



CONSTRUCTION NAVALE BORDEAUX

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OWNER'S MANUAL LAGOON 500

FR-CNB _____

CONTENTS:

1. INTRODUCTION	2
2. SPECIFICATIONS	4
2.1. IDENTIFICATION SHEET OF YOUR BOAT	4
2.2. DIMENSIONS	4
2.3. LOAD	5
2.4. RIGGING & SAILS	7
3. SAFETY	10
3.1. FIRE	10
3.2. VISIBILITY.	13
3.3. STABILITY, DANGER OF INFILTRATION	13
3.4. PREVENTION OF MAN OVERBOARD	14
3.5. LIFERAFT (NOT PROVIDED)	14
4. EQUIPMENT	15
4.1. MOTORIZATION	15
4.2. STEERING GEAR	16
4.3. ELECTRICAL SYSTEM	17
4.4. GAS AND FRESH WATER SYSTEM	22
4.5. WASTE WATER	25
4.6. PUMPS, VALVES AND TRU-HULL FITTINGS	26
5. ANCHORING, MOORING AND TOWING	31
6. HOISTING AND TRANSPORT	32

1. INTRODUCTION

Dear Sir / Madam,

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

A LAGOON is made to last. Right from the design stage through to its construction and launching each boat is the object of careful attention down to the smallest detail in order to ensure you the many years of joy which you expect.

This manual is intended to help you to enjoy your boat in safety. It includes the boat specifications, the equipment provided or installed, the systems on board and tips on their use. Some of the equipment mentioned is only available on option. Read it carefully and familiarise yourself thoroughly with your boat before using her.

Even when your boat is suited, the sea and wind conditions which correspond to the build categories A, B, C and D can vary, ranging from severe conditions to heavy storm, where exceptional waves and gusts can render the conditions dangerous. In this situation only an experienced crew, well trained and prepared, handling a fully maintained vessel, can sail in a satisfactory manner.

Make sure that the forecast sea and wind conditions correspond to the build category of your boat and that yourself and your crew are capable of sailing the vessel in such conditions.

This instruction guide/owner's manual is not a course in safety at sea or good sailing sense. If this is your first boat or if you are changing to a new type with which you are not familiar, first obtain some training in boat handling and sailing to ensure your safety and comfort before taking the helm of your boat. Your retailer, your national sailing or motor vessel federation or your yacht club will be happy to inform you concerning local sailing schools or skilled instructors in the area.

This owner's manual is not a course in maintenance and repair. In the case of difficulty please do not hesitate to ask for help from the builder or his representative.

Always ensure an experienced professional carries out the maintenance of your boat and installs any accessories. Modifications to the vessel could change its safety specifications and should be estimated, carried out and recorded by persons qualified to do so. The builder can not be held responsible for modifications which have not been approved by them.

N.B.: All changes concerning the distribution of mass (adding a raised fishing platform, a radar, mast modification, engine change, etc...) can have an effect on the stability, trim and performance of your boat.

PLEASE KEEP THIS INSTRUCTION GUIDE/ OWNER'S MANUAL IN A SAFE PLACE AND PASS IT ON TO THE NEW OWNER IF YOU SHOULD SELL THE VESSEL.

The users of the boat are informed of the following:

- The entire crew must have appropriate training.
- In some countries, a licence or authorization is necessary, or specific regulations are in force.
- Always keep your boat correctly maintained and take into account the damage which may result from bad weather and excessive or inappropriate use of the vessel.
- Any boat, however solid she may be, may be severely damaged if not used correctly. This is not compatible with safe sailing. Always adapt the speed and direction of your boat to the sea conditions.
- If your boat is equipped with a life-raft, read the instructions carefully. The crew must be familiar with the use of all the safety equipment (harness, flares, life-raft etc.) and emergency safety procedures (MOB, towing etc.). Sailing schools regularly hold training.
- Do not sail at maximum speed in areas of dense traffic or when there is reduced visibility, strong winds or high waves. Reduce the speed and the wake of the boat by consideration for others and as a measure of safety both for them and for yourself. Respect speed and wake limitations wherever they are in force.
- Rules concerning priority as defined by the navigation regulations laid down by the “COLREG” should be respected.
- Make sure that you always have sufficient distance and time to come to a stop or manoeuvre in order to avoid a collision.

Explanation of the nomenclature used

- DANGER

- WARNING

- BEWARE

2. SPECIFICATIONS

2.1. Identification sheet of your boat:

Builder's plate: certain information is given on the shipyard's plate fixed to the vessel. A complete explanation of this information is given in the corresponding chapter of this manual.

☐ NAME OF THE BUILDERConstruction Navale Bordeaux

☐ BUILD CATEGORY.....A

☐ MAXIMUM POWER RECOMMENDED.....55.2 KW x2 KW IN-BOARD

☐ CERTIFYING ORGANISATION NUMBERCE 0607

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

MAXIMUM NUMBER OF PERSONS RECOMMENDED PER DESIGN CATEGORY:

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

WARNING: Do not exceed the maximum number of persons recommended. However many people may be on board, the combined weight of the people and equipment on board should never exceed the maximum load recommended.

2.2. Dimensions

LENGTH OF HULL	15.54m*
HULL BEAM	8.53m*
MAXIMUM LENGTH	15.54m
MAXIMUM BEAM	8.53m
KEEL DRAUGHT	1.40m
MAX HEIGHT	25m

* conforming to the ISO 8666 standards

2.3. Load

NAVIGATION CATEGORIES	A	B	C	D
Light vessel:	16598	16598	16598	16598
Safety equipment	50	50	50	50
Sail	120	120	120	120
Light displacement	16768	16768	16768	16768
Life-raft: (2)	160	160	160	160
Crew	1050	1050	1200	2250
Water	960	960	960	960
Fuel	960	960	960	960
Supplies and personal belongings: ICNN instruction : 30kg minimum Cat A, 20kg Cat B, 10kg Cat C, 5kg Cat D	420	280	160	200
Optional equipment				
Anchoring (anchors + chain + anchor chain)	460	460	460	460
Spinnaker rigging+ spinnaker	60	60	60	60
Reef rigging + Reef	60	60	60	60
Electric genoa sheet winch x2	56	56	56	56
Electric genoa sheet winch x2	34	34	34	34
Lazy bag + Lazy jack	8	8	8	8
Canvas surround with windows	12	12	12	12
Supplementary swimming ladder	7	7	7	7
Mounting for outboard engine	2	2	2	2
Davits	53	53	53	53
Electric winch for davit	15	15	15	15
Aft cockpit in teak	16	16	16	16
Sunbathing cushion	7	7	7	7
Forward and aft cockpit cushion	20	20	20	20
2 nd cockpit deck shower	2	2	2	2
Inlet valve for shore freshwater	2	2	2	2
Seawater foot pump	2	2	2	2
Freshwater foot pump	2	2	2	2
Grill microwave	17	17	17	17
Dishwasher	28	28	28	28
Replacement with coolbox or supplementary fridge	15	15	15	15
Watermaker	35	35	35	35
Ice maker	18	18	18	18

Washing machine	36	36	36	36
Ventilators in the saloon	2	2	2	2
Ventilators in the cabins	2	2	2	2
Heating (incompatible with air conditioning)	58	58	58	58
Air conditioning 44000 BTU	150	150	150	150
Berth cabin in port bow	40	40	40	40
Berth cabin or bathroom in starboard bow	35	35	35	35
Double berth in the saloon	10	10	10	10
Entry door curtain	3	3	3	3
3 supplementary batteries	141	141	141	141
3 battery chargers 40A	18	18	18	18
Wave inverter 12 / 220 2500w	8	8	8	8
Generator + casing 9,5KVA 220 v	350	350	350	350
Dual engine controls	12	12	12	12
Antifouling	40	40	40	40
Laser loader radio + 2 speakers	3	3	3	3
Cockpit Watertight loudspeaker (X4)	2	2	2	2
VHF	1	1	1	1
GPS	2	2	2	2
Electronics: Speedometer/depth sounder/plotter	Toothed gear	Toothed gear	Toothed gear	Toothed gear
Autopilot	10	10	10	10
Radar	3	3	3	3
Mooring lines and fender	30	30	30	30
Appendix + motors:	200	200	200	200
Diving equipment:	60	60	60	60
Others:	10	10	10	10

MAXIMUM LOAD DISPLACEMENT (kg)	22480	22340	22370	24210
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MAXIMUM LOAD (kg)	5712	5572	5602	6692

MAXIMUM LOAD = MAXIMUM LOAD DISPLACEMENT – light vessel

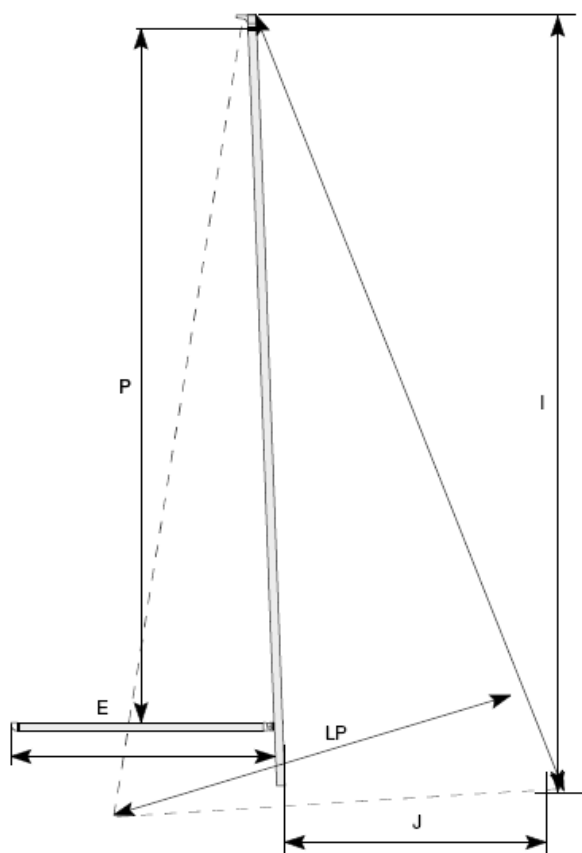
The maximum load recommended includes the mass of persons who are authorized on board, the provisions, personal belongings, and all material not included in the light mass of the boat.

Any degree of overloading could lead to infiltration of water or instability

2.4. Rigging and sails

2.4.1. Sails specifications:

SAIL	SURFACE AREA	DIMENSIONS	
MAINSAIL	97.1m ²	I	19.780m
GENOA (MAXI)	62.5m ²	J	6.150m
SPI	140m ²	P	20.00m
GENAKER	120m ²	E	6.95m
		LP	6.466m



2.4.2. Maintenance of the rigging:

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

With regard to the metal cables:

- Change them as from the appearance of the first rust-spot
- Check for corrosion, particularly at connections with turnbuckles.
- Check that the end fittings and the turnbuckles are in good condition.

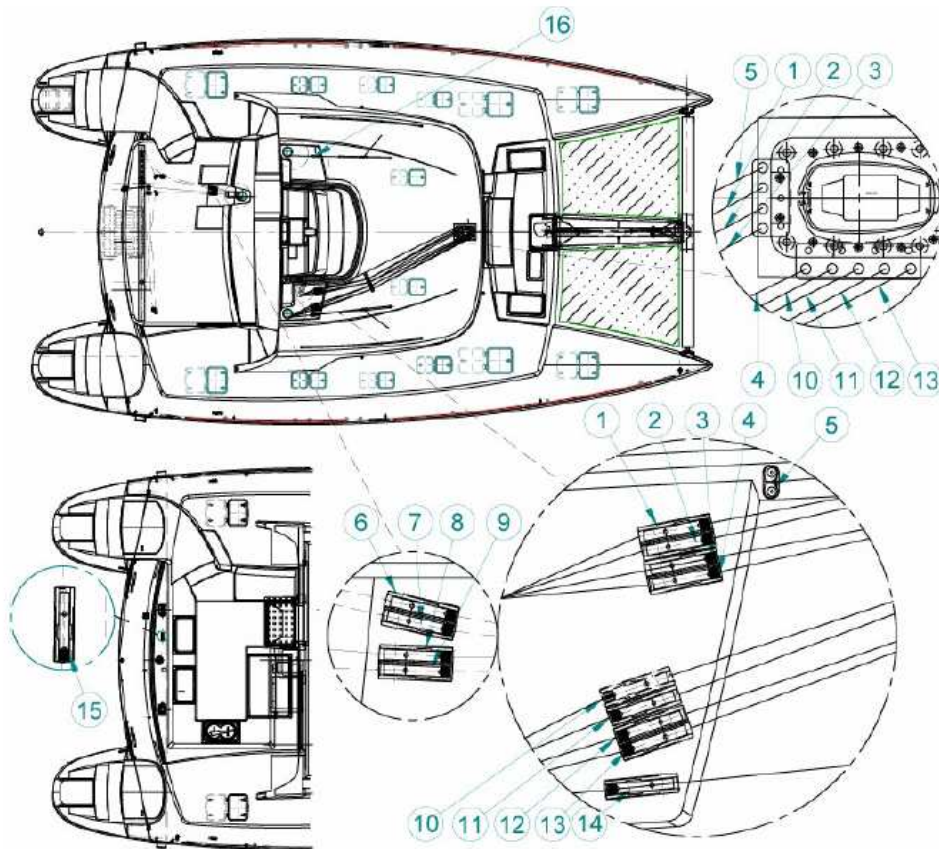
For synthetic rope of backstays, halyards, sheets, mooring lines, etc.;

- Change them as soon as there are any signs of chafing or wear.
- Regularly check the other parts of the rigging, sheets, mooring lines, etc, and replace them if worn.

2.4.3. Handling diagram







Mast

REF	DESIGNATION
1	Reef 1
2	Reef 2
3	Reef 3
4	Main halyard
5	Main sail line
6	Mainsail sheet
7	Main sail traveller control lines
8	Genoa furler
9	Main sail traveller control lines
10	Spare
11	Spinnaker halyard
12	Genoa halyard
13	Boom topping lift
14	Genoa sheet
15	Mainsail sheet (emergency)
16	Genoa sheet



REDUCTION OF SAILS

CAUTION: Any adjustment which differs from these instructions may cause rupture of the mast.
In particular, the genoa 100% with 2 reefs in the mainsail is to be absolutely avoided.

Vent réel maxi		Voilure
Force	Nœuds	
1_4	20	Gv 100% Génois 100% 
5	25	Gv 1Ris Génois 85% 
6	30	Gv 1Ris Génois 70% 
7	35	Gv 2Ris Génois 60% 
8	40	Gv 3Ris Génois 35% 
9	45	Gv 3Ris Génois 30% 

3. SAFETY

3.1. Fire

3.1.1. Risks

The main dangers are relating to motorization (§ 4.1), to the electrical circuit (§ 4.3) as well as the gas system (§ 4.4). Please refer to the appropriate paragraphs.

3.1.2. Fire extinction equipment

Portable extinguishers

The vessel is delivered without extinguishers; the application of the regulations of the country where your vessel is registered is your responsibility. When in service your boat must be equipped with portable extinguishers:

We advise you to install at least one extinguisher within 5 metres distance of each berth, within 2 metres of the extinguisher access hole to the engine compartment, within 2 metres of each naked flame appliance and within 1 metre of the steering station. We recommend a total capacity of portable extinguishers of 8A/68B, each device having a minimum capacity of 5A/34B. The CO2 extinguishers must be kept in priority for kitchen and electrical fires.


On inboard engine versions of the vessel there is an extinguishing access hole for the engine compartment the location of which is indicated on the following diagram by the symbol (the position is identical for the 3 versions):

3.1.3. Emergency exits

The recommended emergency exits are indicated on the opposite diagram by the arrow:





-  PANNEAU DE PONT
-  ISSUE DE SECOURS
-  PANNEAU D'EVACUATION

150

3.1.4. Preventive advice

General points

- | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">- Do not install free-hanging curtains or other textiles near to or above the cooking appliances or other naked flame devices.- Ensure the bilges remain clean and regularly check that there is no vapour or leak of gas or fuel.- Flammable products must not be stored in the engine compartment. |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

- | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">- Do not leave the boat without supervision when cooking and/or heating devices are in use.- Do not smoke while handling fuels or gas. |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

- Make sure the extinguishers can be reached easily when people are on board.
- Inform the crew of:
 - the location and functioning of the extinguishers.
 - the location of the extinguisher access hole to the engine compartment.
 - the location of routes and exits.
- In case any of the fire extinction installations should need replacing, only use appropriate appliances having the same reference or equivalent technical specifications and resistance to fire.
- If non-flammable products are stored in the engine compartment, they must be fastened so that they cannot fall onto machinery or block access either to the engine compartment or to its exit.
- Do not obstruct passages to the exits or hatches.
- Do not obstruct the safety controls, for example fuel stop valves, gas valves or electrical switches.
- Do not obstruct access to portable extinguishers stored inside cupboards.
- Do not use gas lamps in the boat.
- Do not modify any of the boat's installations (in particular the electrical, fuel or gas systems) or allow any non-qualified person to modify any such installation on board.
- Do not fill up fuel tanks or replace gas bottles when the engine is running or when cooking or heating appliances are in use.

Maintenance of fire-fighting material

The owner/user of the boat must:

- Have the fire-fighting material checked at the time intervals marked on the equipment.
- Change the portable fire-fighting devices if they have been used or are out of date, with others of an equal or greater capacity.
- Have re-filled or exchange the fixed extinguishing systems if they have been used or are out of date.

3.2. *Visibility*

Visibility from the command post may be reduced or obstructed because of extreme leaning due to the vessel's trim or because of various other factors caused by one or a combination of the following conditions:

- Load and load distribution
- Speed
- Sea conditions
- Rain and mist
- Obscurity and fog
- Light from the boat's interior
- Position of lateral and upper awnings
- Persons or removable equipment in the helmsman's field of visibility
- In motor-driven boats, rapid acceleration or transition from drive-limit to hydroplaning
- Angle of trim regulator with regard to the engine (for those vessels equipped with them)
- Angle of trim regulator with regard to the hull (for those vessels equipped with them)
- Sailing heel; sails reduce visibility under wind.

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

3.3. *Stability, danger of infiltration*

- **Reduce speed before making tight turns in order to avoid loss of control.**
- When sailing keep all removable portholes, windows and doors closed fast.
- Stability is reduced when you add weight to the upper sections.
- Stability may be reduced when towing another boat or when lifting heavy weights using the davits or the boom.
- Breaking waves are a serious danger for stability and water infiltration. Fasten doors and hatchways when in rough seas.
- Do not sail your boat with negative trim adjustment (low stem) when at speed. This could cause your boat to heel over and may result in instability on the turns. Use a negative trim when going from limit speed to hydroplaning and at lower speeds in small waves.
- The compartments marked as being air pockets must not be pierced.
- If your boat is classed as being unsinkable it is capable of bearing its passengers even in the event of infiltration.
- On boats where a manual bilge pump is not required it is the user's/ owner's responsibility to have on board at least a bucket or baler equipped with the means of avoiding its accidental loss overboard.

3.4. Prevention of man overboard

- Certain boats are equipped with a retractable swimming ladder. This ladder should be put into position as soon as you go on board.
- The deck areas which are not considered as being part of the working deck and should not be used while sailing are hatched on the diagram below.

- Check the guardrails regularly:
 - For metal guardrails check for the appearance of "rust-spots" and corrosion particularly at joints.
 - For synthetic guardrails change them as soon as any signs of wear due to chafing or UV appear.

3.5. Life-raft (not provided)

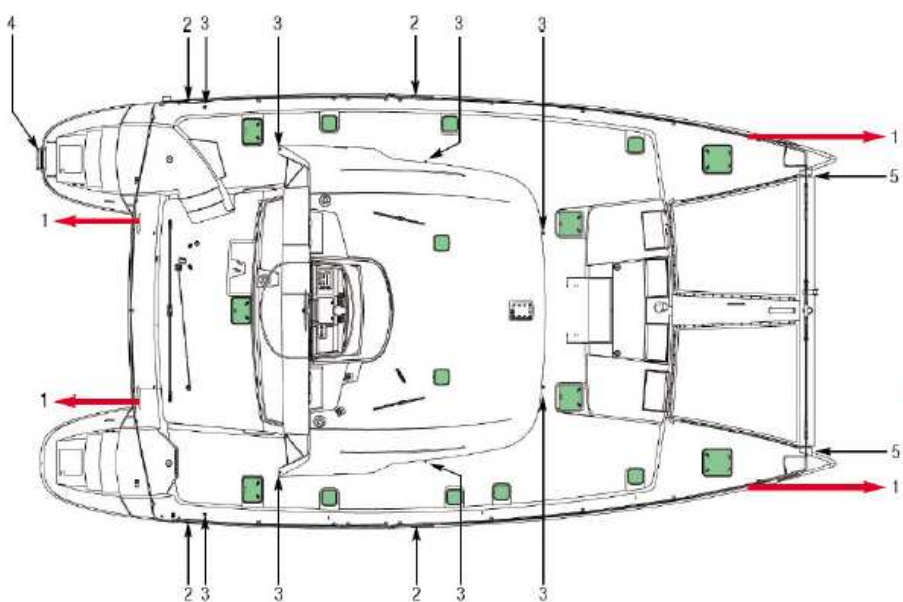
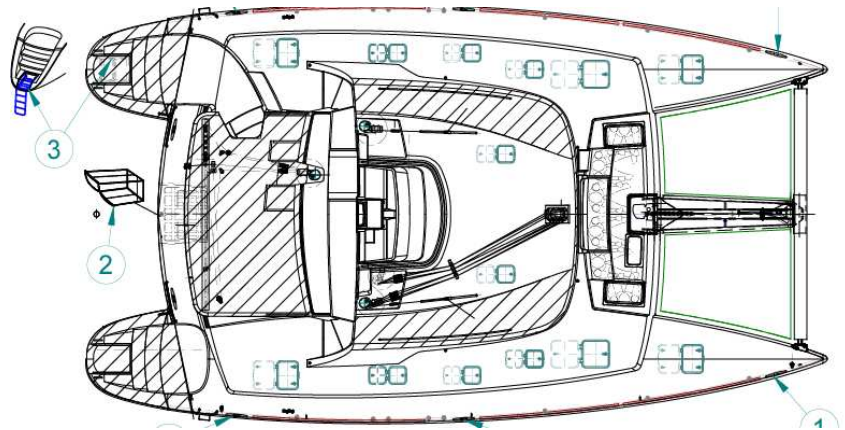
Carefully read the manual.

Areas excluded from working deck

Description

2 Position of the life-raft

3 Swimming ladder



4. EQUIPMENT

For more complete information concerning on-board appliances refer to their instruction manual including in the boat's documents.

4.1. Motorization

4.1.1. Advice for users

- On this vessel do not install any engine the weight and power of which exceeds that recommended, this may cause a danger of instability

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

- For outboard engines equipped with a feed tank always fill up the portable tank while off the boat and in a well ventilated area far from danger of ignition.

- Fuel stored anywhere other than in the main tanks (feed tanks, jerry-cans, etc.) should be kept in a ventilated place.

- Before starting ensure that the engine hold is clean and dry. Any trace of fuel found in the bottoms should mean postponing the start procedure.

- Avoid contact between any inflammable substance and hot parts of the engine.

- Locate the extinguisher access hole which will enable extinction of any fire which might break out in the engine hold.

- For boats equipped with a petrol engine ventilate the engine compartment using the hold ventilators for 4 minutes in order to eliminate any possible petrol vapors.

- Certain models have a fixed extinguisher system installed which will tackle a fire breaking out in the engine hold. Make sure you are aware of the location of the activation switch and how it works (see § 3.1.2).

Activation of this system will necessitate ventilation of the engine compartment afterwards.

- Ensure that the air vents are free of any obstruction.

- Do not block or modify the ventilation system.

- Before starting ensure that:

- the engine control is not engaged.

- the water intake valve of the cooling system is open and that there is definitely water coming out of the exhaust (water may be mixed with exhaust gases in the case of a wet exhaust) once the engine has started.

- It is advised not to intervene on moving parts or their surrounding areas (engine, drive shaft, etc.).

- In the case where an intervention is necessary – stop the engine and/or the rotation of the drive shaft before working on any of their parts.

- beware of catching clothing, hair, or rings which could get caught up; wear appropriate clothing (gloves, hat etc.)

- Beware of the danger of losing consciousness due to carbon dioxide fumes from petrol engines.

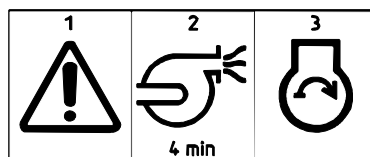
- In the case of fuel spillage on deck during the filling of tanks, clean it up before starting the engine.

- Anticipate the deterioration and wear of fuel pipes.

- Rubber fuel hoses should be replaced with hoses with the same markings.

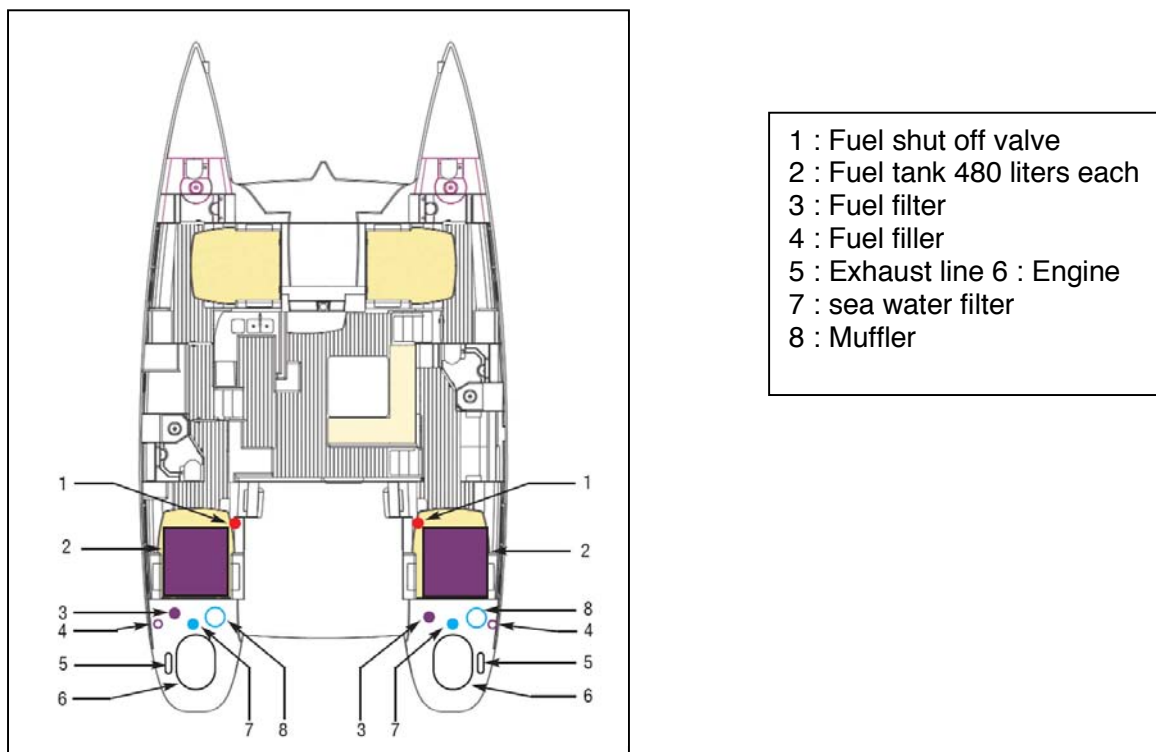
Meaning of symbols

1 : Caution 2: Ventilate for four minutes 3: Start



4.1.2. Fuel tanks: 4x240 litres DIESEL.

The capacities indicated cannot be totally used depending on the trim, the load and the position of the possible point(s) of filling and drainage.



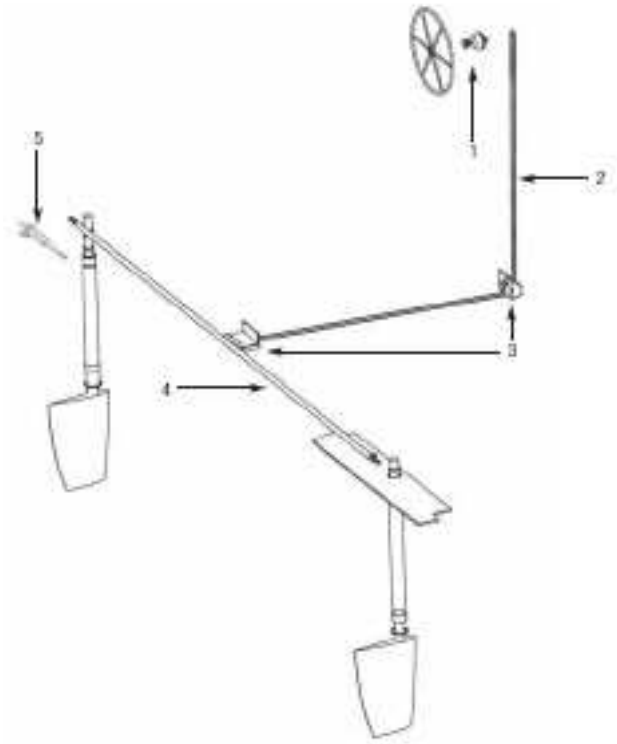
4.2. Steering gear

- At least once a year check the tension in the cables. If in doubt, ask for advice from your concessionaire.
- Boat's fitted with a rudder wheel are supplied with an emergency tiller; make sure that it is accessible at all times.
- Take out the deck fitting on the aft hatch; fit the emergency tiller in to the socket located on the stock head.
- The emergency tiller is only designed for sailing at a reduced speed in the event of wheel failure.

EMERGENCY TILLER



- 1 – Steering rack.
- 2 – Steering cables.
- 3 – Deck organiser
- 4 – Connecting rod
- 5 – Autopilot ram (optional).



4.3. Electrical circuit

4.3.1. Electrical circuit 12V-24V

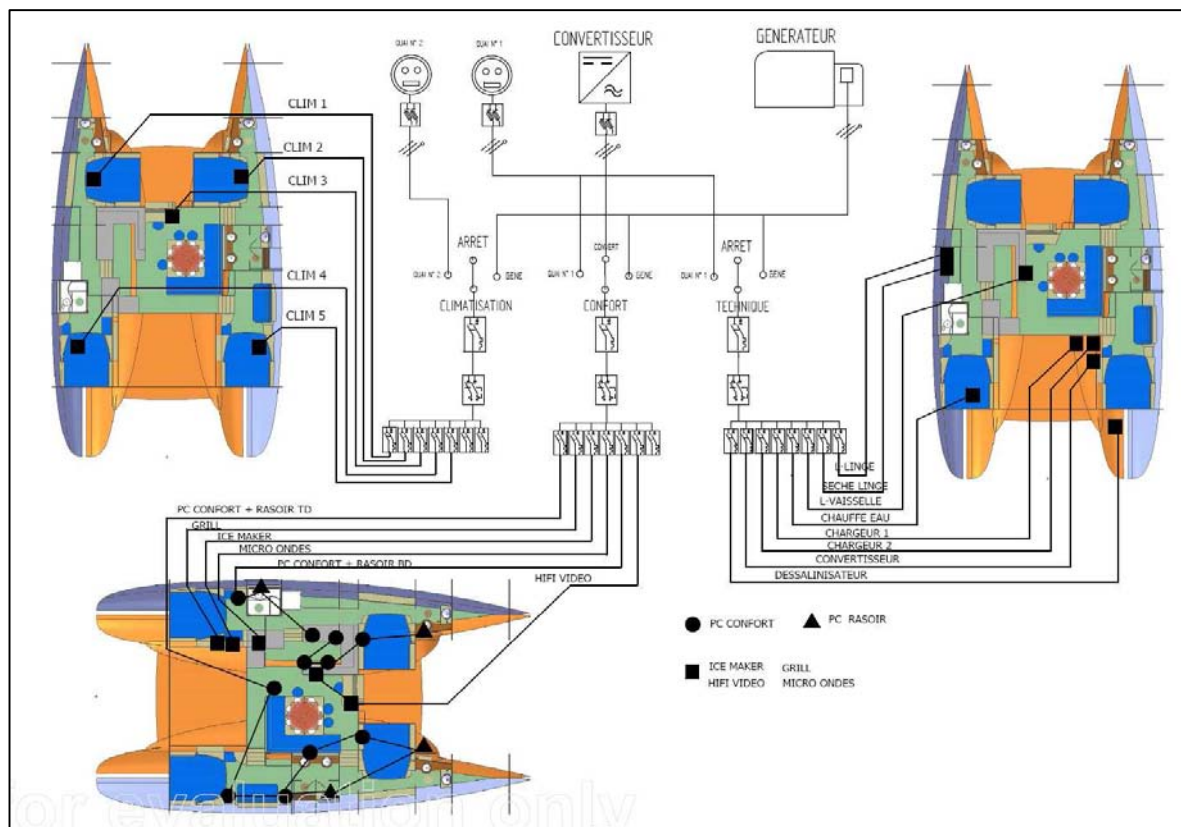
- **Never work on a live electrical circuit.**
 - The batteries should be securely fastened.
 - Do not obstruct the battery ventilation ducts some of them extract hydrogen which could be an explosion risk.
 - The batteries must be handled with care. In the case of electrolyte splash thoroughly rinse the part of the body which has been affected and seek medical help.
 - To avoid short-circuiting between two battery poles do not store conducting objects near to the batteries (metal tools, etc.).
 - During the charging, connecting and disconnecting of batteries switch off the battery cut-outs.
 - Never modify the specifications of appliances for the protection against overload.
 - Never modify an installation. Call in a technician skilled in marine electricity to carry out any electrical modifications.
 - Never install or replace electrical equipment or appliances with components exceeding the circuit amperage.
 - Never leave the vessel unsupervised when the electrical system is under power, except in the case of the automatic bilge pump and fire and burglar protection systems.
- Please note that the 12V circuit wires are marked red for live and black for negative.
Those of the 24V circuit are white or brown for the live and blue for the negative.

4.3.2. Electrical circuit 110V-220V

Certain boats are fitted with (as standard or on option according to the model) a 110V or 220V circuit. It is advisable to take the following measures to avoid the danger of electric shock and fire:

- **Do not work on a live installation.**
- **Connect the boat/shore supply cable in the boat before connecting it to the shore supply socket.**
- **Do not let the end of the boat/shore supply cable fall into the water.**
- **When the shore supply is connected there could be a difference between the boat's «earth » and that of the mains supply, this could entail a danger of electrical cross-currents and therefore electrocution (particularly for any nearby swimmers).**
- **Turn off the shore supply by means of the cut-off device fitted on-board before plugging in or unplugging the boat/shore supply cable.**
- **Unplug the boat/shore supply cable on the shore side first.**
- **If the reverse polarity indicator is activated unplug the cable immediately. Rectify the polarity problem before using the vessel's electrical system.**
- **Close the shore socket cover.**
- **Do not modify the connections of the boat/shore supply cable; only use compatible connections.**
- Do not modify the vessel's electrical system or its relevant circuit diagrams. The installation, any modifications and the maintenance should be carried out by an electrician qualified in marine electricity. Check the system at least twice a year.
- Disconnect the vessel's supply when the system is not in use. This is to avoid any danger of fire - Connect the metallic covers or boxes of the electric appliances that are installed to the protective conductor of the boat (green conductor with yellow stripes).
- Use electrical appliances with double insulation or earth.

Note; the live wires are blue, the neutral are brown and the earth wires are green and yellow.



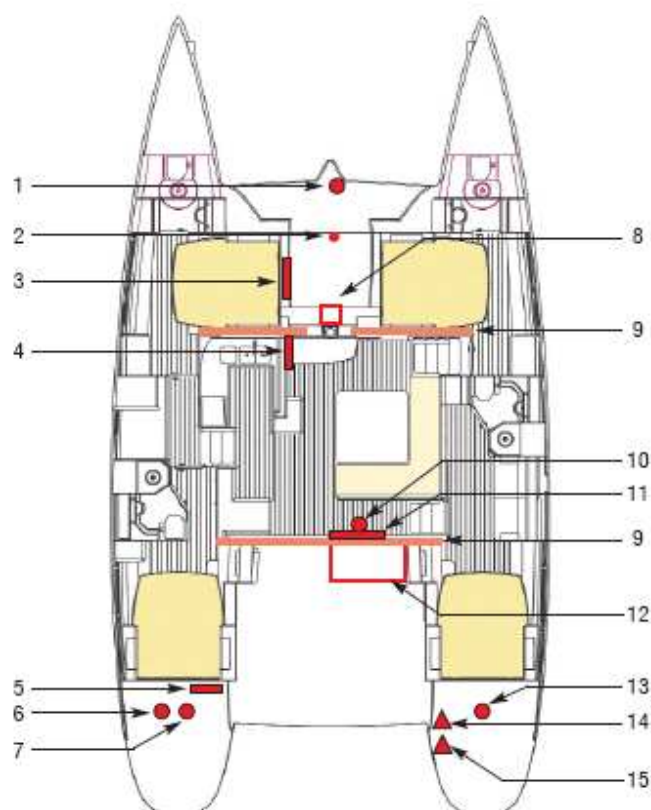
4.3.3. Emergency starting

Activate (ON position) the main power switch, the starboard and port engine circuit breaker and then the emergency battery switch located in the port engine compartment

4.3.4. Battery switches, electrical panels and installation layout ...

- **Before changing a fuse shut off the battery switches.**

Some of the equipment in the following table may be on optional extra.



Locations are the same for the other layouts.

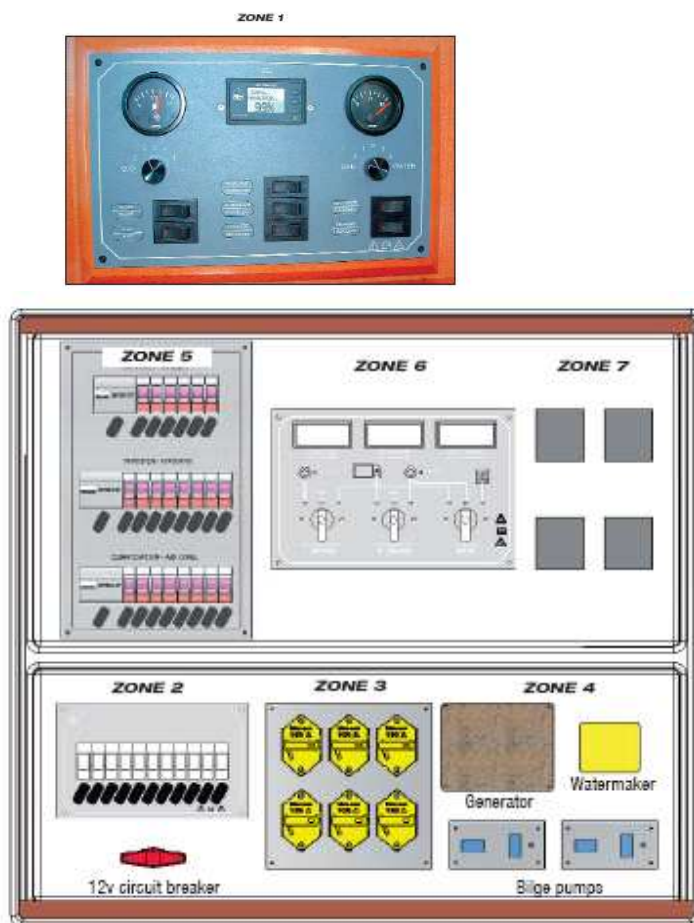
- 1 - Windlass.
- 2 - Windlass control relay.
- 3 - Generator panel and battery.
- 4 - Electrical navigation panel.
- 5 - Emergency battery.
- 6 - Port engine circuit breaker.
- 7 - Emergency battery circuit breaker.
- 8 - Mast connection box.
- 9 - Conduit for optional extras.
- 10 - 12 V Mains switch.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

4.3.5. Electrical panel and circuits

- Before changing a fuse shut off the battery switches.

The fuses for each function are found behind their respective position on the electrical panel
Some of these may be optional extras.

ELECTRICAL PANEL .



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

- ELECTRICAL NAVIGATION PANEL / ZONE 1:

(see following page)

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

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

Navigation lights switch.

Electronics switch.

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

- GENERAL 12 V ELECTRICAL PANEL / ZONE 2:

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

Main 12v circuit breaker.

- 12 V PROTECTION PANEL / ZONE 3:

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

- CONTROL PANEL / ZONE 4:

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

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

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

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

COMFORT

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

POWER

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

AIR CONDITIONING

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

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

Voltmeter (gives voltage of each unit).

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

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

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

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

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

4.4. Gas and freshwater systems

4.4.1. Gas stove

- **Do not fit or store flammable materials above the stove (curtains, paper, napkins etc.).**
- **Never leave the vessel without supervision when gas or alcohol operated appliances are in use.**
- **In the case of gas fumes or accidental extinction of flames (although appliances cut off automatically if the flames go out) close the taps and create a draft to evacuate any residual gas. Find the cause of the problem.**
- **Do not smoke or approach with a naked flame when looking for a gas leak, when changing a gas cylinder or during any other intervention on the gas system.**

- **Appliances which burn fuel use the oxygen of the cabin and release combustible gases in your boat. It is necessary to ventilate your boat when using such appliances. Do not obstruct the boat's air holes (vents) and at least leave the door open.**

- **Close the tap for the supply piping and the taps on the bottles when appliances are not in use.**

- For stoves with fitted bottles the latter must be changed off the boat. Test the stove before putting it back in the galley. Be careful to lock stove brackets into position after re-installing them.

- Do not use cooking appliances to heat the accommodation space.

- Never obstruct the air vents.

- Make sure that the valves of empty tanks are closed before you open the gas bottle or hose valve.

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

- Store the gas bottles in the ventilated spaces on deck or in the lockers intended for this purpose (gas tight and ventilated to the outside).

- Do not block access to the components of the gas system, particularly taps (bottles and cooker).

- Regularly check and replace the rubber tubing that links the gas bottle to one end of the circuit and the stove to the other, according to the current standards and regulations in your country. Only use tubing which conform to your country's standards.

- Do not use gas bottle spaces for storing other material.

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

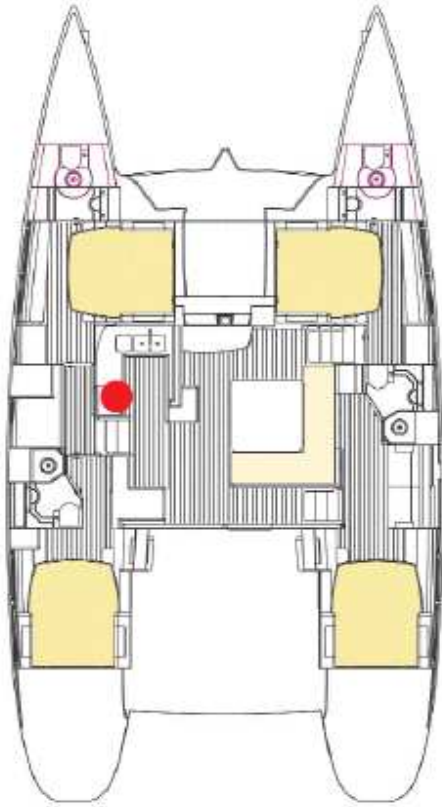
- Ensure that valves of empty tanks are closed and disconnected. Keep all protection devices close to hand; covers and plugs.

- Do not use ammonia-based solvents for cleaning or for looking for leaks.

4.4.2. Gas system layout

See the attached diagram.

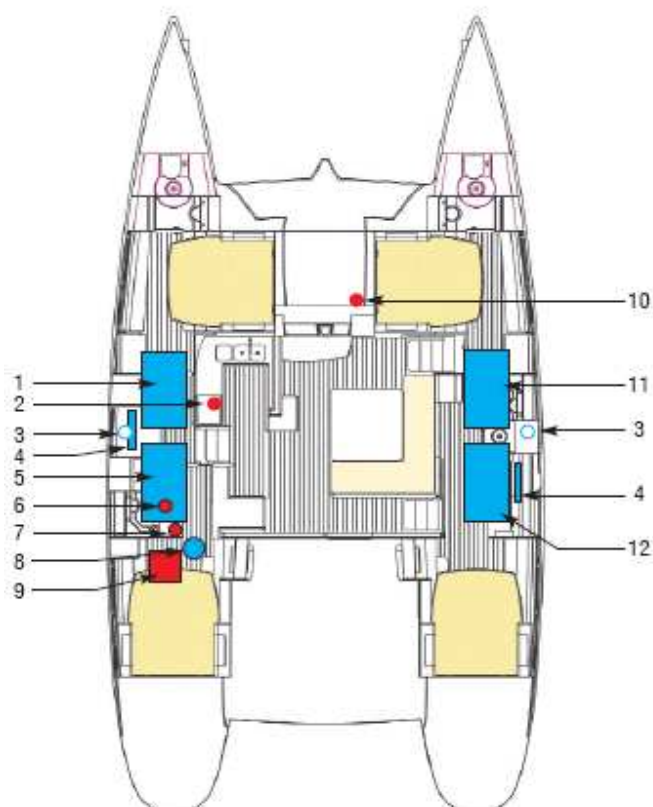
Gas bottle locker located in the forward cockpit chest.



GAS VALVES
(Locker to right of oven)

4.4.3. Alcohol stove

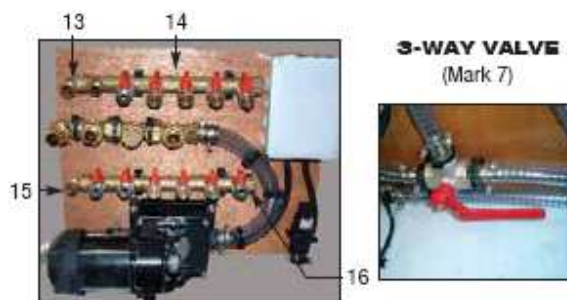
- Do not smoke while using fuel.
- Keep the fuel in a container intended for this purpose away from the stove, the engine and all other heat sources.
- Follow the builder's instructions for the filling of burners. Do not pour alcohol directly into the burner while above the stove.



Locations are the same for the other layouts.

- | | |
|----------------------------------------------|------------------------------|
| 1 - Forward port. | 9 - Water heater. |
| 2 - Gas tap. | 10 - Gas regulators |
| 3 - Deck filler. | in forward cockpit locker. |
| 4 - Distribution manifolds. | 11 - Forward starboard tank. |
| 5 - Port aft tank. | 12 - Aft starboard tank. |
| 6 - Cold water system valve. | 13 - Hot water intake. |
| 7 - 3-way tank selection valve Stbd or Port. | 14 - Hot water hose. |
| 8 - Water pump + expansion chamber. | 15 - Cold water intake. |
| | 16 - Cold water hose. |

DISTRIBUTION TERMINAL PANEL



DISTRIBUTION TERMINAL PANEL

WASTE WATER TANK SYSTEM (PRESENTED WITH ELECTRIC WC OPTIONS.)

- **Only use denatured alcohol. Petrol, paraffin, propane, fuel-oil, heating-oil or any other forms of fuel or inflammable substances are to be avoided.**

- Immediately clean off any spillage of fuel outside the burner tank

4.5. Waste holding tank (WHT)

4.5.1. General Specifications

- **4 and 5 cabin versions 340 litres**

- **3 cabin version 255 litres**

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

- Do not empty toilets near to the coast.

- Keep yourself informed of the local regulations concerning respect of the environment and always follow rules of best practice.

- Follow the international rules concerning marine pollution (Marpol).

4.5.2. Functioning of the waste water retention system

The principle of the system's use is described in the attached diagram.

The heads are only emptied into the waste water tanks which are then drained:

- either by pumping: pump-out fitting 2

- or by draining into the sea : valve 6

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

- Products to be used for cleaning are those for household use.

- The system must be emptied while the vessel is alongside in negative temperatures.

To protect the environment:

- Do not discharge the contents of the holding tanks near to the coast. Use the port or marina pumping facilities to empty the holding tanks before leaving port.

- Ensure that the bowl emptying valve is closed in order to avoid accidental discharge.

1 – Waste water tank.

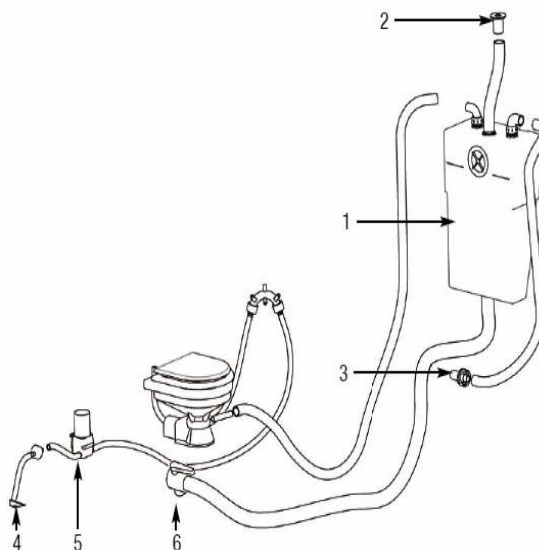
2 – Deck drain socket.

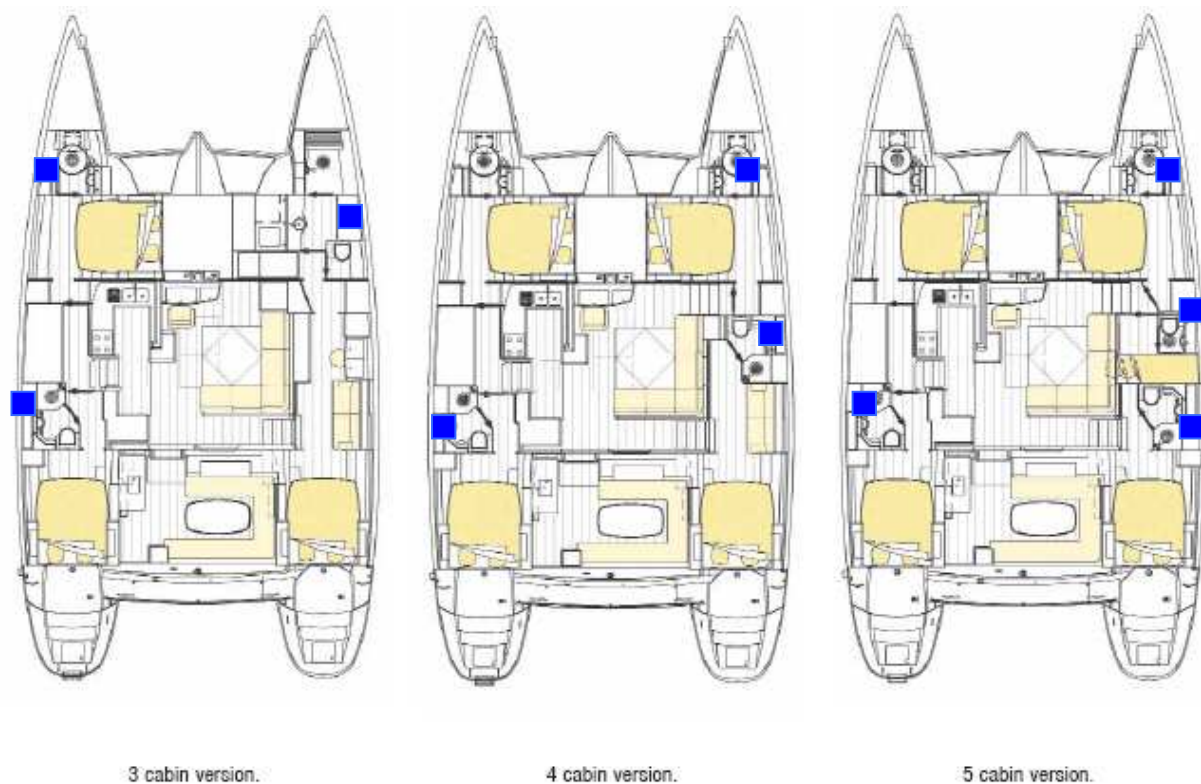
3 – Vent.

4 – Sea water intake strainer.

5 – Electrical pump.

6 – Drain thru-hull





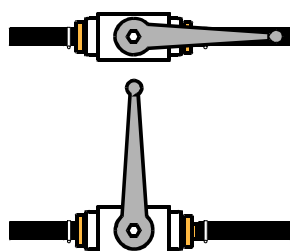
4.6. Pumps, valves and thru-hull fittings.

4.6.1. Pumps

- **The bilge pump system is not designed to provide buoyancy for the boat in the event of damage.**
- Do not let the pumps turn empty. This could result in damage to the pumps.
- The water in the bilge must be maintained at a minimum.
- Visually examine the correct functioning of each bilge pump regularly.
- Check that the strainers or suction points are not obstructed by debris.
- If there are watertight partitions separating the forward and aft valve points these should be closed under normal conditions and only opened in order to drain off water from the main bilges.

4.6.2. Valves and thru-hull fittings

THE OPENING AND CLOSING OF THE VALVES:



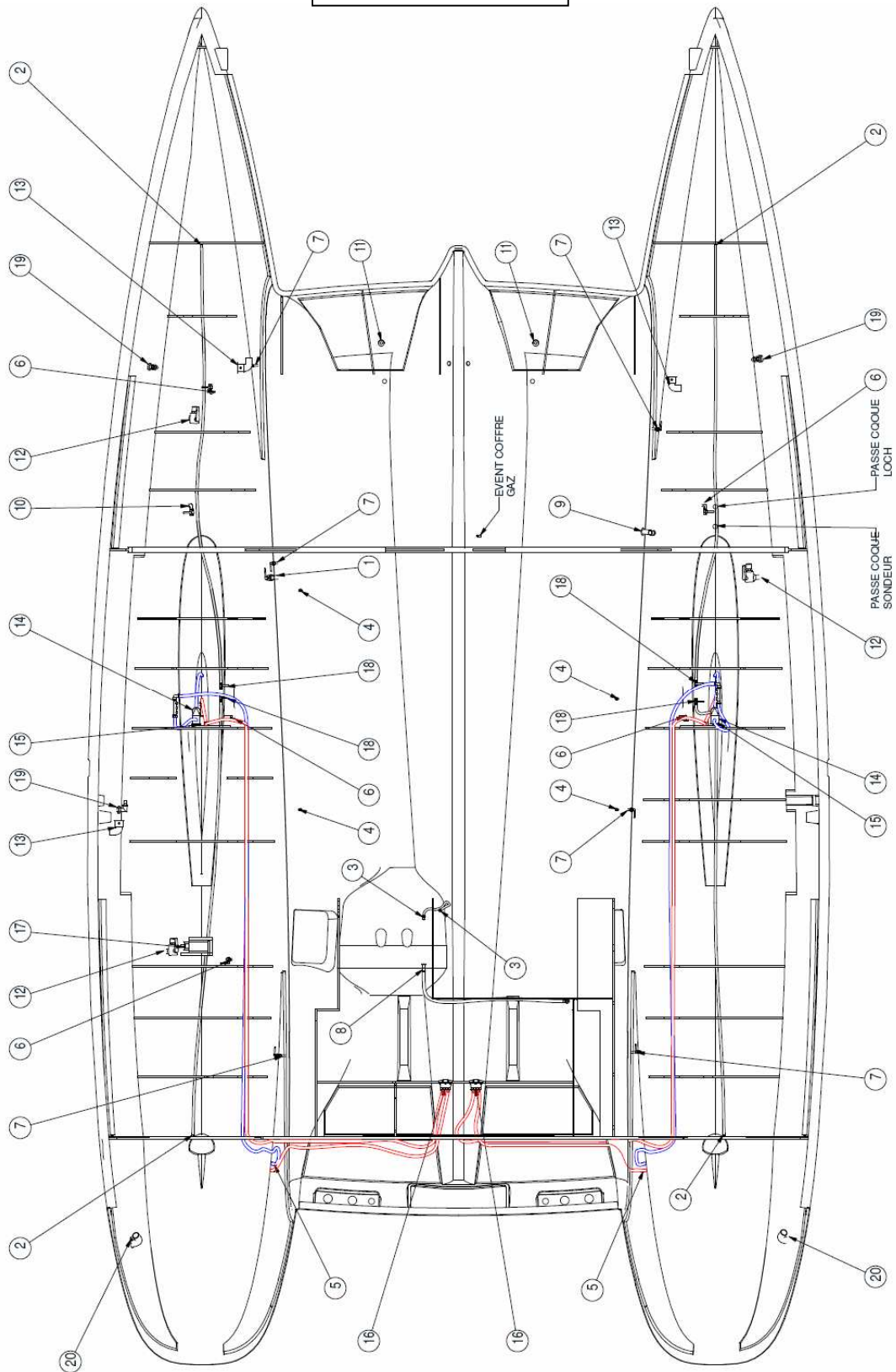
OUVERT

FERME

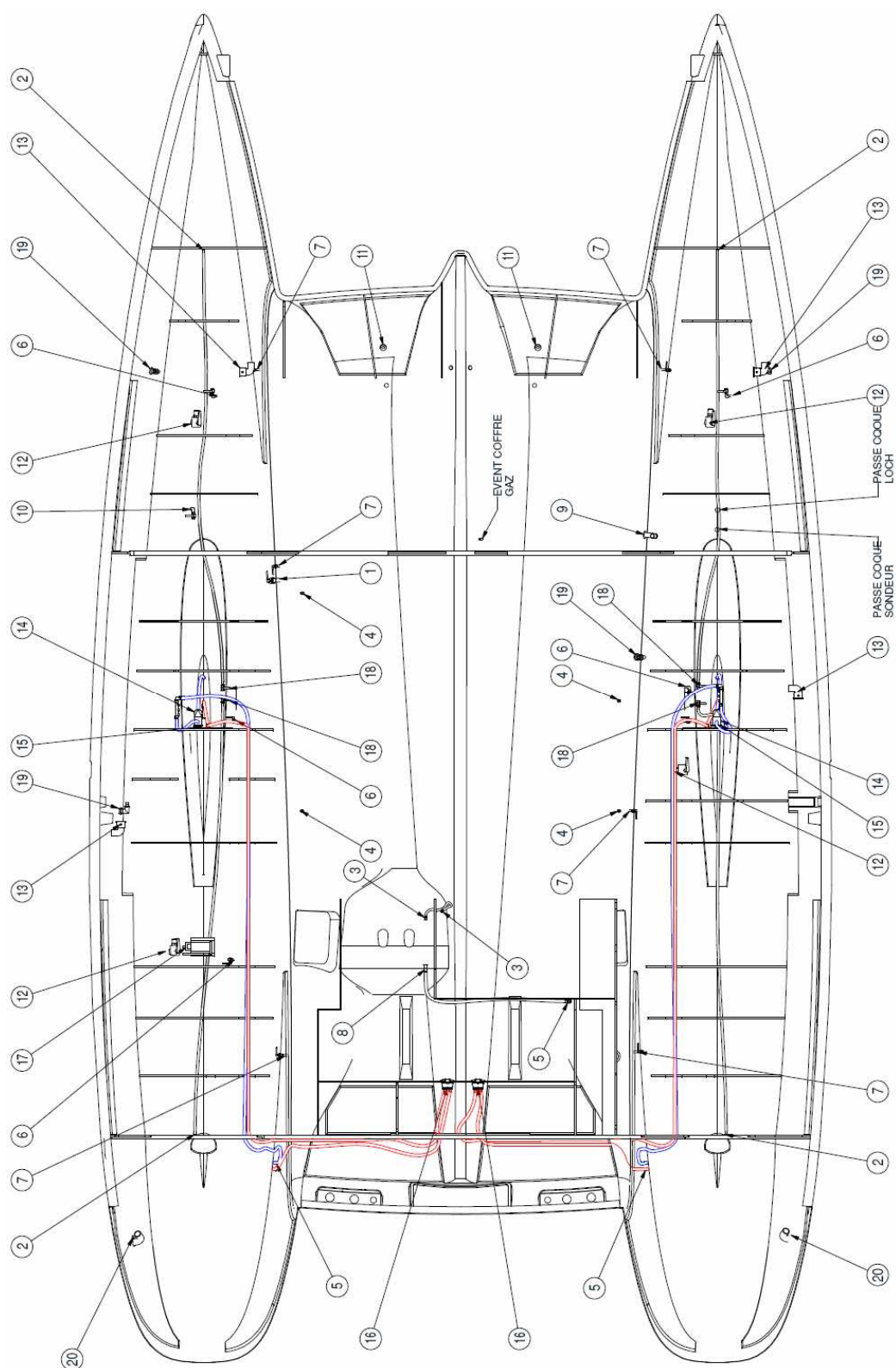
- The hull valves, cockpit drains, pump-out fittings and other opening / closing mechanisms should be kept in their appropriate open / close position to minimise the danger of flooding.
-

REF.	REFERENCE	QTY.	COMMENTS
1	THRU-HULL FITTING 1" ½	1	KITCHEN GREY WATER DRAIN
2	THRU-HULL FITTING 3/4"	5	PARTITION FITTING BILGE PUMP COMPARTMENT
3	WHITE THRU-HULL FITTING Ø 15	2	COCKPIT SCUPPER
4	THRU-HULL ELBOW 90° DIA 20	4	FRESH WATER TANK VENT
5	THRU-HULL ELBOW 90° DIA 25	5	BILGE PUMP DRAIN
6	STRAINER THRU-HULL FITTING DN 20	5	AIR INTAKE AIR CONDITIONING
7	THRU-HULL FITTING DN 15	6	OUTLET AIR CONDITIONING
8	THRU-HULL FITTING DN 25	1	COCKPIT SCUPPER
9	THRU-HULL FITTING DN 50	1	GENERATOR EXHAUST
10	THRU-HULL FITTING BRASS 1"	1	INTAKE GENERATOR COOLING
11	THRU-HULL FITTING PLASTIQUE Ø 38	2	FORWARD LOCKER SCUPPER
12	WHITE THRU-HULL FITTING PPG 2"	3	WC DRAIN
13	DIAPHRAGM PUMP 12V	3	BATHROOM DRAINAGE PUMP ELECTRICAL BILGE PUMP:
14	PUMP AMFA JDREX S40 12V	2	STRAINER IN SUMP 37 litres/minute
15	RULE 1100 12V WETTED PUMP	2	AUTOMATIC BILGE PUMP 17.5 litres/minute
16	PLASTIMO 1038 – MANUAL PUMP	2	MANUAL BILGE PUMP 0,9 litres /stroke
17	WPS DUO 10.0° 12V PUMP	1	WATER PUMP
18	TAP BS 1/4 T 2V FF 3/4"	9	CUT-OFF VALVE COMPARTMENT
19	OUTLET ELBOW 1" ½ EXHAUST OUTLET ELBOW 90°	3	WASTE WATER VENT
20	DIA 90°	2	MOTOR EXHAUST PIPE

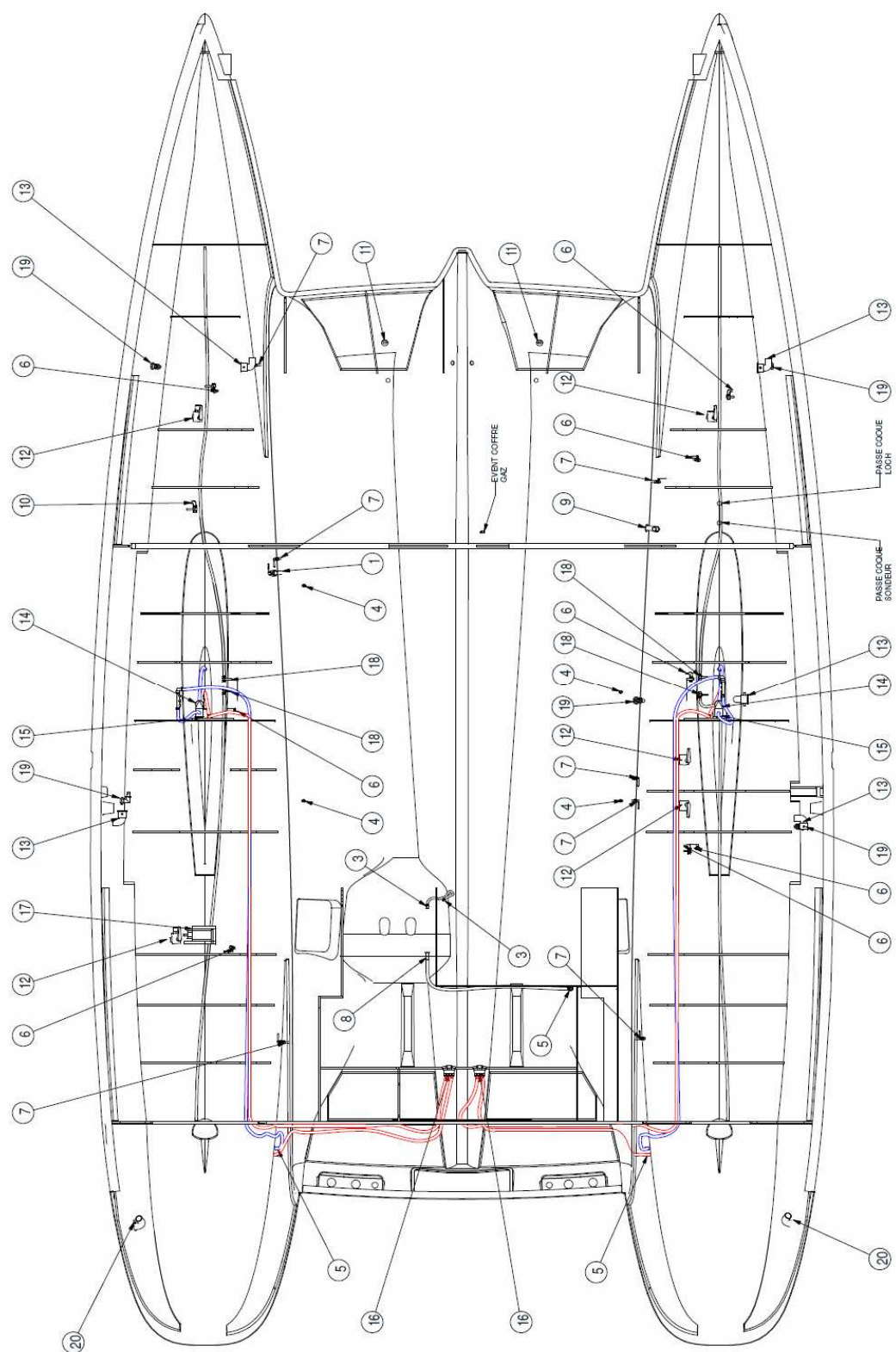
3 cabins version



4 cabins version

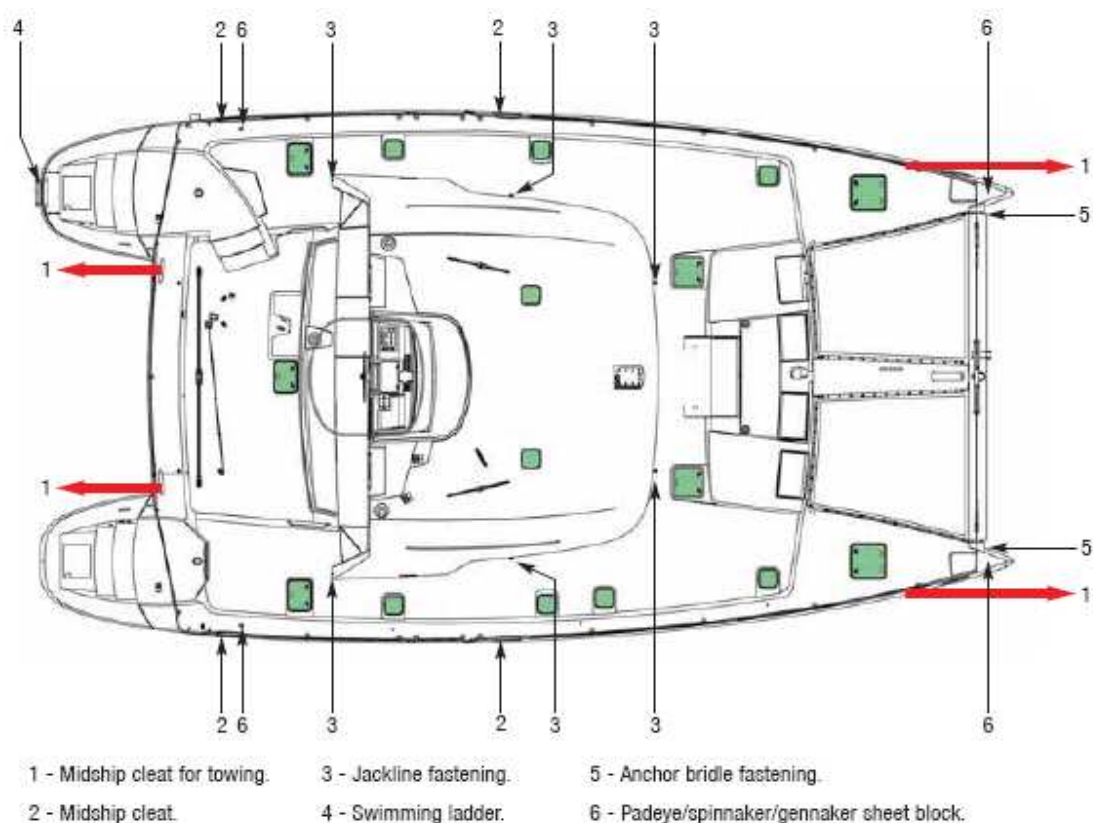


5 cabins version



5. ANCHORING, MOORING AND TOWING

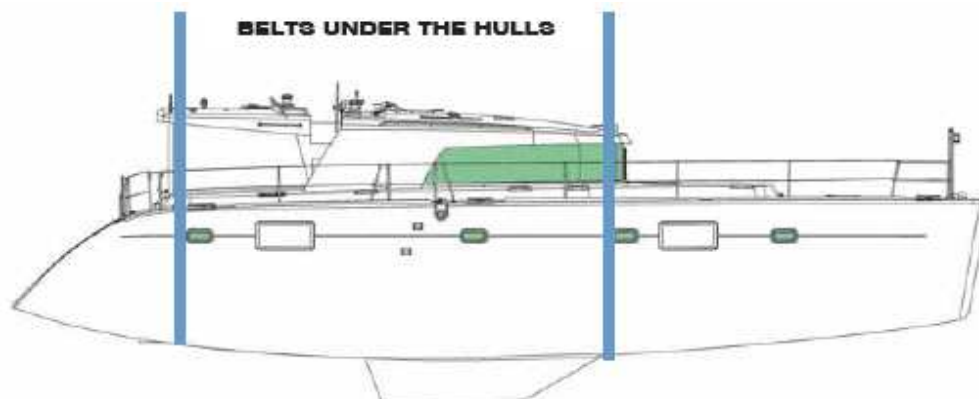
- Keep the chain well hatch or trapdoor sea-tight.
- Always tow at slow speed.
- Secure the tow line in such a way that it can be released under tension.
- The owner must ensure that mooring and towing ropes as well as fastening points and chains all correspond to the conditions of use of the vessel.



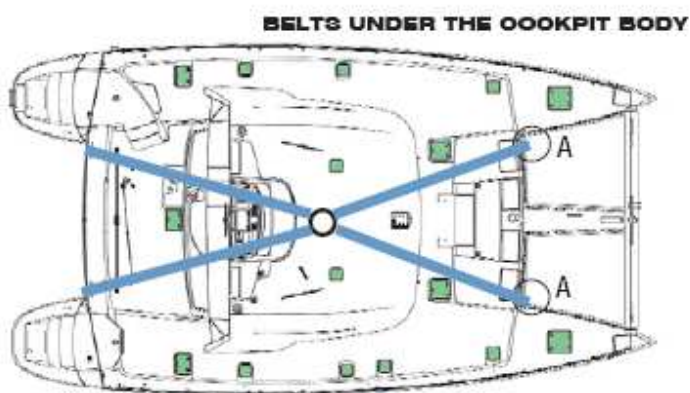
6. HOISTING AND TRANSPORT

DIAGRAM AND DIMENSIONS OF THE HOISTING BELTS AND CRADLE POSITIONING PINS

- Make sure your boat is secure on its tow line, as much lengthways as widthways.
- Remember to tighten the straps or drive straps.



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



**A: CROSS-THREADING
OPENING**