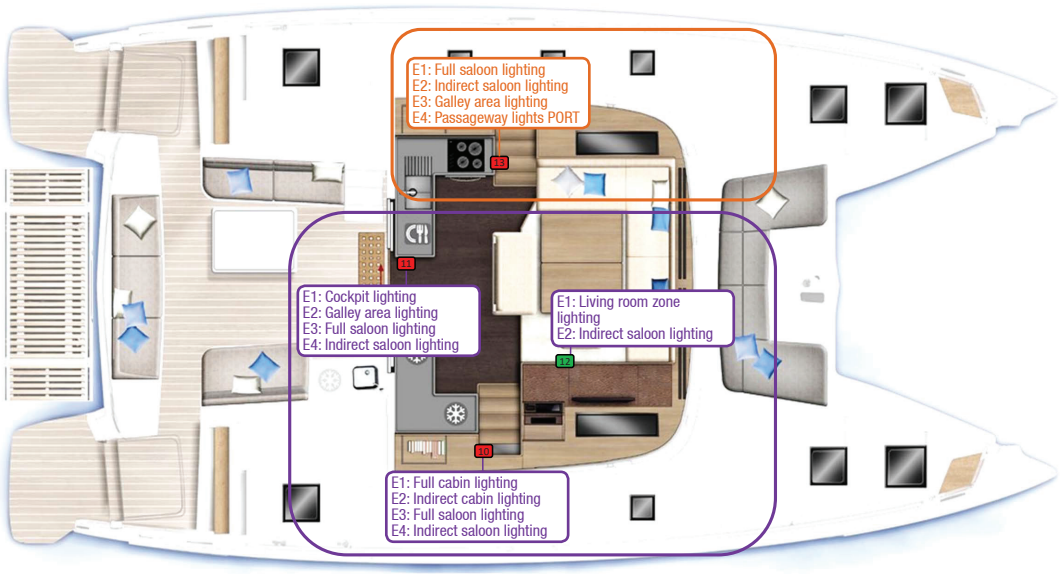
The batteries must be carefully secured.

Please note that the 12 V circuit wires are red for live and black for negative.

12 V CIRCUIT


M07 - BOW THRUSTER
K13 - THRUSTER BATTERY CUT-OUT
F59 - FUSE
G13/14/15/16 - THRUSTER BATTERIES
F58 - FUSE CF8
U13 - 12 V/24 V CHARGER
G09-GENERATEUR
G12 - GE STARTER BATTERY
K04 - GE STARTER BATTERY CUT-OUT
U05 - GE STARTER BATTERY CHARGER
M01 - WINDLASS MOTOR
K12 - WINDLASS RELAY
F53 - WINDLASS CIRCUIT BREAKER
Q02 - GENERATOR PROTECTION BOX
FUSE - MISC. EQUIPMMENT
FUSE - CABIN EQUIPMMENT
ELECTRONIC RELAY + FUSES
REFRIGERATOR RELAY +
FUSES
LIGHTING RELAY
LIGHTING UNIT # X30
X03-SERVICE BUSBAR
U12-INVERTER 2000 W
12 V DC PANEL (CONTROLS°
Q03-INVERTER + RELAY CIRCUIT BREAKER PANEL
S01-SOURCE SELECTOR GEN / SHORE
S02-SOURCE SELECTOR GEN / AIR CON
PRT01/02-MAIN CIRCUIT BREAKER PANEL
X21-EARTH SPLITTER
FUSES PORT HULL EQUIPMENT
FUSES PORT CAB EQUIPMENT
UNIT 7#1 / LIGHTING UNIT#3
ROOF
K06-MAINSAIL HALYARD WINCH RELAY
K07-PORT WINCH RELAY
K08-STARBOARD WINCH RELAY
ROOF FLAP
X05-POWER CONSOLE WINCHES
FUSES - ROOF EQUIPMENT
FUSES - DOWNSTREAM CC ELECTRONICS
LIGHTING UNIT #1 X32
XT02-EARTH PLATE
U04-LOAD SPLITTER
K02-ENGINE BATTERY CUT-OUT
K03-COUPLING BATTERY CUT-OUT
X20-PILOT COMPUTER
PRT03-AIR CON AC BOX
X01-MAIN BUSBAR
K05-SERVICE BATTERY CUT-OUT
X02-SERVICE BUSBAR
K01-ENGINE BATTERY CUT-OUT
U03-LOAD SPLITTER
ROOF (cockpit hatch)
K09-LINE DRIVER RELAY
FUSES - STARBOARD HULL EQUIPMENT
X09
FUSES - STARBOARD CAB EQUIPMENT
X08
UNIT 7#0 / LIGHTING UNIT#4 X31 X34
XT02-EARTH PLATE
U01-CHARGER 60A
U01-CHARGER 40A
BATTERY BANK #3
BATTERY BANK #1
BATTERY BANK #2
M09-PILOT PUMP
M08-TENDERLIFT PUMP
XA02-ANODE PLATE
G11-STARTER BATTERY
G10-STARTER BATTERY
XA01-ANODE PLATE

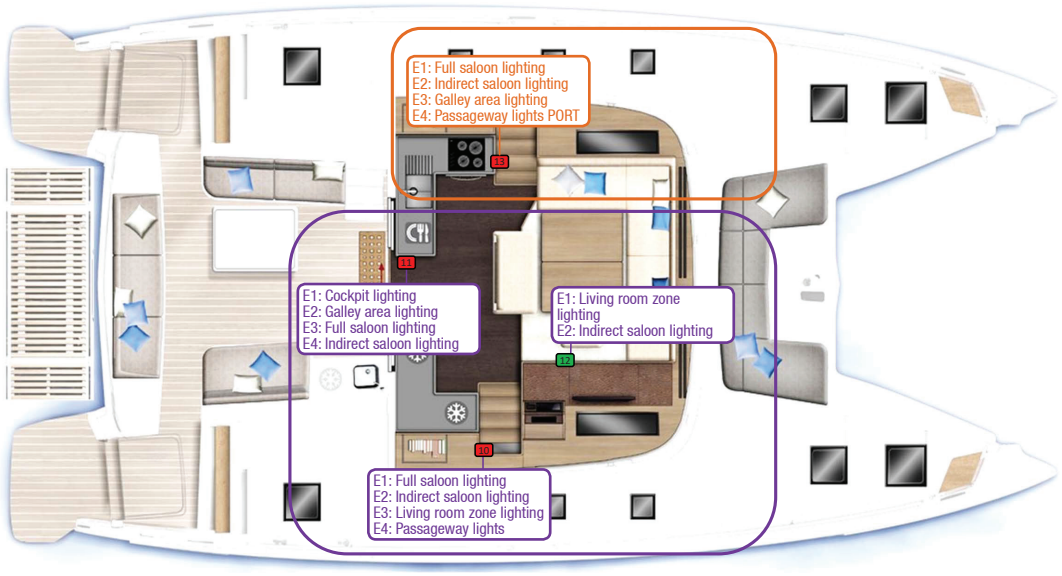
CARRE – GALLEY 4C3T



E1 E2 E3 E4 TWO-BUTTON wireless switch

E1 E2 ONE-BUTTON wireless switch

CARRE – GALLEY 4C4T-6C4T

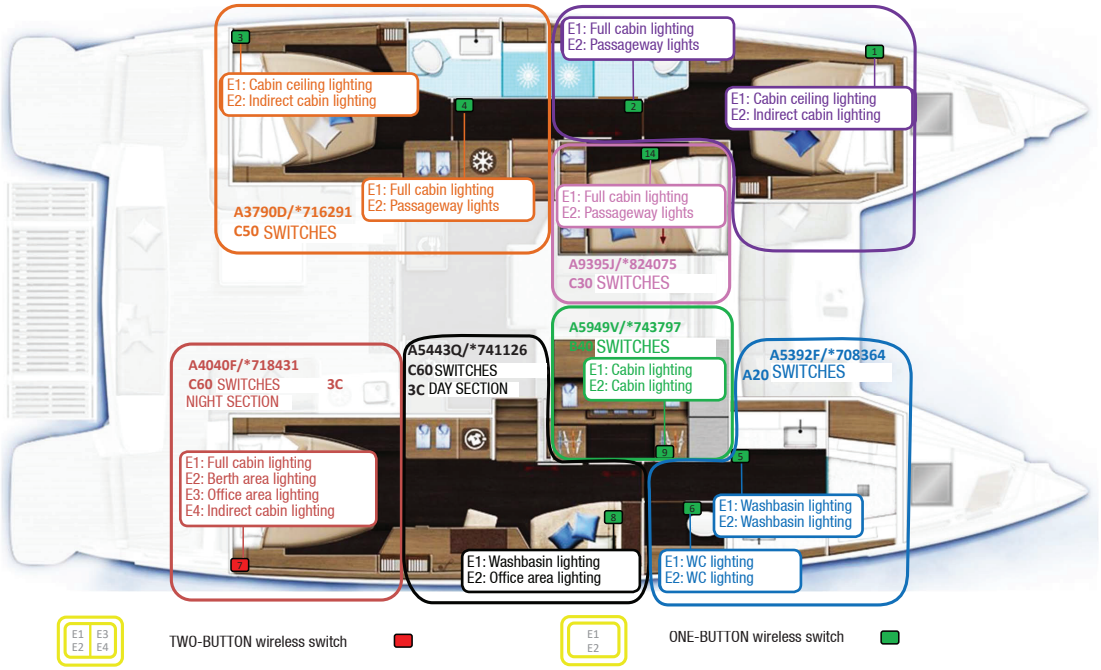


E1 E2 E3 E4 TWO-BUTTON wireless switch

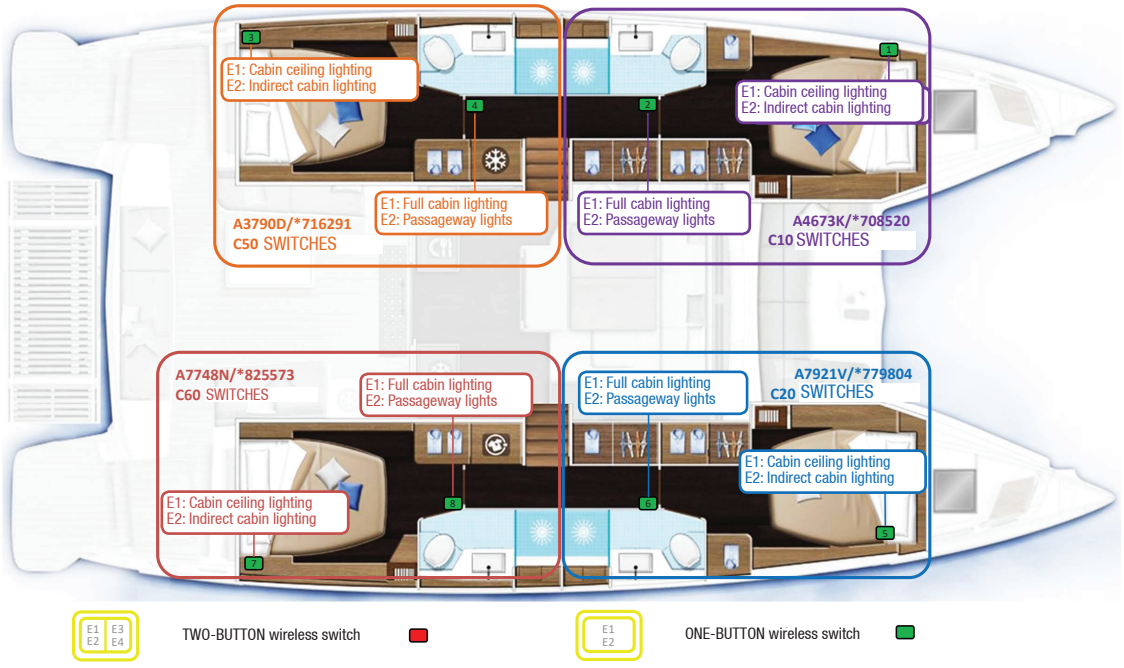
E1 E2 ONE-BUTTON wireless switch

4

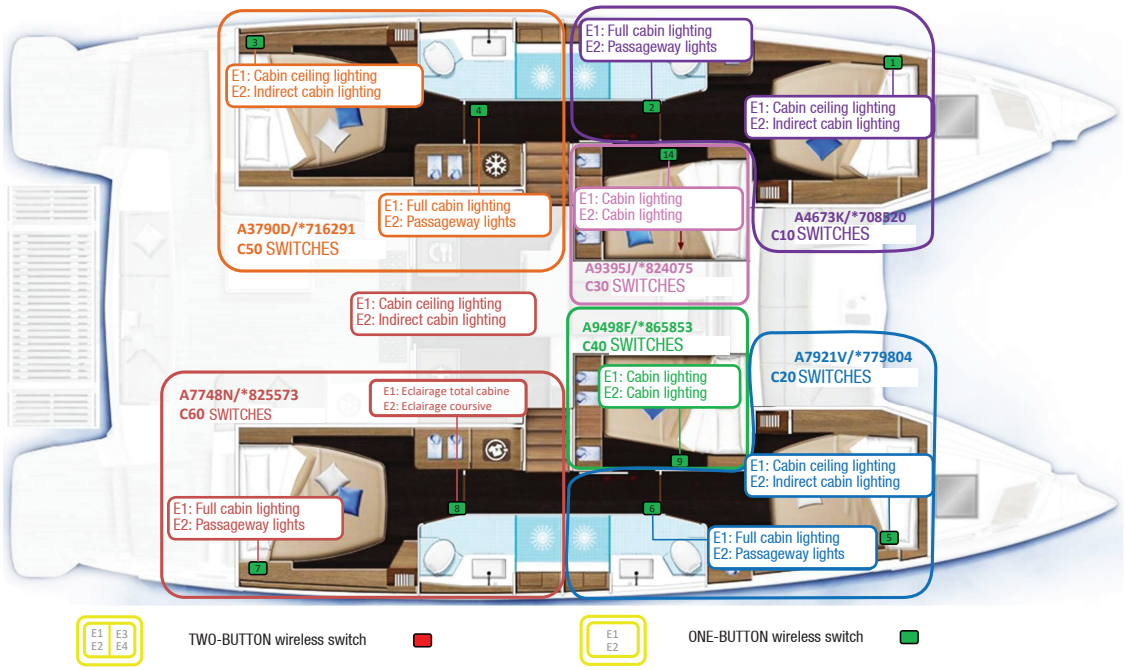
4 CABINS – 3 TOILETS



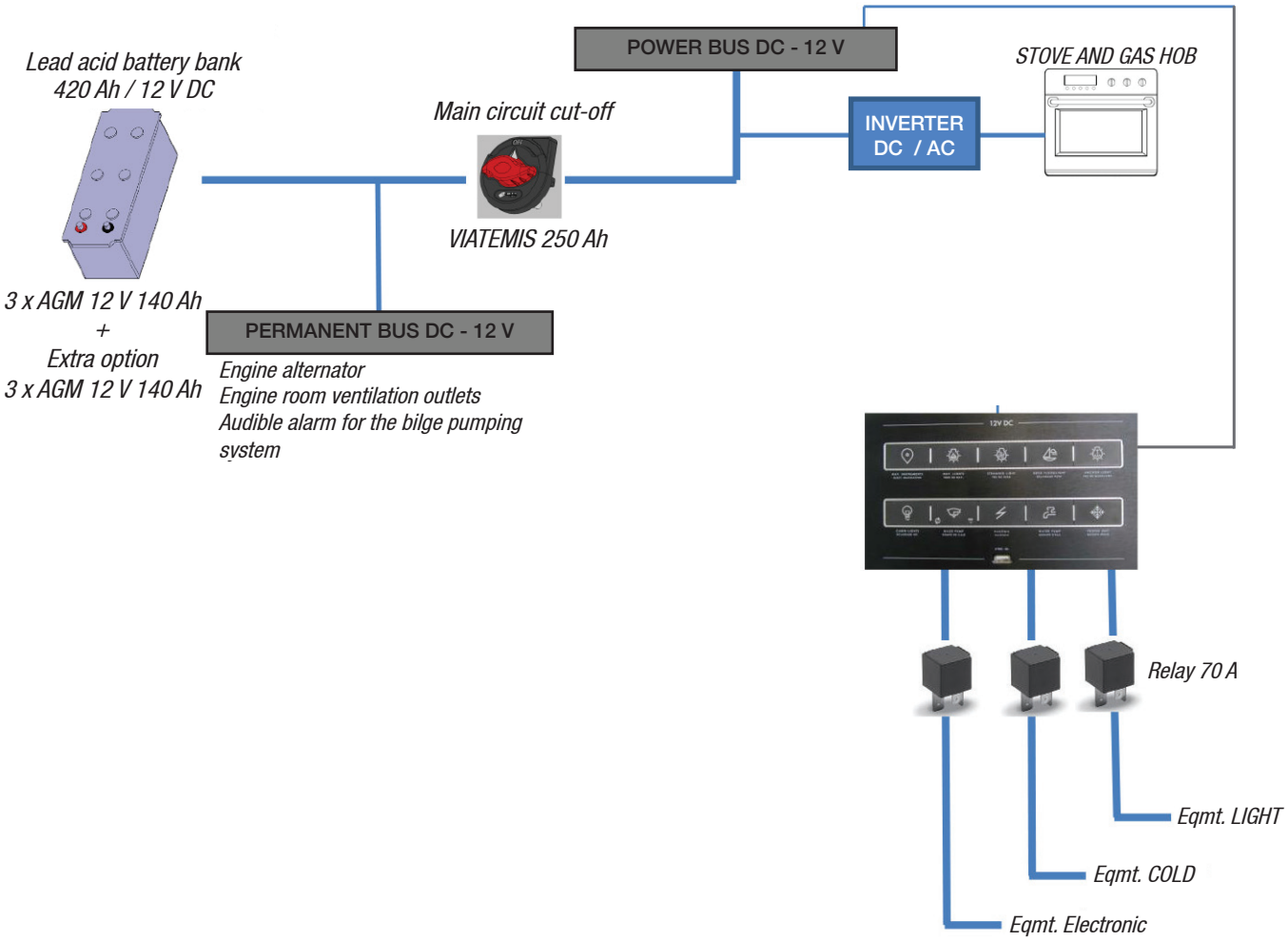
4 CABINS – 4 TOILETS



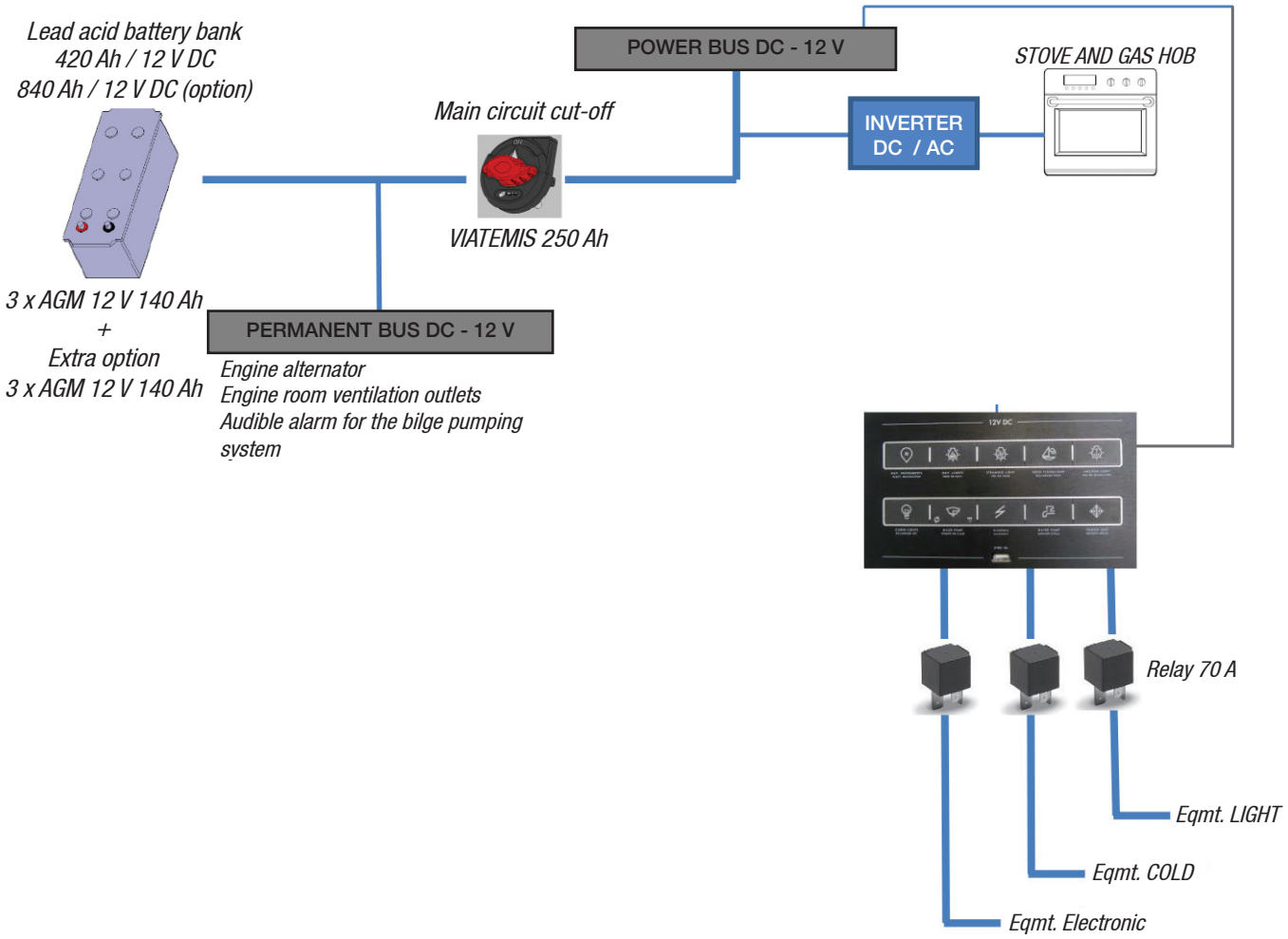
6 CABINS – 4 TOILETS



12 V CIRCUIT - EUROPE



12 V CIRCUIT - US



4

DC CIRCUIT PROTECTION

PORT FLOAT	FUSIBLES - EQUIPEMENTS COQUE BD *FUSE - PORT FLOAT EQUIPMENT*							
NAME	F01	F02	F03	F04	F05	F06	F07	F08
DESIGNATION	PUMP WASHER DECK		GREY WATER TANK PUMP (OPTIONNAL)	MONITORING BLOC 7#1	SEA WATER PUMP	STOVE & OVEN PIEZZO INVERTER	WC SEA WATER PUMP (optionnal)	GAS SOLENOID VALVE (optionnal US)
CALIBRE	10A		10A	5A	10A	20A	15A	2A

STBD FLOAT	FUSIBLES - EQUIPEMENTS COQUE TD *FUSE - STBD FLOAT EQUIPMENT*							
NAME	F01	F02	F03	F04	F05	F06	F07	F08
DESIGNATION	PUMPS SWITCH GREY WATER TANKS		GREY WATER TANK PUMP (OPTIONNAL)	MONITORING BLOC 7#0	SALOON FANS			
CALIBRE	2A		10A	5A	1A			

PORT FLOAT	FUSIBLES - EQUIPEMENTS CAB BD *FUSE - PORT FLOAT CABIN EQUIPMENT*							
NAME	F01	F02	F03	F04	F05	F06	F07	F08
DESIGNATION	WC - A10		WC - A50	GREY WATER PUMP - A50 -V3/V4	GREY WATER PUMP - A30 -V6T	GREY WATER PUMP - A10 -V6T		
CALIBRE	20A		20A	10A	10A	10A		

STBD FLOAT	FUSIBLES - EQUIPEMENTS CAB TD *FUSE - STBD FLOAT CABIN EQUIPMENT*							
NAME	F01	F02	F03	F04	F05	F06	F07	F08
DESIGNATION	WC - A20		WC - A60	HIFI - C60	GREY WATER PUMP - A60 -V6T	GREY WATER PUMP - A40 -V6T / FWD PEAK	GREY WATER PUMP - A20 -V3/V4	WC - FRONT STBD
CALIBRE	20A		20A	15A	10A	10A	10A	20A

DC CIRCUIT PROTECTION (per module)

X01 — JEU DE BARRES DC PRIORITAIRE / PRIORITARY DC POWER BAR

COUPE BATTERIE SERVICE	*SERVICE BATTERY SWITCH*	WDC030	/	CALCULATEUR PILOTE	*AUTOPILOT HYDRAULIC*	WDC093
				REPART NEG LOCAL MOTEUR / EV PLANCHA	*GND DISTRIB STDB ER / EV PLANCHA*	W371/W003-004
PARC BATTERIE SERVICE #1	*SERVICE BATTERY PARK #1*	WDC001	/	PARC BATTERIE SERVICE #1	*SERVICE BATTERY PARK #1*	WDC002
PARC BATTERIE SERVICE #2	*SERVICE BATTERY PARK #2*	WDC005	/	PARC BATTERIE SERVICE #2	*SERVICE BATTERY PARK #2*	WDC008
PARC BATTERIE SERVICE #3	*SERVICE BATTERY PARK #3*	WDC009	/	PARC BATTERIE SERVICE #3	*SERVICE BATTERY PARK #3*	WDC012
CHARGEUR 60A	*CHARGER 60A*	WDC028	F11 - 75A	CHARGEUR 60A	*CHARGER 60A*	WDC029
CHARGEUR 40A	*CHARGER 40A*	WDC066	F12 - 50A	CHARGEUR 40A	*CHARGER 40A*	WDC067
BUZZER SYSTÈME ASSECHEMENT	*BILGE PUMP BUZZER*		2A	BATTERIE DE DEMARRAGE TRIBORD	*STBD STARTING BATTERY*	WDC058
EXTRACTEUR LOCAUX MOTEUR	*EXTRACTOR ENGINE AREA*		5A	BATTERIE DE DEMARRAGE BABORD	*PORT STARTING BATTERY*	WDC019
REPARTITEUR DE CHARGE TD	*STBD CHARGE COMBINERS*	WDC026	F13 - 125A	TENDER LIFT OU BOSSOIR ELECTRIQUE	*TENDER LIFT OR ELECTRICAL DAVIT*	WDC062/WDC107
REPARTITEUR DE CHARGE BD	*PORT CHARGE COMBINERS*	WDC027	F14 - 125A	PANNEAUX SOLAIRES	*SOLAR PANELS*	WDC038/WDC117
PANNEAUX SOLAIRES	*SOLAR PANELS*	WDC037/WDC116	F15 - 100A	JEU DE BARRES TABLE A CARTE	*CHARTE TABLE POWER BAR*	WDC013

X03 — JEU DE BARRES DC SERVICE V41 / V41 SERVICE DC POWER BAR

CONVERTISSEUR	*INVERTER*	F31 - 250A	WDC040	CONVERTISSEUR	*INVERTER*	WDC045
ENROULEUR DE GENOIS ELECTRIQUE		F95 - 200A	WDC186	ENROULEUR DE GENOIS ELECTRIQUE		WDC187
JEU DE BARRES LOCAL MOTEUR TRIBORD	*STBD ENGINE ROOM POWER BAR*	/	WDC068	JEU DE BARRES LOCAL MOTEUR TRIBORD	*STBD ENGINE ROOM POWER BAR*	WDC013
TANGON ELECTRIQUE		F94 - 200A	WDC184	TANGON ELECTRIQUE		WDC185
JEU DE BARRES ROOF	*ROOF POWER BAR*	F30 - 300A	WDC096	JEU DE BARRES ROOF	*ROOF POWER BAR*	WDC095
REPARTITEUR ALIM. TABLE A CARTE	*CHARTE TABLE POWER DISTRIBUTOR*	F36 - 75A	WDC077			
GUINDEAU	*WINDLASS*	F32 - 250A	WDC071	GUINDEAU	*WINDLASS*	WDC075
DESSALINISATEUR	*WATER MAKER*	/	WDC078	DESSALINISATEUR	*WATER MAKER*	WDC079
CHARGEUR PROPULSEUR	*THRUSTER CHARGER*	F37 - 50A	WDC090	CHARGEUR PROPULSEUR	*THRUSTER CHARGER*	WDC091
REPARTITEUR ALIM. FLOTTEUR BABORD	*PORT POWER DISTRIBUTOR*	F34 - 75A	WDC076	REPARTITEUR NEGATIF COQUE BD	*GND DISTRIBUTOR PORT FLOAT*	W315/W316
REPARTITEUR ALIM. FLOTTEUR TRIBORD	*STBD POWER DISTRIBUTOR*	F35 - 75A	WDC064	REPARTITEUR NEGATIF COQUE TD	*GND DISTRIBUTOR STBD FLOAT*	W313/W314
TABLEAU DC 12V TABLE A CARTE	*CHART TABLE POWER BOARD*	F38 - 75A	WDC099	NEGATIF TAC	*GND CHART TABLE*	W389

X02 — JEU DE BARRES DC POSITIF SERVICE / POSITIVE SERVICE DC POWER BAR

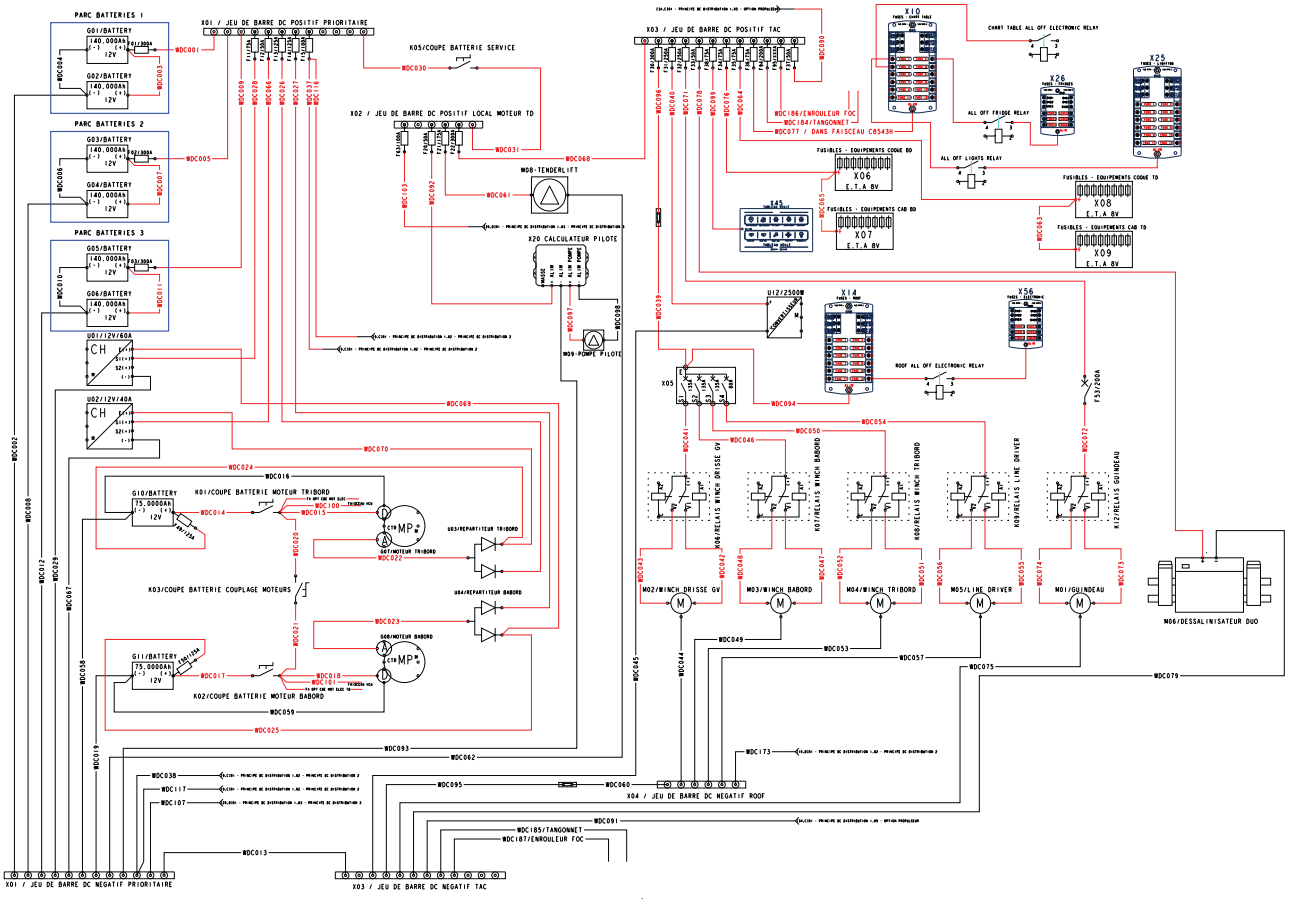
COUPE BATTERIE SERVICE	*SERVICE BATTERY SWITCH*	/	WDC031		
EV PLANCHA COCKPIT	EV COCKPIT PLANCHA	2A	W001		
CALCULATEUR PILOTE	*AUTOPILOT HYDRAULIC*	F20 - 50A	WDC092		
TENDER LIFT	*TENDER LIFT*	F21 - 175A	WDC061		
BOSSOIR ELECTRIQUE	*ELECTRICAL DAVIT*	F63 - 100A	WDC103		
JEU DE BARRES TABLE A CARTE	*CHARTE TABLE POWER BAR*	F22 - 300A	WDC068		

X04 — JEU DE BARRE DC NEGATIF ROOF / NEGATIVE ROOF DC POWER BAR

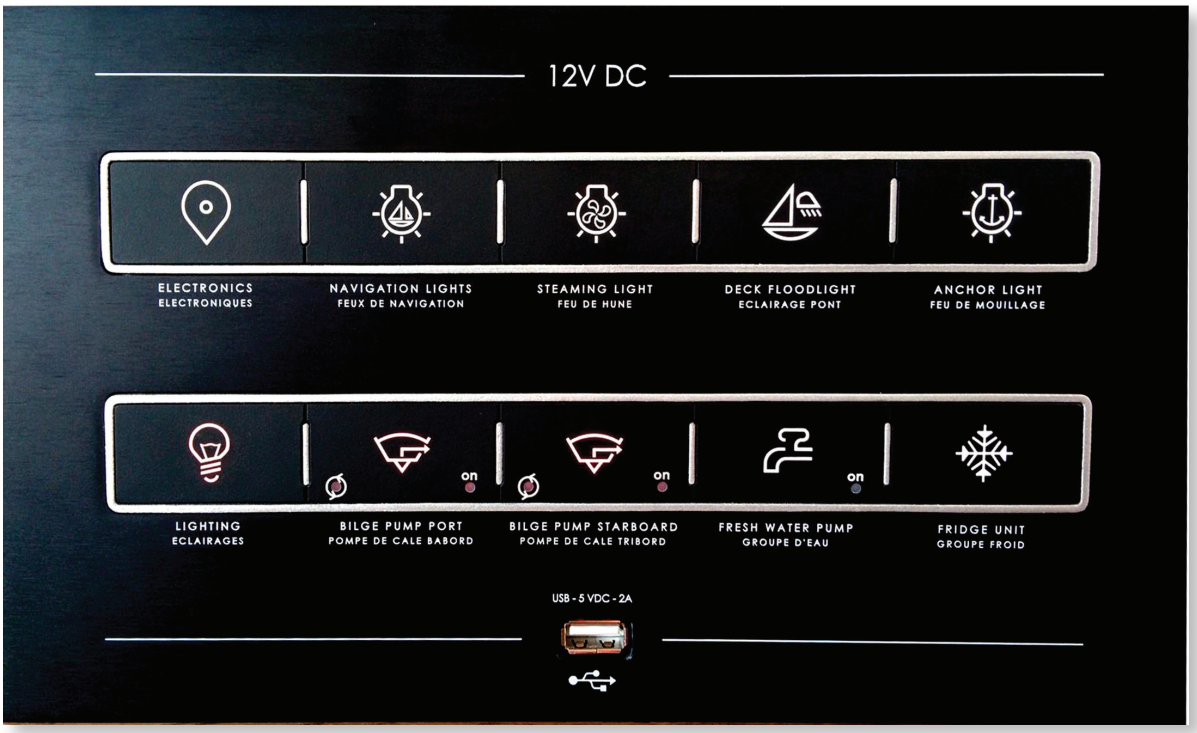
LINE DRIVER	*LINE DRIVER*	WDC057	
WINCH TRIBORD	*STBD WINCH*	WDC053	
WINCH BABORD	*PORT WINCH*	WDC049	
DRISSE GV	*MAINSAIL WINCH*	WDC044	
REPARTITEURS NEGATIF ROOF	*ROOF GND DISTRIBUTORS*	W153/154/155/156	
ALIMENTATION JEU DE BARRE ROOF	*ROOF POWER BAR*	WDC60	

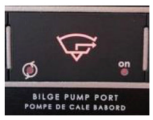
4

12 V DC EQUIPMENT



MAIN 12 V DC ELECTRIC PANEL AND DESCRIPTION OF FUNCTIONS



Pictogram	Functions	Circuit breaker	Bypass
	To power the navigation electronics. - White backlight or off: Electronics not powered - Red backlighting: Electronics powered	FU5	FU25
	Turn on and off the navigation lights (port and starboard lights at the forepeaks, and the stern light at the rear of the roof) - White backlight or off: Lights off - Red backlighting: Lights on	FU8	FU28
	Turn on and off the masthead light (on the mast) - White backlight or off: Light off - Red backlighting: Light on	FU9	FU29
	Turn on and off the deck searchlight (on the mast) - White backlight or off: Light off - Red backlighting: Light on	FU6	FU26
	Turn on and off the anchor light (on the masthead) - White backlight or off: Light off - Red backlighting: Light on	FU7	FU27
	Powers direct lights and wireless lighting modules - White backlight or off: Lights off - Red backlighting: Lights on	FU11 FU10	FU31 FU30
	Powers the port bilge pump. The first press powers the pump automatically, using a float, the indicator lights A second press forces the pump to operate and both lights come on	FU2	FU22
	Powers the starboard bilge pump. The first press powers the pump automatically, using a float, the indicator lights A second press forces the pump to operate and both lights come on	FU4	FU24
	Turn on and off the water unit - White backlight or off: water unit off - Red backlight: water unit on The indicator displays the operation of the water unit	FU3	FU23
	Turn on and off all boat cooling units - White backlight or off: cooling units off - Red backlight: cooling units on	FU1	FU21

4.4.2 ■ Electrical circuit 110 V - 220 V

WARNING
RISK OF ELECTRIC SHOCK

Avoid the risk of electric shock (electrocution).
Disconnect the alternative current (AC) power from the dock and the direct current (D.C.) from the battery to the inverter before opening the panel.

WARNING
RISK OF ELECTRIC SHOCK

The boat is equipped with a transformer converting direct current (DC) into alternative current (AC.).
Avoid the risk of injury or death by electric shock.
Disconnect the dock AC power line and the DC power on the inverter before opening the electrical panel or intervening on the circuits.

General warning sign ISO 7010-W001 | Electricity warning ISO 7010-W012 | Warning: flammable material ISO 7010-W021 | Read the owner's manual ISO 7010-M002

A) Warning sign using symbols

WARNING– To limit the risks of electric shocks and fire:
1 Turn off the onboard shore power switch before connecting or disconnecting the shore power cable. 2 Connect the shore power cable to the onboard power socket before connecting it to the shore socket. 3 If a reversed polarity is signalled, disconnect the cable immediately. 4 First, disconnect the shore socket power cable. 5 Close the onboard power socket cover carefully.
DO NOT CHANGE THE FITTINGS OF THE SHORE POWER CABLE

Note 1: Point 3 only applies if the circuit has a polarity reversal indicator.
Note 2: Points 2, 4 and 5 are not required when the shore socket power cable is permanently connected to the boat.

b) It is suggested that the text of the warning sign should be written in the language of the country of use

Figure 1 – Suggested warning sign

Some boats are fitted with a 110 V or 220 V circuit (in their standard version or as an option according to the model).

Please note that live wires are blue, neutral wires are brown and earth wires are green and yellow.

DANGER

Unplug the boat shore supply cable first on the shore side.
Turn off the shore power with the cut-off device fitted on board before plugging or unplugging the boat shore supply cable.
Never let the end of the boat shore supply cable fall into the water.
Never work on the live electric circuit.

WARNING

When the shore supply socket is plugged, there could be a difference between the "earth" on the boat and the one of the power grid. This could create a danger of electrical cross-currents and therefore electrocution (particularly for nearby swimmers).
Connect the boat shore supply cable in the boat before plugging it to the shore supply socket.

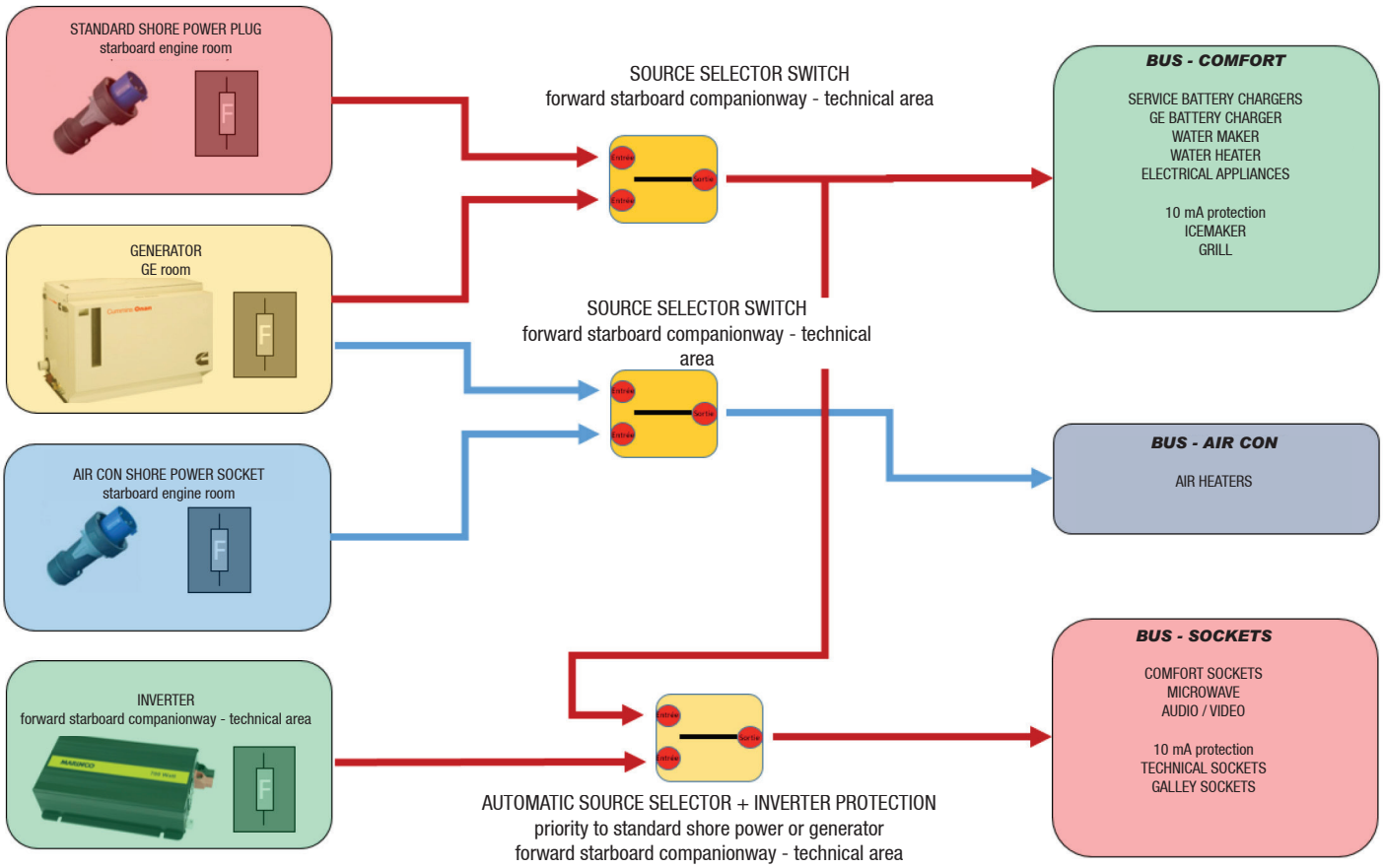
ATTENTION

Switch off the ship's power when the system is not in use, in order to prevent the risk of fire.
Do not modify the boat's electrical system or the relevant diagrams.
All modifications and maintenance must be carried out by a technician skilled in marine electricity. Have the system checked at least twice a year.
Do not modify the connections of the boat / shore supply cable; only use compatible connections.
If the reverse polarity indicator is on, unplug the cable immediately.
Correct the polarity error before using the boat's electrical system.

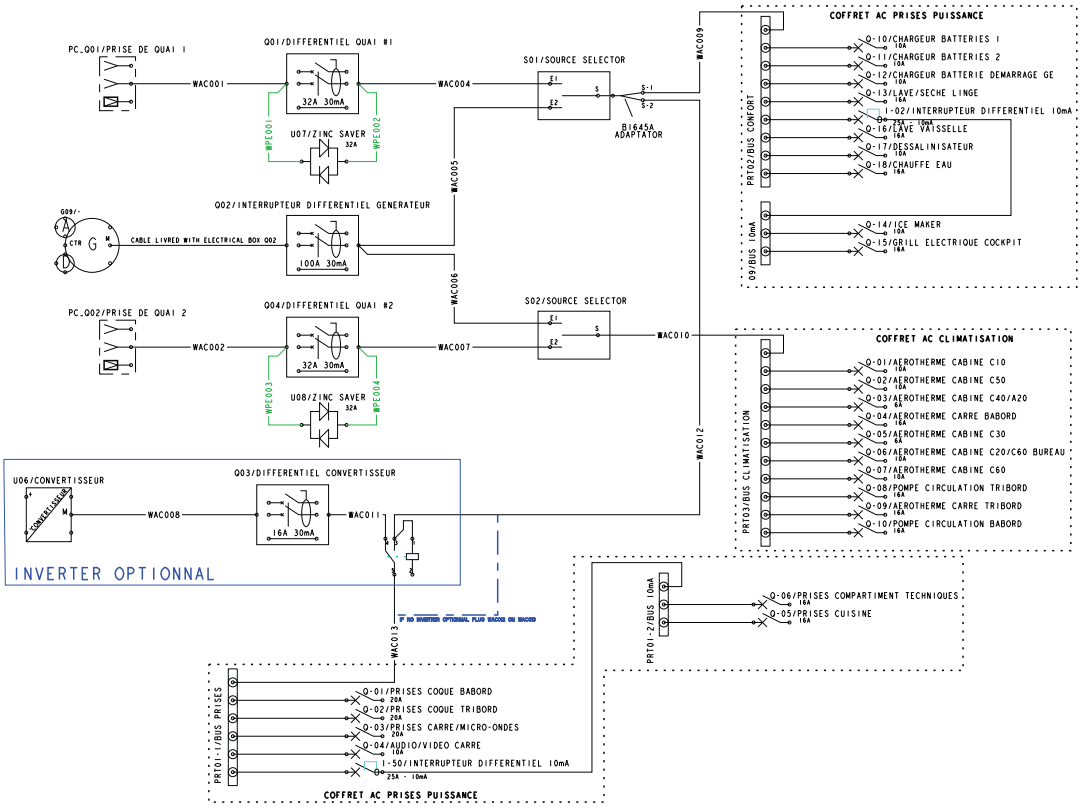
ADVICE-RECOMMENDATIONS

Only use electrical devices with double insulation or earth.
Connect the electrical appliances' metallic covers or boxes to the boat's protective conductor (green conductor with yellow stripes).
Close the shore socket cover carefully.

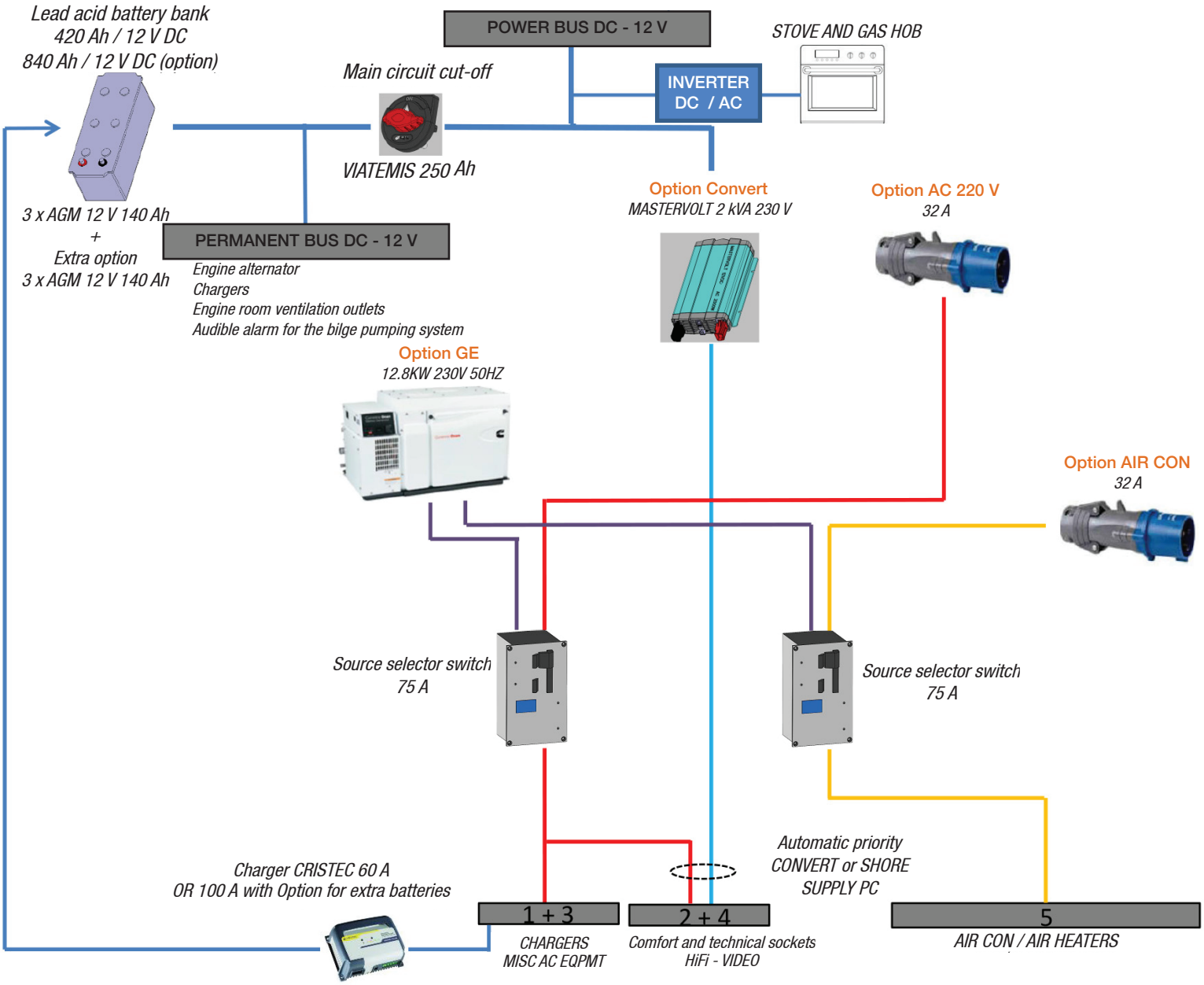
AC POWER SYSTEMS



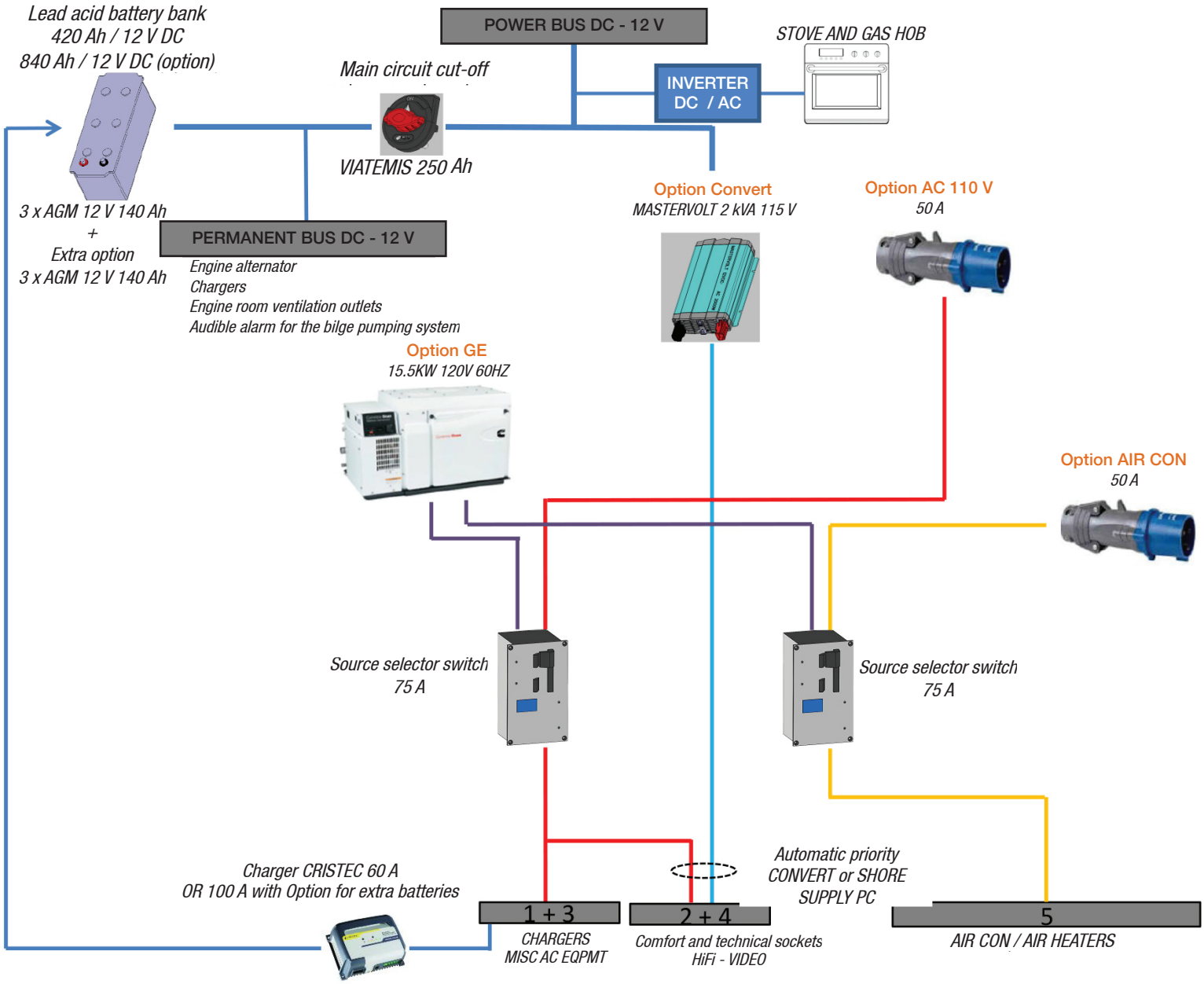
AC INSTALLATION



220 V CIRCUIT - EUROPE



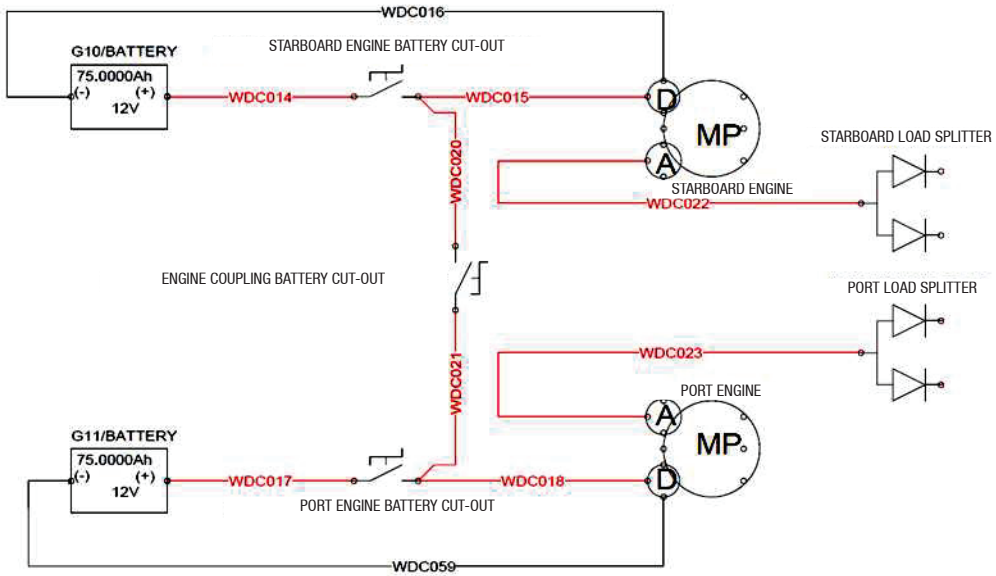
CIRCUIT 110 V / 220 V - US



4.4.3 ■ Emergency startup

If the engine batteries are not available, a coupling system of the port and starboard 12 V starting batteries is available (in the engine compartment port side).

To select the battery coupling:
- Turn on (ON) the coupling circuit-breaker in the port compartment and the port or starboard engine battery circuit-breaker, while turning off the defective battery (OFF position).
- Start the engines, both port and starboard sides.
- Once both engines have started, switch off (OFF position) the coupling cut-out.

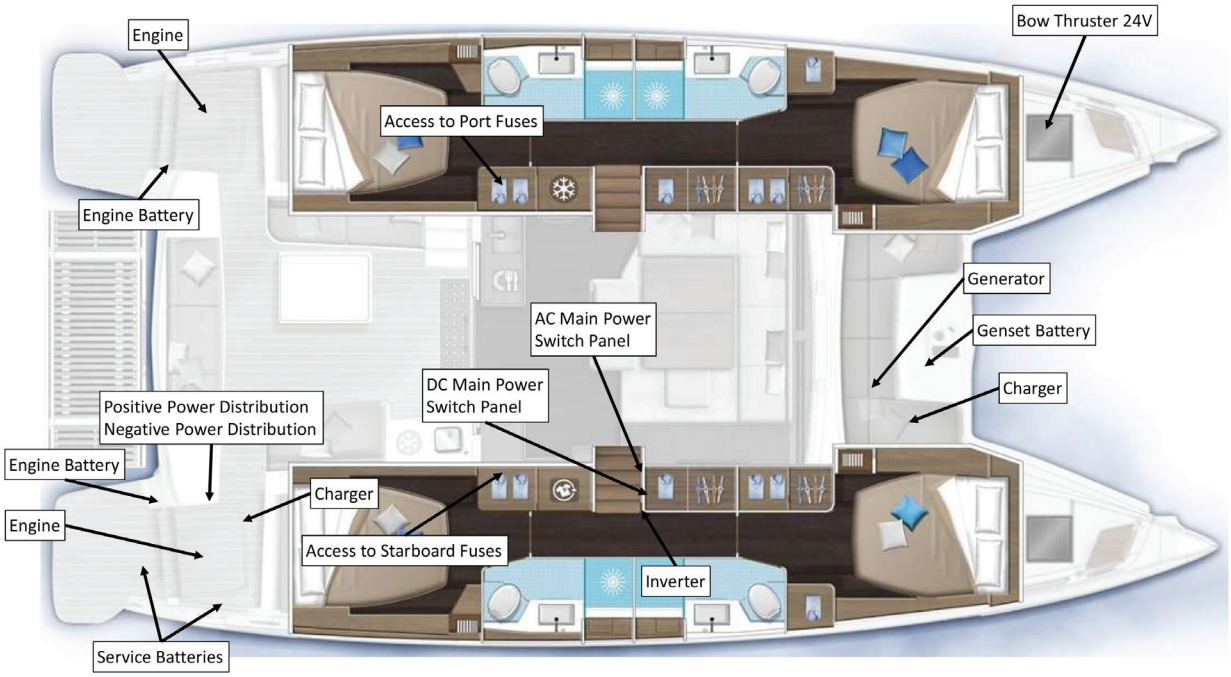


4.4.4 ■ Location of the battery cut-outs, electrical panels and appliances

ATTENTION

Before replacing a fuse, switch off the battery cut-outs.

Some equipment shown in the diagram below may be optional.



4.5 ■ INSTALLATION OF GAS-POWERED APPLIANCES

4.5.1 ■ Gas stove

DANGER

Never place flammable materials above the gas stove (curtains, papers, napkins, etc.).
Never smoke or use an open flame while replacing LPG cylinders. Close the valves on empty cylinders before disconnecting them for their replacement.
Never use an open flame to search for leaks.

WARNING

Never smoke or bring an open flame close when searching for a gas leak or when replacing a gas cylinder or when performing any other job on the gas installation.
Never leave the boat unsupervised when using open flame appliances powered by LPG.
Open flame appliances using fuel use the oxygen of the cabin and release combustion products in the boat.
Never use a gas stove or stove to heat the boat's living quarters. It is necessary to ventilate the boat when these appliances are in use. Open the air vents designed for this purpose when using open flame appliances. Never block air vents. Ventilation requirements have been designed for LPG appliances as installed. It is a good idea to open additional air vents when using several appliances simultaneously.
Never modify the boat's LPG system.
All installations, modifications and maintenance must be carried out by a qualified technician. Have the system checked at regular intervals or at intervals established by national law.
If you find a leak, close the main LPG supply valve and do not use any LPG appliances.

ATTENTION

Fuel-burning appliances use the oxygen of the cabin and release combustion products in the boat. It is necessary to ventilate the boat when using gas-powered cooking appliances. Do not block the boat's ventilation vents (air intake vent) and leave at least the door open.
Never use cooking appliances to heat rooms.
Make sure that valves and gas rings are closed before opening the valve on the pipes and gas cylinder.
Always close the valves before replacing the cylinder, and immediately in the event of an emergency.
Never use ammonia-based solutions for cleaning, nor to identify a leak.

ADVICE-RECOMMENDATIONS

Never leave the boat unsupervised when using gas or alcohol powered appliances.
If you smell gas or extinguish the flame accidentally (even though the gas supply is automatically shut off in the event of a flame extinction), close the valves and create a draught of air to evacuate any residual gases. Search for the cause of the problem.
Close the valve on the supply pipe and the valves on the gas cylinders when not using the appliances.
The cylinders in gas stoves with integral cylinders will have to be changed outside the boat. Test them before re-installing the stove in the galley. Make sure to lock the gas stove hinges properly after installation.
Never block air vents.
Store spare gas cylinders in ventilated housings on the bridge, or in gas-tight lockers provided for this purpose that vent to the outside.
Never block the access to gas system components, especially the valves (cylinders and gas stove).
The flexible hoses connecting the cylinder at one end of the circuit to the gas stove at the other end, must be replaced according to the laws in force in your country. Only use hoses that comply with the standards in your country.

ADVICE-RECOMMENDATIONS

Never use gas cylinder lockers or housings to store other equipment.

Take care not to damage the thread of the cylinder to be fitted to the pressure reducer valve. Check the condition of the pressure reducer valve once a year, and replace it if necessary. Only use pressure reducer valves that are identical to that installed on your boat. Make sure that the valves on empty cylinders are closed and disconnected. Keep all safety mechanisms in place, caps or plugs.

4.5.2 ■ Drawing of the gaz system

- The operating pressure of the LPG appliance is 28 millibars.
- Recommended cylinder capacity:
  Europe version: 2.75 kg of butane.
  US version: 10 lb of propane.

LOCATION OF SYSTEM COMPONENTS:

1 - Gas supply valve.
2 - Gasbox +
bubble leak detector.
3 - Plancha.

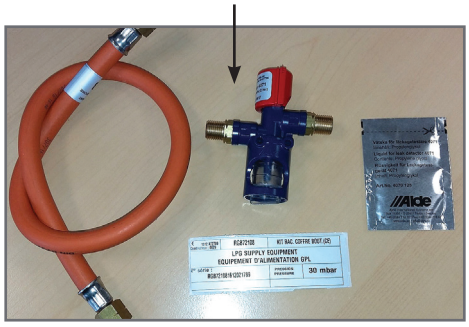
4

The forward locker in the cockpit is designed to house a gas cylinder.
The gas installation opening/closing valves are located in the cupboard under the stove.

The US version of the boat includes an electrovalve located in the cylinder storage locker.
Switch the electrovalve on using its switch located above the hot plates (the electrovalve fuse is located to port in the hull).

1

2



3

4

1 - Gas cylinder locker.
2 - Bubble leak detector.
3 - Leak detection pressure gauge (US version).
4 - Plancha locker.

• DETECTING A GAS LEAK
The gas installation is fitted with a leak detection system.

STANDARD VERSION: a bubble leak detector is fitted on the circuit downstream of the pressure reducer valve in the cylinder storage locker.
When the cylinder is open (system pressurised) and the valve under the household appliance is closed, press the red button on the detector.
If nothing happens, the circuit is leaktight.
Any bubbles that appear in the detector liquid indicate that there is a leak in the gas circuit.

US VERSION: a pressure gauge is fitted on the circuit downstream of the pressure reducer valve in the cylinder storage locker.
When the cylinder is open (system pressurised) and the valve under the household appliance is closed, the reading on the pressure gauge should remain constant.
Any decrease in the pressure indicates that there is a leak in the gas circuit.

• USE AND MAINTENANCE OF THE GAS INSTALLATION:

Please refer to the manufacturer's user guide for instructions on use and maintenance of the LPG cooking appliance.

- Close the valves on the LPG supply pipes and the valves on the gas cylinders when not using the appliances. Always close the valves before replacing the cylinder, and immediately in the event of an emergency.

- Make sure that the valves on the appliance are closed before opening the valve on the gas cylinder.

- Perform a leak test on the LPG-supplied installation prior to using it.

- Check the bubble leak detector on a regular basis (Europe version).

• IN THE EVENT OF A LEAK

- Close the cylinder supply valve.
- Extinguish all open flames and other flammable sources (heating appliances, cooking appliances, night lights, etc.).
- Never activate an electric switch.
- Evacuate the area if possible.
- Never use any installation proven to have a leak until it has been inspected and repaired by a qualified technician.
- Never block the access to LPG-supplied installation components, under any circumstances whatever.
- Make sure that the valves on empty cylinders are closed and disconnected. Keep all safety mechanisms in place, caps or plugs. Store spare gas cylinders in ventilated housings on the bridge, or in gas-tight lockers provided for this purpose that vent to the outside.
- Never use LPG cylinder lockers or housings to store other equipment.
- Flexible hoses on the LPG-supplied installation must be checked on a regular basis, at least once a year, and replaced if worn or damaged.
- Check the exhaust outlets at least once a year. Replace them if they are cracked or damaged.
- Never use the gas stove if there is a risk of large angles of roll or if the boat is in a constant angle of heel (if the boat is not equipped with a stove suspended on gimbals).

The above tests performed by the user do not replace an official inspection by a qualified technician authorised to handle and maintain LPG systems.

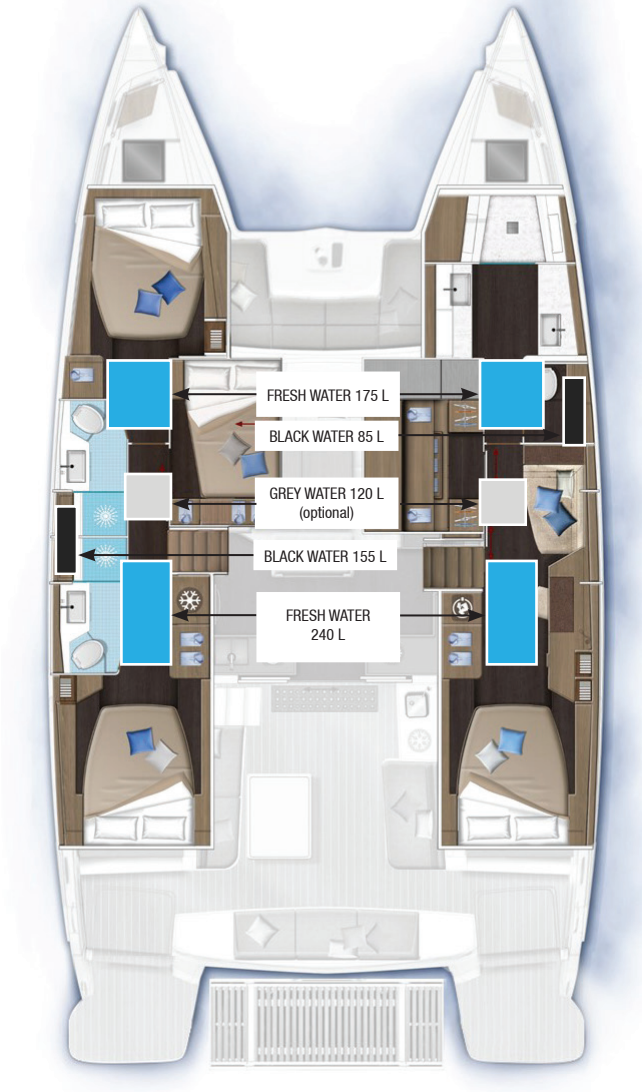
To change the LPG cylinder:

1. Close the valve on the LPG cylinder
2. Unscrew the LPG cylinder
3. Replace the LPG cylinder
4. Screw the new LPG cylinder in
5. Open the valve on the LPG cylinder

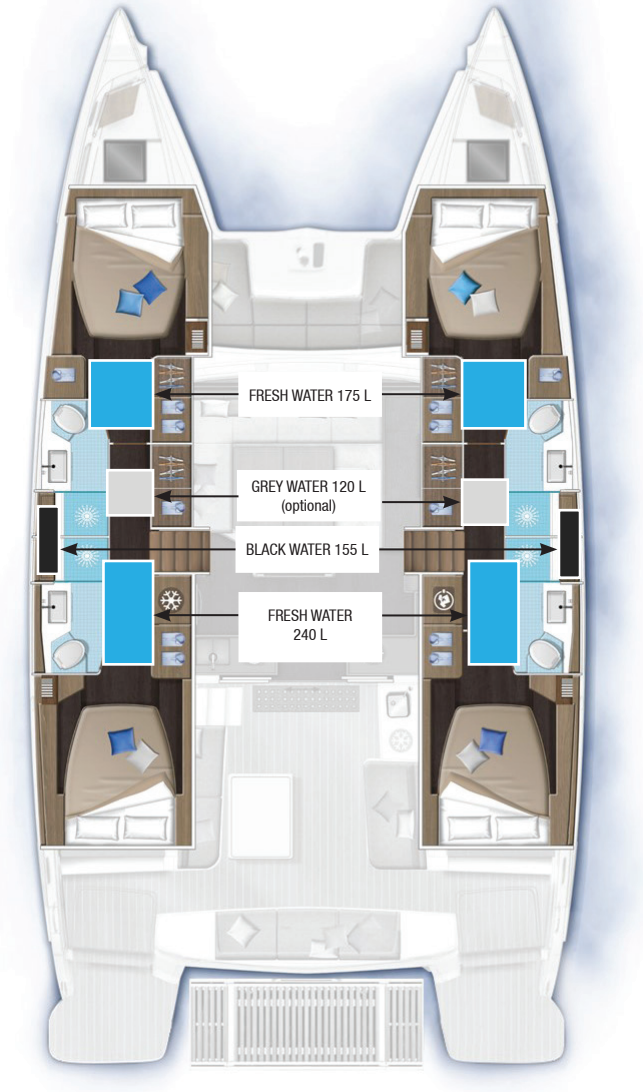
4.6 ■ FRESH WATER SYSTEM

4.6.1 ■ Fresh water circuit: 2 x 175 L + 12 X 240 L

VERSION 3 HEAD/SHOWER COMPARTMENTS



VERSION 4 HEAD/SHOWER COMPARTMENTS



The LAGOON 51 is equipped with four rotomoulded food-grade plastic fresh water tanks of 175 and 240 litres each, under the passageway floors.
There is no direct transfer between the two tanks.

If the boat is equipped with a desalinator (option), a main valve allows to choose which tank is fed by the desalinator. The selection of freshwater tanks feed from the desalinator is under the port aft cabin floors.

ATTENTION

**The tanks may contain zones of leftovers that the pumps cannot reach due to the boat's trim or the design of suction tappings.
You are advised to maintain a reserve.**

4.7 ■ BLACK WATER TANKS

4.7.1 ■ Specifications

In the three cabine version with WC, the LAGOON 51 has one 85-litre tank and another 155-litre tank.
The 4 or 6 cabin versions with 4 WC have two 155-litre tanks.

These capacities may not be completely usable depending on the trim, the load and the position of the possible filling and drainage point(s).

- Do not empty toilets near the coasts.
- Keep yourself informed of the local regulations on the respect of the environment, and always follow rules of best practice.
- Follow the international rules against marine pollution (Marpol).

4.7.2 ■ Operation of the black water retention system

Toilets are emptied via the black water tanks only, which are then emptied as well:
- either by pumping: deck cover
- or by draining into the sea: valve (gravity flow)

ADVICE-RECOMMENDATIONS

After each use, rinse the whole system: fill the tank with fresh or sea water then empty it.
Use domestic cleaning products.
The whole system has to be drained when the boat is halted and the temperature is negative.

ATTENTION

For respect of the environment:
Do not unload the retention tanks close to the coasts, use the pumping systems provided by harbours or marinas to empty the tanks before leaving.
Please check that the outlet valve is closed in order to avoid any accidental discharge.

4.8 ■ GREY WATER TANKS

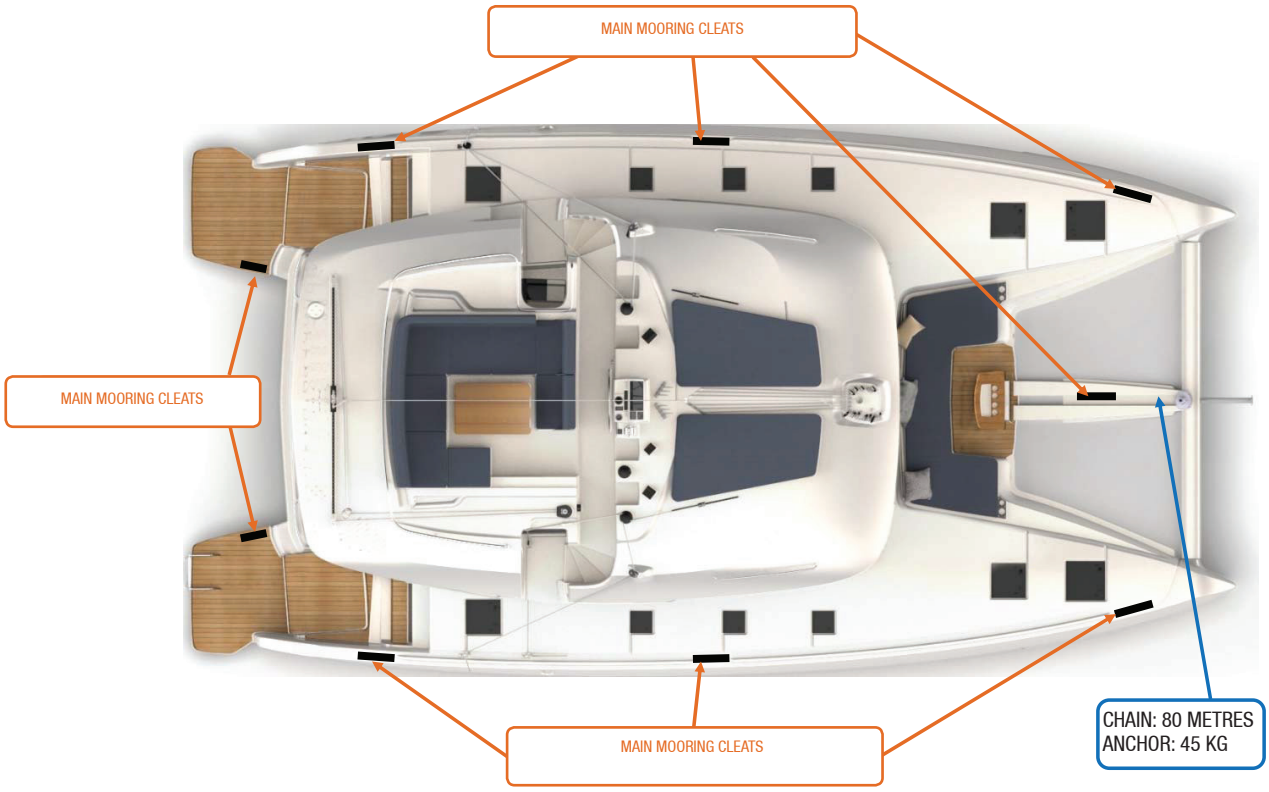
4.8.1 ■ Specifications

In the three and four cabin versions, the Lagoon 51 can be optionally equipped with two 120-litre grey water tanks (starboard and port side sub-floors).
These capacities may not be completely usable depending on the trim, the load and the position of the possible filling and drainage point(s).

- Keep yourself informed of the local regulations on the respect of the environment, and always follow rules of best practice.
- Follow the international rules against marine pollution (Marpol).

5. Anchoring, mooring and towing

- Keep the chain locker panel or hatch closed at sea.
- Towing must always be carried out at low speeds.
- A tow must be taken in such a way that it can be released when loaded.
- The owner must ensure that mooring and towing ropes as well as fastening points and chains correspond to the condition of use of the boat.



WARNING

If the boat is fitted with non-metallic strong points, their limited lifetime must be taken into account. This means that they will have to be replaced as soon as they show any signs of damage, visible surface cracks or permanent distortion.
NOTE: Dark-coloured elements are less sensitive to UV light than light-coloured elements.

WARNING

It is the owner's/operator's responsibility to ensure that the mooring ropes, towing cables, chains and anchorage lines as well as anchors are suitable for the planned use of the boat, i.e. that the lines or chains do not exceed 80% of the rupture resistance for the corresponding strong point.
It is also important that the owner take into consideration the actions required to fix a towing cable on-board.

	MOORING	ANCHORING	TOWING
Anchor point breaking strength	560 kN	74 kN	74 kN
Line/chain breaking strength	41.6 kN	59.2 kN	59.2 kN

ATTENTION

In the event of replacement, the breaking strength of lines/chains must, in general, not exceed 80% of the breaking strength of the strong points.

ATTENTION

If the use of a specific strong point is not clear, the manufacturer will have to label the strong point (strong point designed to be used for anchoring and/or towing) and mark this clearly in the owner's manual.

ATTENTION

Make sure all towing operations are conducted at low speed. Never exceed the speed limit for a travelling hull while it is being towed.

ATTENTION

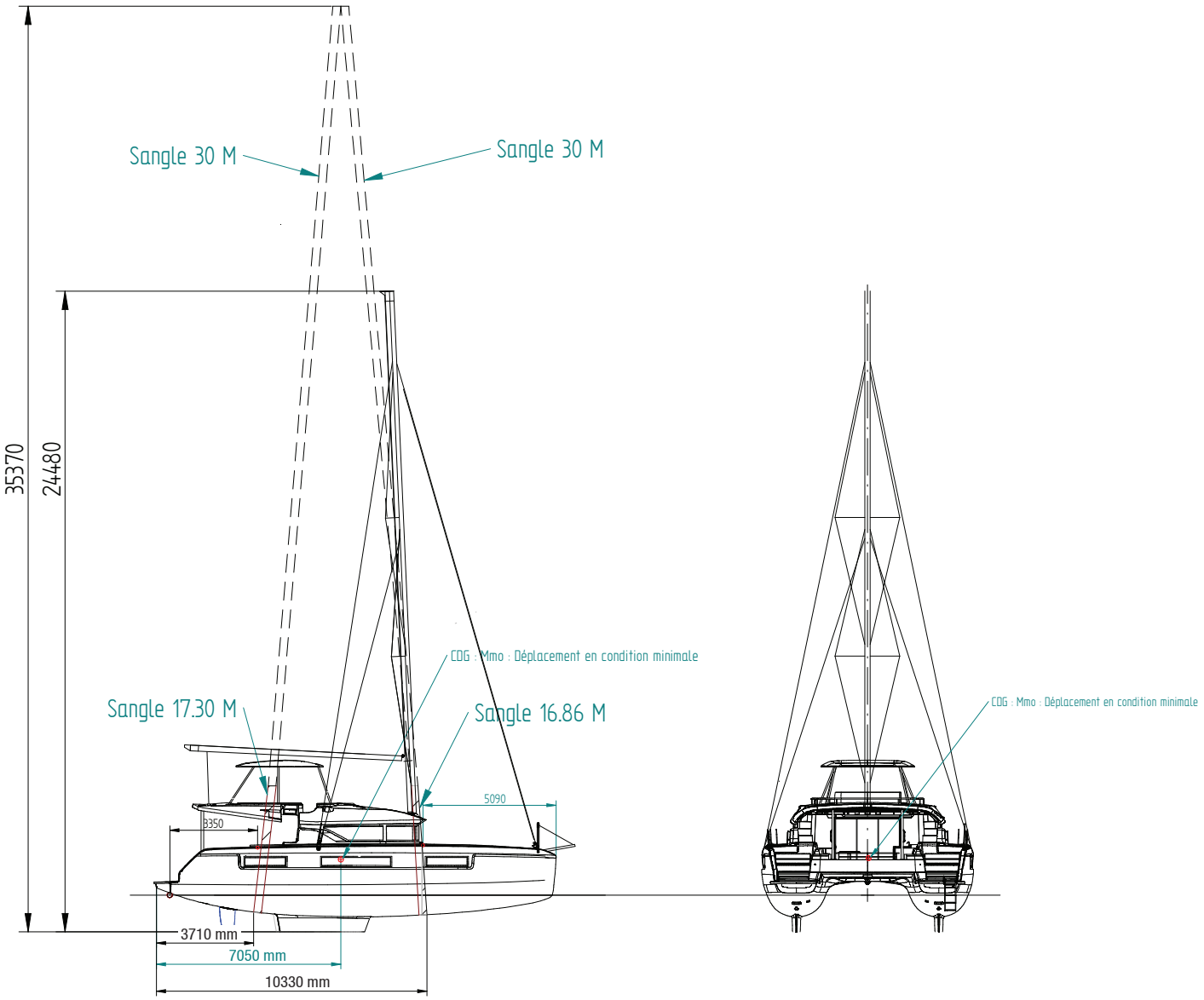
A tow rope must be moored in such a way that it can be released when loaded.

6. Hoisting and transport

6.1 ■ DIAGRAM, DIMENSIONS AND POSITIONS OF THE HOISTING BELTS

ATTENTION
Make sure that the boat is stable on its tow lines, both lengthways and widthways.

ADVICE-RECOMMENDATIONS
Call on a diver for the strainers and sea-cocks fittings.



The necessary hoisting belts are described below:
- Two lifting slings with flat straps
- Four carrying bands
- Two folded eyes – CAT2

CMU: 16 T
Working length: 17M30 (AFT) and 16M86 (BOW)

7. Other precautions

WARNING

Fuel-burning appliances with open flames use the oxygen of the cabin and release combustion products in the boat.
The boat must be adequately ventilated when these appliances are in use.
Open the vents provided for this purpose when these appliances are in use.
Never block air vents and check that flued appliances are in proper working order.

ATTENTION

Check that all mobile components are fixed to their seagoing station when sailing.

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