

SIXTY
5

Owner's manual



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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 authorization 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 be able to find on board all the safety equipment (life jacket, harness, etc.) corresponding to the boat, to the 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 TO THE NEW OWNER SHOULD YOU SELL THE BOAT.

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.

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 - RECOMMENDATION

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

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.

This owner's manual has been drafted and edited by CNB-LAGOON. Any full or partial copy, direct or indirect, permanent or temporary, produced by any means and in any format, any any change made to this manual by a third party for commercial gain, is formally prohibited.

2. SPECIFICATIONS

2.1 ■ IDENTIFICATION SHEET OF YOUR BOAT

- NAME OF THE BUILDER..... Construction Navale Bordeaux
- MODELLAGOON SIXTY 5
- BUILD CATEGORY A
- MAIN PROPULSION MEANS.....SAIL
- MAXIMUM RECOMMENDED POWER.....2 x 195 CV
..... (2 x 143 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

See note on build categories in chapter 9.

MAXIMUM NUMBER OF PEOPLE RECOMMENDED PER BUILD CATEGORY:

CATEGORY	MAXIMUM NUMBER OF PEOPLE
A	14
B	18
C	24
D	40



WARNING

Do not exceed the recommended maximum number of people. Regardless of the number of people on board, the total weight of the people and of the equipment should not exceed the maximum recommended load.

Always use the seats or seating provided.

2.2 ■ BUILDER'S PLATE



The maximum load marked on the builder's plate includes:

- The crew - according to sailing categories.
- Personal equipment.
- Food, drink and cooking utensils.
- Life rafts.
- Waste waters stored on board.

The plate does not show:

- The fuel in the fixed tanks.
- Freshwater in the fixed tanks.
- All the options proposed to the client.

Based on a boat fitted out with all the options on offer.

The user can load their boat above the value shown on the builder's plate by taking account of (deducting) the weight of the options that were not fitted.

2.3 ■ DIMENSIONS * according to ISO 8666

LENGTH OF THE HULL (HL)	19.50 m
HULL BEAM (HB)	10 m
MAXIMUM LENGTH (maxL)	20.55 m
MAXIMUM BEAM (maxB)	10 m
MAXIMUM DEPTH OF KEEL DRAUGHT	1.60 m
MAXIMUM AIR DRAUGHT*	33.90 m

* Unladen boat.

2.4 ■ LOAD

M_{EC}	Empty Boat Weight* (kg)	38024
M_{LC}	Unladen Boat Weight (kg)	39172
M_{MO}	Sailing at the minimum sailing requirement (kg).....	39995
M_{LDC}	Maximum load displacement cat. A (kg).....	55469
M_{LDC}	Maximum load displacement cat. B (kg).....	55629
M_{LDC}	Maximum load displacement cat. C (kg).....	55889
M_{LDC}	Maximum load displacement cat. D (kg).....	57209

* An empty boat weight corresponds to a full boat conform to the shipyard's standard specification,
 - inboard motorisation proposed as a standard feature
 - excluding outboard motor(s) (main or auxiliary motorisation)
 - excluding all sails (note: a non-sailing boat may have some small sails),
 empty of all mobile equipment and excluding all optional equipment and deck fittings

TOTAL OPTIONS

Category A	Category B	Category C	Category D
10744 kg	10744 kg	10744 kg	10744 kg

MAXIMUM RECOMMENDED LOAD: maximum load displacement - unladen boat

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 boat weight.

TOTAL WEIGHT OF CONSUMABLE LIQUIDS = 2105 Kg (DIESEL + ED)



WARNING

When loading the boat, never exceed the maximum recommended load.

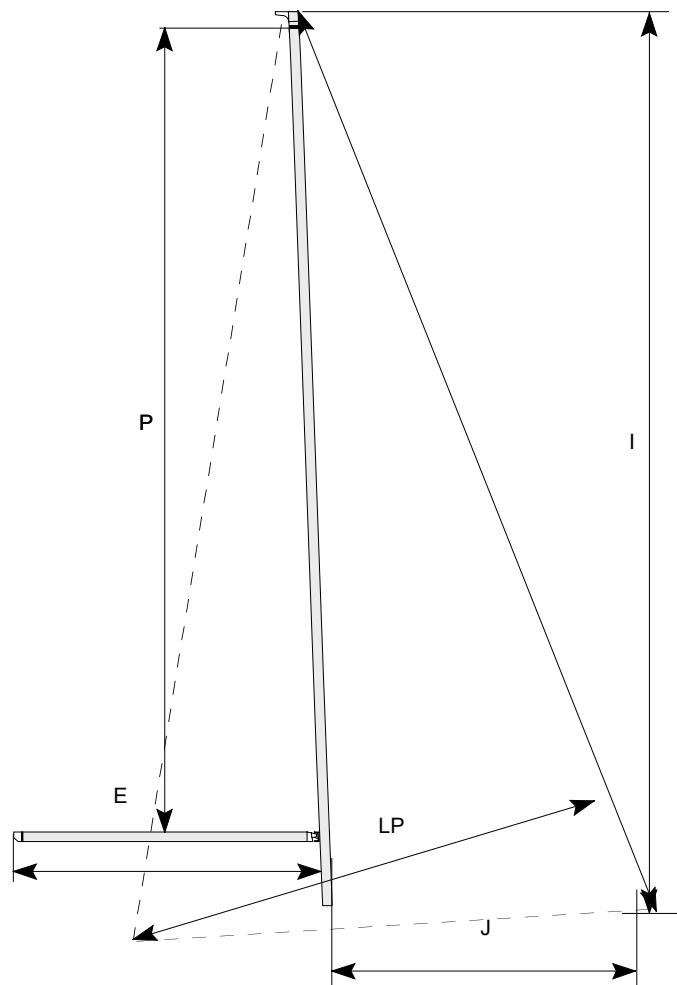
You should always load the boat with care and distribute the loads in the best possible way to preserve the theoretical trim (more or less horizontal). Avoid placing heavy loads in the upper storage space.

2.5 ■ SAILS AND RIGGING

2.5.1 ■ Sail characteristics

Standard aluminium mast

SAIL	SURFACE AREA		Dimensions
MAINSAIL	170 m ²	I	19.80 m
SOLENT	102 m ²	J	7.709 m
CODE 0	150 m ²	P	27.065 m
		E	8.21 m



2.5.2 ■ Maintenance of the rigging



— **ADVICE - RECOMMENDATION**

Check the standing rigging and running rigging on a regular basis, and at least once a year.

Metal cables:

- Replace the cables at the first sign of any “gendarme” (hairy wires).
- Check cables for rust, especially at the junction with the turnbuckles.
- Check the condition of all ends and turnbuckles.

Synthetic cables for runners, halyards, sheets, mooring lines, etc.:

- Replace the cables at the first sign of any chafing or wear.
- Regularly check all other components of rigging, sheets, mooring lines, etc.; replace when necessary if they are showing signs of wear and tear.

Schedule:

ROD:

- To be reviewed every 5 years (replace the Rod and reuse the parts) or every 40,000 nautical miles - mast to be adjusted by authorised persons.
- Full replacement (rod+parts) every 10 years or every 80,000 nautical miles - mast to be adjusted by authorised persons.

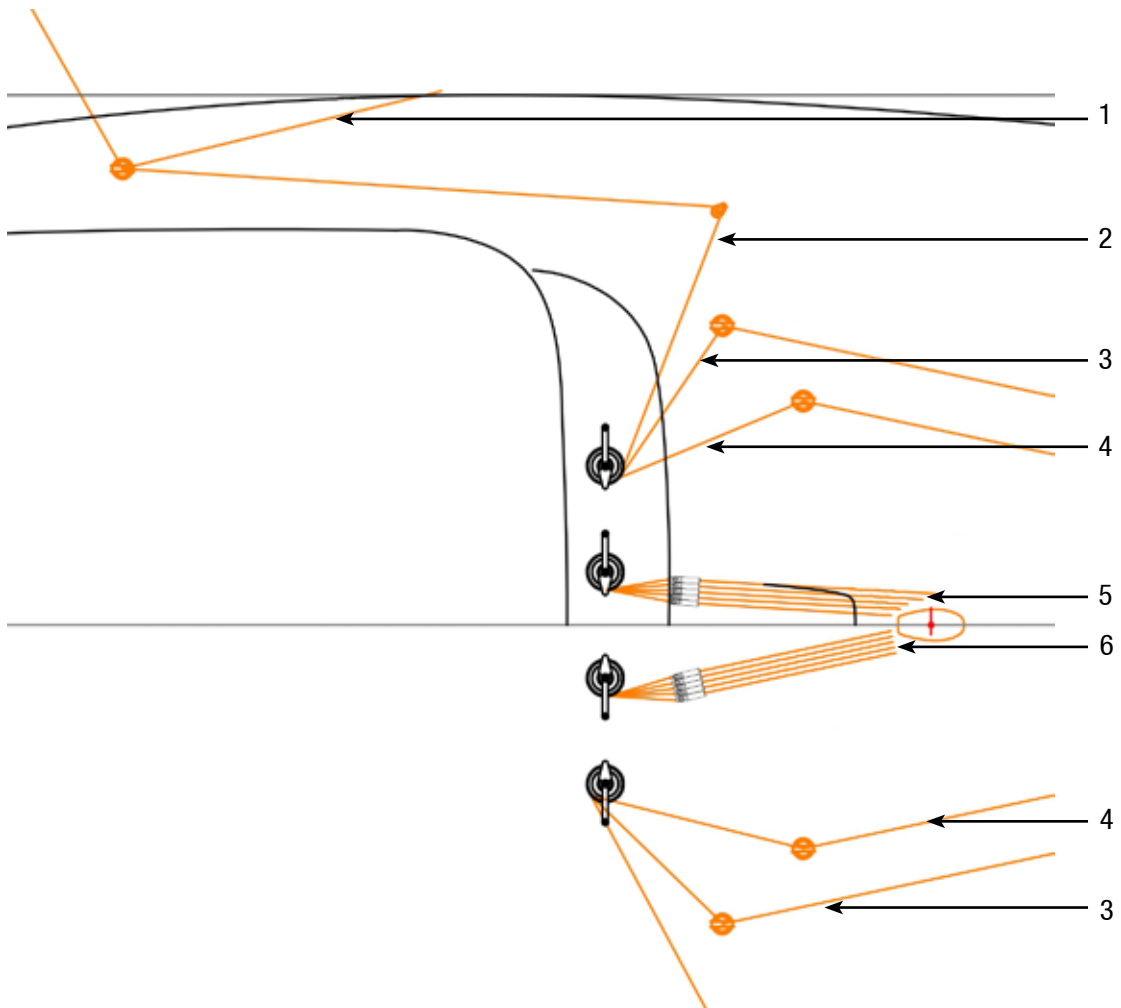
CABLE:

- Cables to be replaced every 10 years or every 50,000 nautical miles - mast to be adjusted by authorised persons.

KEVLAR:

- Kevlar to be replaced every 6 years or every 35,000 nautical miles provided that the sheathing is fully integrated and the mast adjusted by authorised persons.
- If the fibre comes into direct contact with sunlight, change immediately.

2.5.3 ■ Mast operation drawing



1 - Code 0 sheet.

2 - Spi / gennaker sheet.

3 - Genoa sheet.

4 - Staysail sheet.

5* - Topping lift,

Tack,

Spi / gennaker halyard,

Mainsail sheet,

Reef line 3.

6* - Reef tack 2,

Reef tack 1,

Mainsail halyard,

Reef line 2,

Reef line 1.

* : In the order on the diagram, from top to bottom

REEFING THE SAILS



ATTENTION

Any adjustments that do not comply with these recommendations may result in fracture or breakage of the mast.

IN PARTICULAR, THE USE OF A 100% GENOA WITH 2 REEFS IN THE MAINSAIL IS PROHIBITED.

apparent wind angle AWA : 30-70°				apparent wind angle AWA > 70°			
apparent wind (knots)	mainsail	jib	code 0	apparent wind (knots)	mainsail	jib	code 0
0-5	full sail	0%	full sail	0-16	full sail	0%	full sail
0-26	full sail	full sail	0%	0-20	full sail	full sail	0%
26-31	reef 1	full sail	0%	20-24	reef 1	full sail	0%
31-36	reef 1	75%	0%	24-30	reef 2	75%	0%
36-40	reef 2	60% *	0%	30-34	reef 3	60% *	0%
40-45	reef 2	40% **	0%	34-38	reef 3	40% **	0%
45-55	reef 3	0% ***	0%	38-50	0%	25% ***	0%
> 55	0%	0%	0%	> 50	0%	0%	0%

*	or staysail	100%
**	or staysail	75%
***	or storm jib	100%

These data are given for information only and depend on the outside conditions.

- The manufacturer's recommended sail plan is shown on a label on the helm station.
- The skipper must take account of this data in order to prevent any risk of dismasting or capsizing.
- The skipper is solely responsible for deciding how to set the sails according to apparent wind and sea conditions, in order to ensure safe sailing.
- While it is possible to sail windward under power, it is prohibited and dangerous to sail upwind using only the engine.

3. Safety

3.1 ■ RISKS OF FIRE OR EXPLOSION

3.1.1 ■ Risks

The main risks are related to the motorisation (§4.1) and, the electrical system (§4.4).

Please refer to the appropriate sections.

The boat is fitted with smoke alarms (fire detectors). Check that the fire detectors are in proper working order on a regular basis.

If you have any problems, replace the detector with an equivalent model.

Follow the manufacturer's instructions on fire detector maintenance.

3.1.2 ■ Fire fighting equipment

Portable extinguishers: 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:



DANGER

Before unloading, cut the engines and the fans.



ADVICE - RECOMMENDATION

We advise you to fit 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 open-flame appliance, and 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. CO2 extinguishers must be used for kitchen or electrical fires. These extinguishers must have a maximum capacity of 2 kg and, where applicable, be stored in the saloon.

The boat is delivered with one 4-kg ABC powder extinguisher in each engine compartment. Their location is specified on the boat layout diagrams in this manual. Check that the fixed fire extinguishing systems have been armed before departure.

Make sure:

- To fit the boat with fire extinguishers according either to the layout diagram provided in this manual, or to the regulations of the country where your boat is registered.
- 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.

It is vital that the condition of the extinguishers are checked at regular intervals by a certified body.

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 trigger pull handles are located on the engine room extinguishers,
- . 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.

Do not install free hanging curtains or any other textile next to or over cooking appliances or any other open-flame appliances.

Make sure that the bilges remain clean, and check regularly that there are no fumes or leaks of fuel and gas.

Flammable products should not be stored in the engine room. Non-flammable products stored in the engine room should be fastened to prevent them from falling on the engines and obstructing access.

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 pictogramme:



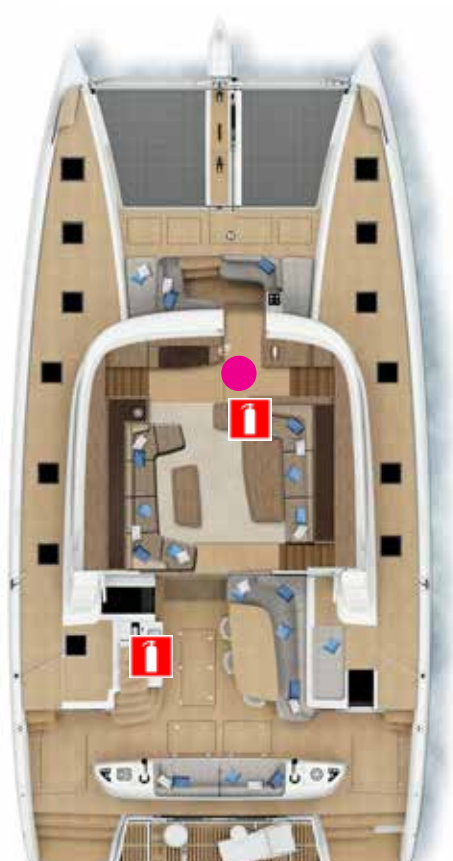
When in service, this boat must be fitted with a fire blanket designed to protect the cooking appliance and/or kitchen, installed at the following location: close to the cooking appliance.

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.

TOP SALOON/GALLEY



SIDE SALOON/GALLEY





Recommended location for the extinguisher



Location of fire detectors

Version 4 cabins - SIDE GALLEY





-  Recommended location for the extinguisher
-  Location of fire detectors

Version 5 cabins - SIDE GALLEY

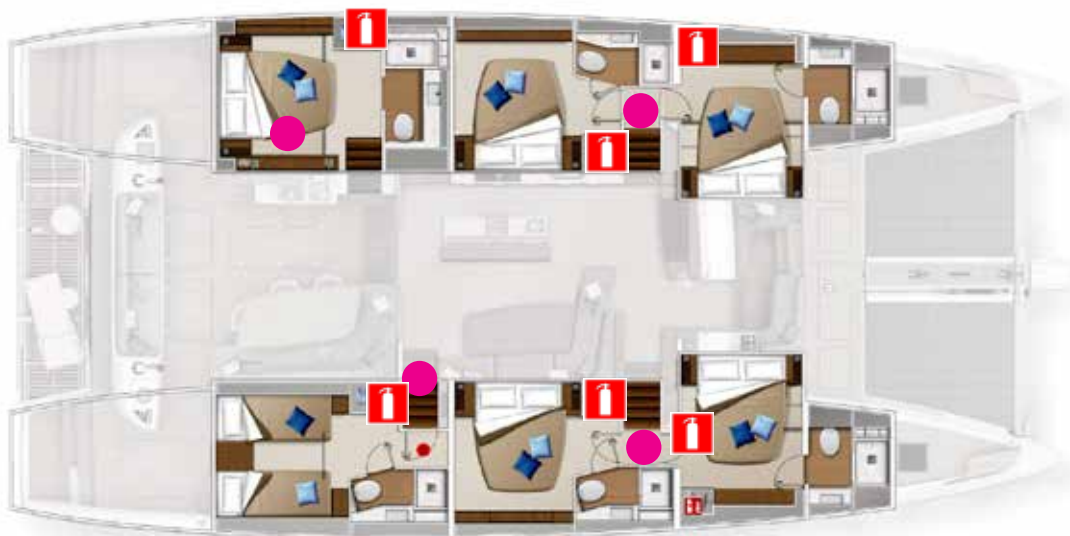


Version 5 cabins - GALLEY/SALOON



-  Recommended location for the extinguisher
-  Location of fire detectors

Version 6 cabins - GALLEY/SALOON



3.1.3 ■ Aft cockpit lifeboat station

The lifeboat station can be used to launch the boat's safety mechanisms in the event of fire or flooding in the bilges.

It is also used to cut the engine air vents and the fuel inlets prior to discharging the fixed fire-fighting system in the engine room.

There is an optional and more extensive MCA equipment that includes a fire detection unit and supplementary air flaps.

In the following order:

- Close the Diesel inlets using the top pull-rods.
- Close the machine air vents using the emergency stop.
- Trigger the discharge using the bottom pull-rods.

Do not enter the engine room until it has been thoroughly aired for a sufficiently long period of time, via the deck cover for instance.



ATTENTION




Extinguishers must be checked on an annual basis; if not checked annually, extinguishers have a shelf-life of 5 years. See the cut-off date shown on the cylinder.

3.1.4 ■ Emergency exits

The recommended emergency exits are shown on the following diagrams:

Version 4 cabins - SIDE GALLEY






-  Emergency exit
-  Emergency exit via the deck panel
-  Guide arrow

Version 5 cabins - SIDE GALLEY



Version 5 cabins - GALLEY/SALOON



-  Emergency exit
-  Emergency exit via the deck panel
-  Guide arrow

Version 6 cabins - GALLEY/SALOON



TOP SALOON/GALLEY

SIDE SALOON/GALLEY



Emergency exit



Emergency exit via the deck panel



Guide arrow

THE SIXTY 5 EMERGENCY EXITS ARE DEFINED AS FOLLOWS:

- Saloon window towards the aft cabin.
- Front saloon door towards the front cockpit.
- Port galley companionway towards the aft cockpit.
- Starboard owner's companionway towards the aft transom if there is an owner's suite.
- Deck panel above the berths depending on the boat version (unfold the retractable panel access system located under the mattress).
- Deck panels for the front bows.

3.1.5 ■ General points

- Do not install free hanging curtains or any other textile next to or over cooking appliances or any other open-flame appliances.
- Make sure that the bilges remain clean, and check regularly - and before switching the engines on - that there are no fumes or fuel and gas leaks.
- 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.

- 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.

- 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 compartments.
- the location of routes and exits.

- 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

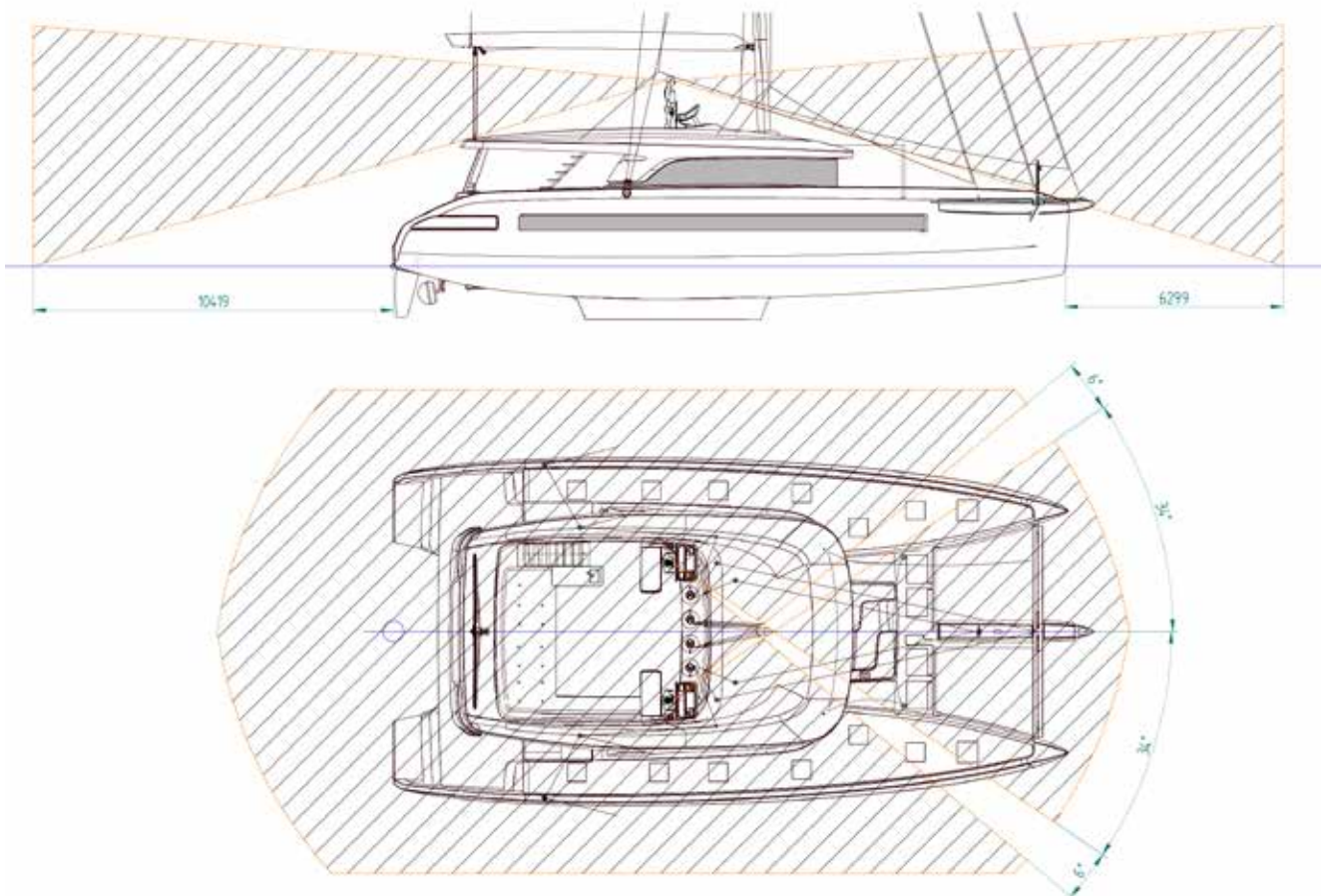
Visibility from the command post may be hindered because of extreme leaning due to the boat's trim or due to other factors linked to one or several of the following conditions:

- Load and load distribution
- Speed
- Sea conditions
- Rain and spray
- Darkness and fog
- Lights on, inside the boat
- Position of the upper or 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).
- Boat heel angle, the sails limiting leeward visibility (genoa, staysail, code 0, spi).

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



3.3 ■ NAVIGATION LIGHTS

The port and starboard navigation lights can be changed directly from the deck.

The stern navigation light can be changed from the roof, taking care to be attached to the life line pad eyes.

The anchor lights and headlamps can be changed by hoisting a crew member up the mast.



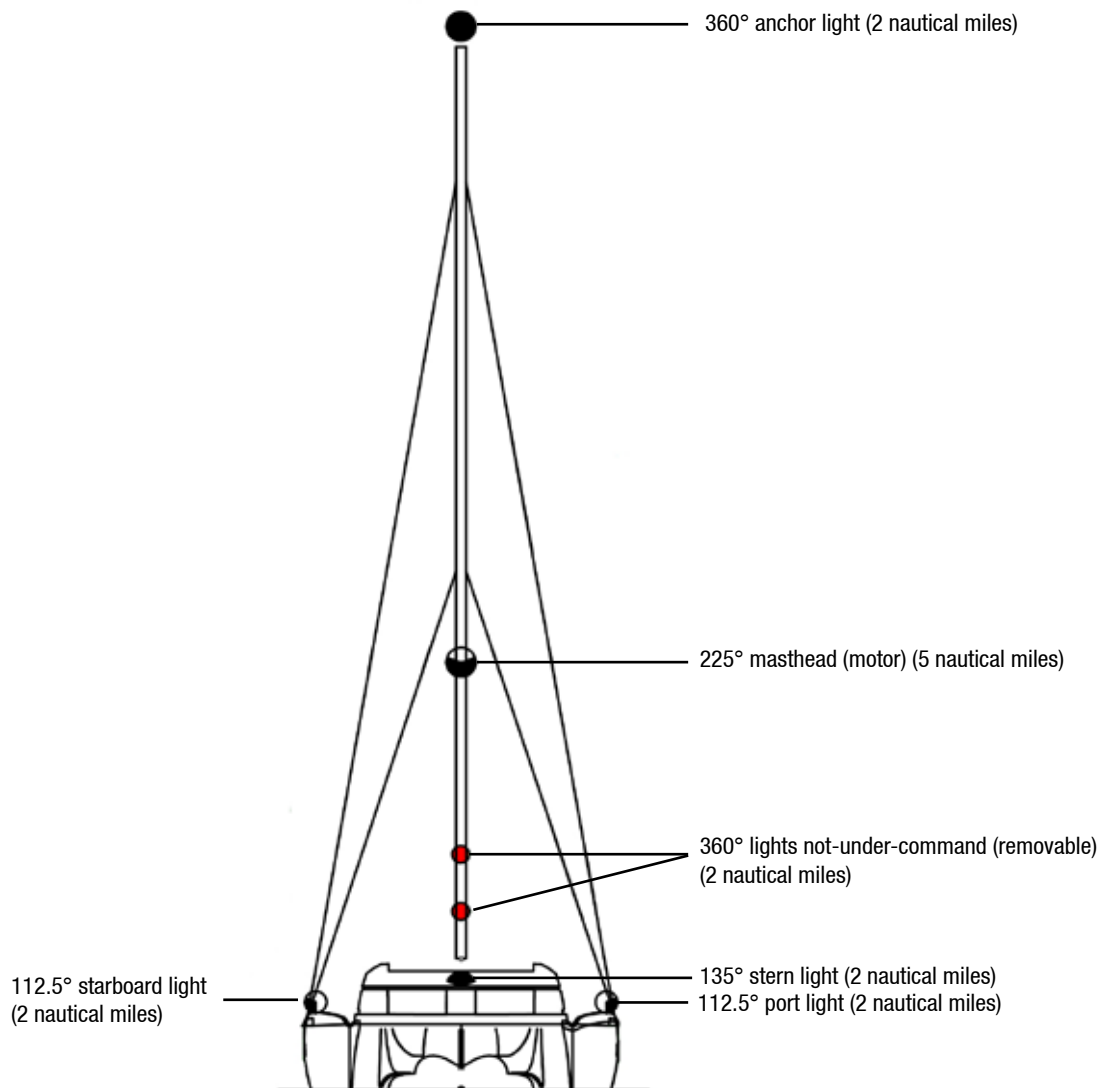
WARNING

Check the navigation lights on a regular basis They must be operative at all times



ATTENTION

Switch on the navigation or anchor lights to make sure you are clearly visible.



3.4 ■ STABILITY, DANGER OF INFILTRATION

3.4.1 ■ Openings in the hull



ATTENTION

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

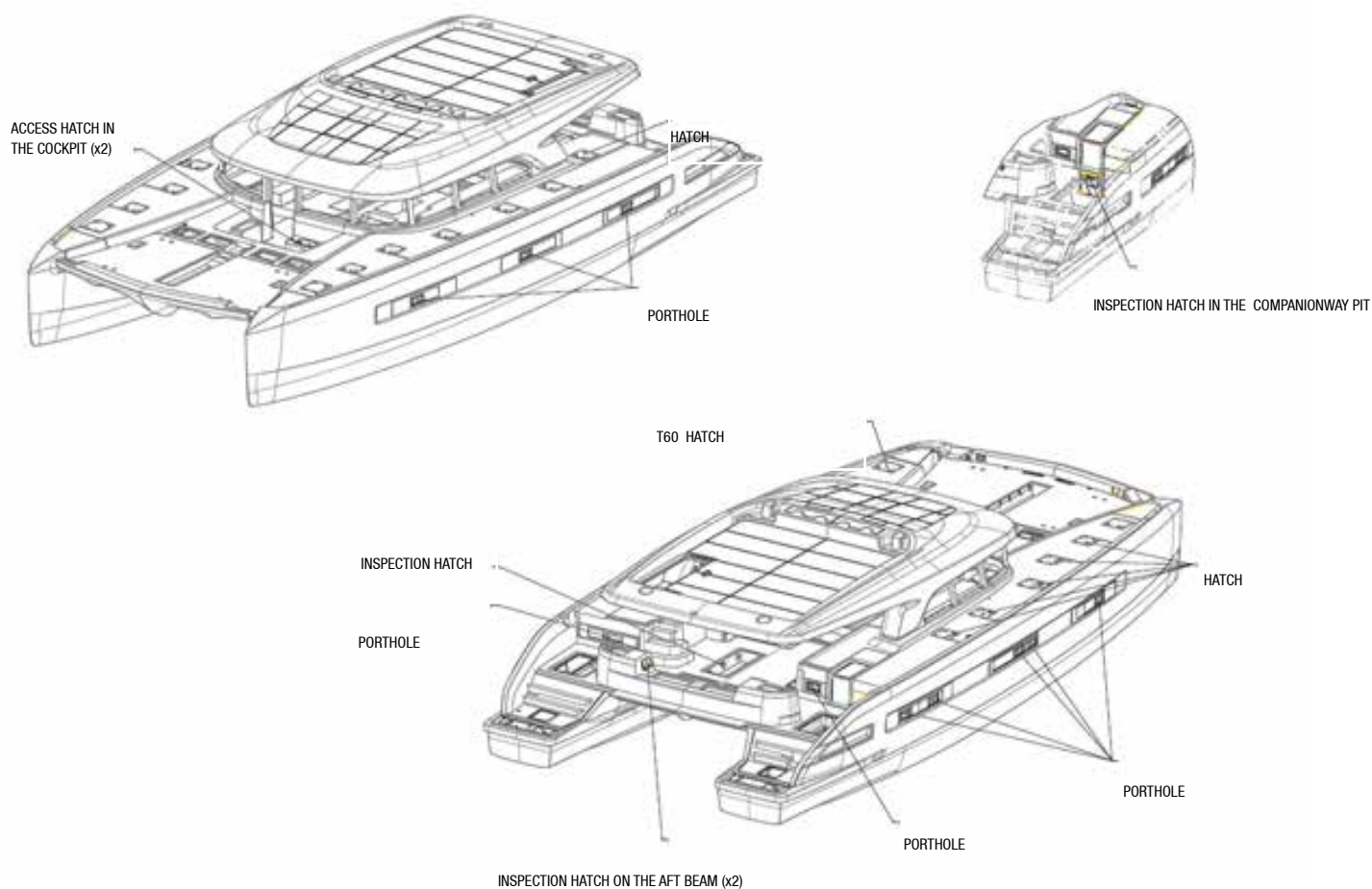


ATTENTION

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.

WINDOWS AND PORTHOLES



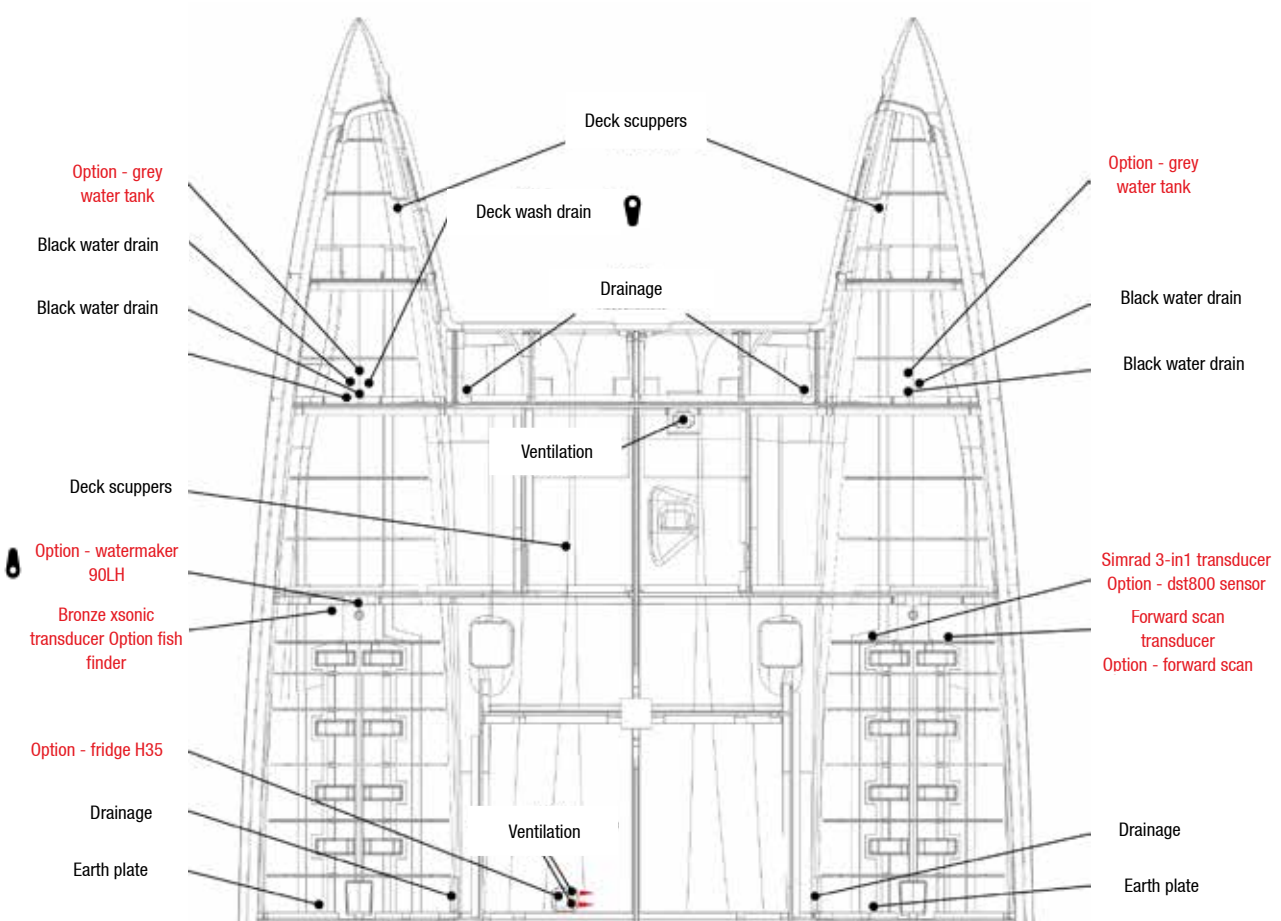
3.4.2 ■ Valves and sea-cock fittings

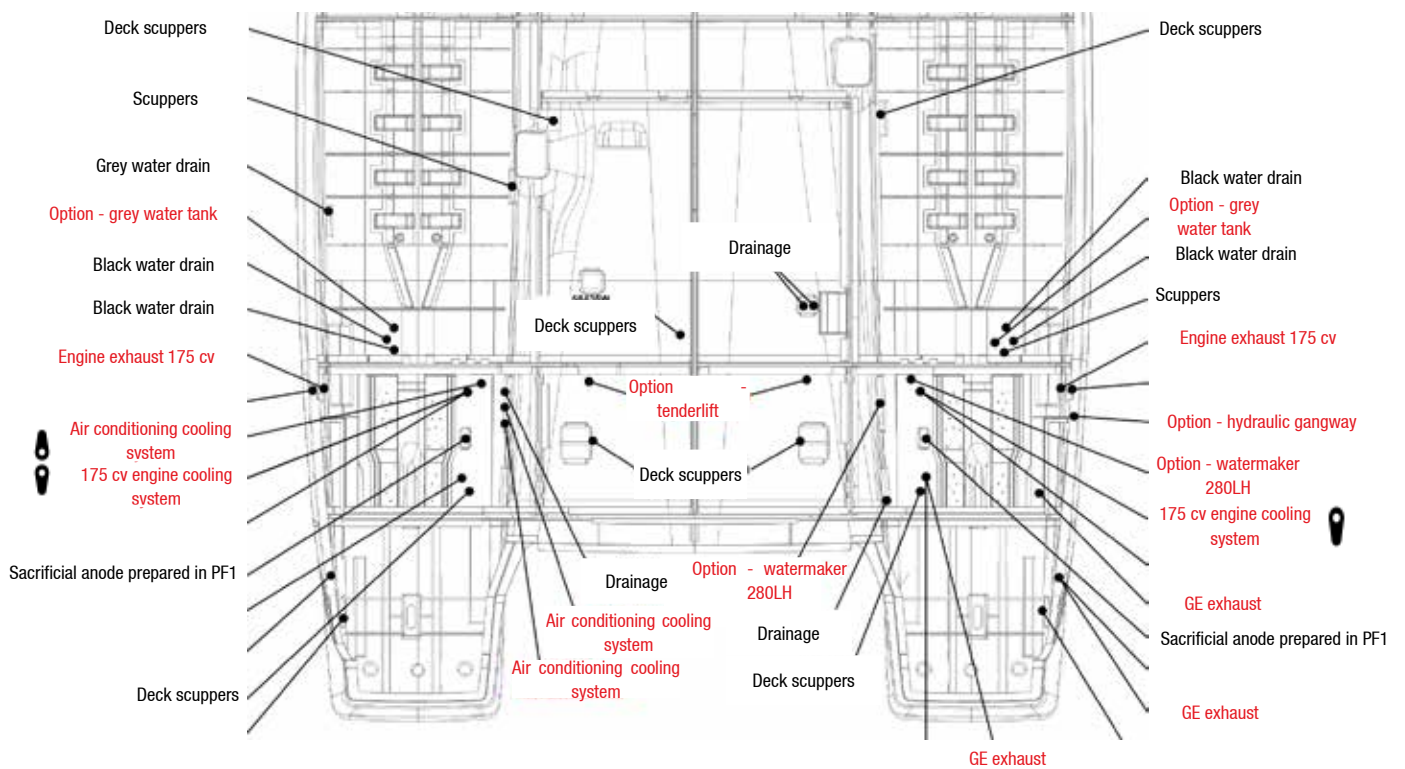




Sea cock open





Sea cock closed





 Aft sea-cock strainer
 Forward sea-cock strainer

 STANDARD
 OPTION

3.4.3 ■ Bilge and Drainage Pumps



DANGER

The automatic drainage system for automatic bilge pumps must always be operational when you are not on the boat. The batteries must have sufficient charge to power the system if there is a mains power outage.



WARNING

Suction and discharge strainers must always be kept free of any object that could block them.



ATTENTION

There is a primary manual system for draining the engine rooms and floats located in the lifeboat station in the aft cockpit. There is a secondary manual system for draining the forward bows located in the side lockers of the forward cockpit.



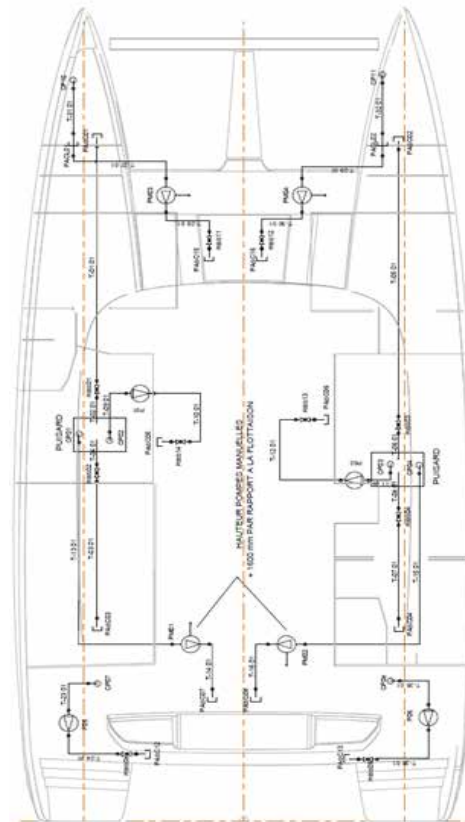
ADVICE - RECOMMENDATION

Never leave water to stagnate in the bilges.

The LAGOON SIXTY 5 drainage system comprises:

- Two forward manual pumps, to drain the forward peaks. These pumps are located in the forward lockers.
- Two manual pumps at the level of the aft cockpit lifeboat station, to drain the floats at the level of the sumps.
- Two electric 24 V pumps in automatic mode on each side (i.e. four in all) used to drain the floats at the level of the sumps and engine compartments.

There is a link connecting the forward peaks to the float sumps via a hose with a shut-off valve in the sump (valve closed under normal conditions).



Operating manual bilge pumps:

The manual bilge pumps are switched on in the port and starboard cockpit areas.

The pumping brake lever must remain in its station location.



Operating electric bilge pumps:

Detection floats are installed in the floats and engine rooms (there is a trigger level and a warning level).

The electric bilge pumps are operated via the main panel.



WARNING

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



ADVICE - RECOMMENDATION

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. Check each bilge pump visually on a regular basis to ensure that they are in proper working order. 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 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 least one bucket / bailer on board equipped with a device that prevents it being lost overboard.

Capacity of an electrical bilge pump: 2 640 litres/hour
Capacity of a manual bilge pump: 0.9 litres/cycle or 40.5 litres/minute



WARNING

When the service cut-out in the starboard companionway is cut off, the bilge pumps and the battery charger remain active.

3.4.4 ■ Stability and flottability

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

Breaking waves represent serious hazards, both for stability and water infiltration. Fasten the doors and hatchways in the event of rough seas.



— ADVICE - RECOMMENDATION

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.

3.4.5 ■ Righting the boat after capsizing

In accordance with stability report relating to standard ISO 12217-2, this model is not considered "vulnerable to capsizing in its design category".

Therefore, this section in the manual is not applicable.

3.5 ■ PREVENTION OF MAN OVERBOARD

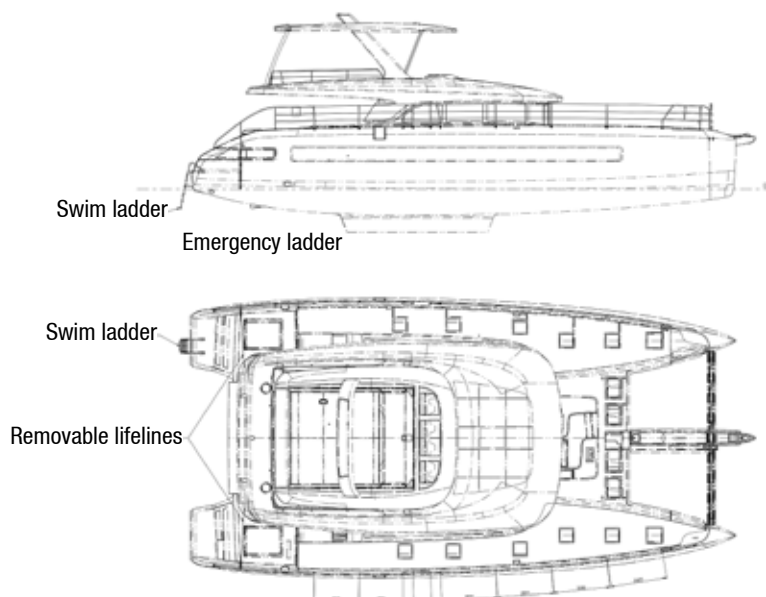
The swim ladder is removable. It is stored in the aft cockpit locker.

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 following 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.



3.6 ■ RE-BOARDING METHODS

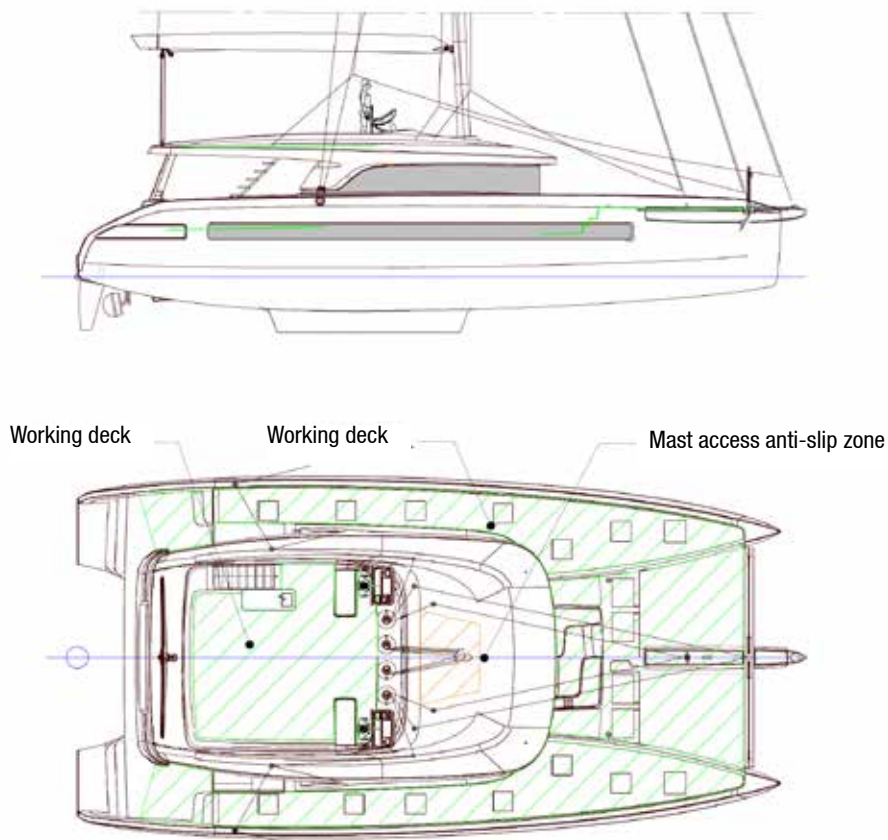
The emergency ladder fits into the aft pulpit by stowing. The cord can be pulled by someone in the water to open the flap covering the ladder's storage space. The ladder then deploys automatically. The ladder is specially designed to lower into the water by itself. There are two rungs under water to make the climb up easier.

The moment anyone comes on board, make sure that the boarding ladder's trigger control is no more than 500 mm above the water's surface.



3.7 ■ Definition of working deck areas

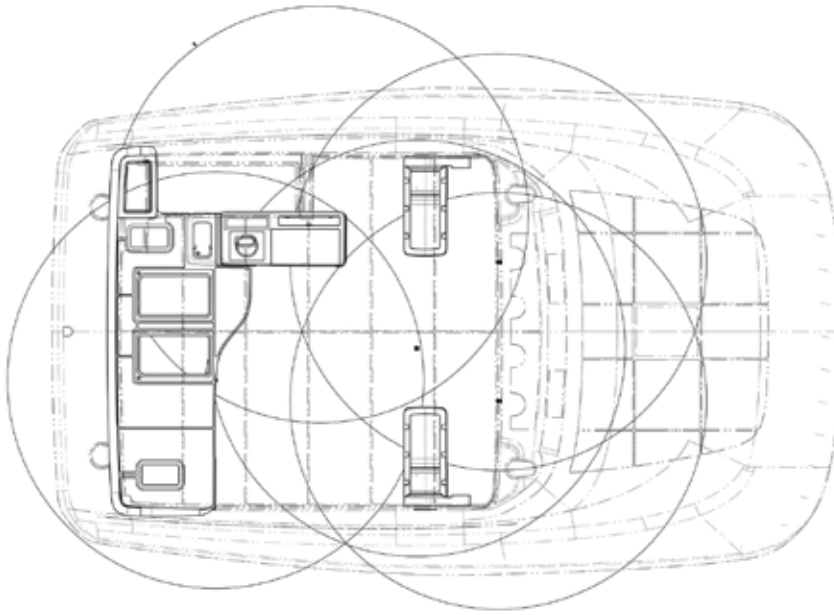
Deck areas which are considered part of the working deck, and which can be used when sailing are shown cross-hatched on the diagram below.



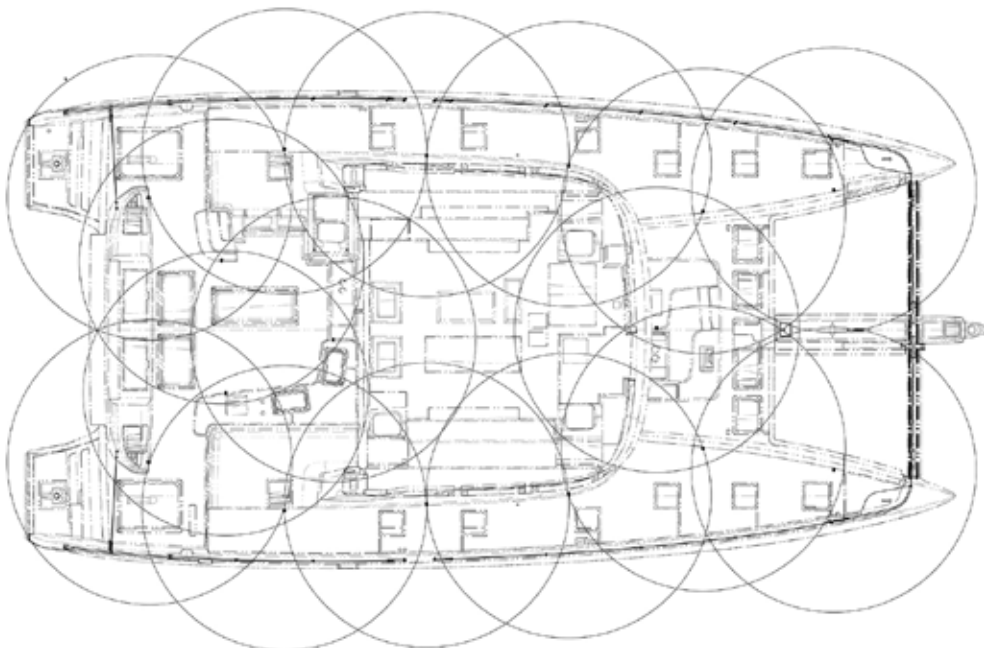
3.8 ■ Emergency equipment

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

FLYING BRIDGE: FIXED ATTACHMENT POINT FOR LIFELINES



ROOF DECK: FIXED ATTACHMENT POINT FOR LIFELINES

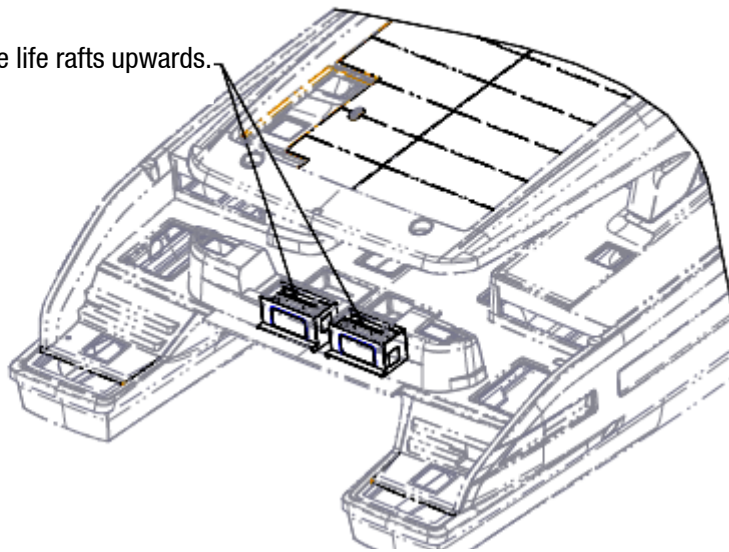


LOCATION OF THE LIFE RAFTS

The two life raft compartments can be accessed via the rear of the cockpit.

Make sure that you have carefully read the life raft instruction manual.

Removing the life rafts upwards.



LIFEBUOY ON THE BOAT RAIL, AT THE LEVEL OF THE AFT COCKPIT.



4. EQUIPMENT

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

4.1 ■ MOTORISATION

4.1.1 ■ Directions for use



WARNING

Stop the engine, do not smoke when filling up the fuel tank.

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

If equipped with a petrol engine, beware of the danger of falling asleep due to carbon monoxide fumes.



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 their parts.

If there is a secondary engine control (option), you can switch from one to the other by pressing the NAV STATION key after having first placed the controls in the neutral position.

For details on engine control operation and maintenance, please refer to their instruction manuals.



Volvo



— ADVICE - RECOMMENDATION

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 ventilated area.

Before starting, ensure that the engine compartment 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 compartment. 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 compartment. Check 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 compartment 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.

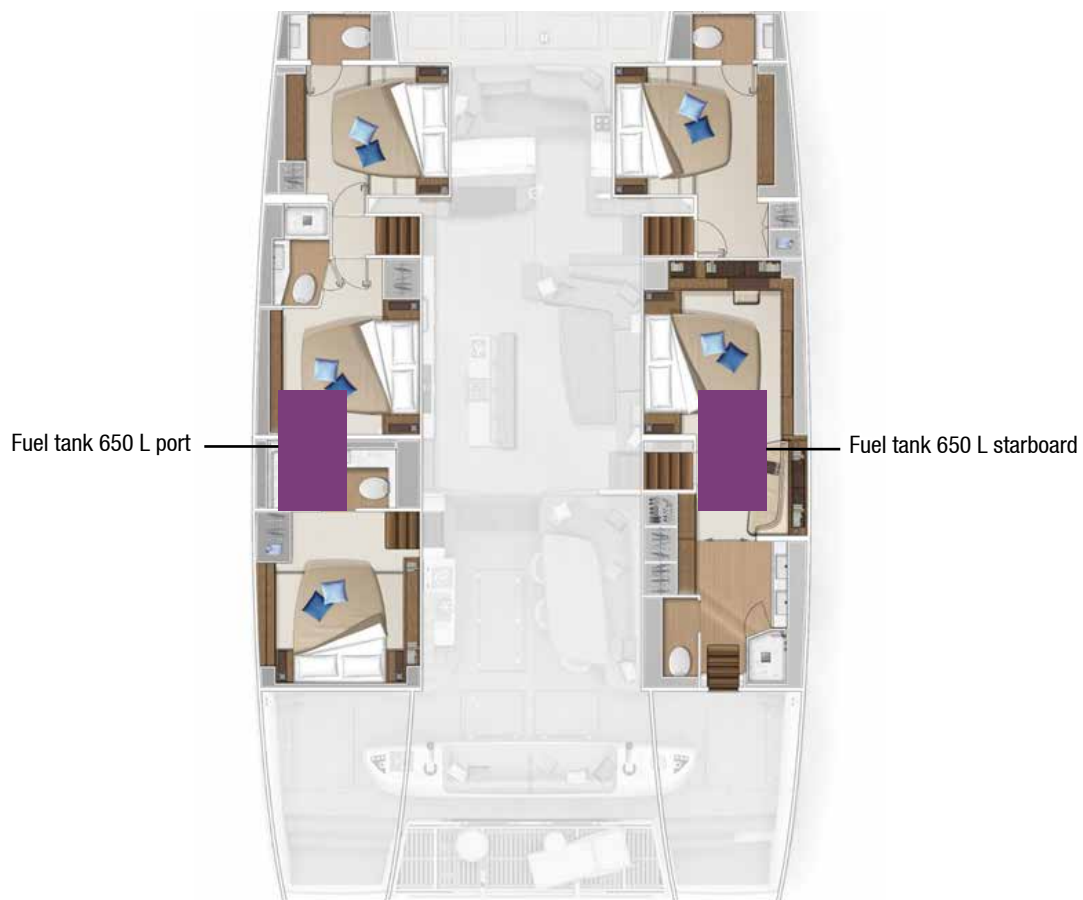
Fuel hoses must be replaced by hoses bearing the same markings.

Meaning of the symbols:



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

4.1.2 ■ Fuel tanks: 2 x 650 litres DIESEL



The valves can be coupled to enable the engine and the generator to use the same tank for fuel supply and consumption.

There is no direct transfer system between the two tanks, other than the “Generator 19 KVA” option.



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 STATION

4.2 ■ Helm stations

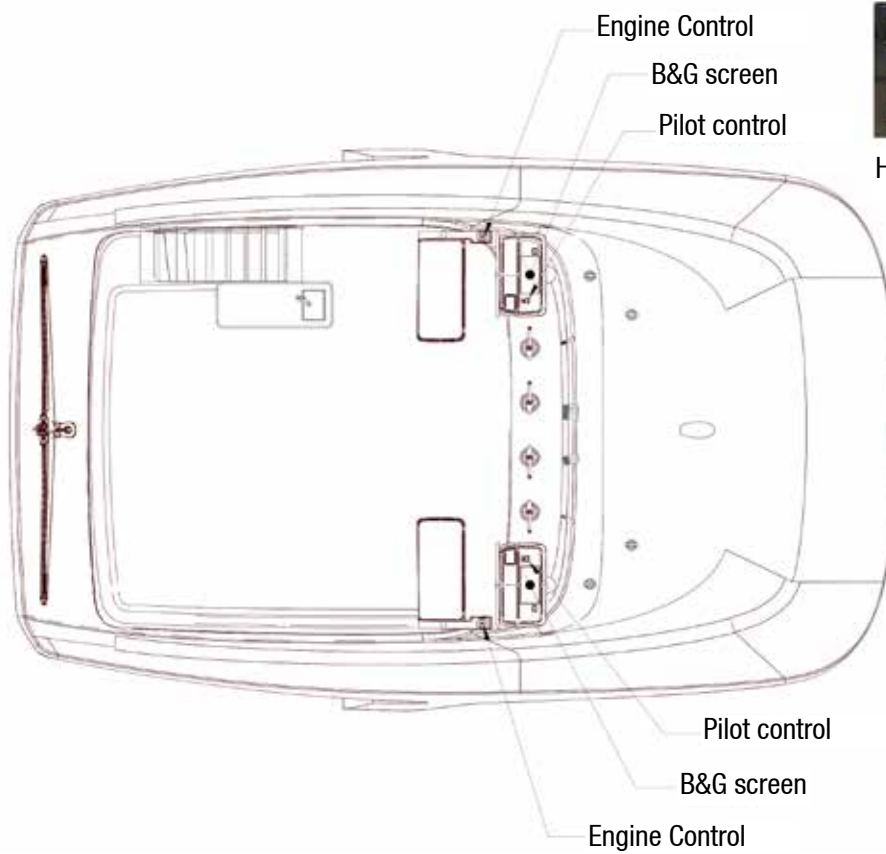
HELM STATION - PORT SIDE



HELM STATION - STARBOARD SIDE



HELM STATIONS



Helm station - starboard side

4.2.2 ■ Engine starting procedure

In normal mode:

1- Switch on the engines.



2 - Press down on the E-key in front of the engine control panel.



3 - Press the IGNITION switches to activate the engine ignitions; two green indicator lights come on.
- Start the engines by pressing the START / STOP switches.



In backup mode:

If the engine start batteries are not available, a coupling system of the port and starboard starting batteries can be used to start the engines and generators.



Helm station control panels are powered by the engine ECU. This ECU is powered up when the engine cut-outs are triggered.



WARNING

In the event of a failure, there is a 3-way backup panel in the engine room: START / SPEED POTENTIOMETER / FORWARD/REVERSE BUTTON.



WARNING

If the backup panel is ON, all helm station controls are blocked.
- SWITCH OFF THE BACKUP PANEL IN THE ENGINE ROOM,
- CUT THE SUPPLY TO THE ENGINES FOR 10+ SECONDS, THEN SWITCH BACK ON.

4.3 ■ STEERING SYSTEM

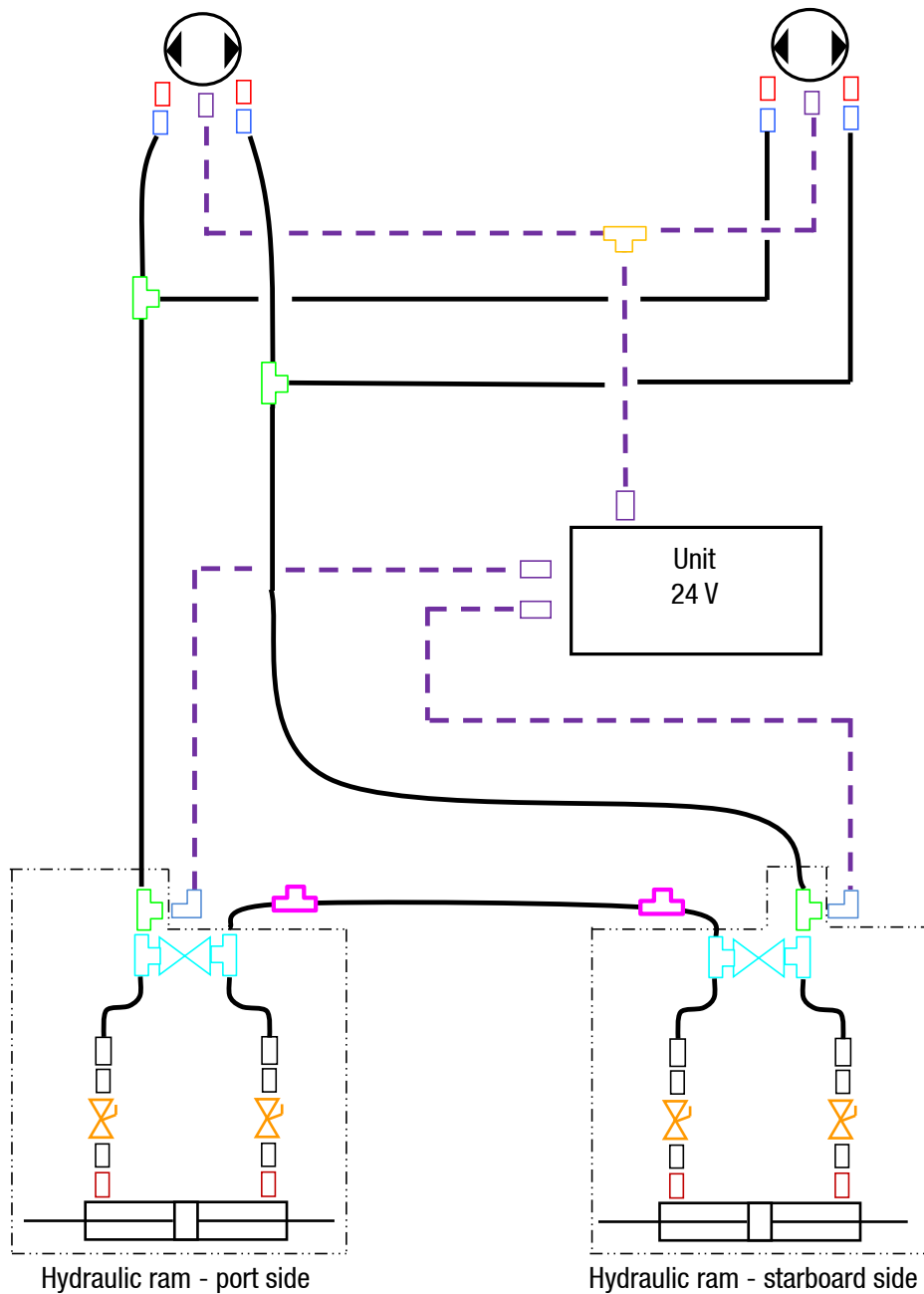
4.3.1 ■ General description

The steering system comprises two hydraulic units.

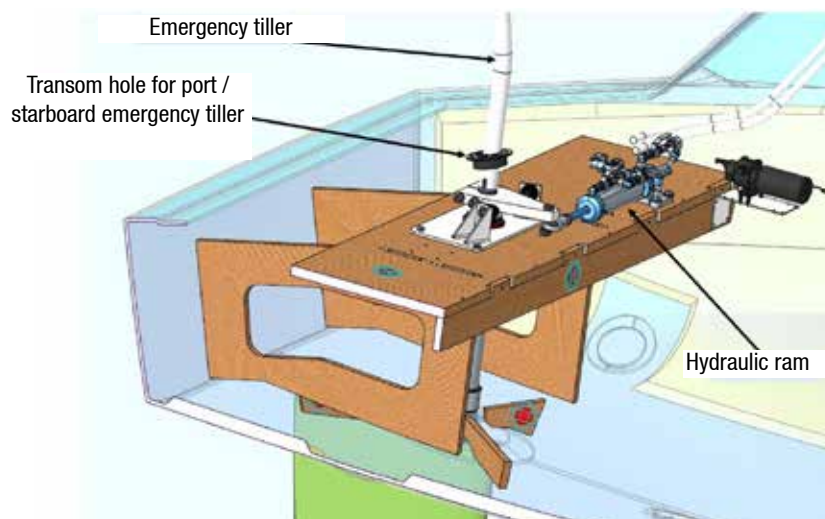
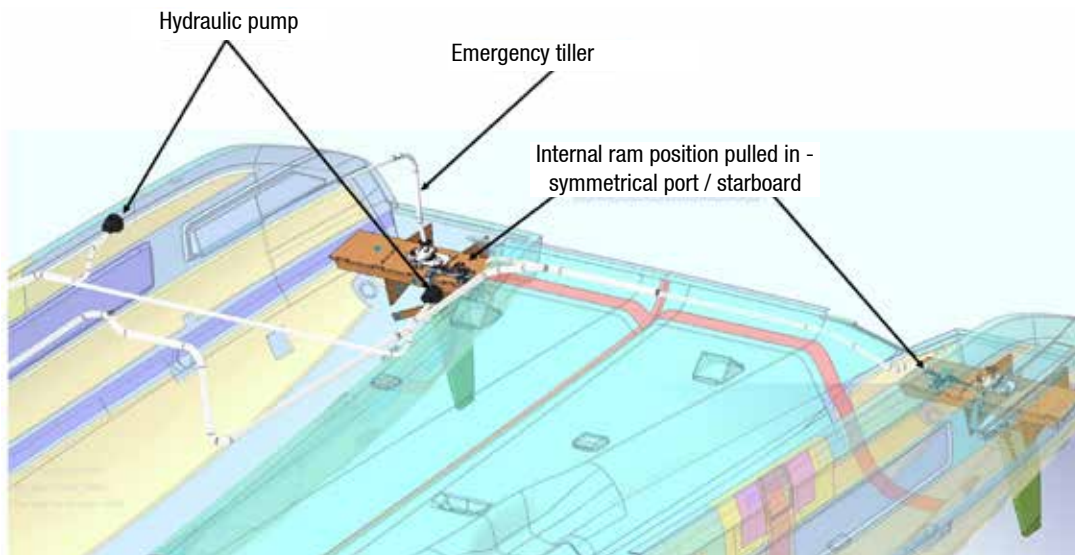


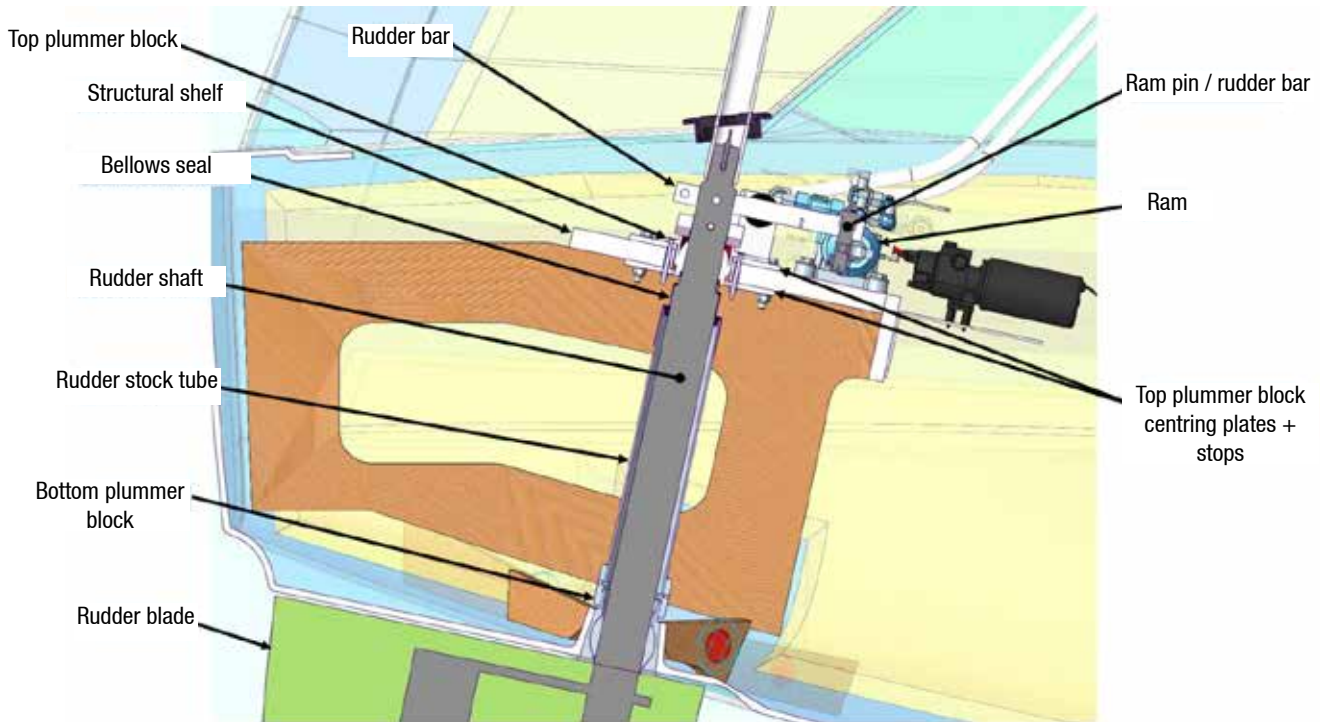
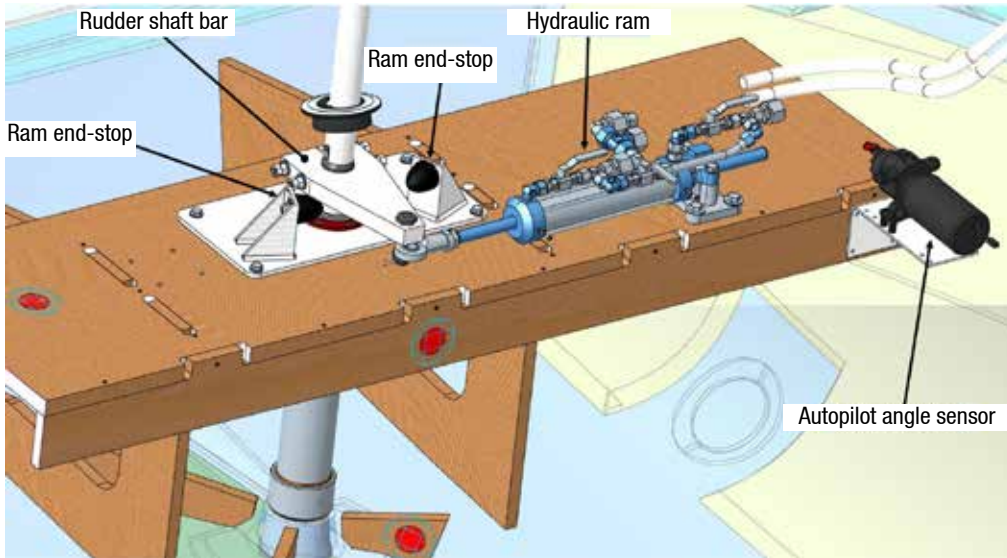
ADVICE - RECOMMENDATION

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



4.3.2 ■ Component identification





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).



ADVICE - RECOMMENDATION

Check fastening systems on a regular basis, especially those of the rudder shaft bar and those of the ram bar.

- 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.
- Check the flexible coupling between the pump and the engine; change it after every 5,000 hours.

4.3.4 ■ Back-up system

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

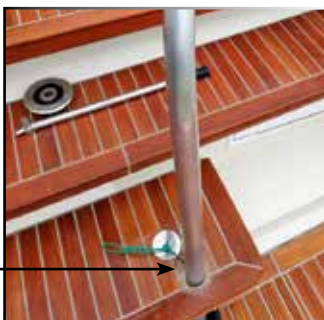
The emergency tiller is stored in the starboard engine compartment, above the gangway and on the ventilation boxes. The tiller must remain easily accessible at all times.

To deploy the emergency 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 into the box.
 - Insert the attachment screw through the shaft and tighten the nut (access via the engine compartment).
 - Place the ram valve in the engine compartment on the relevant side in the by-pass position.
- This isolates the rudder from the helm system.



- 1 - Valve of the steering ram.
- 2 - Emergency tiller.
- 3 - Valve of the ram in by-pass position.
- 4 - Emergency tiller cover.



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.

PORT COMPANIONWAY (all versions)



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

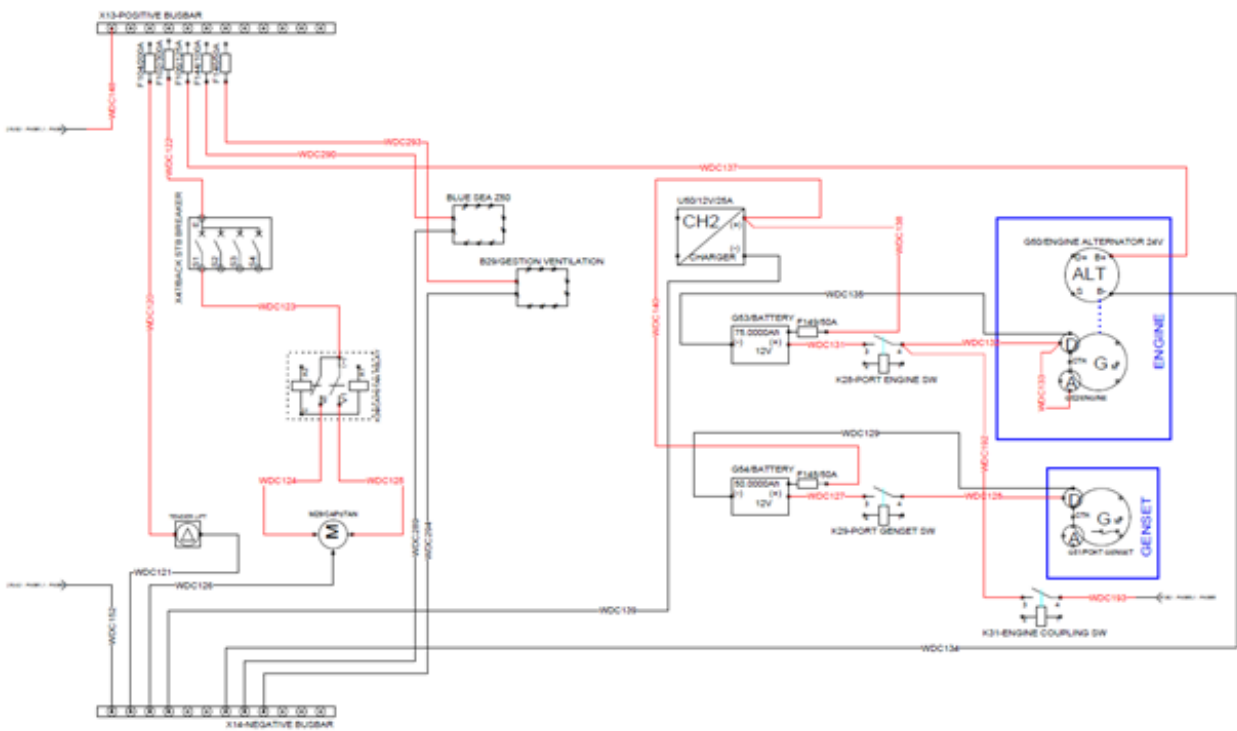
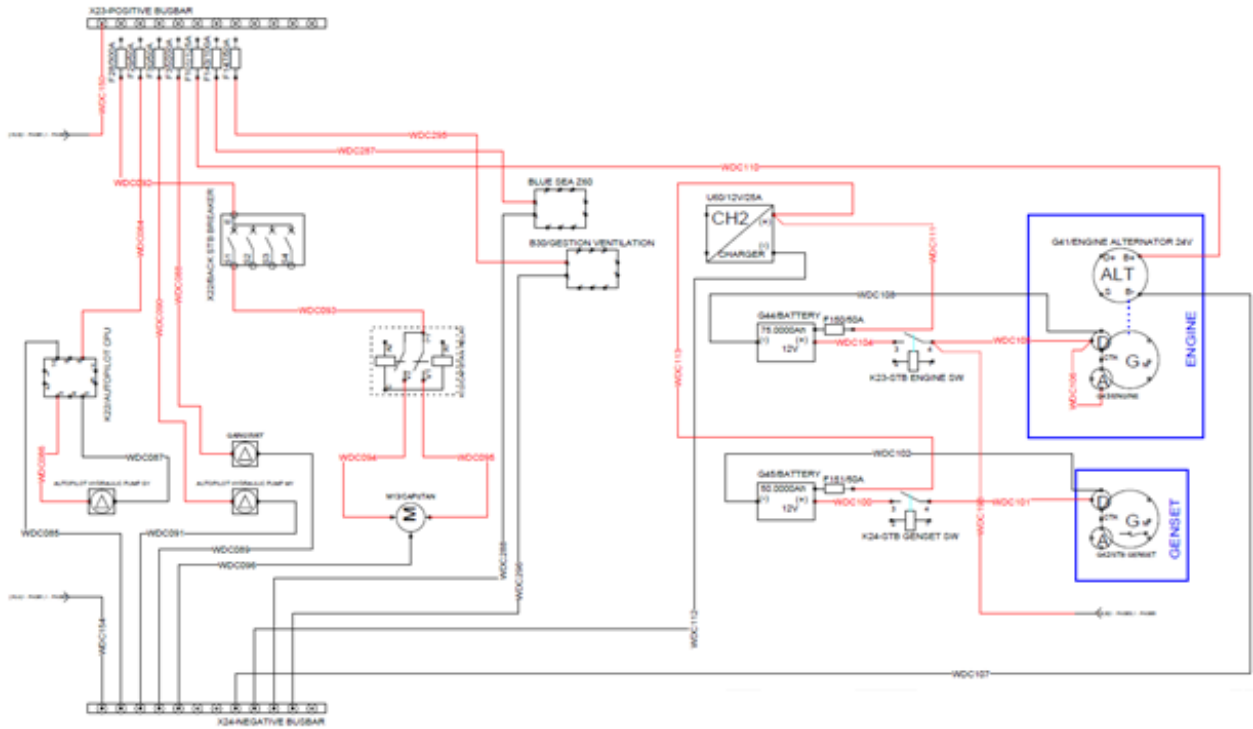
Do not block the battery ventilation vents: some of them release hydrogen, which could be an explosion risk.
 Do not leave the boat unsupervised when the electrical system is under power, excepting the automatic bilge pump and the fire and burglar protection systems.
 Never install or replace electrical 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.



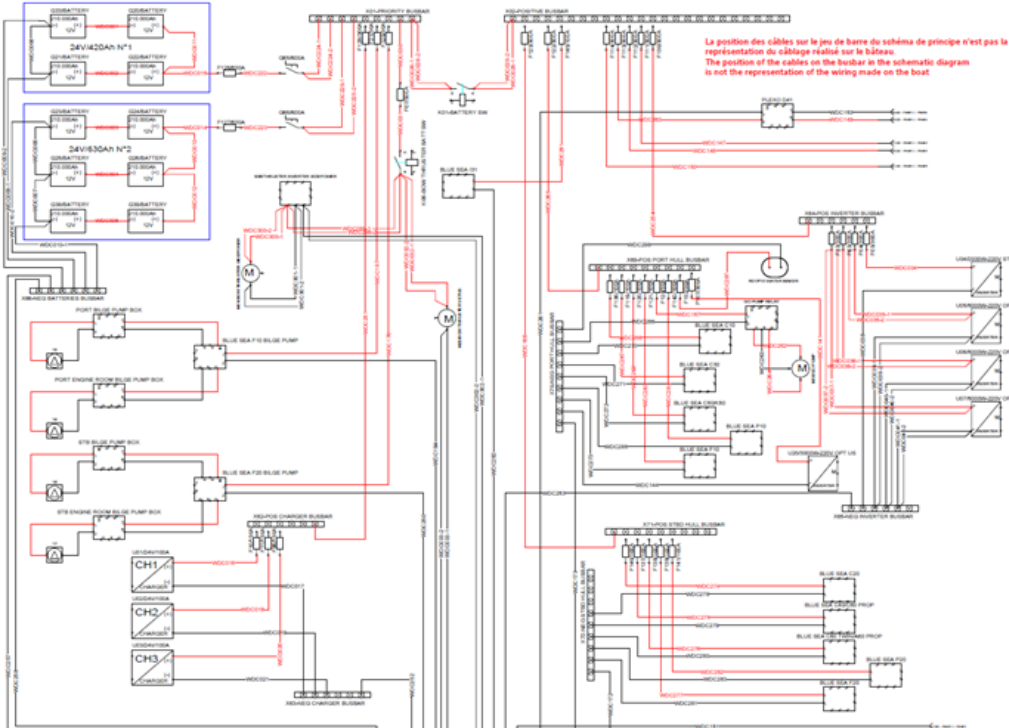
ATTENTION

The batteries must be carefully secured.

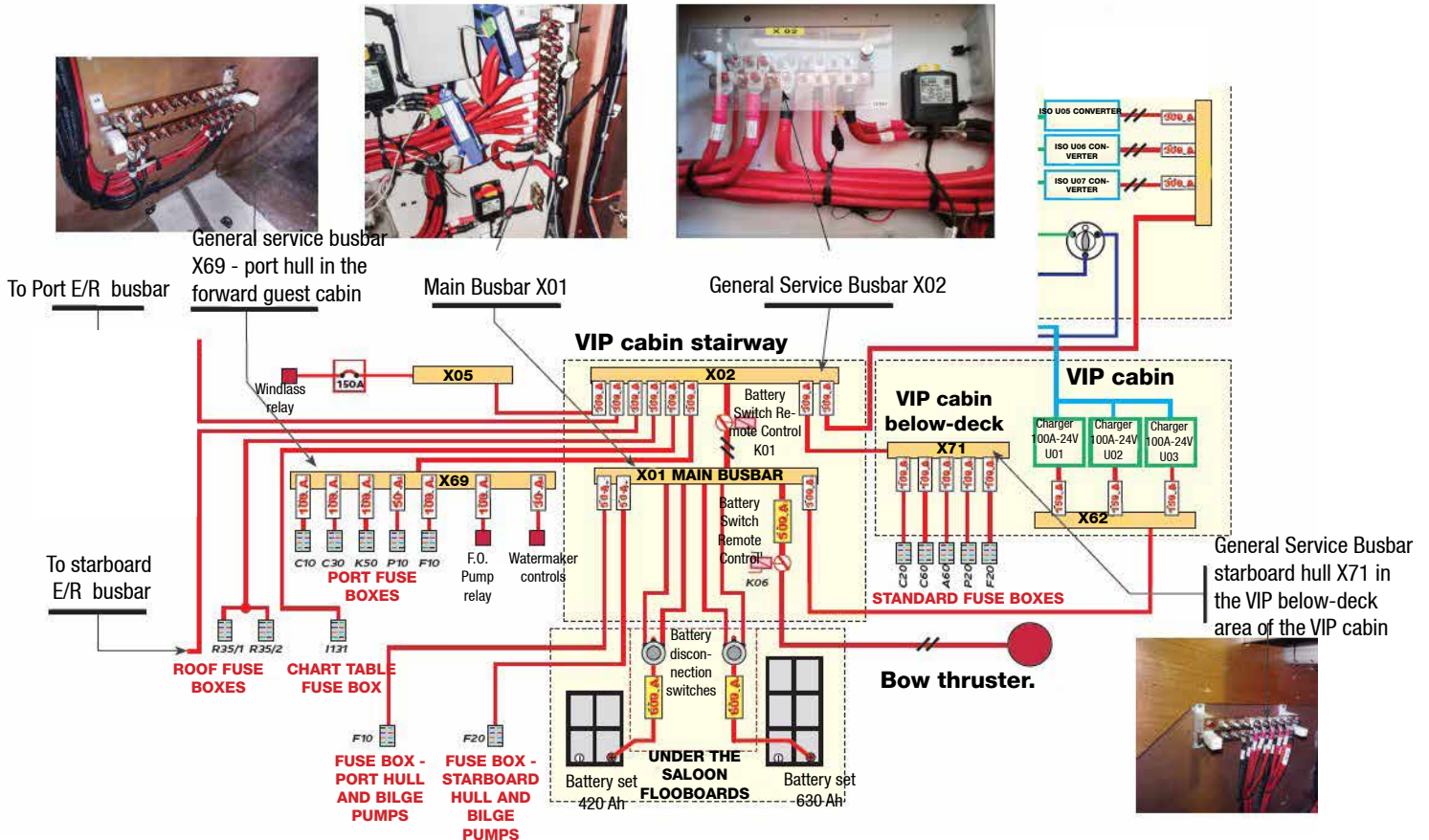
12 V CIRCUIT (port and starboard engine rooms)



24V CIRCUIT (main panel starboard saloon companionway)



24 V GENERAL DISTRIBUTION CIRCUIT



4.4.2 ■ Procedure for switching on the on-board circuit

BOARDING THE BOAT

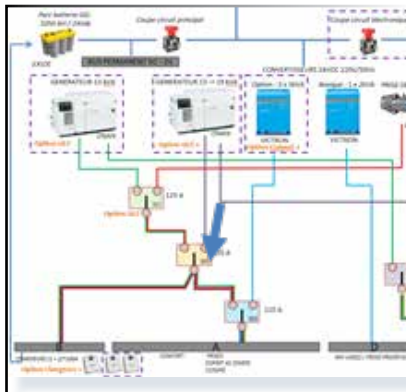
- Activate the service battery cut-out located in the starboard forward companionway.



- Start the generator.



- Switch the source selectors to the generator line (e.g. N°1).



- Activate the connecting circuit cut-out between power busbars X01 and X02 in order to power the whole boat.

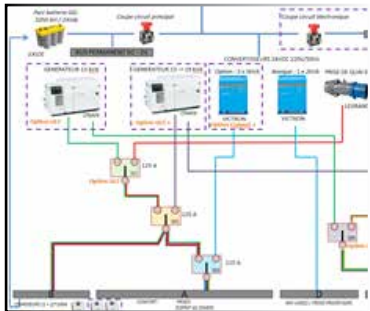


REMOTE CONTROL PANEL FOR THE GENERATORS



LEAVING THE BOAT

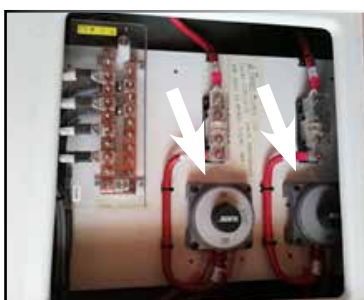
- Connect the shore socket,
- Switch the generators off and switch the source selectors to the shore line.



- Activate the charger circuit breakers in the AC panel located in the starboard companionway.



- NEVER CUT the shut-off circuit breakers located under the floor between the batteries and the distribution busbars in the starboard forward companionway.



- Cut the connecting circuit cut-out between power busbars X01 and X02 to isolate the whole boat except for the battery charge and direct automatic drainage (floats and bilge pumps).



4.4.3 ■ Electrical system 110 V - 220 V



DANGER

RISK OF ELECTRIC SHOCK

Avoid risks of electric shocks (electrocution).
Disconnect the AC shore supply and the DC supply from the battery to the converter before opening the panel.



DANGER

RISK OF ELECTRIC SHOCK

The boat is fitted with a converter that converts direct current (d.c.) to alternating current (a.c.)
Avoid risks of injury or death due to electric shocks.
Disconnect the a.c. shore supply and the converter's d.c. supply before opening the electric panel or working on the circuits.



General warning sign
ISO 7010-W001



Danger; electricity
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 on-board shore power switch before connecting or disconnecting the shore power cable.
- 2 Connect the shore power cable to the on-board 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 on-board power socket cover carefully.

DO NOT MODIFY THE CONNECTIONS OF THE SHORE LINE 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



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.



DANGER

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

Deactivate the boat supply when the system is not in use. This is to prevent fire risks.

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.



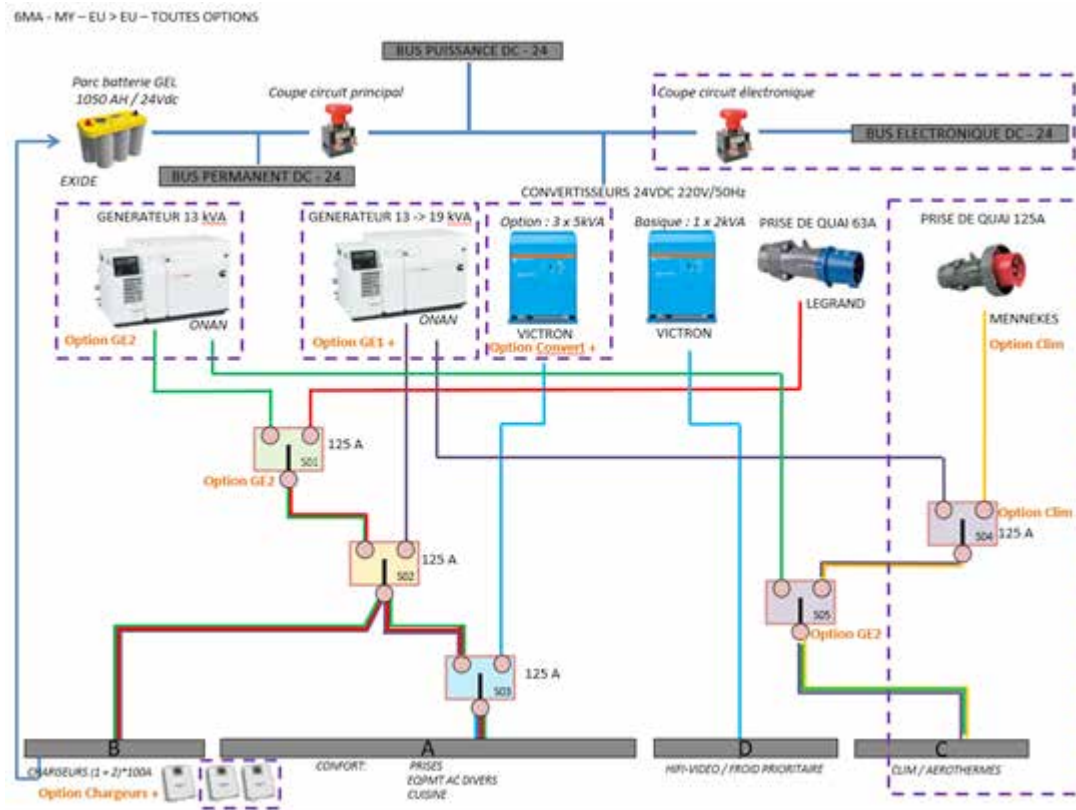
ADVICE - RECOMMENDATION

Only use electrical devices with double insulation or earth.

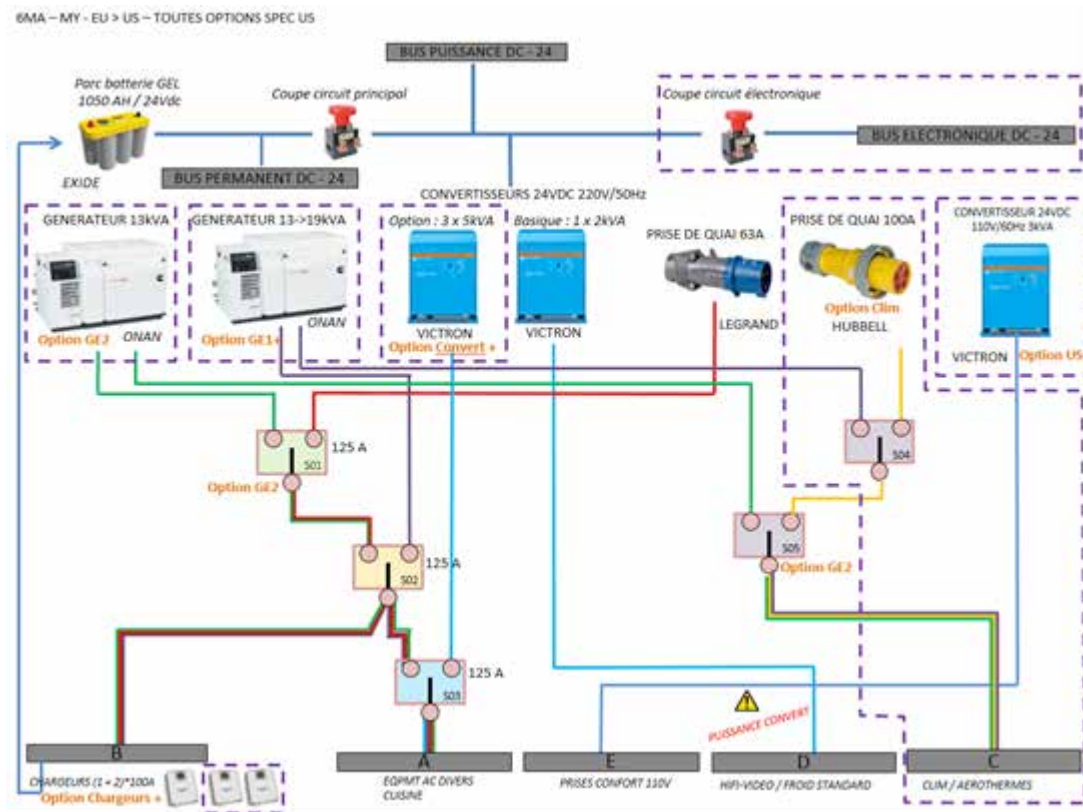
Connect the electrical appliances' metallic covers or boxes to the boat's protective conductor (green conductor with yellow stripes).

Close the shore socket cover carefully.

EUROPE SCHEMA ALL OPTIONS



US SCHEMA ALL OPTIONS



LIST OF PROTECTION RATINGS

NAME	DESCRIPTION	DESIGNATION
Q-01	PC COMFORT f10	20 A
Q-02	BATTERY CHARGER Z50-Z60	20 A
Q-03	HIFI VIDEO F10	16 A
Q-04	HIFI VIDEO F20	16 A
Q-05	GALLEY FRIDGE K50/K30	16 A
Q-06	WASHER DRYER	20 A
Q-07	PC COMFORT F20	20 A
Q-08	DISHWASHER	20 A
Q-09	INDUCTION PLATE	32 A
Q-10	PC COMFORT H35	20 A
Q-11	PC 10mA F10	20 A
Q-12	PC 10mA F20	20 A
Q-13	ICE MAKER	16 A
Q-14	GRILL-PLANCHA	16 A
Q-15	OVEN	20 A
Q-16	HOOD / COFFEE MAKER / MICROWAVE	20 A
Q-22	WATER HEATER F10	16 A
Q-23	WATER HEATER F20	16 A
Q-25	WATERMAKER Z60	25 A
Q-27	ELECTRIC HOUSEHOLD EQUIPMENT H35	16 A
Q-37	AEROTHERME F10	10 A
Q-38	AEROTHERME F20	10 A
Q-39	AEROTHERME H35	10 A
Q-46	SERVICE BATTERIES CHARGER #1	20 A
Q-47	SERVICE BATTERIES CHARGER #2	20 A
Q-48	SERVICE BATTERIES CHARGER #3	20 A
Q-54	WASTEWATER P10	16 A

NAME	DESCRIPTION	DESIGNATION
FUSE 01	INDICATOR LIGHT 5x20 FUSE	100 mA
FUSE 02	INDICATOR LIGHT 5x20 FUSE	100 mA
FUSE 06	INDICATOR LIGHT 5x20 FUSE	100 mA
FUSE 08	INDICATOR LIGHT 5x20 FUSE	100 mA

AC PROTECTION CIRCUIT (per module)



4.4.4 ■ Emergency starting

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

To select the battery coupling:

- Activate (position ON) the general cut-out, the port and starboard engine cut-outs, and then the coupling cut-out, located in the port engine compartment.

This coupling can be activated remotely via the panel in the port companionway.

- Start the port and starboard engines.

- Once the engines are running, close (position OFF) the coupling cut-out.

Note: in a normal configuration, the 12 V engine starting batteries would then be charged by the engines' 12 V alternators.

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

CF8 type fuses are placed directly between the busbar and the crimped lug on the cable.

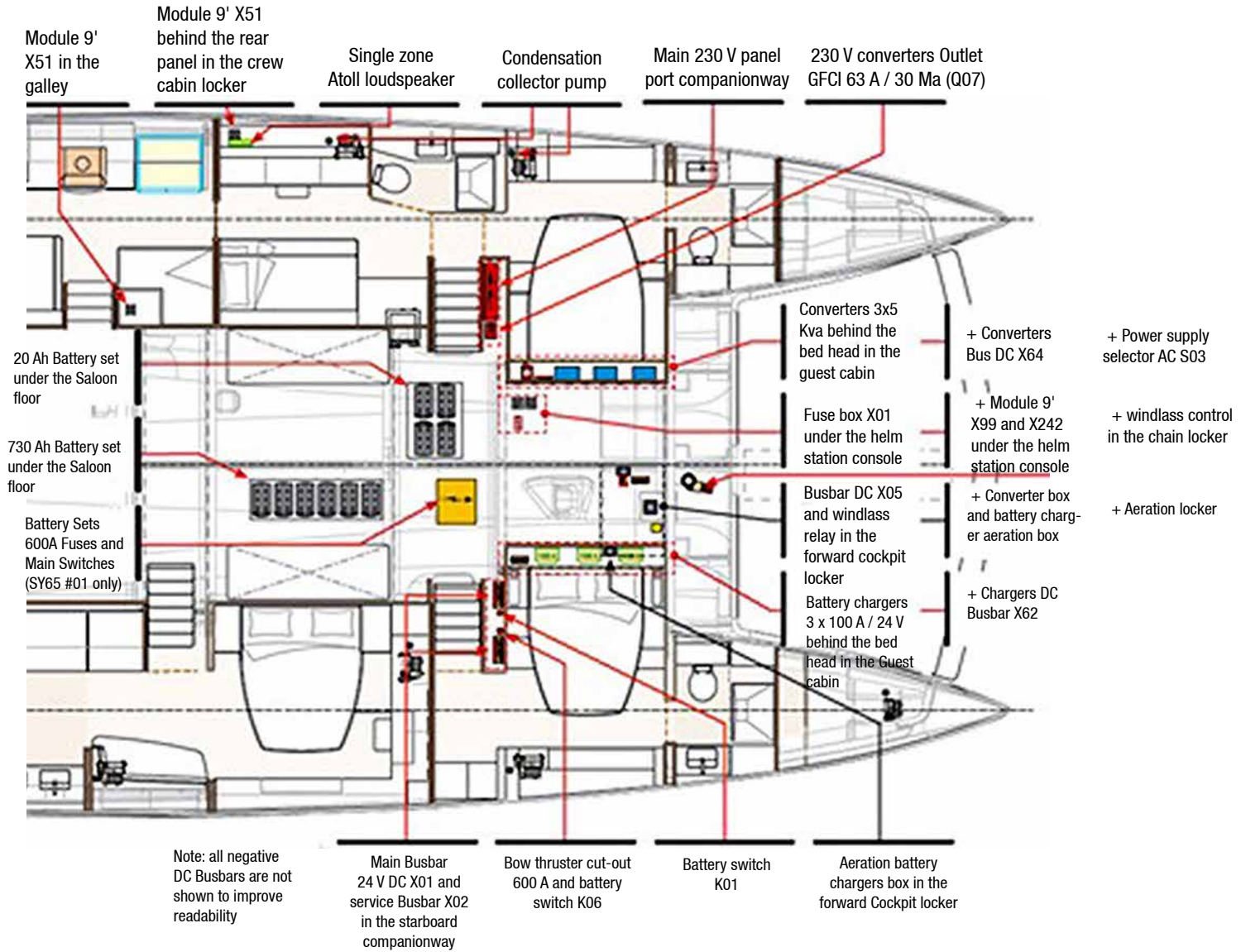


ATTENTION

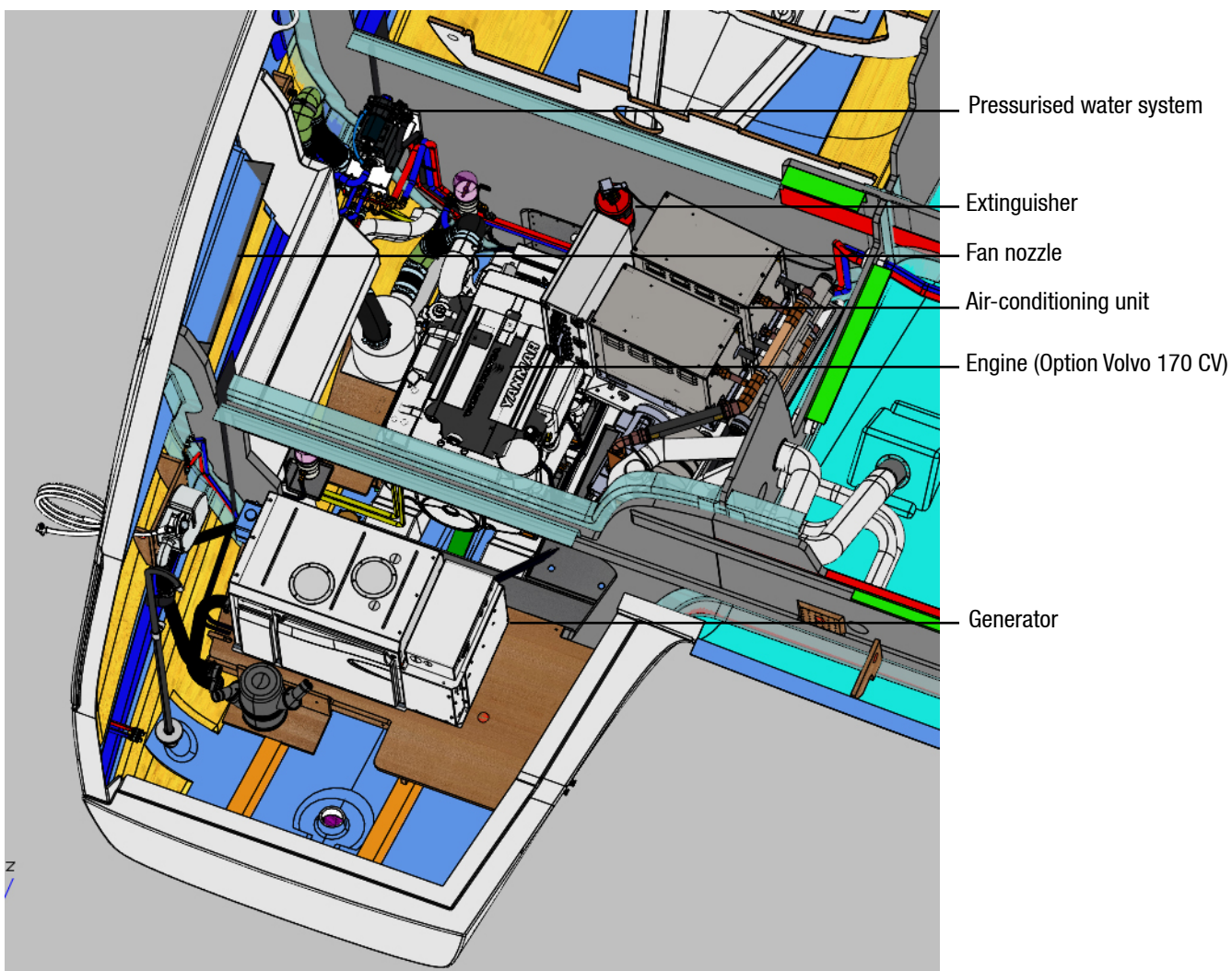
Before replacing a fuse, switch off the battery cut-outs.

Some equipment shown on the panel below may be optional.

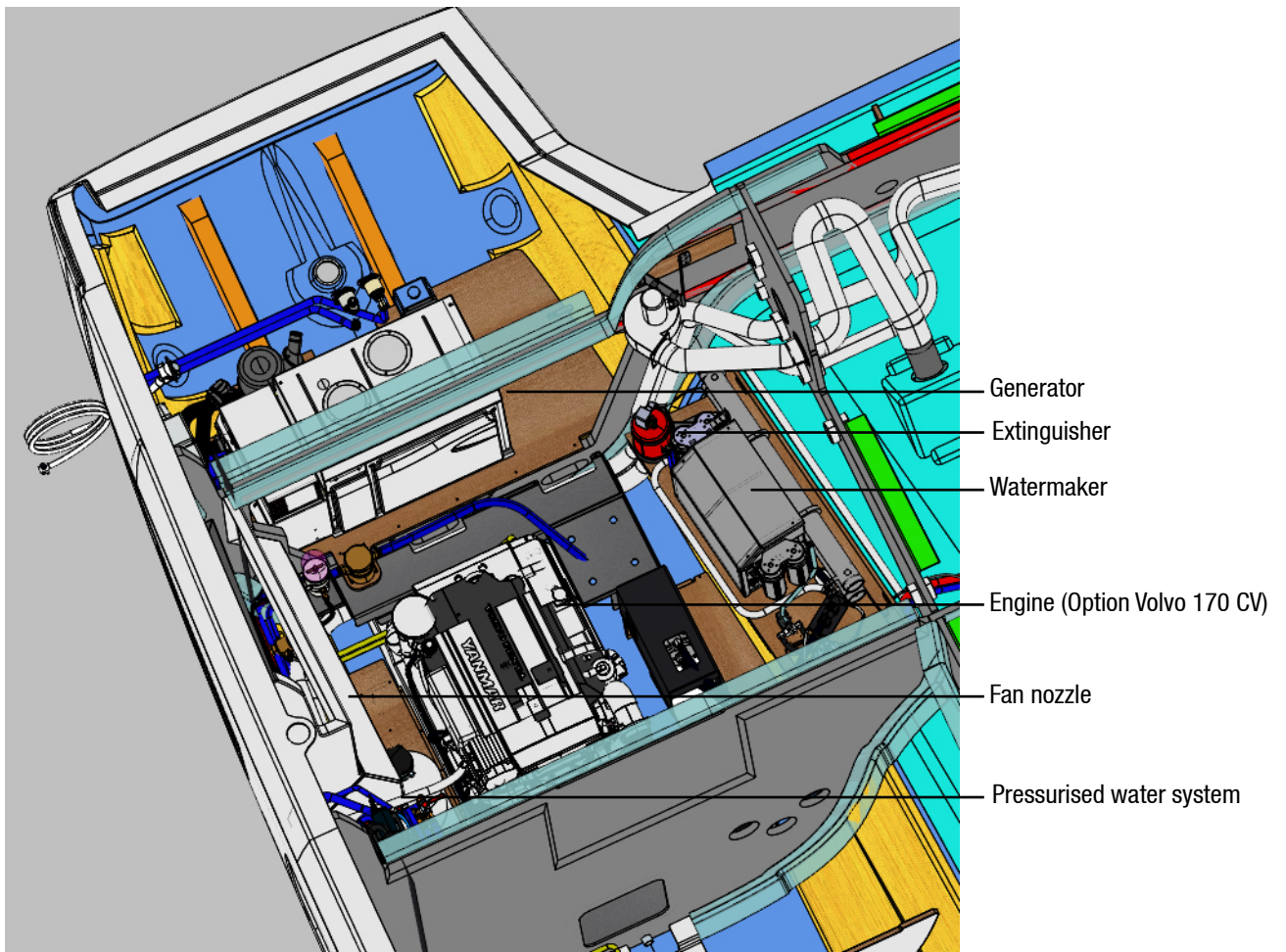
EQUIPMENT



PORT ENGINE BILGE



STARBOARD ENGINE BILGE



4.6 ■ BLACK WATER TANKS

4.6.1 ■ Specifications

The Lagoon SIXTY 5 is fitted with one 120-litre and one 135-litre black water tank in each float, i.e. a total capacity of 510 litres.

- 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).

4.6.2 ■ Operating the black water retention system

Black water tanks are emptied:

- either by pumping: deck cover
- or by draining into the sea: pump + valve

The WC are gravity-connected to the black water tanks. These tanks are emptied by an electric drain pump. A manual backup pump is located under the floor close to the tank.

A gauge connected directly to the WC shows the tank's fill status (green / usable, red / full). A second gauge gives a reading on the control screens.



— ADVICE - RECOMMENDATION

After each use, rinse the whole system: fill the tank with fresh or sea water then empty it.

Use domestic cleaning products.

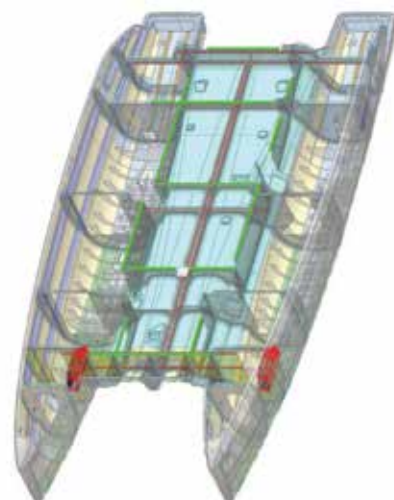
The whole system has to be drained when the boat is halted and the temperature is negative.



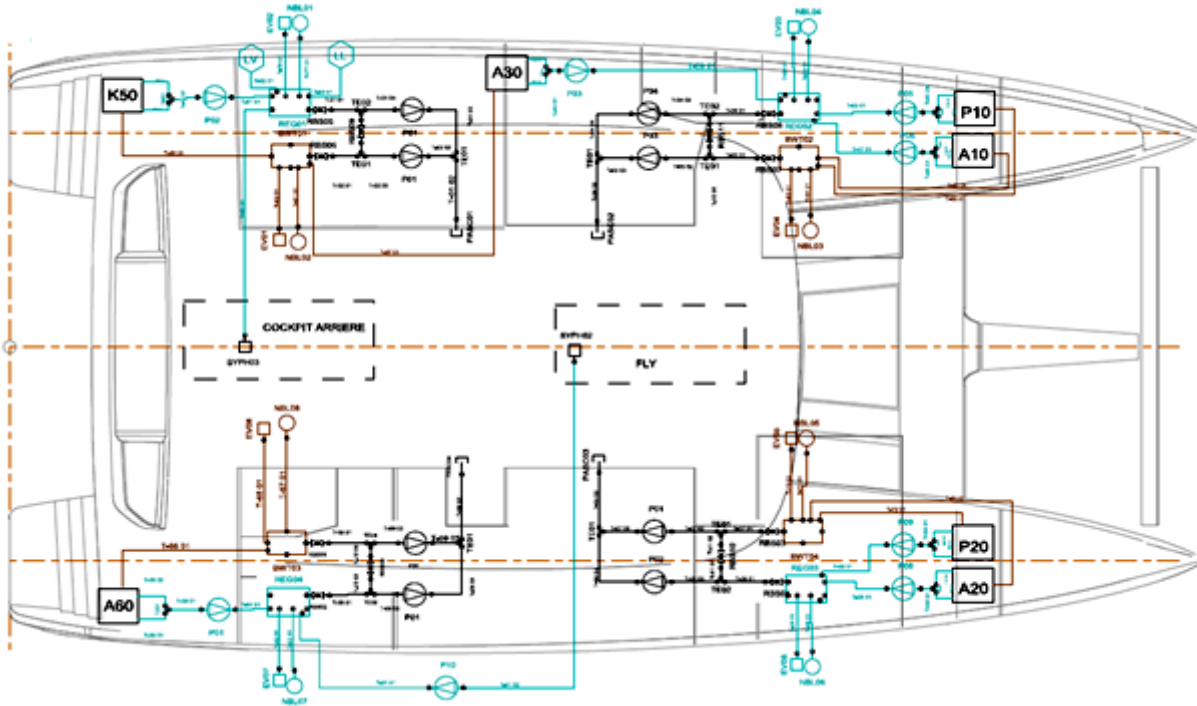
ATTENTION

For respect of the environment:

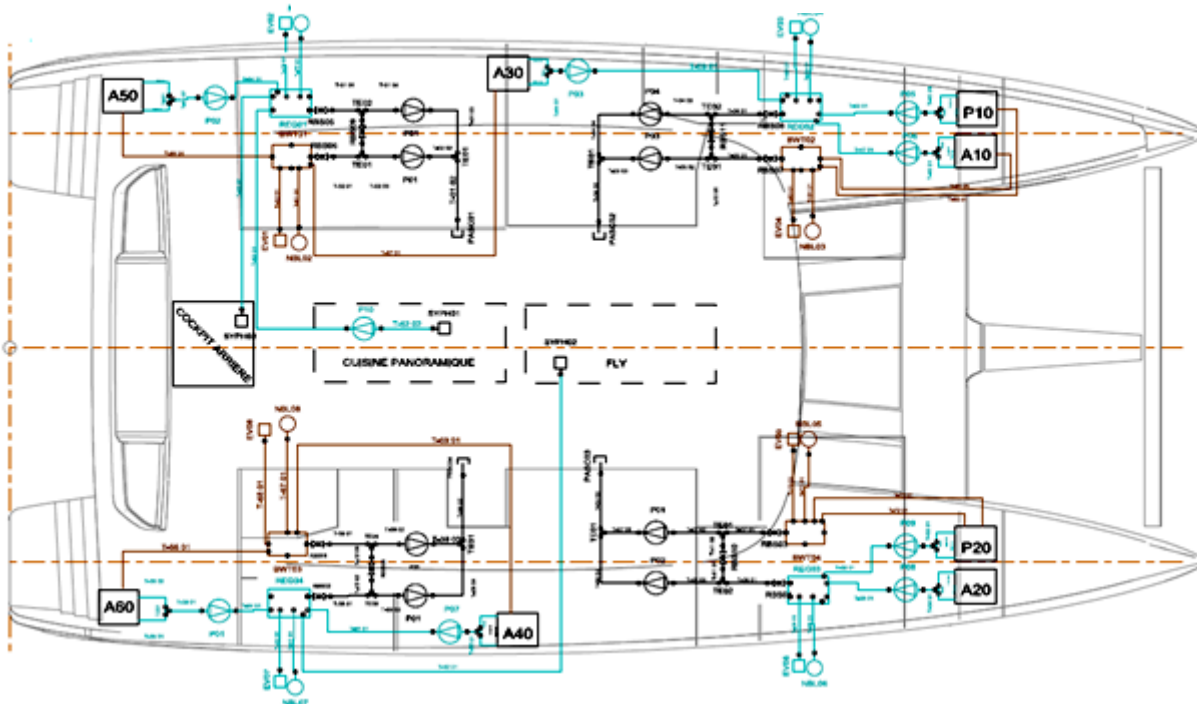
Do not unload the retention tanks close to the coasts, use the pumping systems provided by harbours or marinas to empty the tanks before leaving. Please check that the outlet valve is closed in order to avoid any accidental discharge.



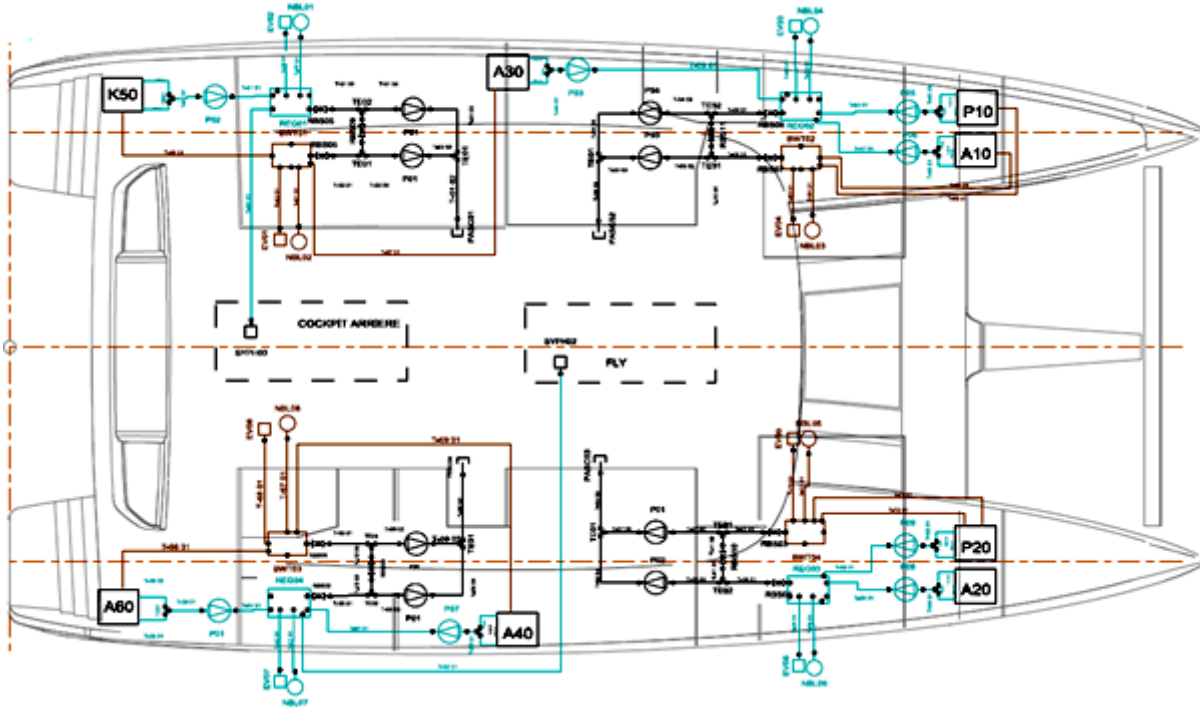
VERSION 4 CABINS - SIDE GALLEY



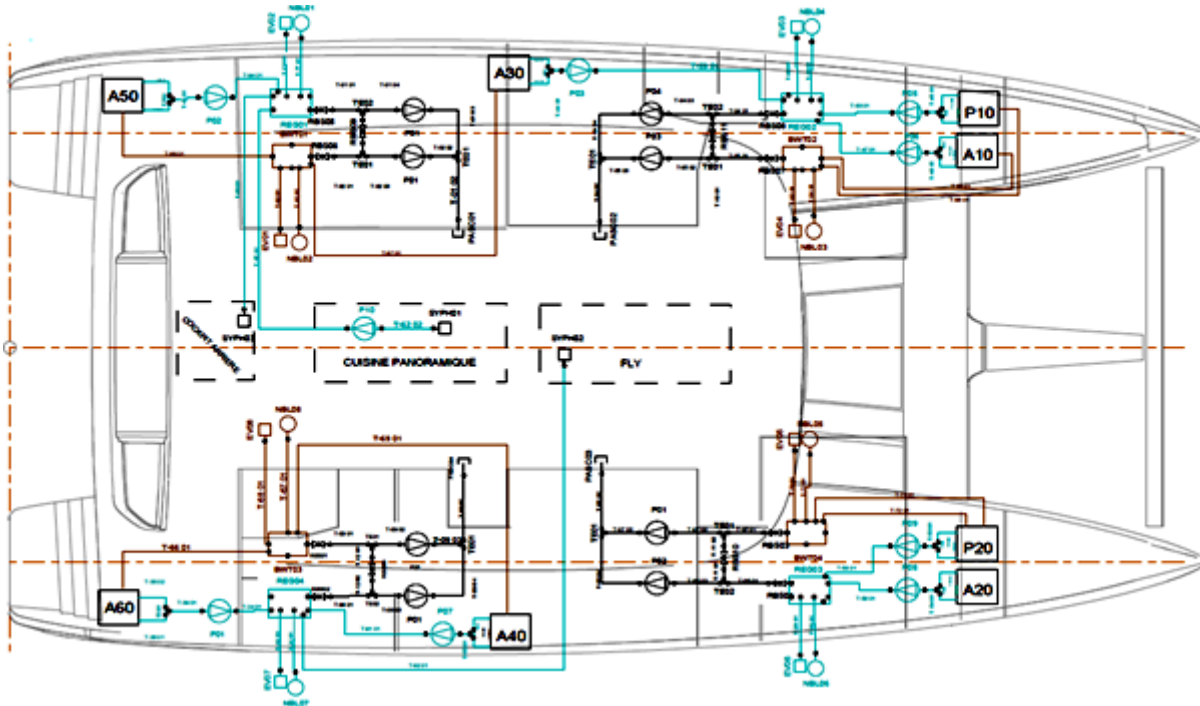
VERSION 5 CABINS - SIDE GALLEY



VERSION 5 CABINS - SIDE GALLEY



VERSION 6 CABINS - SIDE GALLEY



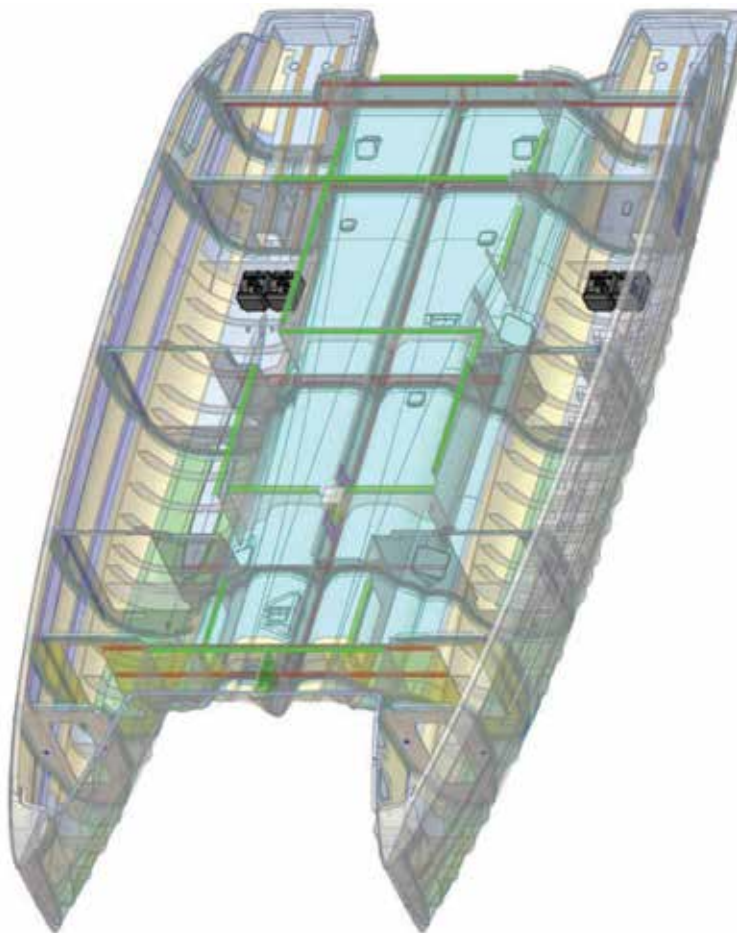
4.7 ■ GREY WATER TANKS

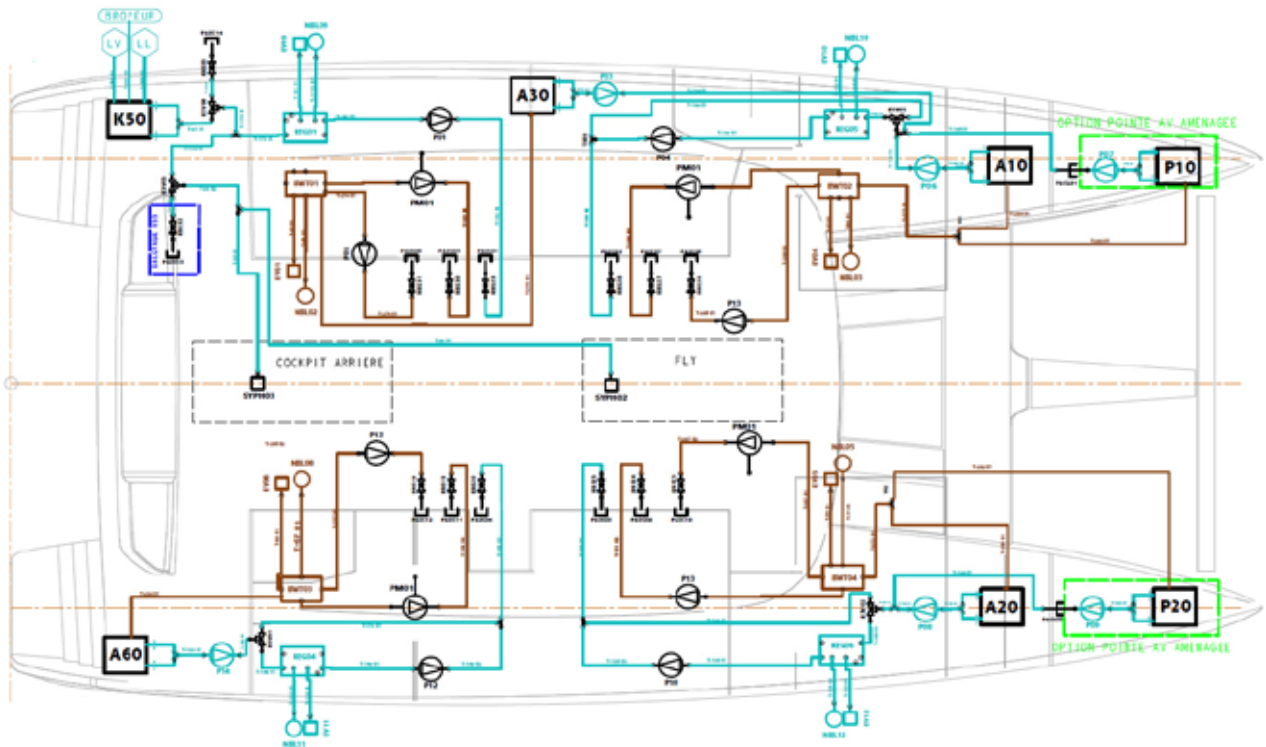
4.7.1 ■ Specifications

The Lagoon SIXTY 5 is fitted with two 120-litre grey water tanks in each float, i.e. a total capacity of 480 litres.

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

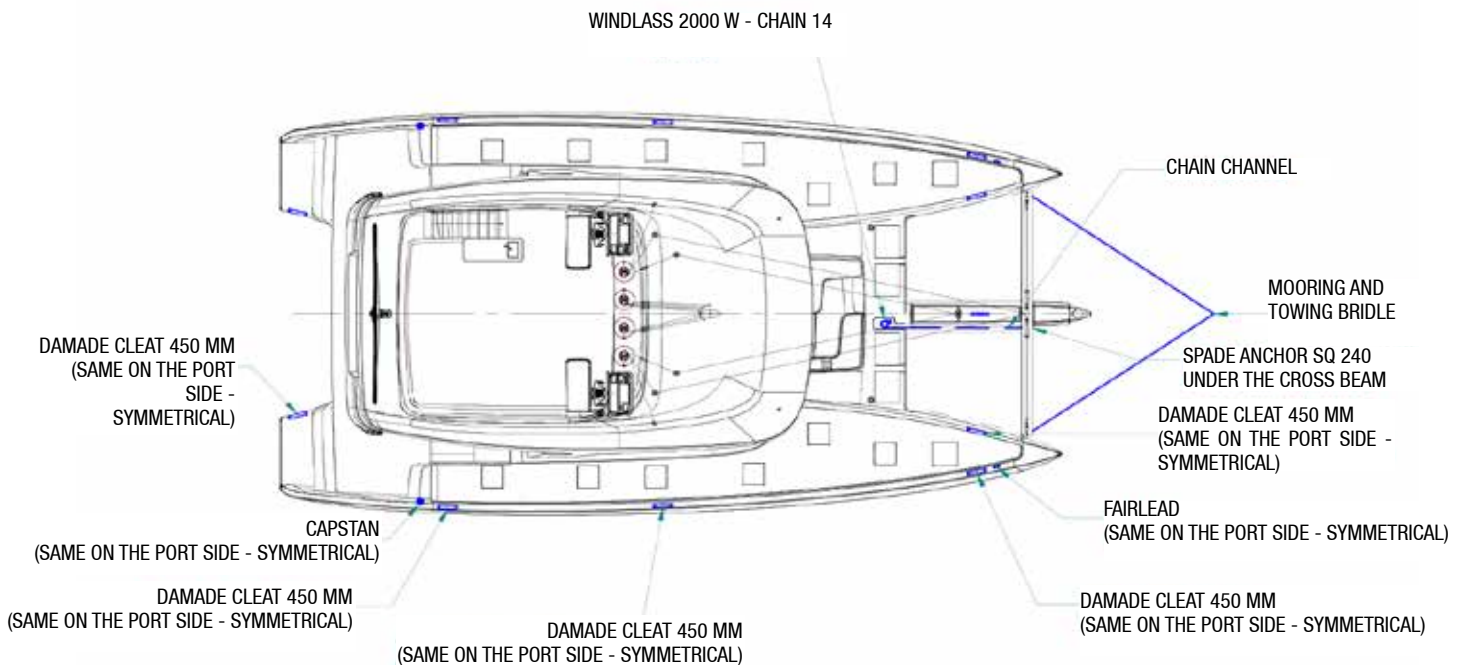
- Do not empty tanks near the coasts.
- Keep yourself informed of the local regulations on the respect of the environment, and always follow rules of best practice.
- Follow the international rules against marine pollution (Marpol).





5. ANCHORING, MOORING AND TOWING

- Keep the hatch or the well door sea tight.
- Always tow at low speeds.
- Secure the tow line in such a way that it can be released under tension.
- 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.

ANCHORING, MOORING AND TOWING



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
Anchoring point breaking strength	120 kN	120 kN	120 kN
Line/chain breaking strength	83.39 kN	98.1 kN	83.39 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

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

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

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



WARNING

Anchor points with visible signs of damage must be replaced.

6. HOISTING AND TRANSPORT

6.1 ■ DIAGRAM, DIMENSIONS AND POSITIONS OF THE HOISTING BELTS



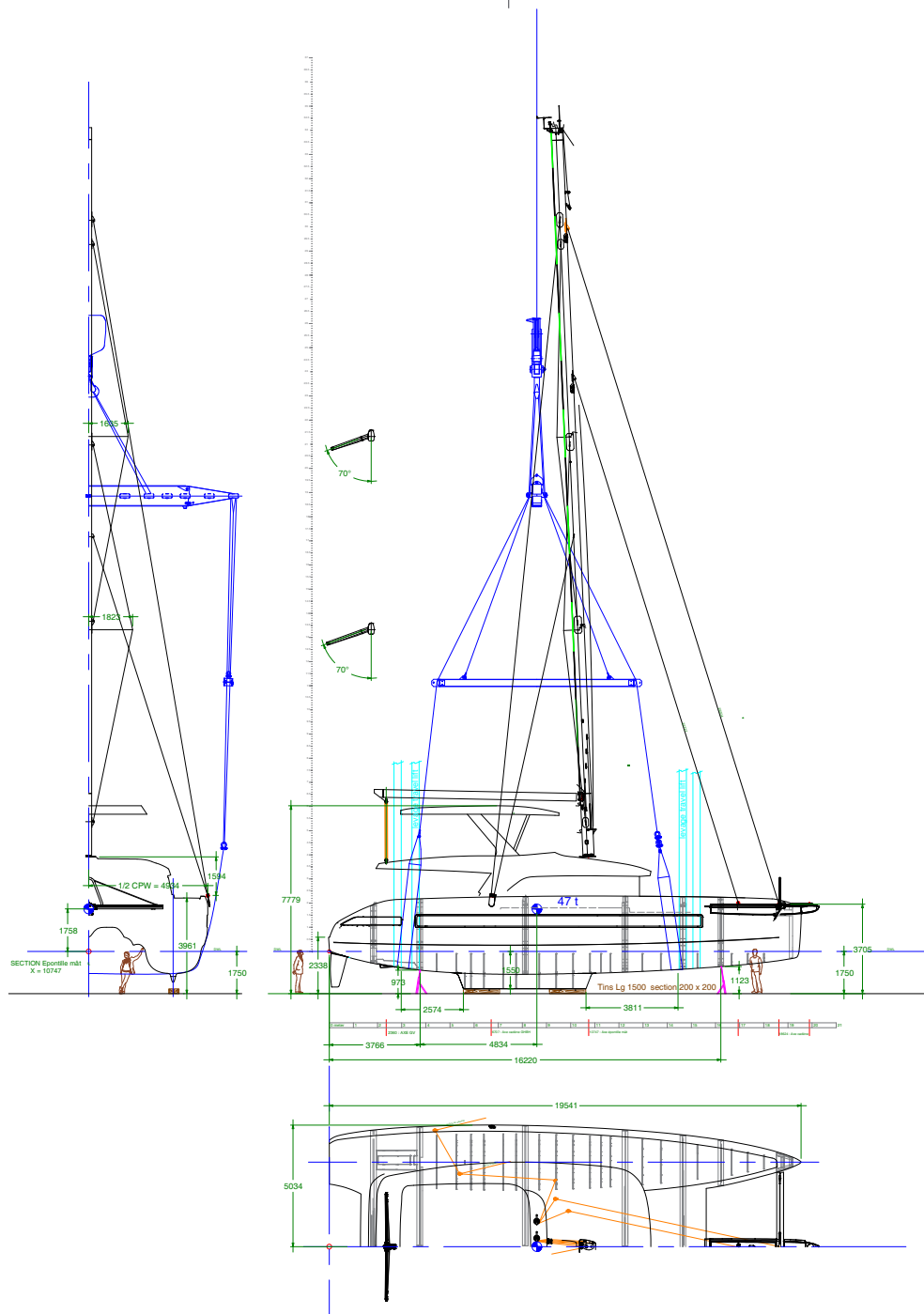
ATTENTION

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



ADVICE - RECOMMENDATION

Get a diver to intervene for the strainers and sea cocks.



The necessary hoisting belts are described below:

Two rudder bars with two 300 millimetre straps and 50 tonnes each (total capacity - 100 tonnes).

7. Additional Information



WARNING

Open-flame appliances using fuel use the oxygen of the cabin and release combustion products in the boat.

It is necessary to ventilate 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.

BUILD CATEGORIES

Category A: the design of category A leisure boats is considered to be capable of withstanding force 8 winds or more (on the Beaufort scale) and waves that may exceed a significant height of 4 metres, excluding extraordinary conditions such as storms, severe storms, tornadoes and extreme sea conditions or giant waves.

Category B: the design of category B leisure boats is considered to be capable of withstanding winds of up to force 8 and waves of up to a significant height of 4 metres.

Category C: the design of category C leisure boats is considered to be capable of withstanding winds of up to force 6 and waves of up to a significant height of 2 metres.

Category D: the design of category D leisure boats is considered to be capable of withstanding winds of up to force 4 and waves of up to a significant height of 0.3 metres, with occasional waves of up to a maximum significant height of 0.5 metres.

REFERENCES AND APPLICABLE STANDARDS

The applicable standards are conform to the list given in the reference appendix supplied by the shipyard certification body.



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