

LAGOON 52 S

User's guide



www.cata-lagoon.com

WELCOME ABOARD

We share a common passion for the sea; we, LAGOON, as catamaran builders and you who want to live your passion on the seven seas.

We are delighted to welcome you to the family of LAGOON catamaran owners and we congratulate you on it.

This instruction guide is intended to help you to enjoy your boat in comfort and safety.

It includes the boat specifications, the equipment provided or installed, the systems on board and tips on her use and maintenance.

We advise you to read this guide carefully before setting sail in order to take the greatest advantage of your sailing.

Our network of LAGOON official retailers is entirely at your disposal in order to help you discovering your boat. They will be the most able to do the maintenance on your boat.



REJOIGNEZ LE CLUB LAGOON ! JOIN THE CLUB LAGOON!

Vous venez d'acquérir un catamaran Lagoon ! Saviez-vous qu'un club de propriétaires existait ? En tant que propriétaire Lagoon, vous bénéficiez d'un accès exclusif à ce club.

POURQUOI LE CLUB LAGOON ?

Il s'inscrit dans la logique de la *Lagoon Attitude* qui nous est chère : entretenir des relations simples et amicales avec nos clients, leur proposer des rendez-vous privilégiés, aller à leur rencontre. Avec le *Club Lagoon*, nous voulons concrétiser cet état d'esprit en vous faisant bénéficier de certains avantages.

QUELS AVANTAGES POUR LES MEMBRES DU CLUB LAGOON ?

En tant que membre du *Club Lagoon*, vous avez accès au site privé www.club-lagoon.fr : des informations sur le chantier, nos catamarans et nos événements, des fiches techniques, des invitations aux salons nautiques, une boutique privée, et des offres exclusives de nos partenaires (à voir sur le site !).

L'adhésion au *Club Lagoon* est simple et gratuite. Nous serons très heureux de vous y accueillir, alors n'hésitez plus, rendez-vous sur notre site pour vous inscrire.

You have just purchased a Lagoon catamaran! Did you know that an owner club exists? As Lagoon owner, you get an exclusive access to this club.

WHY JOIN CLUB LAGOON?

The Club reflects the *Lagoon Attitude* that we value so highly: in other words, our desire to develop warm, open relations with our customers, organise special events for you and meet you in person. With *Club Lagoon*, we wish to follow through with this way of thinking by giving you access to some specific benefits.

WHAT BENEFITS DO CLUB LAGOON MEMBERS ENJOY?

As a member of *Club Lagoon*, you can access the private website www.club-lagoon.fr: here you will find exclusive information about the shipyard, our catamarans and our events, technical documents, invitations to boat shows, an exclusive boutique and special offers from our partners (you can see them on the website).

***Club Lagoon* membership is free and it couldn't be simpler to join. We look forward to welcoming you to the Club, so go to our website to register.**



www.club-lagoon.fr

Club
Lagoon

PREAMBLE

■ This user guide is a tool that will enable you to get to know your boat and apprehend the use of the components that are necessary for running her.

■ A WAY TO MAKE THE MOST OF THIS USER GUIDE

In order to have an easier apprehension, this guide offers you two complementary reading levels:

- . The pages with text on the right hand side of the document develop the different subjects dealt with in the chapters,
- . The pages on the left hand side are given to the related photos, layouts or block diagrams.

■ The different warnings used throughout this guide are as follows:

RECOMMENDATION

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

WARNING

Draws your attention on dangerous ways of doing that may bring about injuries to people or damages to the boat or her components.

DANGER

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

■ Before you put out to sea, please read the owner's manual (CE standard manual) delivered with your boat and please follow the instructions.

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SPECIFICATIONS 1

- 1.1 I D of your boat**
- 1.2 Technical specifications**
- 1.3 Helm station**
- 1.4 Chart table**
- 1.5 Multifunction touch screen**

YOUR BOAT

NAME OF YOUR BOAT:

VERSION:

DELIVERY DATE:

REGISTRATION NUMBER:

DOOR KEY NUMBER:

HULL NUMBER:

MAKE OF THE ENGINES:

NUMBERS OF THE ENGINE KEYS:

SERIAL NUMBER OF THE STARBOARD ENGINE:

SERIAL NUMBER OF THE PORT ENGINE:

FURTHER INFORMATION:

.....

.....

.....

OWNER'S NAME:

ADDRESS:

.....

.....

E-MAIL ADDRESS:

LANDLINE PHONE NUMBER:

MOBILE PHONE NUMBER:

EMERGENCY CONTACT

1



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DESIGN CATEGORIES WEATHER CONDITIONS

CATEGORIES	MAXIMUM WIND			MAXIMUM WAVES
Category A	Force 9	Established 47 knots	Gusts approximately 61 knots	10 metres
Category B	Force 8	Established 40 knots	Gusts approximately 52 knots	8 metres
Category C	Force 6	Established 27 knots	Gusts approximately 35 knots	4 metres
Category D	Force 4	Established 16 knots	Gusts approximately 23 knots	0,5 metres

The maximum height of waves is measured from trough to crest; The European regulations use the concept of significant height of waves ($H_{1/3}$).

The wind force (Beaufort scale) is the average actual wind speed over a period of 10 minutes at 10 metres above the sea.

TECHNICAL SPECIFICATIONS

Length Over All.....15,84 m / 52'
 Waterline length15.60 m / 51'18"
 Beam.....8,74 m / 28'8"
 Air draft.....27,08 m / 88'1"
 Keel draft.....1,55 m / 4'11"

Light displacement 25730 kg / 56735 lbs
 Maximum load displacement..... 31600 kg / 68908 lbs
 Maximum load..... 7877 kg / 17366 lbs

Water capacity..... 4 x 250 l / 4 x 66 US gal
 ou 3 x 250 l / 3 x 66 US gal (if watermaker option)
 Fuel capacity 2 x 500 l / 2 x 132 US gal
 Cold capacity 200 l + 130 l (optional) + 60 l (icemaker)

BATTERY CAPACITY

Standard..... 6 x 140 Amp (12 V)
 Optional 6 x 210 Amp (12 V)
 Engines 2 x 55 Amp (12 V)
 Generator 55 Amp (12 V)
 Engine power 2 x 54 HP
 2 x 75 HP (optional)

CE CATEGORY	Maximum number of persons
A.....	14 persons
B.....	14 persons
C.....	16 persons
D.....	30 persons



Bottom surface, appendages included: approx. 95 m².

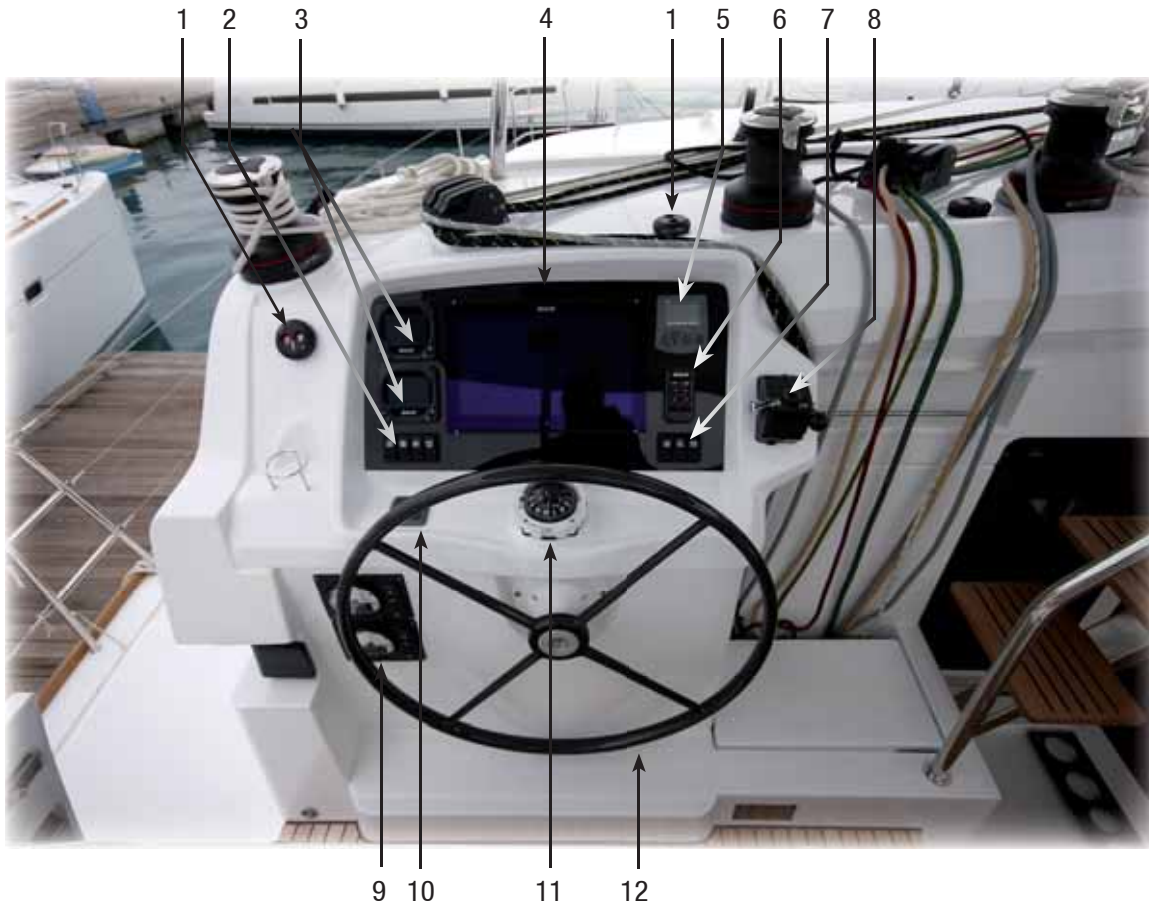


SPECIFICATIONS

HELM STATION

SPECIFICATIONS

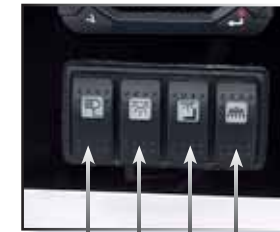
12



- 1 - Electric winch control.
- 2 - 12 V port switches.
- 3 - Screen / repeater for electronics.
- 4 - Screen / repeater for electronics.
- 5 - Chain counter.
- 6 - Automatic pilot controls.

- 7 - 12 V starboard switches.
- 8 - Engine controls.
- 9 - Engine dashboards.
- 10 - Bow thruster control.
- 11 - Compass.
- 12 - Steering wheel.

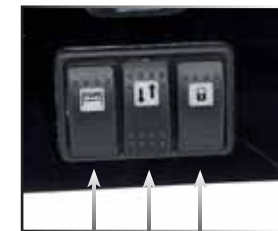
2 - 12 V port switches



A B C D

- A - Deck light.
- B - Exterior courtesy lighting.
- C - Aft beam spotlight.
- D - Lighting under boom.

7 - 12 V starboard switches



E F G

- E - Bimini top lighting.
- F - To raise / lower the windlass.
- G - Switching on the windlass and electric winches.

CHART TABLE



- 1 - VHF.
- 2 - Multifunction touch screen.
- 3 - Electronic navigation screen.
- 4 - Electronic navigation repeater.

- 5 - On / off switch for electronics.
- 6 - Generator control.
- 7 - Air conditioning control.
- 8 - Watermaker control.

- 9 - Automatic pilot remote control.
- 10 - Electronic navigation boxes.
- 11 - General cut-out.

1

SPECIFICATIONS

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MULTIFUNCTION TOUCH SCREEN



SPECIFICATIONS

■ 1.5 Multifunction touch screen

The LAGOON 52 S is equipped with a multifunction touch screen located on the chart table.

- PRESENTATION OF THE MULTIFUNCTION TOUCH SCREEN

The multifunction touch screen is designed to:

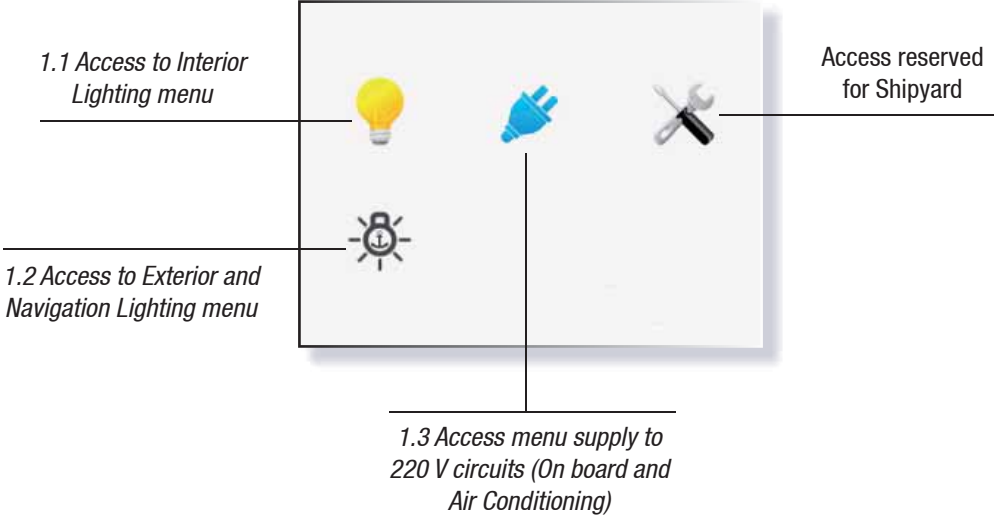
- Pilot all the lighting on board,
- Monitor the charge level of the battery banks (on board, engines, and depending on option, generator),
- Control the level of the fresh water, grey water and fuel tanks,
- Manage the 110 V - 220 V supplies to the boat (shore power sockets, generator and inverters).

- OPERATING THE MULTIFUNCTION TOUCH SCREEN

- Switch on the boat's 12 V circuit at the general cut-out (at the bottom of the chart table starboard cupboard).
- Switch on the control touch screen using its ON/OFF switch.
- Depending on requirements, choose the Lighting and 110 V - 220 V supply menu, the Tanks menu or the Batteries menu using the corresponding buttons on the sides of the screen.

Use the touch screen to navigate to the sub menus.

**1 - ACCESS TO LIGHTING AND
110 V - 220 V SUPPLY MENU**

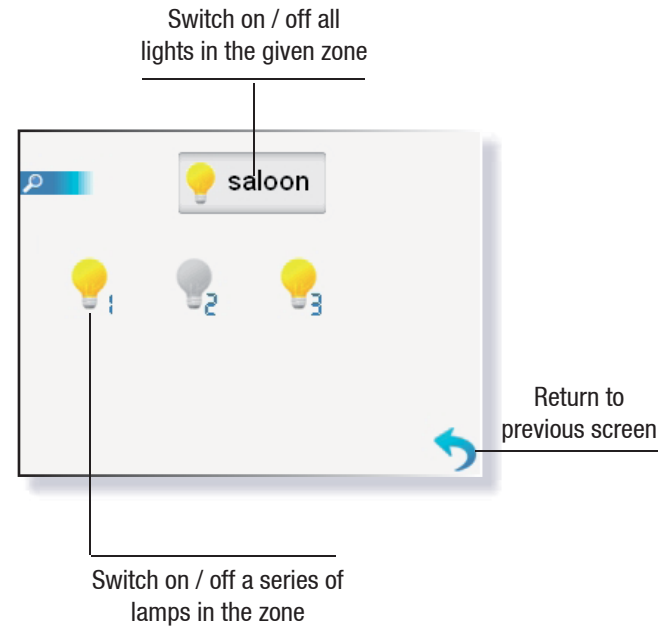
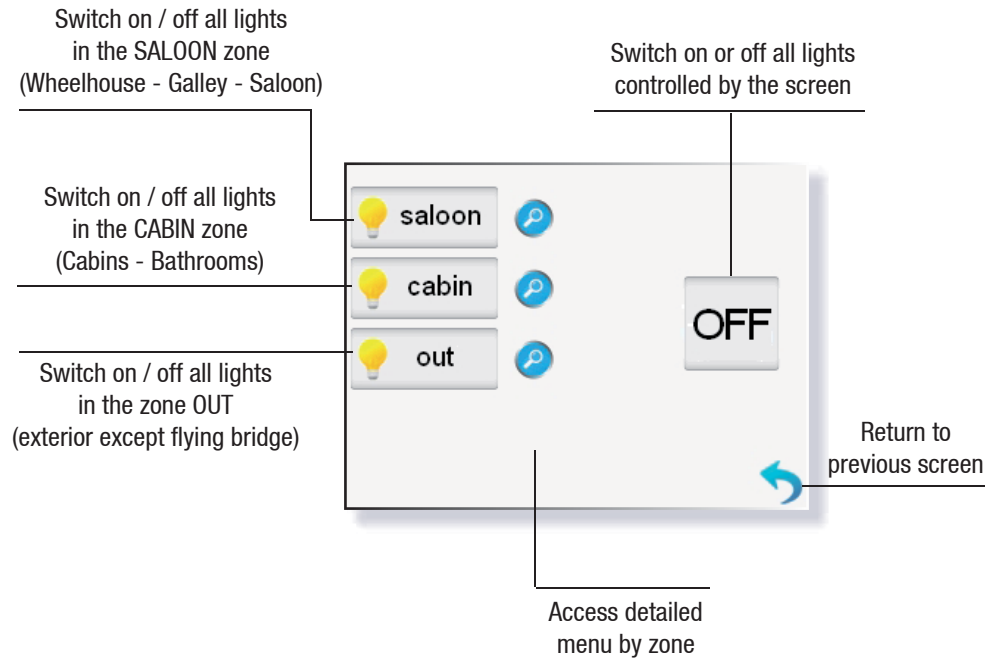


SPECIFICATIONS

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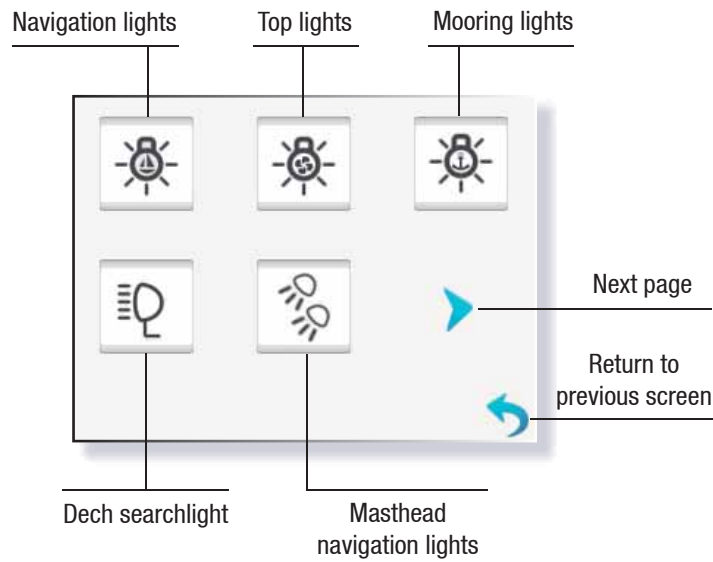
• 1.1 Interior Lighting menu

• 1.1 Lighting by zone menu

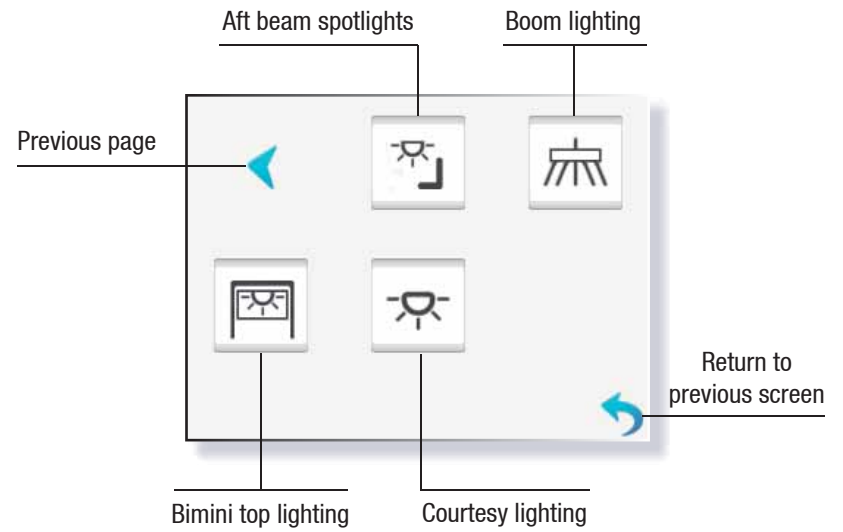


• NOTE
Grey icons: lighting is switched off
Blue icons: lighting is switched on

• 1.2 Exterior and Navigation Lighting menu

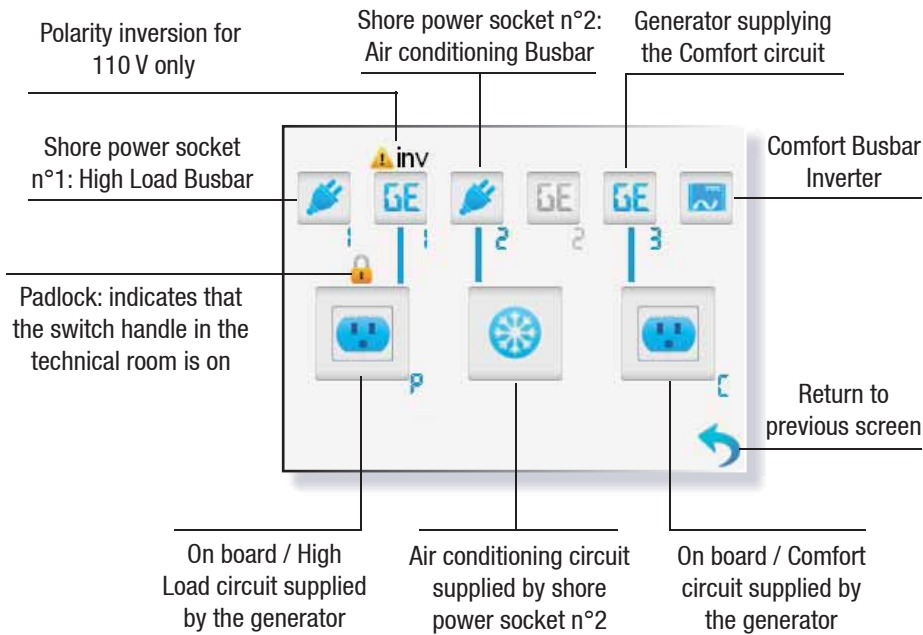


• 1.2 Exterior and Navigation Lighting menu

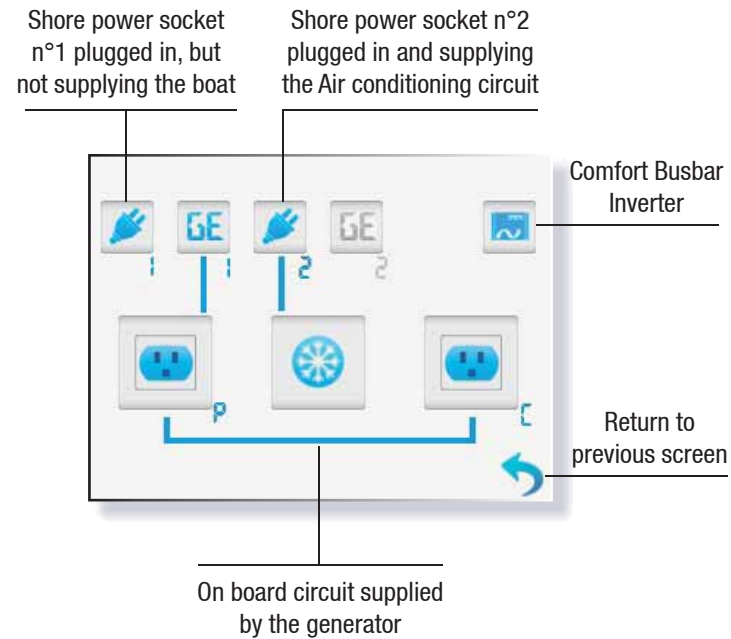


• NOTA
Grey icons: lighting is switched off
Blue icons: lighting is switched on

• 1.3 110 V - 220 V circuit supply menu

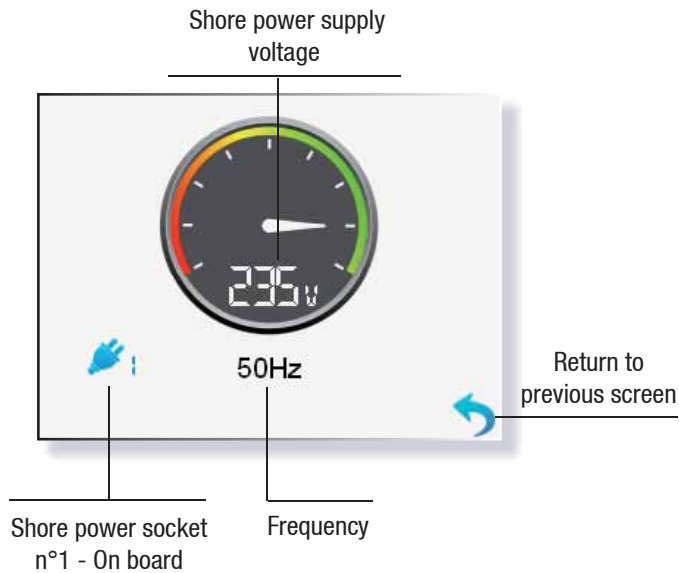


• 1.3 110 V - 220 V circuit supply menu

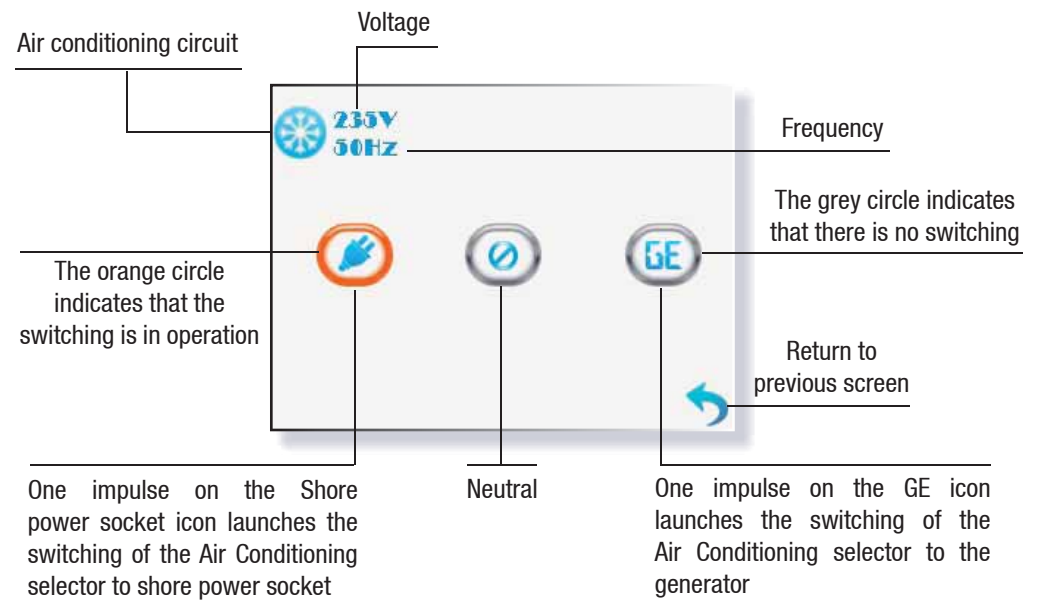


• **NOTA**
 Grey icons: lighting is switched off
 Blue icons: lighting is switched on

• 1.3 110 V - 220 V circuit supply menu



• 1.3 110 V - 220 V circuit supply menu



• **NOTA**
 Before selecting the Generator supply, ensure that it is switched on at the chart table remote control (see Generator chapter for details on operations).

WARNING

In case of malfunctioning of the multifunction touch screen, use the manual supply selector switches located in the technical room of the forward swim deck to supply the boat with 220 V (High Load and Comfort) or in the port engine room for air conditioning.

**HIGH LOAD AND COMFORT
MANUAL SUPPLY SELECTOR
SWITCHES**



FORWARD SERVICE ROOM

**AIR CONDITIONING MANUAL
SUPPLY SELECTOR SWITCH**



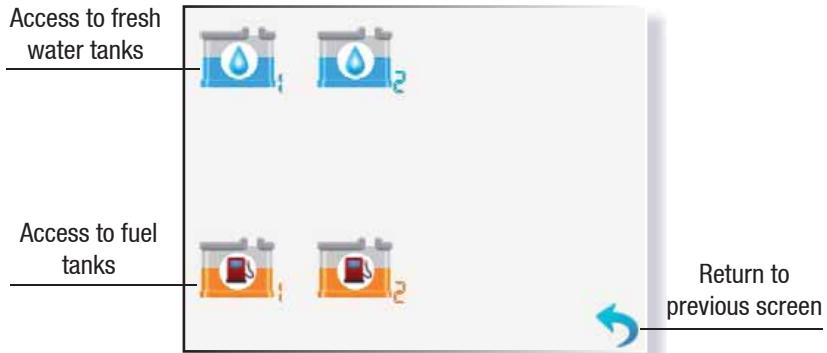
SIDE ENGINE HOLD

WARNING

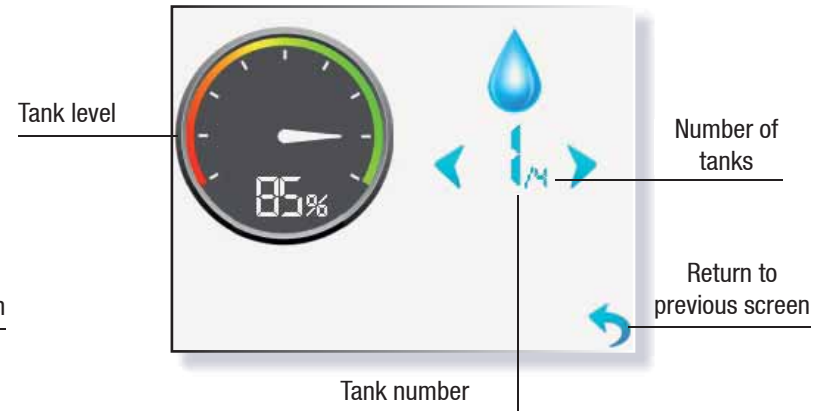
In case of malfunctioning of the multifunction touch screen, use the override switches to switch on the 12 V appliances. See pages 100 and 101 of the ELECTRICITY chapter for more details.

2 - GENERAL TANK MENU

• 2.1 General tank menu

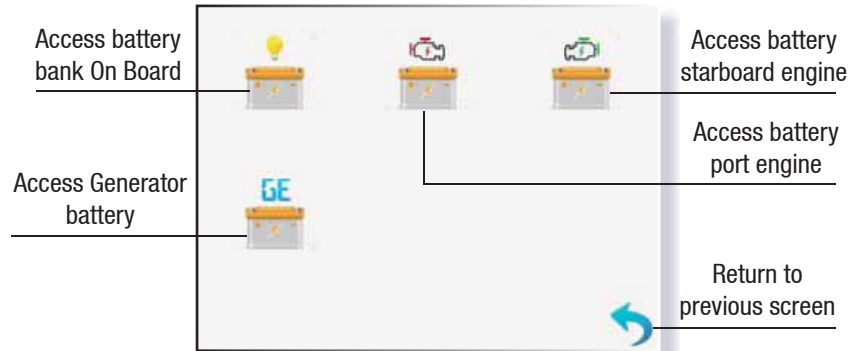


• 2.2 Detail: example of the fresh water n°1 tank level menu

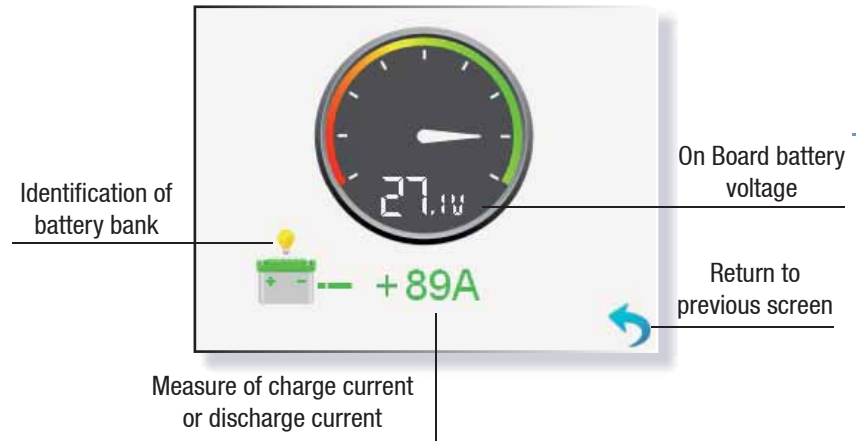


3 - GENERAL BATTERIES MENU

• 3.1 General batteries menu



• 3.2 Detail: example of on board battery bank menu



HULL / DECK

2

- 2.1 Construction**
- 2.2 Careening**
- 2.3 Deck equipment**
- 2.4 Cockpit**
- 2.5 Access to helm station**
- 2.6 Anchoring**
- 2.7 Deckwash pump**
- 2.8 Gangway**
- 2.9 Davits**
- 2.10 Steering system**

DECK EQUIPMENT

HULL PROTECTIONS



HULL / DECK

■ 2.1 Construction

The LAGOON 52 S is constructed following the infusion process of a polyester resin and a high quality anti-osmotic resin on a core of balsa and fibreglass layers.

The hull bottoms and keels are made of monolithic laminates by infusion.

WARNING

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

■ 2.2 Careening

A periodical careening of your boat will keep her original performances and avoid any adhesion of marine vegetation.

The type of the water where you boat sails determines how to choose the antifouling paint as well as how often to carry out these careenings.

Please contact a professional for advice.

■ 2.3 Deck equipment

• DECK FITTINGS

The fittings on the deck of your LAGOON 52 S were selected according to quality criteria.

To keep them to their best look, a regular maintenance is necessary.

- Rinse the equipments with fresh water, particularly the stainless steel parts.
- Lubricate the different blocks, sheaves, turnbuckles, winches, tracks and travellers.
- Clean and polish the stainless steel parts with a chrome and stainless steel polish in case of oxidation.

• PULPITS

Regularly rinse the stainless steel parts with fresh water.

• LIFELINES

Inspect the metal lifelines for 'hairy wires'.

Check for corrosion, in particular on the connections.

• OUTSIDE WOODWORK

Regularly rinse and brush the outside woodwork with water.

There are teak cleaners and brighteners on sale.

The use of a pressure washer is not advisable on teak.

DECK EQUIPMENT

**ENTRANCE DOOR
BRAKE SYSTEM**



**ACCESS DOOR
TO PORT CABIN**



OPENING SERVING HATCH



HULL / DECK

SWIM LADDER



SHOWER IN TRANSOM



- PLEXIGLAS

To protect the surface of your windows in plexiglas, avoid any contact with alcohols, tanning creams, sand and all abrasive products generally speaking.

- Rinse the plexiglas with fresh water, do not use solvents.
- Brighten up with a soft rag soaked with a gentle cleaning product.
- Use polish paste to remove scratches.

■ 2.4 Cockpit

- ENTRANCE DOOR

The sliding door is fitted with a mechanism allowing its locking in an open position.

A latch on the door jamb allows its locking from inside the saloon.

RECOMMENDATION

While sailing, block the sliding door by locking it.

- ACCESS TO PORT CABIN

Access to the port cabin is through a vertical opening door from the cockpit.

RECOMMENDATION

Close the door when sailing.

- DUSTBIN LOCKER

A dustbin locker, with access from the top, is located in the starboard cockpit locker, behind the front cockpit bench.

- SERVING HATCH

The cockpit is fitted with an opening serving hatch.

While sailing, please lock the serving hatch either in the open or closed position.

- SWIM LADDER

A stainless steel swimming ladder is located on the aft starboard transom. The boat may optionally be fitted with a second swimming ladder (with the option of a second hand shower in the cockpit).

WARNING

For safety's sake, always sail with the ladder up and kept in position.

- SHOWER

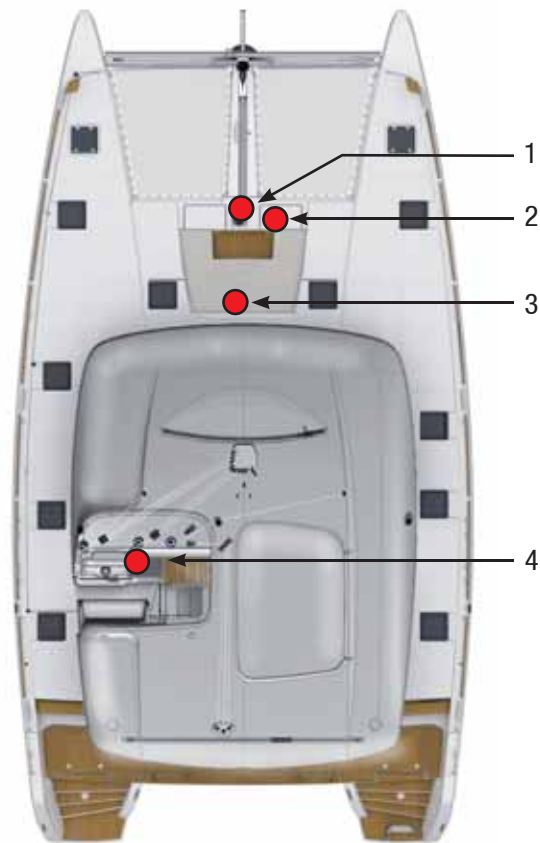
A shower supplied with hot and cold water is located on the side of the aft starboard transom.

A second shower can be optionally installed on the side of the aft port transom.

STROP - ELECTRIC WINDLASS

HULL / DECK

30



- 1 - Electric windlass.
- 2 - Electric windlass remote control.
- 3 - Windlass automatic breaker.
- 4 - Electric windlass control + chain counter.

STROP CIRCUIT



3 - AUTOMATIC BREAKER OF THE WINDLASS



4 - ELECTRIC WINDLASS CONTROL + CHAIN COUNTER



BIMINI RIGID + SECURITY DOOR



■ 2.5 Access to helm station

A staircase to port in the cockpit enables access to the helm station. Another staircase enables access to the roof.

During sailing, watch out for possible movements of the boat when using these staircases.

The helm station may be optionally equipped with a rigid protection (bimini) with opening panel and a security door on the port side.

RECOMMENDATION

Secure the rigging before accessing the mast step or sun bed.

■ 2.6 Anchoring

• WINDLASS

The electric windlass works with the 12 V domestic batteries. Operate the windlass from the helm station or with the control in a locker to starboard on the foredeck.

If the electrical windlass does not function properly, check its automatic breaker in the service room on the foredeck.

Refer to the manufacturer's instructions for windlass maintenance.

RECOMMENDATION

The electric windlass should be used with one or two engines running.

For the sake of safety, a switch at the helm station enables to power off the electric windlass and all electric winches.

• PREPARING ANCHORING

Set the strop fastening it to the chainplates at the ends of the main beam.

Insert the strop inside the stem anchor roller.

Make fast the strop to the central cleat when lowering the chain.

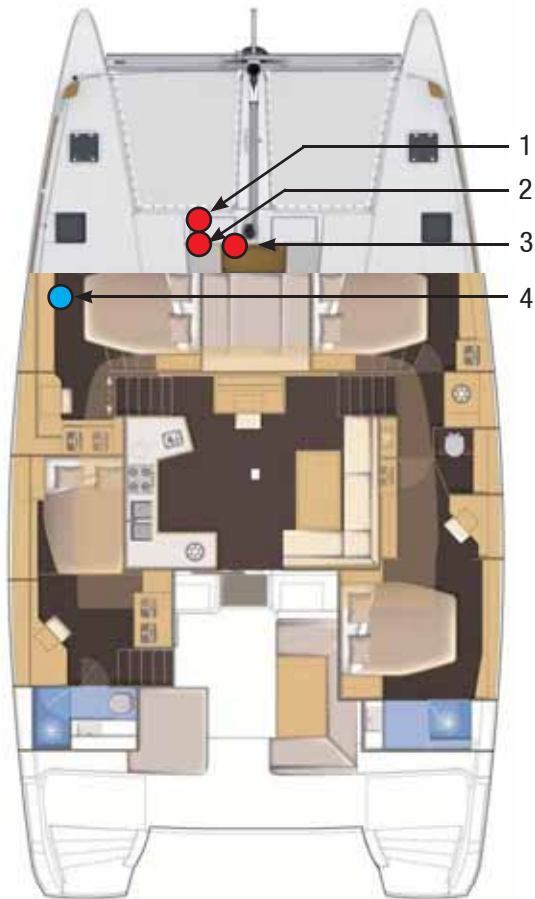
RECOMMENDATION

Before you anchor, check the type of the sea bed, the depth of water and the strength of the stream.

DECKWASH PUMP

HULL / DECK

32



**1 - 2 - POWER SWITCH +
DECKWASH PUMP +
SELECTION VALVE**



4 - SEA WATER INLET VALVE



3 - INTAKE TO CONNECT HOSE



- 1 - Deckwash pump + valve to select sea water / fresh water.
- 2 - Power switch.
- 3 - Intake to connect hose.
- 4 - Sea water inlet valve.

Please note: you can find the same locations in the other accommodation versions.

• ANCHORING

Have your boat head wind and without speed.
Pay out the chain while moving back slowly.
Secure the chain on the strop.
Release the chain until the strop is taut.
Pay attention to the swinging space when mooring.

• LIFTING THE ANCHOR

Ensure that the chain is properly set on the gypsy.
Activate the windlass in the upward position.
Slowly go near the anchor using the engine (do not use the windlass force to winch up the boat).
Unfasten the pendant.
Visually check the final metres until the anchor makes contact with the anchor roller.
Check the position of the anchor on the stemhead fitting.

Rinse the windlass and the ground tackle with fresh water after each trip.

Use the winch handle to loosen the windlass during anchorage.

WARNING

Windlass operations are dangerous:

- Always keep the ground tackle clear and free.
- Always proceed with care, wearing gloves and always wearing shoes.
- Make sure that nobody leans on the windlass when operating the control.

Nota: the boat is fitted with a chain counter.

The standard measurement «Zero» corresponds to the position of the anchor ready to be dropped.

Refer to instructions for its use and maintenance.

■ **2.7 Deckwash pump (optional extra)**

The deckwash pump is located in the fore peak port locker.

It provides sea water or fresh water from tanks.

The selection valve is located next to the deckwash pump, in the fore peak port locker.

Switch on the deck wash pump using the switch located above the pump.

Open the sea water inlet valve located in the forward starboard cabin before use.



DAVITS

HULL / DECK

34



- 1 - Davit control.
- 2 - Hydraulic pump + power supply boxes.
- 3 - Relay and fuses box.

DAVITS



1 - DAVIT CONTROL



2 - HYDRAULIC PUMP + POWER SUPPLY BOXES



3 - RELAY AND FUSES BOXE



■ 2.8 Gangway (optional extra)

The boat may optionally be fitted with a foldable carbon gangway. Remove, store and stow the gangway when sailing.

WARNING

Do not use the gangway as a diving board.

■ 2.9 Davits (optional extra)

The davits operate using two hydraulic cylinders. They are automatically energized as soon as the domestic general battery switch is set to ON. In case of malfunctioning, check the fuse in the box located in the starboard engine compartment.

WARNING

Nobody should be on board or under the tender during manoeuvres carried out with the davits. Tie up the tender during manoeuvres.

• INSTALLING A TENDER ONTO THE DAVITS

Fix the davit rope hooks to the front and rear parts of the tender. Remove the equipment from the tender and remove the water drain plug.

Activate the controls present on the starboard davit. A remote control is available as an option.

WARNING

The davits are designed to support a maximum load of 300 kg and a tender which is maximum 3,90 metres long.

• LAUNCHING A TENDER FROM THE DAVITS

Put the water drain plug back into position in the tender. Make fast the tender and then operate the control.

Install onboard the tender all the safety equipment in pursuance of the regulations of the country where your boat is registered.

TENDERLIFT

**LOCK TURNBUCKLE OF
TENDERLIFT**



HULL / DECK

**LOCKING NUTS OF THE
HYDRAULIC UNIT**



**CONE-POINT SET SCREWS OF
THE HYDRAULIC UNIT**



■ 2.10 Tenderlift

The tenderlift is activated by a hydraulic cylinder. It is automatically switched on when the on board general battery cut-out switch is ON. Its control connects at the level of the starboard transom. Optionally, a remote control is delivered with the boat. Turn off the remote control after use.

In case of malfunctioning, check the fuse located in a box in the starboard engine room. When sailing, stow the tender placed on the cradles.

WARNING

The tenderlift is designed to withstand a maximum load of 300 kg and a tender of a maximum length of 3.90 metres.

DANGER

It is strictly prohibited to sail when the tenderlift is in a position other than the utmost raised one. When sailing, the tenderlift must be locked in the high position with the turnbuckles.

Note: in case of failure of the electrical system, the procedure to lower the tenderlift is as follows:

- Loosen the two locking nuts (top and bottom) present on the hydraulic unit (starboard engine room).
- Loosen the cone-point set screws using Allen keys.

Operate gently, and at the same time, to synchronise the lowering of booms.

At the end of the procedure, retighten the cone-point set screws (do not force), and retighten the locking nuts.

The hydraulic circuit contains ISO 46 oil.

■ 2.11 Steering system

The steering assembly comprises a steering wheel, hydraulic transmission system and hydraulic cylinders for the rudders.

You can reach it through the engine compartments both starboard and port sides.

The hydraulic pump is located in the port engine room. Access to the oil filling (HM 32 type oil) is done from the facing of the helm station after removing the repeater screen for electronics. Consult a professional.

The suspended rudders are fitted with stainless steel stocks.

Maintain nylon, ertalon or Teflon rings with a lubricant.

Please refer to Chapter 'SAFETY' as for the emergency tiller use.

RIGGING / SAILS 3

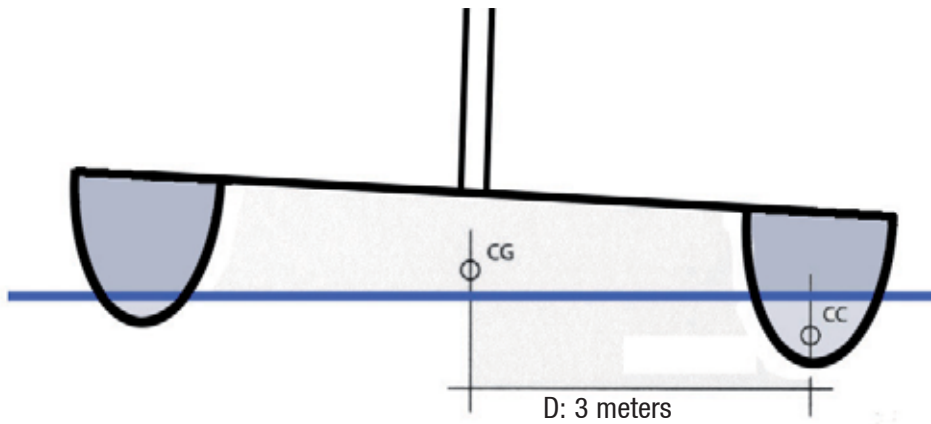
3.1 Sailing

3.2 Standing rigging

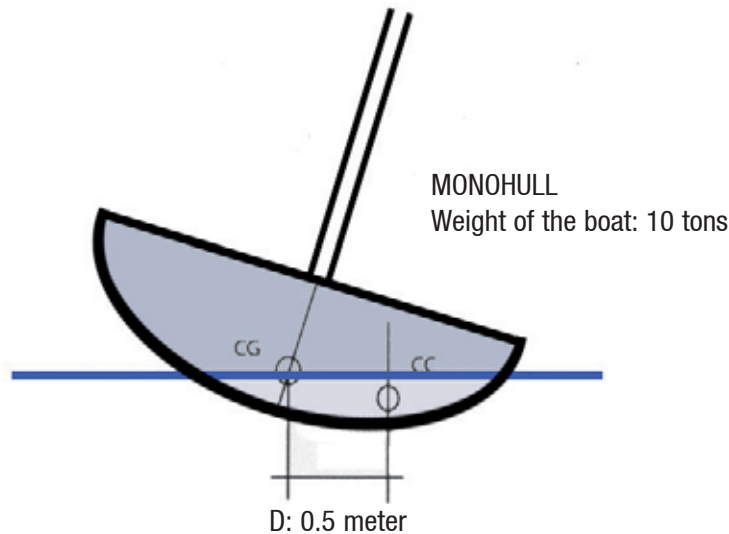
3.3 Running rigging

3.4 Sails

RIGHTING MOMENT



CATAMARAN
Weight of the boat: 10 tons



MONOHULL
Weight of the boat: 10 tons

Illustration of the difference of the righting moment existing between a 10 m monohull and catamaran.

d: distance between centre of the bottom and centre of gravity.

RMmax: Weight of the boat x d
(RMmax: moment of maximum uprighting)

RMmax monohull : 10 tons x 0.5 meter
: 5 tons.meters

RMmax catamaran : 10 tons x 3 meters
: 30 tons.meters

■ 3.1 Sailing

- BEWARE

A catamaran is about 6 times more resistant to heeling than a monohull.

In naval architecture, it is referred to as uprighting moment multiplication of the weight of the boat by the transversal distance between the centre of gravity and the centre of flotation (or bottom).

See the illustration on the opposite page.

This fact has real consequences as for the sailing and sail trimming of a catamaran.

The fact that the boat does not heel may mask overcanvassing, which may be very dangerous for the crew and the boat.

Therefore you must permanently keep a close eye on the speed of the true wind, and trim the sail surface according to the latter as a matter of priority.

The below-mentioned trims apply in a calm sea. When the sea is brown, you shall reduce earlier by 10% as far as the speed of true wind is concerned. And as a general rule, it is absolutely imperative to permanently try to ease up the boat rather than to stress her.

You will always try to have the forward edges of the sails facing the apparent wind, and to have the sail not sheeted home, so that the airflow behind the sail may be laminar, that is to say so that it may go off the aft part of the sail without any disruption.

In case you shouldn't follow the recommendations below, it might be dangerous for the boat and the crew, and, in case of an accident, the manufacturer's responsibility would not be involved.

- TRIMMING WHEN CLOSE HAULED (between 75 and 50° of true wind)

Wind force given in apparent wind

- **From 0 to 16 knots:** full sail; sheet traveller 30 cm above the centre line of the boat, mainsail sheeted with a slightly open leech (boom on the centre line of the boat).

The jib is fully unwound.

- **From 16 to 20 knots:** full sail; the sheet traveller goes up 60 cm above the centre line of the boat, mainsail sheeted with a leech a little more open (boom always in line: therefore you must ease off the sheet).

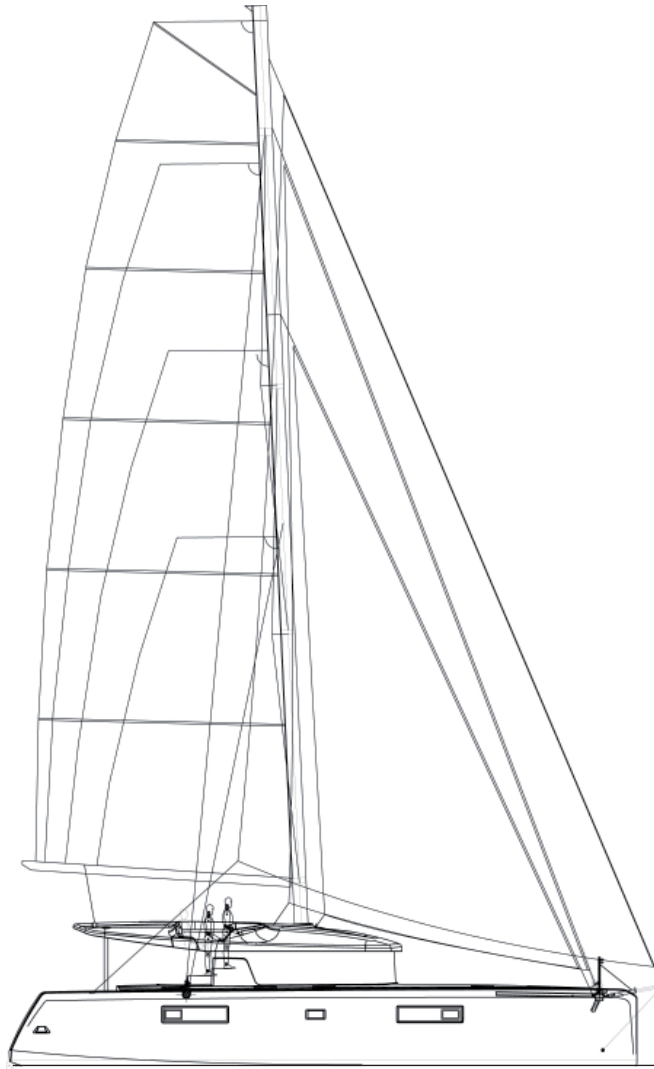
The jib is fully unwound.

- **From 20 to 26 knots:** 1 reef, full jib; the sheet traveller goes back to 30 cm above the centre line of the boat.

The jib is fully unwound.

- **From 26 to 30 knots:** 1 reef, 75% of the jib; the sheet traveller goes up 60 cm above the centre line of the boat.

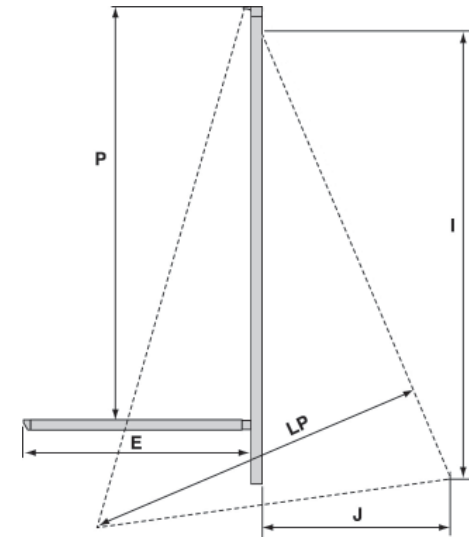
- **From 30 to 36 knots:** 2 reefs, 60% of the jib; the sheet traveller is back 30 cm above the centre line of the boat, the sheet is 50 cm eased off and the boom is leeward.



■ Sails

Sail surface close hauled (standard)	156 m ² / 1679 sq.ft
Fully battened mainsail	97 m ² / 1044 sq.ft
Square top mainsail (optional extra)	107 m ² / 1151 sq.ft
Self-tacking jib	59 m ² / 635 sq.ft
Code 0 (optional extra)	152 m ² / 1636 sq.ft
Asymmetric spinnaker (optional extra)	255 m ² / 2744 sq.ft

I	19,95 m / 65'5''
J	7.53 m / 24'8''
P	21.6 m / 70'10''
E	6.47 m / 21'3''



- **From 36 to 45 knots:** 2 reefs, jib 40%. The sheet traveller is on the centre line of the boat, the sheet is 1 metre eased off and the boom is leeward.

The jib sheet is eased off to open wide in gusts.

- **From 45 to 55 knots:** 3 reefs only (or try sail, or lying to), the traveller is on the centre line of the boat, the sheet is 1 metre eased off and the boom is leeward.

The boat would be more at ease scudding in such a weather.

- **Over 55 knots:** lying to, sea anchor, or preferably scudding.

- TRIMMING WHEN DOWN WIND (between 75 and 130° of true wind)

- **From 0 to 23 knots:** full sail; the traveller can be set at different places ranging from 1 metre off the centre line of the boat to the end of the track, depending on the angle of the wind, the sheet is eased off so that the boom may be leeward and 50 cm far from the traveller in dead calm then up to 2 metres when the wind strengthens.

In all the cases, you will avoid having more than one batten chafing against the upper shroud, in the fairest points of saling.

The jib is eased off in order to have its average front edge facing the apparent wind.

- **From 23 to 28 knots:** 1 reef, full jib. The trimmings are similar.

- **From 28 to 33 knots:** 2 reefs, 80% of the jib. The trimmings remain similar.

- **From 33 to 38 knots:** 2 reefs, 60% of the jib. The trimmings remain similar.

- **From 38 to 45 knots:** 3 reefs (or mainsail lowered and slightly more jib), jib 40%. The trimmings remain similar.

- **From 45 to 55 knots:** mainsail lowered, jib 40 to 30% quite hardened in order to avoid flapping.

- **Over 55 knots:** scudding, depending on the sea, you will set mooring ropes from one transom extension to the other one in order to reduce the speed of the boat.

These figures are given for reference only and are to be adapted regarding external conditions.

- SQUARE TOP MAINSAIL

WARNING

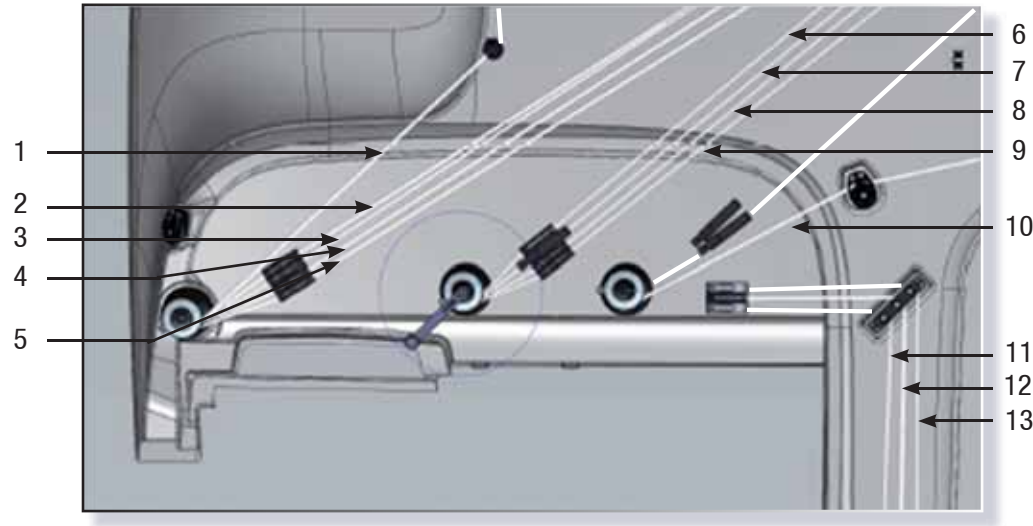
A cruising square top mainsail is more powerful than a standard mainsail.

Short en the sails earlier, depending on the wind conditions.

RIGGING PLAN

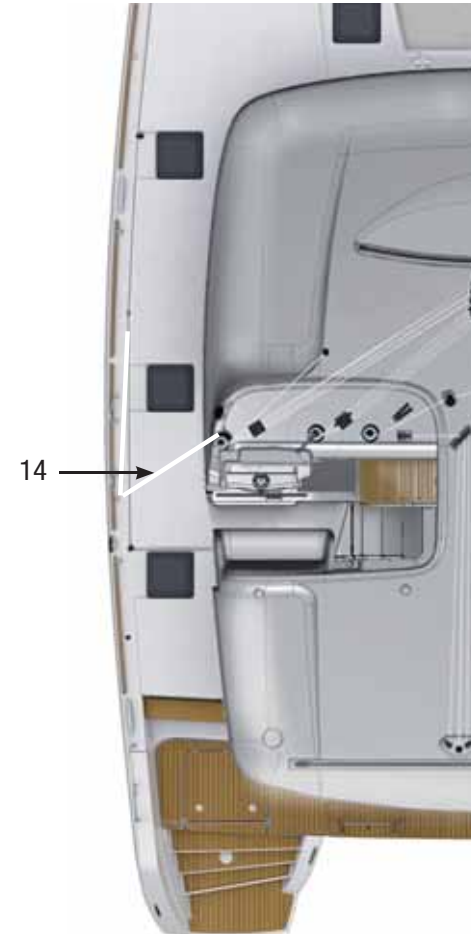
RIGGING / SAILS

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- 1 - Self-tacking jib.
- 2 - Self-tacking staysail sheet.
- 3 - Boom topping lift.
- 4 - Reef Cunningham 1.
- 5 - Reef Cunningham 2.
- 6 - Reef tack 3.
- 7 - Mainsail halyard.

- 8 - Reef tack 1.
- 9 - Reef tack 2.
- 10 - Staysailhalyard (optional).
- 11 - Port mainsail traveller.
- 12 - Mainsailsheet.
- 13 - Starboardmainsail traveller.
- 14- Jib furling line.



■ 3.2 Standing rigging

The LAGOON 52 S has been adjusted by the shipyard and by the mast manufacturer when first masting.

The cables stretch a little during the first sailings. Therefore it is advisable to have the mast inspected and adjusted by a specialist.

Before you put out to sea, it is essential to make sure that the standing rigging is in good condition: inspect the gooseneck, turnbuckles, and check the condition of the shrouds.

RECOMMENDATION

Any intervention on the standing rigging comes within a specialist remit.

To hoist a crew member up to the top of the mast, use the man hoisting halyard.

Belay the crew member with a bowline on the bosun's chair ring (do not use snap shackle or shackle).

WARNING

The man hoisting halyard which is the only one to be authorized for this purpose, is only meant to hoist a crew member up to the top of the mast.

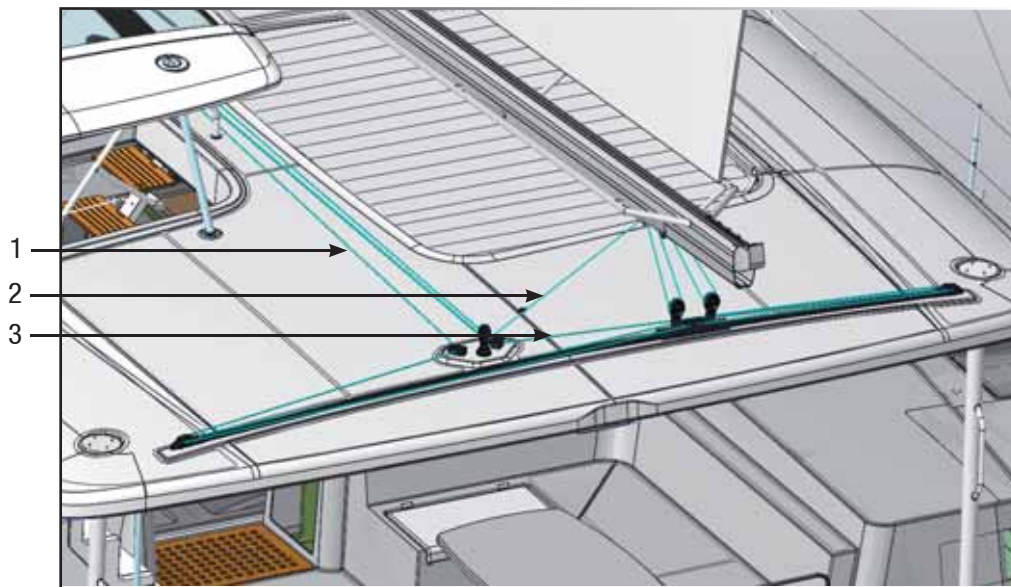
■ 3.3 Running rigging

Description of the ropes	length (m)	diameter (mm)
Mainsail halyard	56 + 14	12 + 10
Mainsail topping lift	57	12
Genoa halyard <small>(tensioning mast step)</small>	18,5	10
Genoa lowering halyard	30	8
Reef 1	16 + 8	14 + 10
Reef 2	17 + 16	14 + 10
Cravate	0,88	6
Mainsail sheet	30	14
Self-tacking jib sheet	29	14
Genoa furling line	29	10
Code 0 halyard	50 + 35	14 + 12
Code 0 / spinnaker sheet	40	14
Staysail halyard	50	14
Man hoisting halyard	55	10
Reef cunningham 1	13	14
Reef cunningham 2	18	14
Port traveller adjustment	13	10
Starboard traveller adjustment	17	10

RUNNING RIGGING - MAINSAIL CIRCUIT

RIGGING / SAILS

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- 2 - Mainsail sheet.
- 1 - Two-way rail to port for mainsheet traveller.
- 3 - Two-way rail to starboard for mainsheet traveller.

ELECTRIC WINCHES POWER OFF SWITCH



The mainsail, self-tacking jib, jib and staysail sheets, the topping lift, the reefing lines, the mainsail and spinnaker halyards, the control lines for the main traveller are led back to the manoeuvre station.

- **SHEET WINCHES AND MANOEUVRE WINCHES (MANUAL OR ELECTRIC) (OPTIONAL EXTRA)**

The circuit breakers of the electric winches are in the technical room of the foredeck.

For safety, all electric winches may be switched off by a switch on the helm station (switching off the capstan and windlass as well).

RECOMMENDATION

Have at least 3 turns on the winch.

Electrical winches generate an extremely powerful force and you should use them with much care.

Never force when you find a jamming point.

When using the winches, keep your hands away.

After use, shut the switch covers.

WARNING

Refer to the manufacturer's instructions to remove the winches and put them back.

Improper refitting may result in accidents (for example: kick of the crank handle).

■ 3.4 Sails

• STANDARD MAINSAIL

To hoist the standard mainsail:

- Point your boat into wind with engine in gear.
- Make sure that the mainsheet is eased off and the reefs are free.
- Open the jammer.
- Hoist the sail being careful for the battens not to get jammed in the lazy-jacks.
- Make fast the halyard with the jammer.
- Trim the mainsail according to the wind and sea conditions.
- Easing of the topping lift.

To lower the standard mainsail:

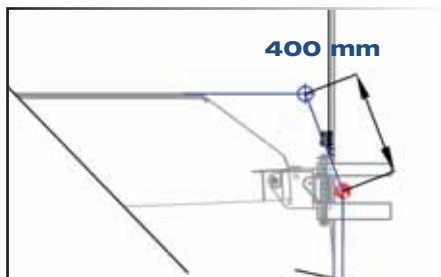
- Haul up.
- Tighten the topping lift.
- Slacken off the halyard, lower the mainsail then furl it.
- Tighten the sheet.

WARNING

During mainsail hoisting, ensure that the head pulley is blocked (Allen key) to avoid it turning on its own.

REEF TACK LINE - CRUISING SQUARE TOP MAINSAIL

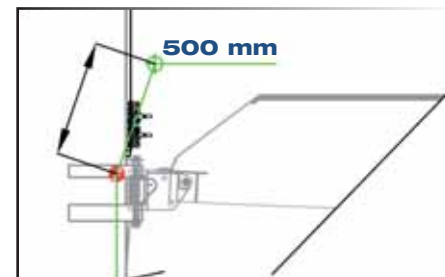
**POSITION REEF TACK LINE 1
(STARBOARD)**



**POSITION REEF TACK LINE 2
(STARBOARD)**



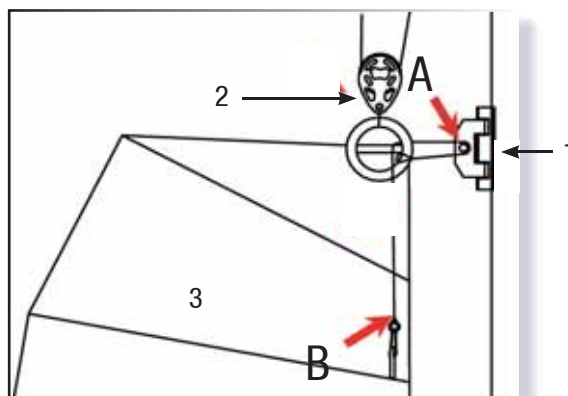
**POSITION REEF TACK LINE 3
(PORT)**



RIGGING / SAILS

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**FASTENING OF THE CRUISING
SQUARE TOP MAINSAIL**



- 1 - Headboard traveller.
- 2 - Halyard block (to be fastened onto the headboard eye).
- 3 - Cruising square top mainsail.

- REEFING A SAIL

On each reef, you will also find a stopper on the leech and on the tack.

- Move the mainsail closer to the eye of the wind, using the wheel or the traveller.
- Check the main sheet.
- Pick up the lift again.
- Slip the halyard .
- Haul the required reef tack line to the level defined in the diagram opposite and then close the blocker.
- Repeat the same maneuver with the reef tack stopper.
- Hoist the mainsail home and shut the locker.
- Slip the lift.

For the reef 3, attach the "cravate" on the padeye of the mast after passing it through the reef eyelet designed for the purpose

REEF SHAKING OUT

- Make the mainsail closer to the eye of the wind, either steering the boat or using the traveller.
- Ease off the mainsheet.
- Tighten the topping lift.
- Ease off the tack and leech reef pendants.
- Hoist the mainsail, then close the jammer.
- Slacken off the topping lift.

- CRUISING SQUARE TOP MAINSAIL (optional extra)

The cruising square top mainsail halyard is lashed on the eyelet of the sail, not on the headboard traveller.

The square top will be properly set automatically once the sail is hoisted up.

FITTING OF THE MAINSAIL CRUISING SQUARE TOP SYSTEM

Refer to the drawing on the opposite page.

- Remove the pin of the headboard car (mark A).
- Make the 2 strand tackle as per the drawing on the opposite page.
- Put back the headboard car pin (mark A), adding the sheave.

The length of the headboard line is adjusted to the right dimension for a new sail at the sailmaker's.

The lashing (mark B) makes possible to make up for the possible lengthening of the rope due to ageing.

Nota: this system is patented by the INCIDENCES sailmaker.

WARNING

A cruising square top mainsail has a more important power than a standard mainsail. Shorten the sail earlier depending on the wind conditions.

JIB - SELF-TACKING JIB

**TRAVELLER BLOCKED
IN OPEN POSITION**



**HALYARD
TO ITS EXTENSION**



RIGGING / SAILS

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RAIL FOR SELF-TACKING JIB



- JIB

JIB FITTING

Pay attention to the way the drum winds up: the Genoa UV protection must be outside (see location pictograms on the sail - sun on exterior side, sun crossed out on interior side-).

The jib halyard has an extension linked to it through a whipping.

- Hoist the jib until the halyard whipping appears level with the tension adjustment track.
- Furl the jib.

The halyard can then be slackened.

- Separate the halyard from its extension.
- Have both of them fixed on each side of the tension adjustment traveller.
- Block the locker.
- Harden moderately the halyard until the traveller locks automatically one or two notches lower.

Once the jib is completely unwound, you will be able to adjust its definitive tension using a tightening rope, more important than the halyard extension.

If the jib is kept wound when the boat is not used, slip the halyard one notch tighter on the track in order to release the tension of the halyard on the masthead sheave.

JIB USE

- Progressively slip the jib roller furling stopper pulling a sheet.
- Pull on the stopper to wind up the jib.

We advise you to wind or unwind the front sails when sailing before the wind.

Never force in case of hard point during the winding or unwinding of the front sails.

Check that there is no halyard caught in the furler or that the sail is not too tightened.

WARNING

When the mainsail is shortened and reefed down twice, you must replace the jib by the staysail.

JIB LOWERING

The jib must absolutely be furled.

- Have the jib halyard extension fixed in the lower hook of the tension adjustment traveller then pass it in the available mast foot block with a direct return to a winch on the wheelhouse.
- Hoist the halyard (about 5 cm) before letting the traveller go down.
- Release the traveller locker doing a ninety-degree turn.
- Slip the halyard to the winch.

This group of elements is no longer under tension.

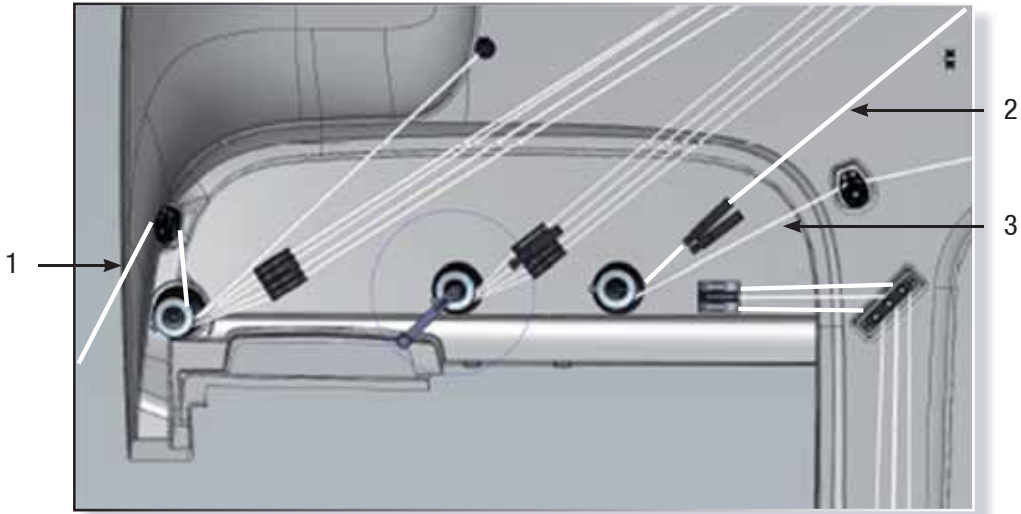
- Release the halyard and its extension from the tension adjustment traveller and tighten them together with a solid whipping (in order to get one single halyard).
- Harden moderately the halyard using the winch.
- Unwind the jib to haul down.

STAYSAIL

The staysail fits onto a furler with a free luff.

In order to avoid unexpected unwinding of the furler, remove the staysail as soon as it has been furled.

RIGGING CIRCUIT SPINNAKER



- 1 - Port spinnaker sheet.
- 2 - Spinnaker halyard.
- 3 - Starboard spinnaker sheet.

- CODE 0

It is possible to remove the front guard lines when using the code 0. Before getting under the way, take advantage of a windless period of time and hoist the code 0.

- Secure the swivel to the code 0 headboard.
- Secure the furling system to the tack clew.
- Put the furling system to the boomsprit with a 2:1 rope.
- Secure the halyard to the headboard swivel.
- Hoist the code 0.

Use the furling system line to furl or unfurl the code 0.

Code 0 sheets:

- Secure the sheets to the code 0 clew.
- The sheets pass to the exterior of the forestay and the shrouds. Upwind, pass the sheets to the interior of the guard lines and downwind to the exterior of the guard lines.
- Make fast the sheet leading blocks to the chainplates.
- Reroute the sheets to the code 0 sheet winches.

WARNING

In some sailing trims, the code 0 may hide the fore navigation lights.

WARNING

Unrig the code 0 when not in use (risk of being UV damaged and inadvertently unfurled).

ACCOMMODATIONS 4

4.1 Saloon - Galley

4.2 Lighting

4.3 Portholes - Deck hatches

4.4 Window blinds

DRAWERS - LIGHTINGS

**SUCTION PADS FOR
THE FLOORBOARDS**



12 V SOCKETS



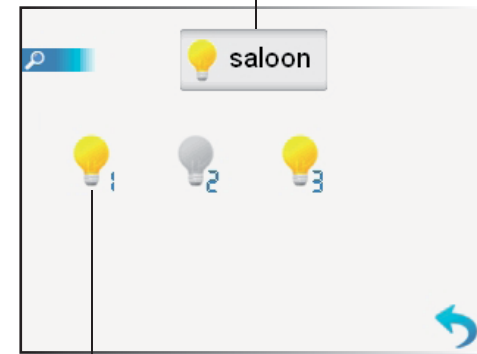
ACCOMMODATIONS

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**REMOVING DRAWER
LEVER + RAIL**



Turn on / off all lights
in the given zone



Return to
previous screen

Turn on / off a series of
lamps in the zone

■ 4.1 Saloon - Galley

- FLOORBOARDS

The floorboards can be lifted up to have access to the different technical components on board.

Use the suction pad provided for this purpose.

RECOMMENDATION

To avoid premature ageing of the floorboards (dents, scratches) it is recommended to keep them as clean as possible and to remove shoes inside the boat.

- DRAWERS

The different drawers have an automatic closing function.

Gently push them until the movement ends itself.

These drawers can be removed by pushing on the levers on each side, under the rails.

When you reassemble it, clip the drawer before you push it back.

- 12 V SOCKETS

A built-in 12 V power sockets system is present on the aft part of the galley.

■ 4.2 Lighting

- ON-BOARD LIGHTING MANAGEMENT

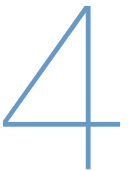
After switching on the domestic 12 V circuit and the multifunction touch screen:

- Use the touch screen to select the Lighting Menu icon.
- Move to the Lighting zone sub menus and select the areas of the boat to be lit.

Turn on the lights using the switches in the desired zone.

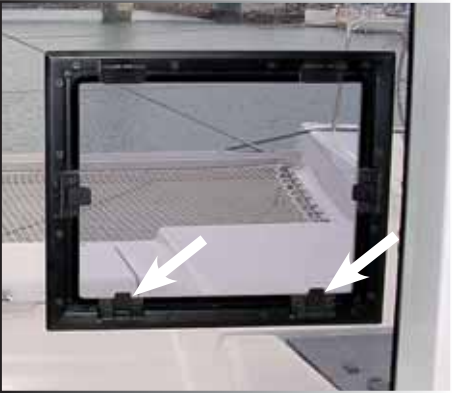
Please refer to chapter 1.5 Multifunction touch screen for details.

In case of malfunctioning, check the appropriate fuses located in the port and starboard keelson boxes (see ELECTRICITY chapter).



PORTHOLES - DECK HATCHES - WINDOWS

CLOSURE OF SALOON PORTHOLES



CURTAIN AND MOSQUITO SCREEN OF THE DECK HATCH



PLEATED SALOON BLINDS



■ 4.3 Portholes - Deck hatches

The portholes and deck hatches have locking systems to keep them in a closed position.

At anchor, intermediate opening position allows the ventilation of the boat.

The deck hatches are fitted with a blind and mosquito screen system that can be used even when the hatch is open.

Their handling shall be done carefully.

■ 4.4 Window blinds

There are black out curtains or blinds on the saloon, cabins and heads windows.

The opening hatches (optional extra) of the aft cabins are also fitted with curtains.

RECOMMENDATION

Pull and push the blinds carefully.

Take care to fasten them when they are fitted with the relevant systems.



UTILITY ABOARD

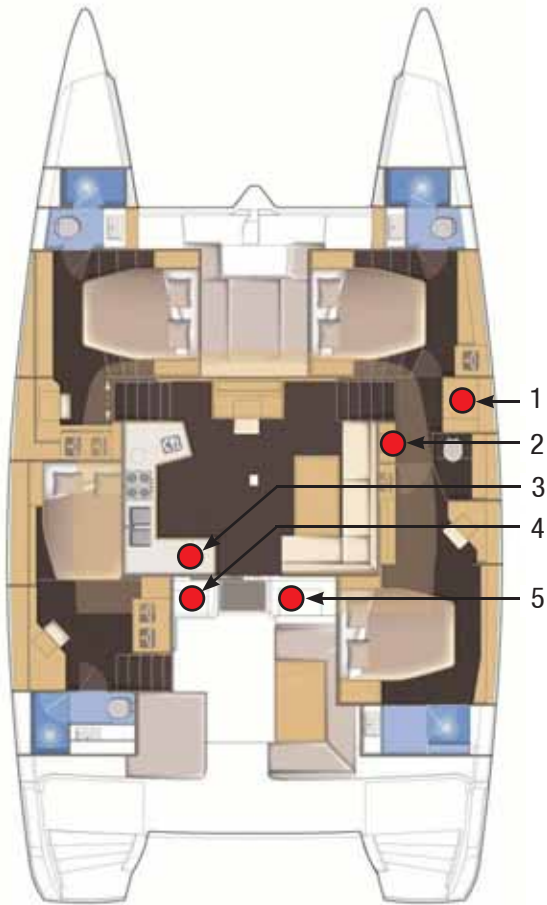
5

- 5.1 Refrigerators - Icebox**
- 5.2 Icemaker (optional extra)**
- 5.3 Microwave oven (optional extra)**
- 5.4 Gas oven and hobs**
- 5.5 Dishwasher (optional extra)**
- 5.6 Washer dryer (optional extra)**
- 5.7 Televisions (optional extra)**
- 5.8 Air conditioning (optional extra)**

REFRIGERATOR / FREEZER - ICEBOX - ICEMAKER

UTILITY ABOARD

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- 1 - Refrigerator / freezer.
- 2 - 220 V electrical panel.
- 3 - Refrigerator or icebox (optional extra).
- 4 - Cockpit refrigerator.
- 5 - Ice maker.

1 - REFRIGERATOR / FREEZER



3 - ICEBOX



4 - COCKPIT REFRIGERATOR



5 - ICEMAKER



■ 5.1 Refrigerators - Icebox

The boat is equipped as standard with a refrigerator (100 l) / freezer located in the starboard passageway.

The refrigerator / freezer works using the 12 V / 220 V inverter, as soon as the 12 V on board circuit is switched on.

The boat can be equipped as an option with a second refrigerator or freezer in the aft galley cupboard.

The icebox lets you have negative cold.

The boat can also be optionally equipped with a cockpit refrigerator (80 l), located under the port cabinet at the saloon entrance.

RECOMMENDATION

Defrost then drain on the refrigerators / freezer and the icebox before you stop the domestic 12 V circuit.

After having turned on the 12 V on board circuit, switch on the refrigerators and icebox with their thermostat button.

In case of malfunctioning of the cockpit refrigerator, check its fuse located in the port keelson boxes (see ELECTRICITY chapter).

For the use and maintenance of the refrigerators and icebox, please refer to their instruction guides.

■ 5.2 Ice maker

The boat may be equipped as an option with an icemaker located in the starboard cockpit cupboard in front of the saloon entrance door.

The icemaker requires 220 V (110 V in US version).

It is supplied with water coming from the fresh water system.

Check that its automatic breaker is switched on at the Comfort busbar of the 110 V - 220 V electrical panel (starboard passageway cupboard) and ensure that the Water Pump switch located in the starboard passageway cupboard is on.

SUPPLY

Select the power supply source (generator, shore power socket n° 1 or inverter - for the US version, only generator and inverter) from the touch control screen at the chart table.

RECOMMENDATION

**The usage of the icemaker through the inverter should remain limited.
Check the battery charge during the use of the inverter.**

Please note: the icemaker system is fitted with a filter.

Regularly change the filter.

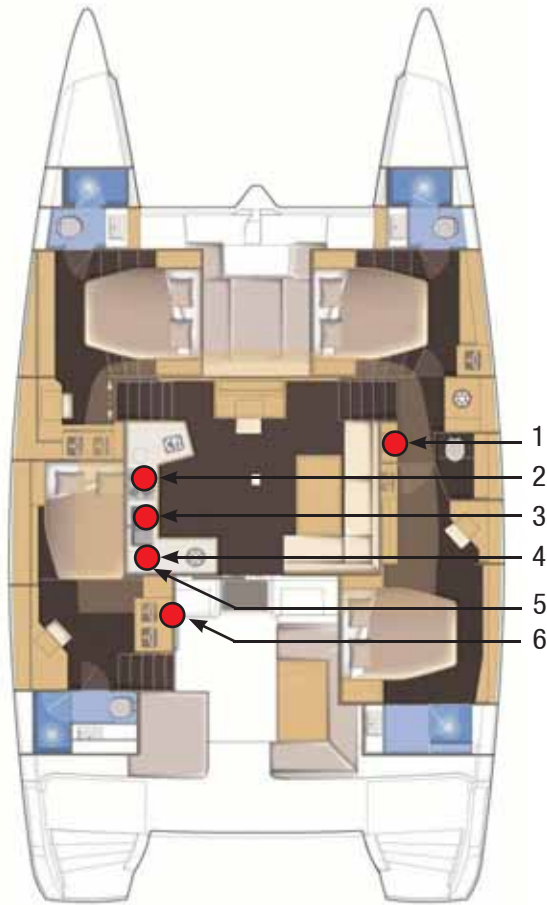
For the use and maintenance of the icemaker, please refer to its instruction guide.



MICROWAVE OVEN - GAS HOBS

UTILITY ABOARD

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- 1 - 220 V electrical panel.
- 2 - Gas hobs.
- 3 - Gas valves.
- 4 - Microwave oven.
- 5 - Gas solenoid valve switch (US version).
- 6 - Gas bottles locker.

**4 - LOCATION MICROWAVE OVEN
+ GAS SOLENOID VALVE SWITCH
(US VERSION)**



**3 - HOBS AND OVEN
GAS VALVES**



2 - GAS HOBS



6 - GAS BOTTLES LOCKER



■ 5.3 Microwave oven

The boat may optionally be fitted with a microwave oven in the top port cupboard in the galley.

Check that its automatic breaker is switched on at the Comfort busbar of the 110 V - 220 V electrical panel (starboard passageway cupboard).

SUPPLY

Select the power supply source (generator, shore power socket n° 1 or inverter - for the US version, only generator and inverter) from the touch control screen at the chart table.

RECOMMENDATION

**The usage of the microwave oven through the inverter should remain limited.
Check the battery charge during the use of the inverter.**

For the use and maintenance of the microwave oven, please refer to its instruction guide.

■ 5.4 Gas oven and hobs

The boat is standard fitted with gas oven and hobs.

The gas valves are located to the right in the under-sink cupboard. The gas bottle is located in a cockpit port locker.

RECOMMENDATION

Shut the gas valves and the regulator tap when you do not use the gas oven and hobs.

The hobs have an electric ignition.

The inverter that supplies ignition is automatically operated when the 12 V system on board is switched on.

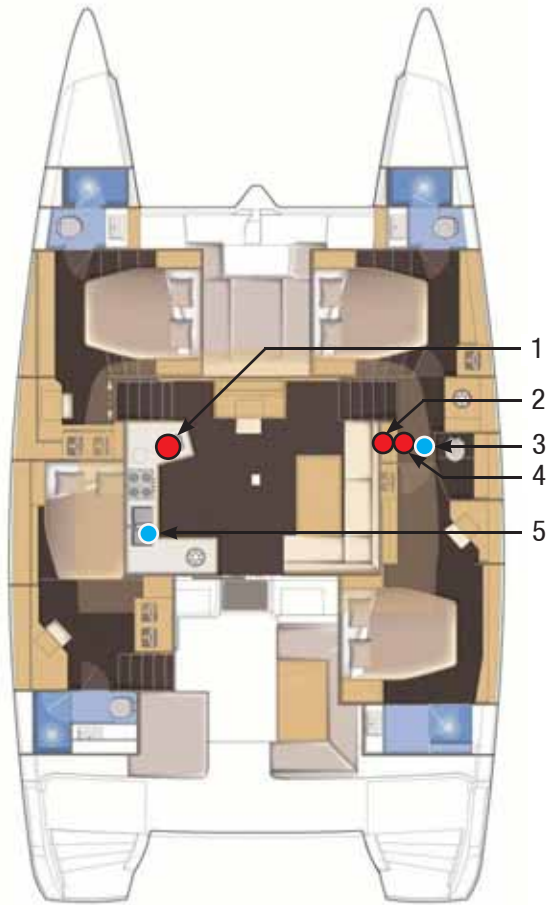
The boat in her U.S. version has an electrovalve located in the locker where the bottles are stored.

Switch on the valve using its switch located under the microwave oven unit, at the port entrance to the galley.

DISHWASHER - WASHER DRYER

UTILITY ABOARD

66



- 1 - Washer dryer.
- 2 - 220 V electrical panel + water pump switch.
- 3 - Washing machine fresh water supply valve.
- 4 - Dishwasher.
- 5 - Dishwasher fresh water supply valve.

1 - DISHWASHER



5 - DISHWASHER FRESH WATER SUPPLY VALVE



4 - WASHER DRYER



3 - WASHER DRYER FRESH WATER SUPPLY VALVE



■ 5.5 Dishwasher

The boat may optionally be fitted with a dishwasher located in the galley cupboard.

The dishwasher fresh water is supplied by the port tanks.

Check that the valve is open on the manifold under the sink and ensure that the Water Pump switch located in the cupboard of the starboard passageway is on.

Its water outlet is shared with the sink.

Check that its automatic breaker is switched on at the High Load busbar of the 110 V - 220 V electrical panel (starboard passageway cupboard).

SUPPLY

Select the power supply source (generator or shore power socket n° 1 - for the US version, only generator) from the touch control screen at the chart table.

RECOMMENDATION

Do not use the dishwasher when sailing.

For the use and maintenance of the dishwasher, refer to its instruction guide.

■ 5.6 Washer dryer

The boat may optionally be fitted with a washer dryer located in the lower cupboard of the starboard passageway.

The washing machine fresh water is supplied by the starboard tanks. Check that the valve located under the passageway floor, at the foot of the washer, is open and ensure that the Water Pump switch located in the cupboard of the starboard passageway is on.

Drainage is directly via the valve located behind a hatch in the cupboard next to the washer.

Check that its automatic breaker is switched on at the High Load busbar of the 110 V - 220 V electrical panel (starboard passageway cupboard).

SUPPLY

Select the power supply source (generator or shore power socket n° 1 - for the US version, only generator) from the touch control screen at the chart table.

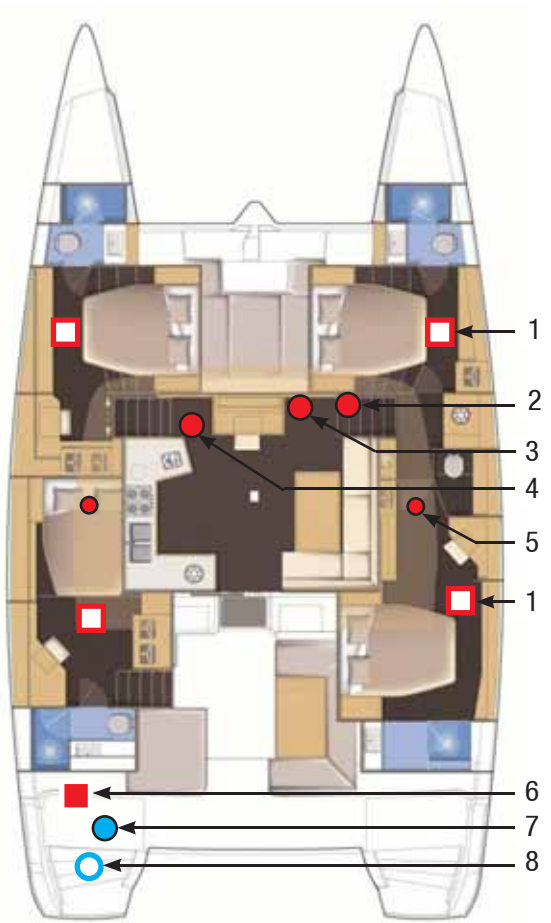
RECOMMENDATION

Do not use the washer dryer when sailing.

For the use and maintenance of the washer dryer, refer to its instruction guide.

AIR CONDITIONING - TELEVISION

UTILITY ABOARD
68



- 1 - Forced air heater.
- 2 - Up / down television switch.
- 3 - Television.
- 4 - Air conditioning control.
- 5 - Drainage pump / air conditioning drains.
- 6 - Air conditioning unit.
- 7 - Sea water inlet valve + filter.
- 8 - Pressure gauge + water circuit valve.

4 - AIR CONDITIONING CONTROL



WATER ADDITION VALVE CONTROL



**6 - AIR CONDITIONING UNIT
SEA WATER INLET VALVE +
FILTER**



**8 + PRESSURE GAUGE
+ WATER CIRCUIT
REPRESSURIZATION VALVE**



■ 5.7 Televisions

The saloon can be equipped as an option with a slot-in television in the starboard cabinet of the chart table.

The cabins may also be fitted with optional television sets.

The televisions are powered by the optional converter (Comfort bus).

After switching on the 12 V system:

- Press on the switch located next to the cabinet to starboard of the chart table to move the television up or down.

Be careful nothing impedes the opening of the television hatch.

Set the television down to its initial position when sailing.

An antenna booster is located next to the pillar, in the saloon ceiling.

For the use and maintenance of the televisions, please refer to their instruction guide.

■ 5.8 Air conditioning

The boat may be fitted with an optional reversible air conditioning system.

The air conditioning group is located in the port engine compartment. It works with 220 V (identical in US version) according to the principle of a chilled water circulation system.

The compressors (engine compartment) are pre-set by the Builder on the automatic mode ; they produce either cold or heat according to the exterior temperature and to the selected temperature.

Unit heaters are fitted in every cabin and in the saloon.

Before you start the system:

- Open the sea water circulation system (suction valve and drain valve) in the port engine bilge.

SUPPLY

Select the power supply source (generator or shore power socket n° 2) from the touch control screen at the chart table.

Check that the pumps and air conditioning units are switched on at the automatic breakers located in the port engine room.

Switch on the air conditioning, then regulate the temperature and ventilation using the saloon (access on the port side of the chart table) or cabin controls.

In case of a fall in pressure, open the valve located on the water circuit in front of the pressure gauge in the port engine room, to increase the pressure in the circuit (between 10 and 15 PSI).

Ensure that you close the valve after increasing pressure in the circuit.

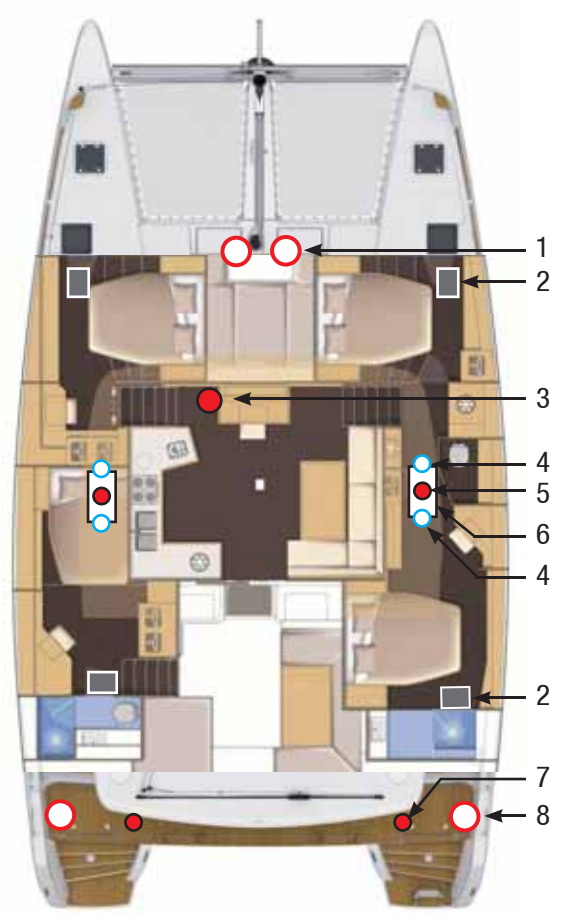
Note: every hull is provided with an automatically triggered pump in order to empty the air conditioning drain water traps.

For the draining, use and maintenance of the air conditioning system, refer to its instruction guide.

WATER SYSTEMS 6

- 6.1 Bilge pump system**
- 6.2 Grey waters**
- 6.3 Black waters**
- 6.4 Fresh water**
- 6.5 Watermaker (optional extra)**

BILGE PUMP SYSTEM - GREY WATERS



Each hull has the same components.
Nota: each valve in the boat is identified.

SEA-COCK OPEN



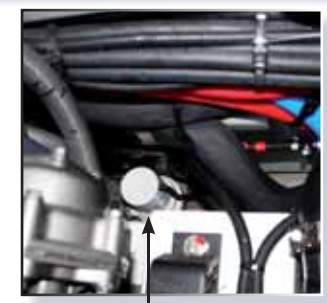
SEA-COCK CLOSED



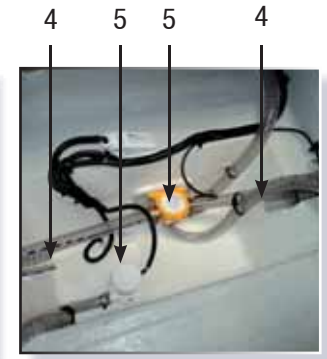
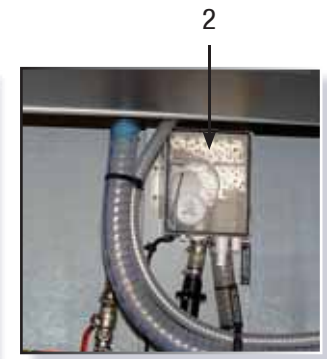
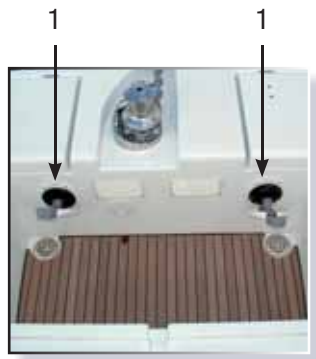
ELECTRIC BILGE PUMP SWITCHES



- 1 - Bow bilge pump.
- 2 - Grey water collecting box.
- 3 - Electric bilge pump switches.
- 4 - Venting forward / aft compartment.
- 5 - Electric bilge pump / sump + Drainage pump / air conditioning drains.
- 6 - Hull sump.
- 7 - Electric bilge pump / engine bilge.
- 8 - Manual bilge pump.



7



■ 6.1 Bilge pump system

A main sump is under the floorboard of each hull.

The fore and aft compartments are linked to these sumps by a bilge pipe and a valve (access under the floors of the port and starboard passageway).

Each sump is drained by:

- A cockpit manual pump.
- An electric pump with automatic and manual start (on the bilge pump switch panel, to the left of the chart table).

An automatic start for a low level starts the pump but not the alarm (draining of the bilge pipes).

Then the alarm starts when the water level is higher.

Nota: the electric bilge pumps automatically work even if the 12 V system has been switched off.

The engine bilges are each equipped with an electric pump with automatic and manual start.

WARNING

The bilge pump system is not designed to provide buoyancy to the boat in case of damage.

The bilge pump system is designed to drive out the water being either sea spray or leaks but absolutely not the water coming through a hole in the hull, this hole being the result of a damage.

Every hull is provided with an automatically triggered pump in order to empty the air conditioning drain water traps.

In case of malfunctioning, check the appropriate fuses located in the port and starboard keelson boxes (see ELECTRICITY chapter).

Two manual bilge pumps located at the front of the boat are used to remove water from the forward compartments.

RECOMMENDATION

Regularly check the valves and sea-cocks for proper operation and watertightness.

Regularly make sure the filters and strainers on the draining system are clean.

■ 6.2 Grey waters

The grey waters are grouped together in two collecting tanks in each hull.

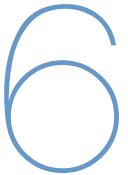
They collect the waste waters of the basins and showers of the shower rooms.

The grey water tanks are drained using automatic starting pumps.

They are automatically switched on when the on board general battery cut-out switch is ON.

In case of malfunctioning, check the appropriate fuses located in the port and starboard keelson boxes (see ELECTRICITY chapter).

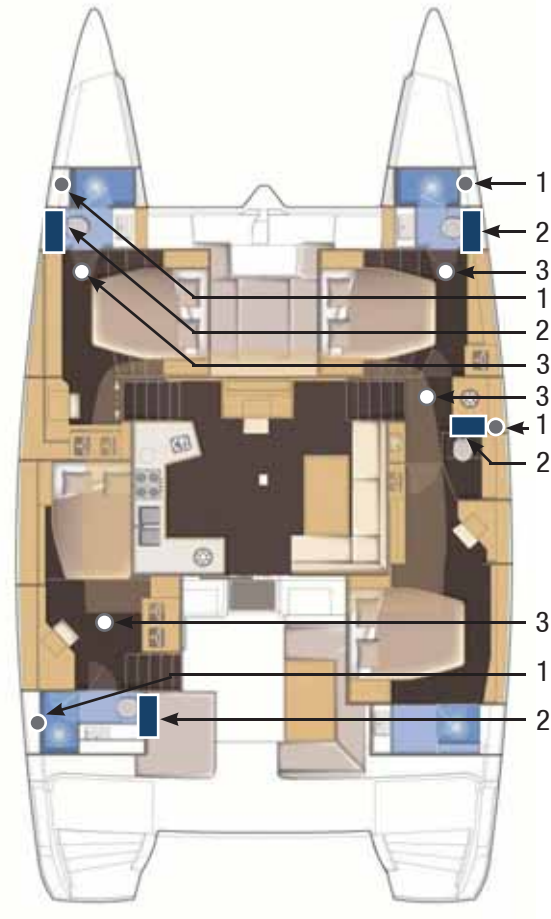
It is recommended to regularly clean the filters (access by unclipping the covers).



BLACK WATERS - ELECTRIC TOILETS

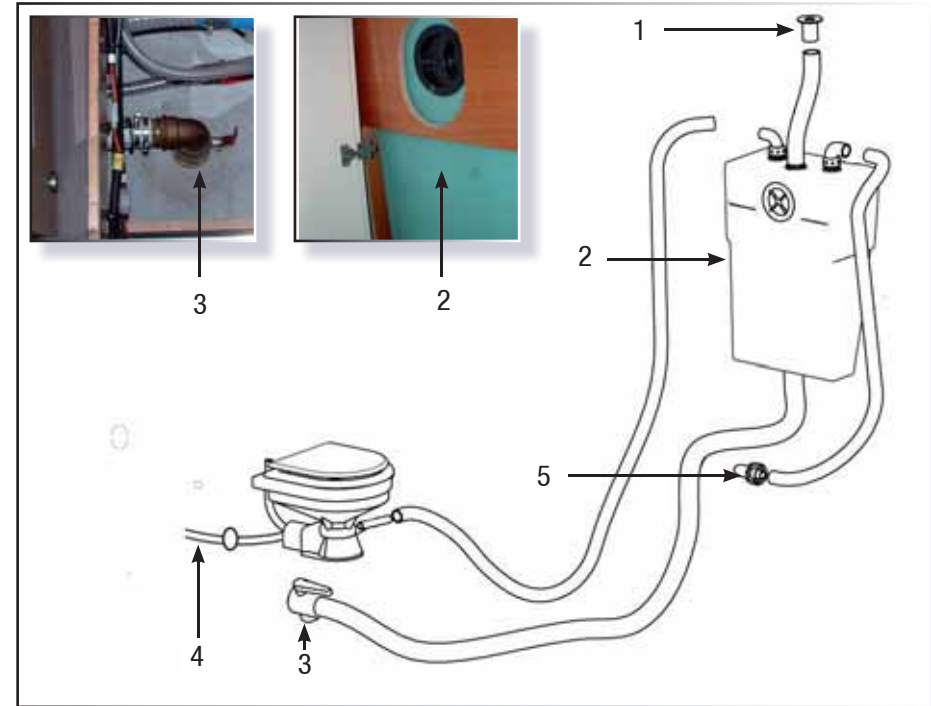
WATER SYSTEMS

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- 1 - Drain bung hole on deck.
- 2 - Holding tank.
- 3 - Drain valve on hull.
- 4 - Fresh water tank inlet.
- 5 - Vent.

HOLDING TANK SYSTEM



■ 6.3 Black waters

The standard boat is fitted with manual toilets. She may be fitted with optional electric toilets and holding tanks in all the washrooms.

• USE OF THE MANUAL TOILETS

- Open the water inlet and drain valves.

To empty the bowl:

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

To dry the bowl:

- Set the lever back vertical (DRY) and operate the pump.

In order to avoid clogging the toilets, use absorbent paper only and pump until the emptying hose is completely empty. Regularly rinse the toilets with fresh water. Close the valves after each use.

• USE OF THE ELECTRIC TOILETS

You rinse them using the fresh water in the port tanks for the heads in the port hull and the starboard tanks for the heads in the starboard hull.

Ensure that the on board 12 V circuit and the water pump switch (electrical cupboard starboard passageway) are switched on. For correct functioning of the toilets, only use the paper recommended in the toilet instruction manual.

In case of malfunctioning, check the appropriate fuses located in the port and starboard keelson boxes (see ELECTRICITY chapter).

For the use and maintenance of the electric toilets, please refer to their instruction guide.

• USE OF THE HOLDING TANKS

The heads are fitted with holding tanks.

To use them, make sure the drain valve on the bowl is closed in order to avoid any inadvertent discharge (the valve is closed when the handle is perpendicular with the pipe).

You will reach the tanks via the bathrooms.

To empty a black water tank:

- In an authorized area, open the drain valve to empty the tank through gravity.

- In a marina equipped with an organic waste suction system, put the suction hose into the tank through the deck filler. Start the pump of the suction system.

The filler cap is opened and closed with an appropriate key.

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

Regularly rinse the holding tanks.

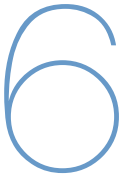
RECOMMENDATION

Use the suction systems in marinas to empty your holding tanks.

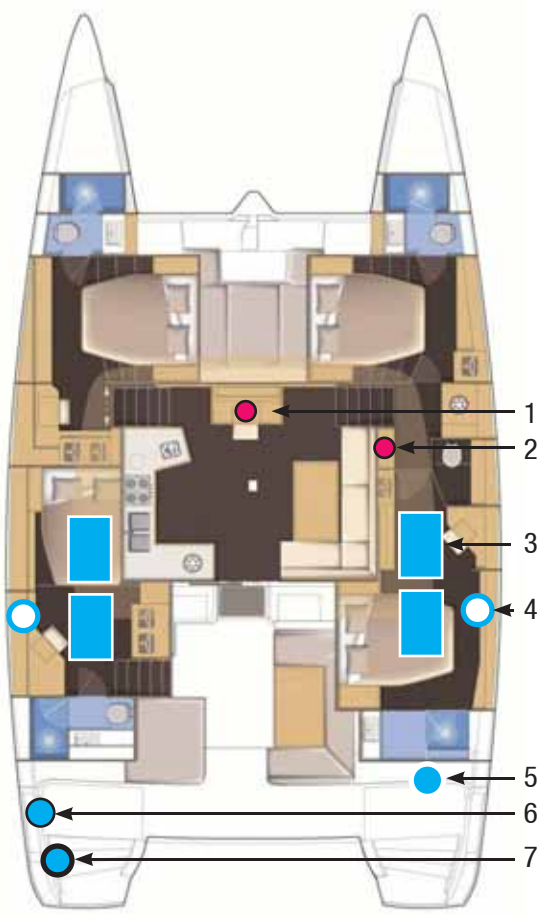
In order to respect environment, do not discharge your holding tanks near the shore.

WARNING

Ask for information about the laws in force in your country or your marina about discharging black water into the sea.



FRESH WATER



- 1 - Multifunction touch screen.
- 2 - Starting switch of the water pump.
- 3 - Fresh water tank.
- 4 - Deck filler.
- 5 - Pressure water pump.
- 6 - Valve for shore fresh water supply.
- 7 - Shore fresh water supply.



2



5

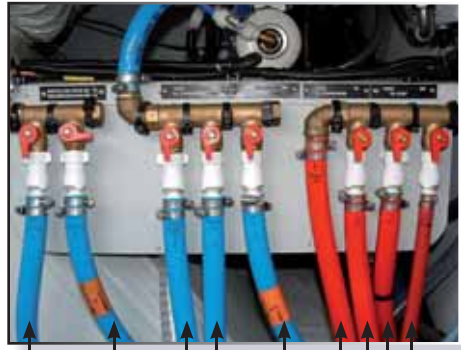


7



6

FRESH WATER DISTRIBUTION MANIFOLD



A B C D E F G H I

- A - Starboard tanks selection.
- B - Port tanks selection.
- C - Fresh water supply port side float.
- D - Fresh water supply starboard side float.
- E - Fresh water supply to water heater.
- F - Hot water inlet from water heater.
- G - Hot water supply port side float.
- H - Hot water supply starboard side float.
- I - Hot water supply shower starboard transom.

■ 6.4 Fresh water

• FRESH WATER TANKS

The boat is equipped as standard with two 240 l tanks linked together by the hull.

The tanks are independent between the port hull and the starboard hull.

The selection valve to use the tanks is located in the starboard engine room.

To prevent any handling mistake, never fill the water and fuel tanks at the same time.

Two deck fillers (port / starboard) enable the tanks to be filled.

During filling, avoid handling contaminants near the fillers.

Open and close the filler caps with the suitable key.

Check the filler cap seals for condition during filling.

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

The tanks are fitted with inspection hatches therefore it is possible to clean the inside.

RECOMMENDATION

Pay attention to the quality of the water for the filling up.

Check if it is drinking water.

If the boat is not used for long, purify the tanks and pipes with proper treatment.

Nota: the capacity of the fresh water tank(s) indicated on the page 'SPECIFICATIONS' may be not completely usable depending on the trim and load of the boat.

• PRESSURE WATER PUMP

The water pump is located in the starboard engine room.

It is switched on using the switch located in the electrical cupboard of the starboard passageway. Switch OFF in case of absence.

RECOMMENDATION

Never operate the water system equipment when the valves are closed or when the tanks are empty.

Close the supply valve on an empty tank -A or B- (the electrical equipment may be damaged).

Check the different water filters for condition.

• WATER GAUGES

Monitor the water gauges using the multifunction touch screen.

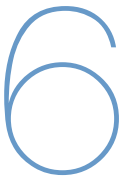
• SHORE FRESH WATER SUPPLY

The boat may be equipped as an option with a fresh water shore socket.

The shore fresh water supply is located in the port aft transom extension.

To use the marina fresh water:

- Connect the shore supply.
- Open the shore supply valve (access by port engine bilge).
- Open the port tank valve (B), and if necessary the starboard tank (A) and water heater (E) valves on the distribution manifold (access starboard engine room).



SHOWER - WATER HEATER - WATERMAKER

WATER SYSTEMS

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6



5



2



8



10

- | | |
|----------------------------------|--------------------------------------|
| 1 - Watermaker control. | 6 - Watermaker. |
| 2 - 3-way tank selection valve. | 7 - Fresh water tank. |
| 3 - 220 V electrical panel. | 8 - Cockpit shower (optional extra). |
| 4 - Watermaker sea water filter. | 9 - Cockpit shower. |
| 5 - Watermaker sea water intake. | 10 - Water heater. |

- **EXTERIOR SHOWER**

A shower supplied with hot and cold water (mixing faucet) is located on the starboard side of the transom.

It is supplied by the pressure water pump.

A second shower can be supplied as an option on the aft port transom.

WARNING

In period of frost, do not forget to empty the cockpit shower, even if there is someone onboard the boat.

Think about closing the shower tap before storing it.

- **WATER HEATER**

The water heater is located in the starboard engine room.

It has a capacity of 60 litres.

The water heater functions automatically when the engine is on or when set on the 110 V - 220 V circuit (generator or shore supply socket) after having activated its circuit breaker on the electrical panel in the starboard passageway.

The water heater operation is identical in the US version.

The hot water temperature is pre-set using the thermostatic tap located on the water heater.

RECOMMENDATION

When the water heater is not used, switch it off using its 110 V - 220 V circuit.

Before you switch it on using the 110 V - 220 V circuit, check the water heater is full of water.

■ 6.5 Watermaker

The boat may be equipped as an option with a watermaker located under the floor in the owner's cabin, in the place of a starboard freshwater tank.

RECOMMENDATION

The watermaker shall be used exclusively in clear waters, when moored or sailing.

OPERATION

The watermaker functions with 220 V (identical in US version), with the generator switched on.

Open the sea water supply valve (access under the floor of the owner's cabin, to starboard).

To switch on the watermaker:

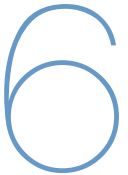
- Check that its automatic breaker is switched on at the High Load busbar of the 110 V - 220 V electrical panel (starboard passageway cupboard).
- Start the water maker using its control located on the chart table.

The watermaker circuit is equipped with a 3 channel valve to supply freshwater to the port or starboard tanks. This valve is located under the companion ladder in the front starboard cabin.

Check the level of fresh water in the tanks when the watermaker is working.

When rinsing, check that there is water in the tank.

For the use and maintenance of the watermaker, please refer to its instruction guide.



ELECTRICITY

7

7.1 12 V circuit

7.2 Inverters

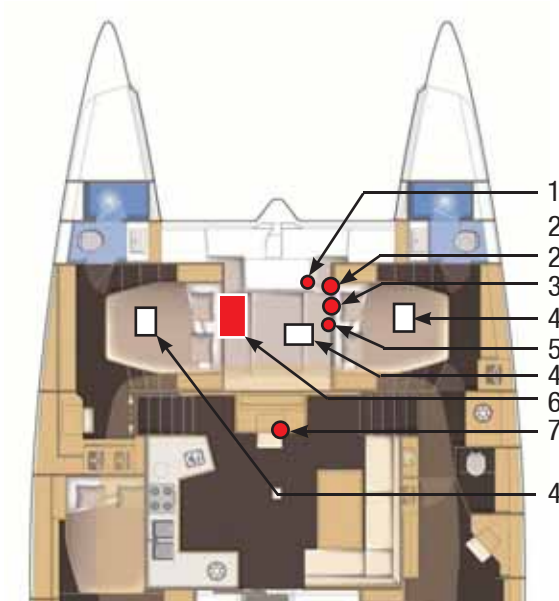
7.3 110 V - 220 V circuit

7.4 Electronics

BATTERY CHARGERS - INVERTERS

ELECTRICITY

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- 1 - 12 V / 110 V - 220 V / 1500 Va inverter (standard).
- 2 - 12 V / 220 V / 100 Ah charger (standard).
- 3 - 12 V / 220 V / 100 Ah charger (optional extra).
- 4 - On board battery bank (standard).
- 5 - 12 V / 110 V - 220 V - 3000 Va inverter (optional extra).
- 6 - Generator.
- 7 - General on board 12 V cut-out.

2 - BATTERY CHARGERS



1 - STANDARD INVERTER



7 - GENERAL 12 V CUT-OUT



5 - OPTIONAL INVERTER



■ 7.1 12 V circuit

The main domestic circuit is supplied in 12 V.

• BATTERIES

The on board battery bank is located under the bed of the forward starboard cabin. The optional battery banks are located respectively under the bed of the forward port cabin and in the technical room of the forward swim deck.

The 12 V batteries supplying the two engines and the generator can be found respectively in each engine room and in the technical room of the forward swim deck.

The general 12 V circuit is switched on with the manual cut-out (position ON) located in the cupboard at the bottom right of the chart table.

• BATTERIES RECHARGING

You recharge the battery park with a coupled alternator (80 Ah / 12 V) or two battery chargers (220 V / 12 V).

BATTERY CHARGERS (OPTIONAL EXTRA)

The battery chargers are located in the technical room of the foredeck. They recharge the domestic batteries.

OPERATION

The battery chargers are used with the shore power socket 1 or the generator switched on.

Check that their automatic breakers on the electrical panel (cupboard starboard passageway) are in the correct position.

Select the power supply source (generator or shore power socket n° 1) from the touch control screen at the chart table.

Nota: the battery chargers can remain in operation even when the boat is not energized in 12 V.

■ 7.2 Inverters

The boat is equipped as standard with a 12 V - 220 V / 1500 Va inverter which supplies the following appliances, when the 12 V on board circuit is switched on:

- The refrigerator / freezer in the starboard passageway,
- The electrical ignition of the gas hobs and oven (piezo),
- The television and hifi sockets.

The boat may optionally be equipped with a 12 V / 110 V - 220 V / 3000 Va inverter.

It supplies appliances on the COMFORT busbar.

Note: the inverter works automatically.

RECOMMENDATION

Use with caution the biggest electrical-consuming devices supplied with 220 V (e.g. microwave) when they depend on the inverter.

Note: the converters are automatically switched on when the 12 V general circuit is switched on.

The inverters are located in the technical room of the forward swim deck.

RECOMMENDATION

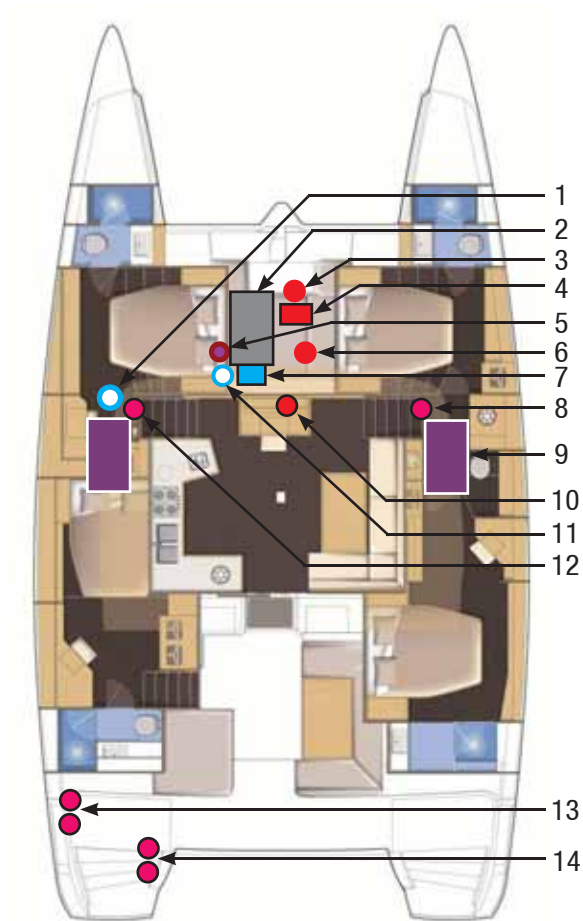
Check the battery charge during the use of the inverter.



SHORE POWER SOCKETS - GENERATOR

ELECTRICITY

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**1 - FUEL BOOSTER PUMP
+ SEA WATER FILTER**



**6 - AUTOMATIC BREAKERS
OF THE GENERATOR**



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- 1A - Generator sea water inlet valve.
- 1B - Generator sea water filter.
- 1C - Fuel booster pump.
- 2 - Generator.
- 3 - Battery charger of the generator.
- 4 - Generator start battery.
- 5 - Generator fuel filter.
- 6 - Generator automatic breakers.
- 7 - Water / gas separator.
- 8 - Fuel / generator stop pull handles.
- 9 - Fuel tank.
- 10 - Chart table remote control.
- 11 - Drain valve of separator.
- 12 - Generator / tank selection pull rob.
- 13 - Automatic breakers of the shore power sockets.
- 14 - Shore power sockets.
- 15 - Power on indicator.

**13 - AUTOMATIC BREAKERS OF
THE SHORE POWER SOCKETS**



■ 7.3 110 V - 220 V circuit

• SHORE POWER SOCKETS

The two shore power sockets are located in the port transom. They supply the 220 V circuit and the battery chargers, as well as the air conditioning (optional). In US version, Y connectors enable 220 V to be supplied to the circuit.

Before you plug in or unplug the boat / shore power supply cable, switch off the shut off device connected to the shore supply. Connect the boat / shore power supply cable in the boat before connecting it to the shore supply socket. Unplug the boat / shore supply cable on shore first. Close the protecting cover of the shore supply socket when the plug is not in use.

The shore power sockets are protected by automatic breakers located in the port engine room.

WARNING

Before using the shore power sockets, imperatively check the shore power is 50 A.

DANGER

Never let the end of the boat / shore supply cable hang in the water; the result may be an electric field liable to hurt or kill the swimmers nearby.

• GENERATOR

The generator is located in the technical room of the foredeck. Its function is to re-supply the batteries via the charger and supply 110 V or 220 V electricity on board.

The generator is supplied by the port or starboard fuel tank.

To shift from one tank to the other, use the pull rob located under the first step of the companionway to the forward port cabin (pull rob pushed: port tank selected, pull rob pulled: starboard tank selected).

OPERATION

The generator is switched on either on the control box in the technical room, or using the chart table remote control.

Check that the relative seawater cooling valve is open (access through the front port cabin floor, at the foot of the companion ladder).

AVERTISSEMENT

If necessary, the tank closure handles are located under the first step of the companionway to the forward port cabin and under the first step of the companionway to the starboard passageway.

Note: the ventilation of the technical room is supplied by the generator battery. In case of strong heat, supply the battery via its own charger (220 V / 12 V - 35 A).

For the generator use and maintenance, refer to the instruction guide.

AUTOMATIC BREAKERS 110 V - 220 V - MANUAL SELECTOR SWITCHES

**AUTOMATIC BREAKERS
110 V - 220 V + WATER PUMP**



**MANUAL SUPPLY SELECTOR
SWITCHES
COMFORT AND HIGH LOAD**



**MANUAL SUPPLY SELECTOR
SWITCH
AIR CONDITIONING**



ELECTRICITY

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**AIR CONDITIONING UNIT
AUTOMATIC BREAKERS**



MANUAL 220 V SUPPLY SELECTOR SWITCHES

In case of malfunctioning of the chart table multifunction touch screen, it is possible to use the manual emergency switches to supply 220 V to the boat (technical room of forward swim deck for on board; starboard engine room for air conditioning).

Use the handle to select Generator (I) or Shore power socket (II).
Position the handle to OFF after use.

WARNING

Ensure that all appliances are switched off before using the switches.

Note: while the system is in manual mode, the multifunction touch screen is locked (padlock icon shown on screen) and cannot be used to select the power supply source, even when the handle is OFF.

- CHECKING OF THE 110 V - 220 V CONSUMING APPLIANCES

MANAGEMENT OF 110 V - 220 V SUPPLY

The chart table multifunction touch screen enables you to choose the power supply source (shore power socket, generator or inverter) for the different 110 V - 220 V appliances on board.

110 V - 220 V PROTECTION PANELS

The starboard passageway electrical cabinet groups 2 automatic breaker busbars for 110 V - 220 V appliances and equipment:

The upper line concerns the HIGH LOAD busbar (220 V - 50 or 60 Hz).

The lower line concerns the COMFORT busbar (220 V - 50 Hz or 110 V - 60 Hz).

The automatic breakers for the air conditioning units are located in the port engine room.

Nota: all the automatic breakers of the 110 V - 220 V circuit are bipolar automatic breakers.

- USE OF THE 110 V - 220 V POWERED APPLIANCES

TO SWITCH ON THE APPLIANCES

In order to be able to use the 110 V - 220 V powered appliances (washing machine, watermaker, etc.), it is advisable:

- Ensure that the automatic breakers are OFF on the corresponding 110 V - 220 V protection panel.
- Switch on the 110 V - 220 V source (start the generator or connect a shore power socket to shore).

- Select this supply source at the chart table multifunction touch screen.

- Push the automatic breaker of the appliance to be used (washing machine, watermaker, etc.) on the electrical panel.
Once these operations have been carried out, switch on the appliance using its own controls.

TO STOP THE 110 V - 220 V POWERED APPLIANCES

To stop the 110 V - 220 V powered appliances (washing machine, watermaker, etc.) it is advisable to do as follows:

- Stop the appliance with its own controls.

To stop 110 V - 220 V appliances using the generator, wait for 10 to 15 seconds between the stop of each new component (in order to allow the generator to become stabilized).

- On the electrical panel, turn off the automatic breaker of the appliance that is used.
- At the multifunction touch screen, turn OFF the 110 V - 220 V supply (generator or shore power socket).
- Stop the generator or disconnect the shore power socket.

WARNING

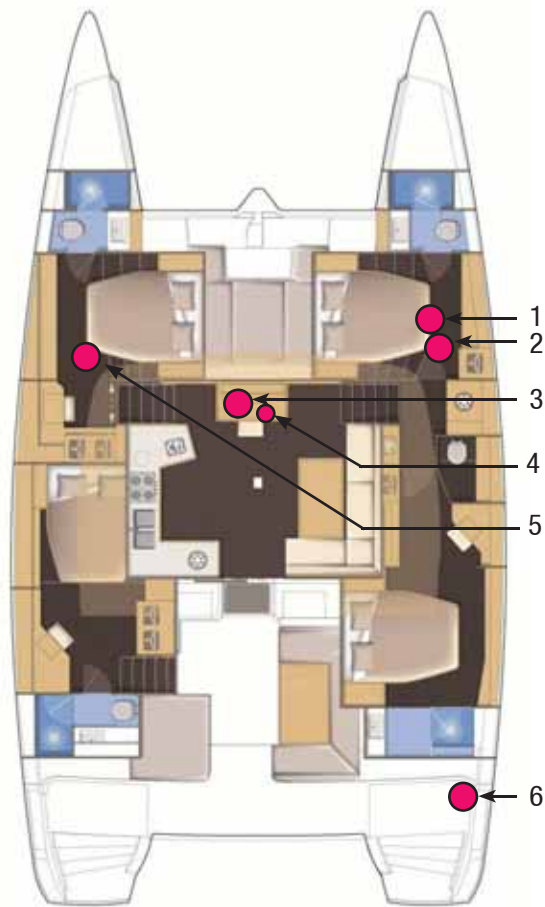
Before you turn the 110 V - 220 V source selector to OFF, make sure no other appliance is working (danger of an electric arc that would destroy the changeover switch and risk of damaging the generator).



ELECTRONICS

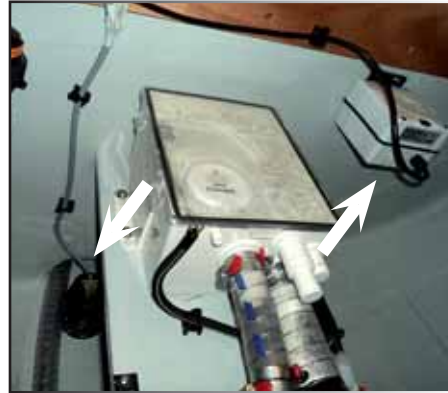
ELECTRICITY

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- 1 - Compass of the automatic pilot.
- 2 - Log + depth sounder sensor.
- 3 - Electronic boxes.
- 4 - On / off switch for electronics.
- 5 - Fish finder sounder sensor.
- 6 - Pilot hydraulic pump.

**1 - COMPASS + LOG + 2 - DEPTH
SOUNDER SENSOR**



3 - ELECTRONIC BOXES



**4 - ON / OFF SWITCH FOR
ELECTRONICS.**



AUTOMATIC PILOT RAM



■ 7.4 Electronics

The boat may be fitted with an optional electronic pack and different navigation aid accessories.

Switch on the on board electronics using the switch located at the chart table.

For the use and maintenance of all these components, please refer to their instruction guides.

The ram, the automatic pilot and the calculator are located in the starboard engine compartment.

The automatic pilot fuse is located on the High Load bars in the technical room of the forward swim deck.

The electronic boxes are located in the cupboard under the chart table.

The compass and log sounder speedometer (optional) are located under the floor of the forward starboard cabin.

The fish finder sounder sensor (optional) is located under the floor of the forward port cabin.

RECOMMENDATION

Make sure you do not put close to the compass, objects susceptible to disturb the magnetic field of the compass (metal objects).

POWER SURGE PROTECTION (OPTIONAL)

The system is made up of a heat sink and sacrificial diodes protecting the modules from possible power surges.

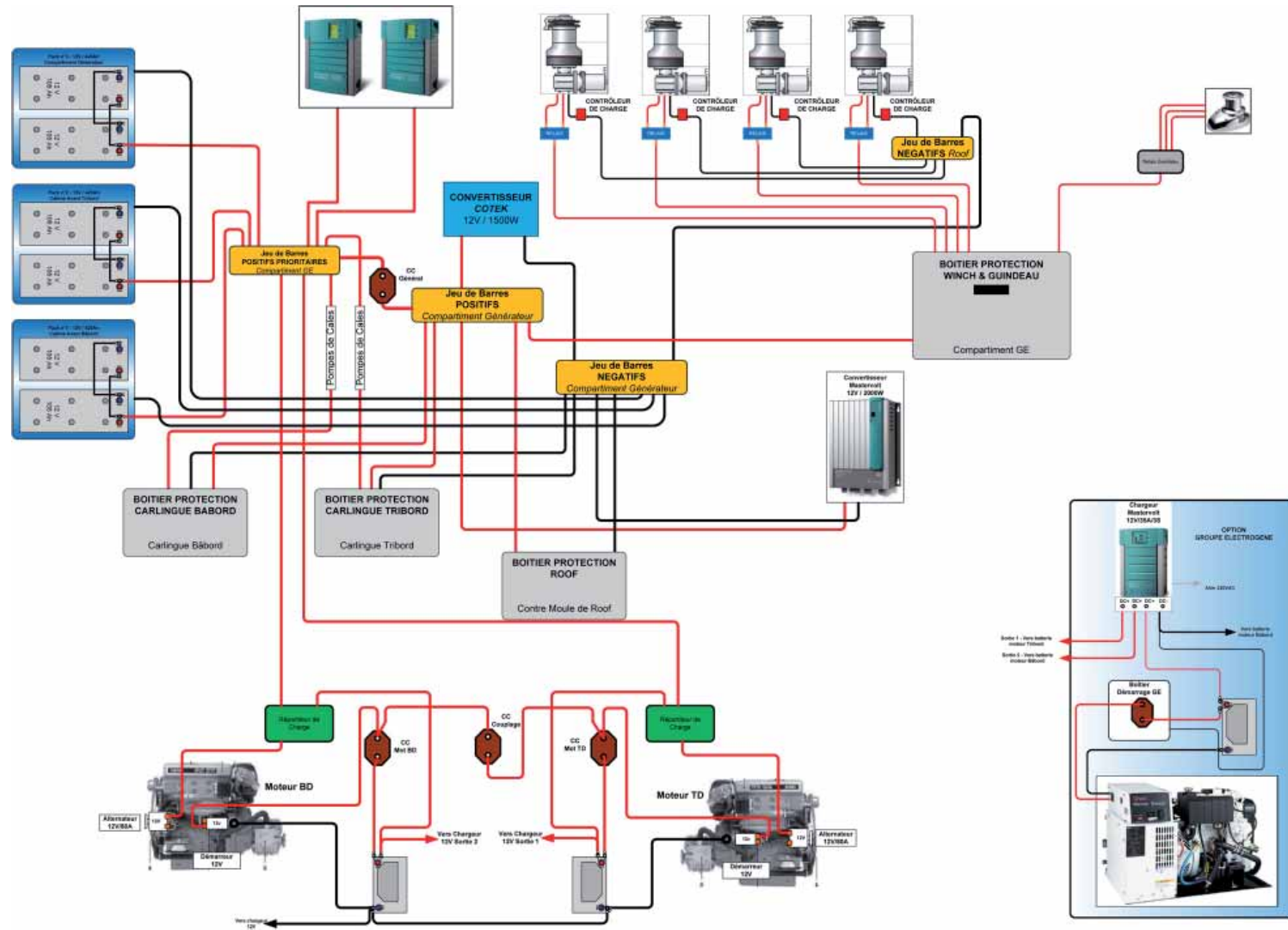
It also has an indicator and surge fuses.



GENERAL BLOCK DIAGRAM 12 V

ELECTRICITY

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SUMMARY FOR THE 12 V COMPONENTS

CHARGE AND ELECTRICAL CONVERSION

1 x 220 V / 12 V - 100 A charger	12 V service bank + engines
1 x 220 V / 12 V - 100 A charger (optional extra)	Engines + board
1 x 220 V / 12 V - 35 A charger	With optional generator
2 x 12 V - 80 A alternators	Recharge service bank, batterie engines, generator

BATTERIES / CONSUMING APPLIANCES

12 V CURRENT	VOLTAGE	START	PROTECTION
Navigation Electronics	12 V	Chart table switch	
Navigation lights	12 V	Multifunction touch screen	
Lighting	12 V	Multifunction touch screen	Port or starboard keelson box
Refrigerator / icebox galley	12 V	12 V board	Port or starboard keelson box
Cockpit refrigerator	12 V	12 V board	Port keelson box
Electric toilets	12 V	12 V board	Port or starboard keelson box
Electric bilge pumps	12 V	Dedicated panel	Port or starboard keelson box
Grey water collecting pumps	12 V	12 V board	Port or starboard keelson box
Deckwash pump	12 V	12 V board	Port or starboard keelson box
Winches	12 V	12 V board	Technical room
Windlass (directly on the batteries)	12 V	12 V board	Technical room
Davits / Tenderlift	12 V: hydraulic pump	12 V board	Port engine compartment
Service batteries	12 V (840 Ah as standard, 1260 Ah optional,)		
Service batteries' charging	by a 12 V alternator on the engine + 1 or 2 220 V / 12 V - 100 Ah chargers (optional extra)		
Engine start batteries	(12 V - 55 Ah) x 2		
Engine battery recharging	by alternator on engine + 220 V / 12 V - 35 Ah charger		
Generator start battery	(12 V - 55 Ah) x 1		
Generator battery recharging	by 220 V / 12 V - 35 Ah charger		
VHF	12 V	12 V board + 12 V terminal block	
Sockets	12 V	12 V board + 12 V terminal block	Keelson box



SUMMARY FOR THE 110 V - 220 V COMPONENTS

GENERATOR

Generator power 7 kva or 17,5 Kva

The generator gives 100% of its power in 220 V - 50 Hz
(Air conditioning, Comfort and 220 V High load buses)

In the US version, the generator produces 25% of 110 V - 60 Hz current and 75% of 220 V current.

SHORE POWER SOCKETS

High load Shore power socket - European Version
Air conditioning Shore power socket - European Version

A 50 Ah simple shore power socket - connection in the port aft transom extension (220 V - 50 / 60 Hz)
A 50 Ah simple shore power socket - connection in the port aft transom extension (220 V - 50 / 60 Hz)

High load shore power socket - US Version

Utilisation of the two 110 V phases to supply 220 V power on board via Y connectors supplied

ELECTRICITY

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ELECTRIC DISTRIBUTION

Comfort Busbar 220 V
High load Busbar 220 V
Air conditioning Busbar 220 V

Supplied by generator, shore or inverter
Supplied by generator or shore
Supplied by generator or shore

Comfort Busbar US version 110 V

Supplied by the generator or the inverters

CHARGE AND ELECTRIC CONVERSION

220 V / 12 V - 100 Ah charger
220 V / 12 V - 35 Ah charger (3 connections)

Optional: recharge of the service bank by generator or shore
Automatically comes with the optional generator to recharge the 12 V battery,
the generator and the two 12 V engine batteries

Standard inverter
Inverter (optional extra)

12 V / 220 V - 1500 Va
12 V / 110 V or 220 V - 3000 Va

SUMMARY FOR THE 110 V - 220 V COMPONENTS

CONSUMING APPLIANCES	Operating voltage	220 V Boat	110 V Boat
Refrigerator / Freezer	220 V	Standard inverter	Standard inverter
Piezzo hobs and oven	220 V	Standard inverter	Standard inverter
HIFI	220 V	Standard inverter	Standard inverter
Icemaker	220 V or 110 V	COMFORT busbar	COMFORT busbar
Microwave oven	220 V or 110 V	COMFORT busbar	COMFORT busbar
Power outlets	220 V or 110 V	COMFORT busbar	COMFORT busbar
Televisions	220 V	COMFORT busbar	COMFORT busbar
Washer dryer	220 V or 110 V	HIGH LOAD busbar	COMFORT busbar (GEN only)
Dishwasher	220 V or 110 V	HIGH LOAD busbar	COMFORT busbar (GEN only)
Water heater	220 V	HIGH LOAD busbar	HIGH LOAD busbar in 220 V and engine
Watermaker	220 V	HIGH LOAD busbar	HIGH LOAD busbar
Diving compressor	220 V	HIGH LOAD busbar	HIGH LOAD busbar
Air conditioning	220 V	AIR CONDITIONING busbar	AIR CONDITIONING busbar in 220 V (double phase)



SHORE CONNECTION DIAGRAM 50 Ah - 250 V FOR A BOAT IN US VERSION

The boat is equipped with an on board 50 Ah 3P+E socket (P1+P2+N+E) for the Air conditioning circuit.

The supplied power cable is a 4G 10 mm² with:

On board side: a 50 Ah 3P+E socket

Shore side: a 50 Ah 3P+E connector

A 50 Ah four-pole differential automatic breaker is placed on the line in the existing box.

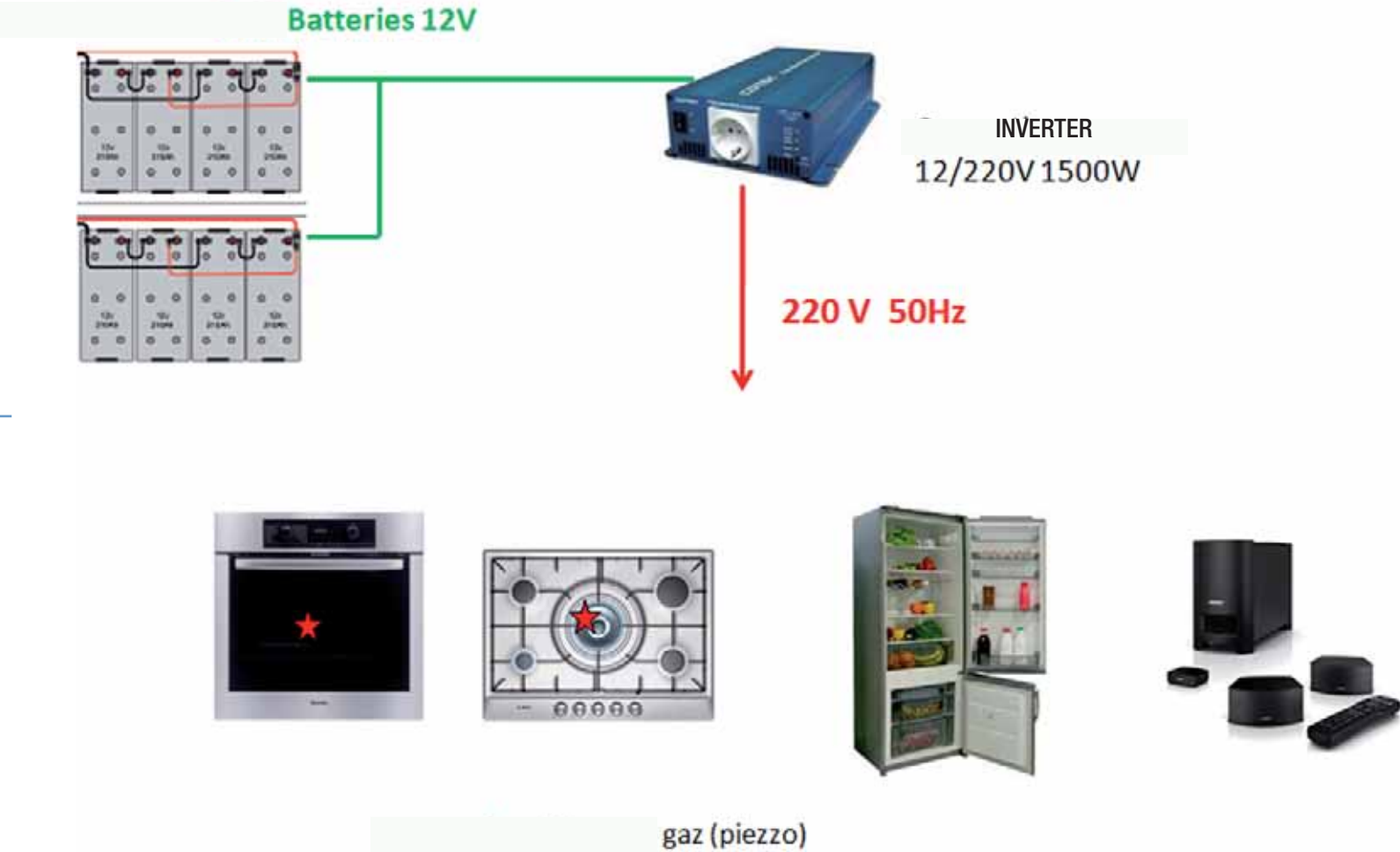
The on board circuit is connected to the two phases at the exit to the 50 Ah automatic breaker.

The shore neutral is connected to the automatic breaker but not to the on board circuit.

The shore earth is connected to the on board earth via a simple connector.

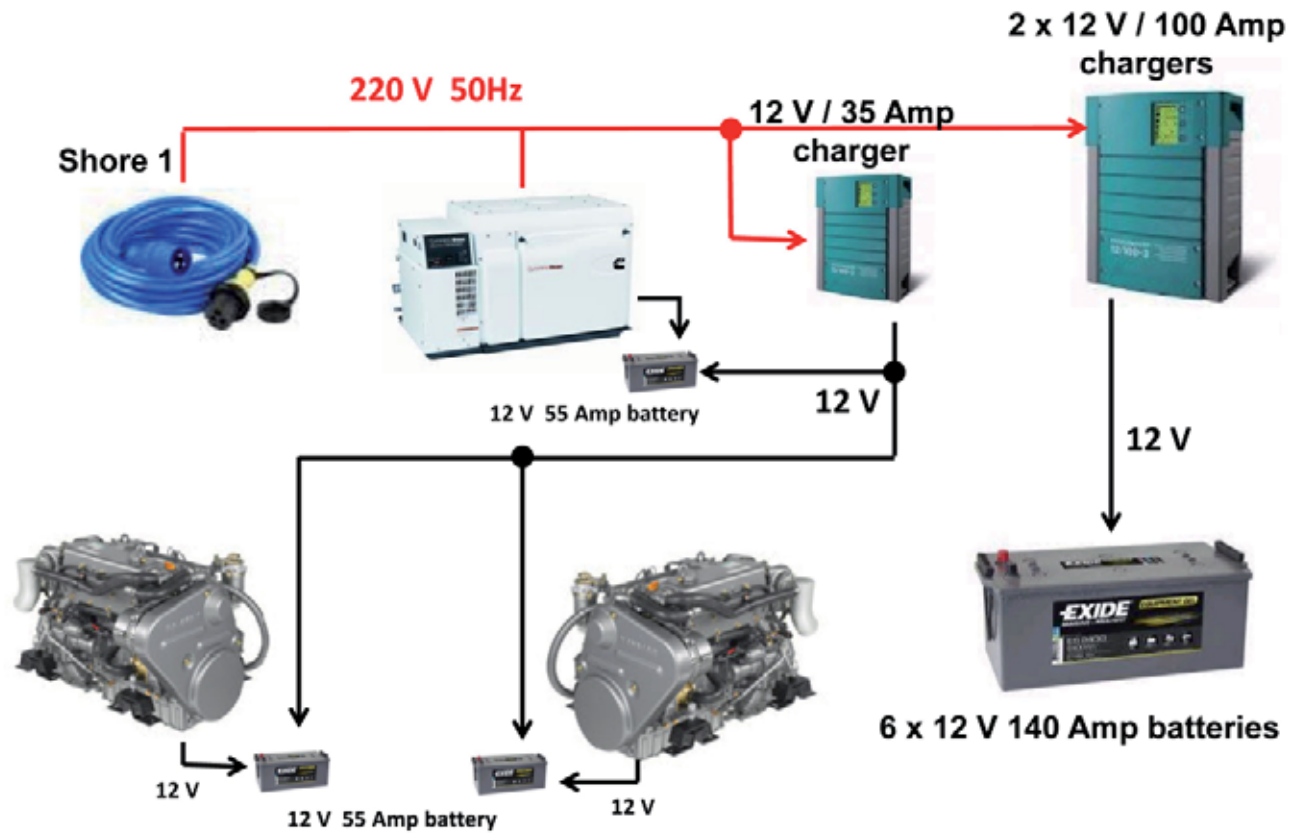
If the marina does not have a 50 Ah 3P+E socket, you should use the “Y” Marinco 167RYN by connecting it to two 30 Ah - 125 V sockets.

STANDARD CIRCUIT EQUIPMENT



ELECTRICITY

CHARGING CIRCUIT 220 V / 12 V

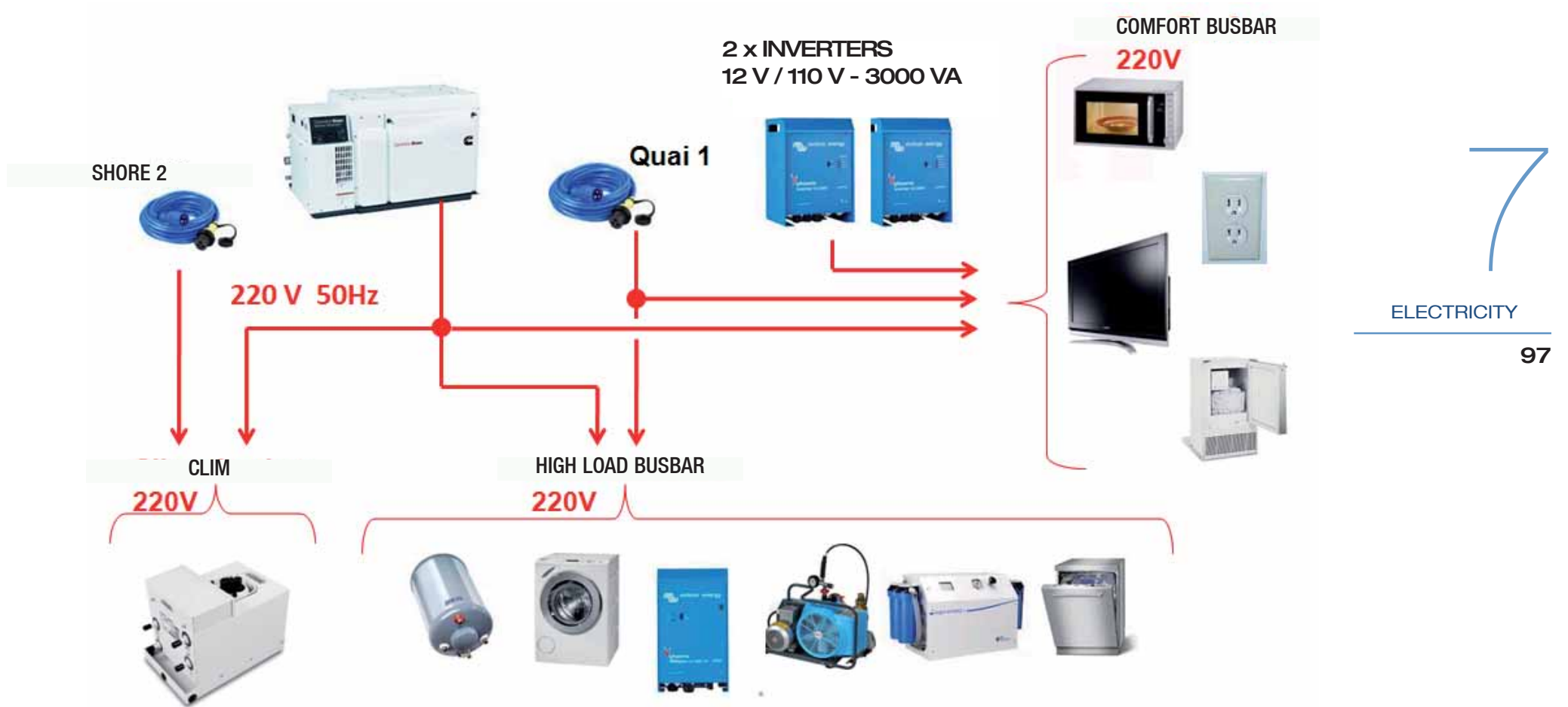


GENERAL BLOCK DIAGRAM 220 V

ELECTRICITY
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GENERAL BLOCK DIAGRAM 110 V - 220 V (US version)



APPENDIX 1: HIGH LOAD BUSBAR PROTECTION

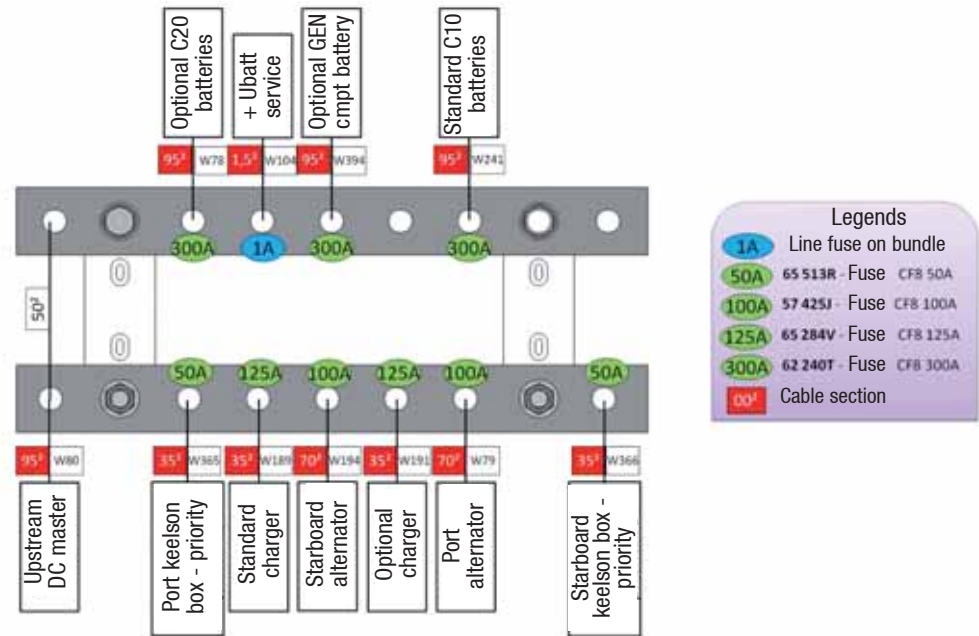
The busbars in the technical room supply the various electrical devices of the boat.

These equipments are protected by fuses.

DANGER
 Before any intervention on a bus bar, turn OFF the 12 V circuit on board.

CABLE CONNECTION TO UPSTREAM DC BUSBARS

HIGH LOAD BUSBAR

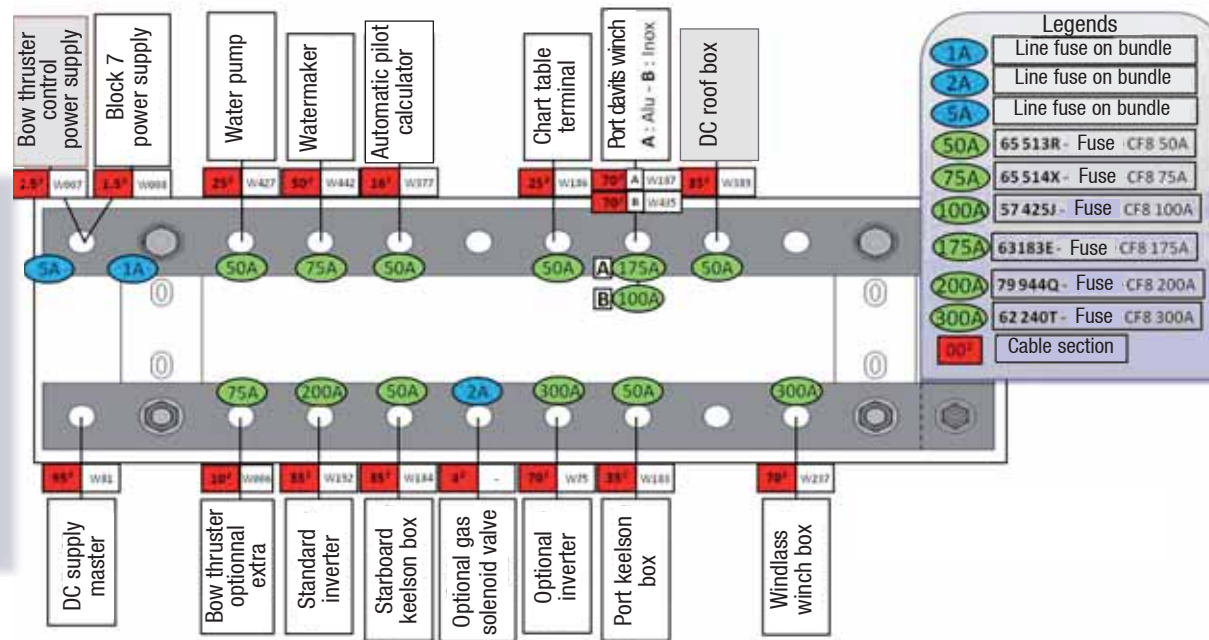


APPENDIX 1: HIGH LOAD BUSBAR PROTECTION

HIGH LOAD BUSBAR



CABLE CONNECTION TO POSITIVE BUSBARS



APPENDIX 2: FUSES BOXES

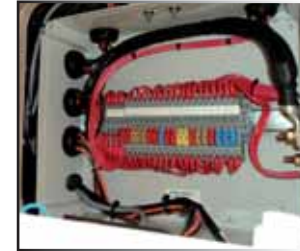
5 - ELECTRONIC FUSES BOX



1 - PORT FUSES BOX



1 - PORT FUSES BOX



2 - ROOF FUSES BOX



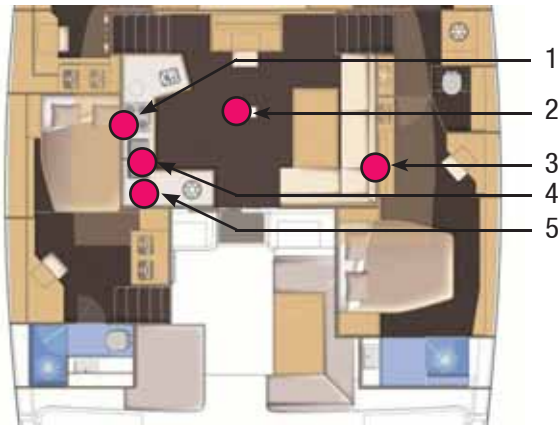
2 - ROOF FUSES BOX



3 - STARBOARD FUSES BOX



3 - STARBOARD FUSES BOX



- 1 - Port fuses box +
override switches n° 2 and 3.
- 2 - Roof fuses box.
- 3 - Starboard fuses box +
override switches n° 6 et 7.
- 4 - Override switches n° 1, 4 and 5.
- 5 - Electronic fuses box.

APPENDIX 2: FUSES BOXES

Port Keelson Box fuse details		
F1	Headboard wall light and ventilation + forward cabin desk	10A
F2	Headboard wall light and ventilation + aft cabin desk lamp	10A
F3	Bow and engine compartment lighting	5A
F4	Lighting aft bathroom	5A
F5	Lighting forward bathroom	5A
F6	Central cabin headboard wall light and ventilation	10A
F7	Lighting central bathroom	5A
F8	Forward cabin optional PC 12V	10A
F9	Aft cabin optional PC 12V	10A
F10	Optional cockpit fridge	15A
F11	Aft cabin optional radio system	15A
F12	Forward cabin optional radio system	15A
F13	Electric toilet forward cabin	20A
F14	Electric toilet aft cabin	20A
F15	Central cabin optional 12V PC	10A
F16	Fuse block 07 (gauges)	5A
F17	Grey water pump aft bathroom	8A
F18	Grey water pump forward bathroom	8A
F19	Grey water pump central bathroom	8A
F20	Central cabin optional radio system	15A
F21	Electric toilet central cabin	20A
F22	Wireless lighting module 3	15A
F23	Wireless lighting module 2	15A
F24	Free	8A
F25	Drain well bilge pump	15A
F26	Engine bilge pump	15A
F27	Air conditioning drain pump	15A
F28	Free	

Roof box fuses details		
F1	Navigation module	15A
F2	Roof lighting module	15A
F3	Block 2 (lighting module of the helm station)	5A
F4	Winch pedals	10A
F5	Ventilators	10A
F6	Boat radio option	15A
F7	Chain counter	5A
F8	Mast lighting module	15A
F9	Antenna	5A
F10	Electronic box	20A
F11	Optional flying bridge fridge (52F only)	15A

Details Chart table fuses		
F1	Simnet network	3A
F2	Optional Black Box NSO2	10A
F3	Hub NEP2	5A
F4	Optional TAC screen	7.5A
F5	Optional pilot remote control WR20	2A
F6	Optional Fish Finder	3A
F7	Optional Forward Scan	3A
F8	Optional Aft Split Cam Port + Starboard	1A
F9	Optional Wifi	2A
F10	Optional Thermal Split Cam	1A
F11	Reserve	
F12	Optional AIS + Splitter	2A
F13	Optional VHF	7.5A
F14	Reserve	
F15	to inter TAC	5A

Starboard Keelson Box fuse details		
F1	Grey water pump forward bathroom	8A
F2	Grey water pump aft bathroom	8A
F3	Forward cabin headboard wall light and ventilation	5A
F4	Headboard wall light and ventilation + aft cabin desk lamp	10A
F5	Bow shower pump	5A
F6	Bow and engine compartment lighting	5A
F7	Lighting forward bathroom	5A
F8	Lighting aft bathroom	5A
F9	Fuse block 07 (gauges)	5A
F10	Forward cabin optional PC 12V	10A
F11	Aft cabin optional PC 12V	10A
F12	Forward cabin optional radio system	15A
F13	Aft cabin optional radio system	15A
F14	Electric toilet forward cabin	20A
F15	Electric toilet aft cabin	20A
F16	Wireless lighting module 6	15A
F17	Wireless lighting module 7	15A
F18	Lighting forward bathroom version 3 cabins	15A
F19	Grey water pump central bathroom	8A
F20	Headboard wall light and ventilation + central cabin desk lamp	10A
F21	Lighting central bathroom	5A
F22	Central cabin optional PC 12V	10A
F23	Central cabin optional radio system	15A
F24	Electric toilet central cabin	20A
F25	Drain well bilge pump	15A
F26	Engine bilge pump	15A
F27	Bilge pump panel	5A
F28	Air conditioning drain pump	15A

Electronic box fuses details		
F1	Box	20A
F2	Optional radar	5A
F3	Optional flying bridge screen	7.5A
F4	Optional thermal camera	5A
F5	Optional flying bridge VHF charger	2A
F6	Optional port reversing camera	1A
F7	Optional starboard reversing camera	1A
F8	Simnet network	3A
F9	Optional Sonichub	15A



ANNEXE 3: OVERRIDE SWITCHES

See location of override switches on diagram page 100 and warning on page 21.

**OVERRIDE SWITCHES
N° 1-4-5 - GALLEY**



**OVERRIDE SWITCHES N° 6-7 -
STARBOARD CABIN**



**OVERRIDE SWITCHES
N° 2-3 - PORT CABIN**



SCHEIBER MODULES LOCATION



ANNEXE 3: OVERRIDE SWITCHES

Override switches num	3-cabin version	4-cabin version	5-cabin version	6-cabin version
1 Roof (saloon ceiling)	1 Compass/stern light lighting	1 Compass/stern light lighting	1 Compass/stern light lighting	1 Compass/stern light lighting
	2 Anchor light	2 Anchor light	2 Anchor light	2 Anchor light
	3 Top light	3 Top light	3 Top light	3 Top light
	4 Deck light	4 Deck light	4 Deck light	4 Deck light
	5 Masthead navigation light	5 Masthead navigation light	5 Masthead navigation light	5 Masthead navigation light
	6 Indirect port saloon lighting		6 Indirect port saloon lighting	6 Indirect port saloon lighting
2 Port hull	1 Port forward companionway interior courtesy light	1 Port forward companionway interior	1 Port forward companionway interior	1 Port forward companionway interior courtesy light
	2 Port and starboard transom exterior courtesy light	2 Port and starboard transom exterior	2 Port and starboard transom exterior	2 Port and starboard transom exterior courtesy light
	3 port navigation light	3 port navigation light	3 port navigation light	3 port navigation light
	4 port beam spotlight	4 port beam spotlight	4 port beam spotlight	4 port beam spotlight
3 Port deck	1 Aft port cabin ceiling lighting	1 Aft port cabin ceiling lighting	1 Aft port cabin ceiling lighting	1 Aft port cabin ceiling lighting
	2 Forward port cabin ceiling lighting	2 Forward port cabin ceiling lighting	2 Forward port cabin ceiling lighting	2 Forward port cabin ceiling lighting
	3 Aft port cabin indirect lighting	3 Aft port cabin indirect lighting	3 Aft port cabin indirect lighting	3 Aft port cabin indirect lighting
	4 Forward port cabin indirect lighting	4 Forward port cabin indirect lighting	4 Forward port cabin indirect lighting	4 Forward port cabin indirect lighting
			5 Central port cabin lighting	5 Central port cabin lighting
	6 Port passageway lighting		6 Port passageway lighting	6 Port passageway lighting
4 Roof (saloon ceiling)	1 TAC zone lighting	1 TAC zone lighting	1 TAC zone lighting	1 TAC zone lighting
	2 Port galley zone lighting	2 Port galley zone lighting	2 Port galley zone lighting	2 Port galley zone lighting
	3 Port saloon zone lighting	3 Port saloon zone lighting	3 Port saloon zone lighting	3 Port saloon zone lighting
	4 Indirect starboard saloon lighting	4 Indirect starboard saloon lighting	4 Indirect starboard saloon lighting	4 Indirect starboard saloon lighting
	5 Cockpit table indirect lighting	5 Cockpit table indirect lighting	5 Cockpit table indirect lighting	5 Cockpit table indirect lighting
	6 Aft cockpit indirect lighting	6 Aft cockpit indirect lighting	6 Aft cockpit indirect lighting	6 Aft cockpit indirect lighting
5 Roof (saloon ceiling) mast step	1 Roof and cockpit exterior courtesy light	1 Roof and cockpit exterior courtesy li	1 Roof and cockpit exterior courtesy l	1 Roof and cockpit exterior courtesy light
	3 Boom lighting	3 Boom lighting	3 Boom lighting	3 Boom lighting
	4 Bimini top lighting	4 Bimini top lighting	4 Bimini top lighting	4 Bimini top lighting
6 Starboard deck	1 Aft starboard cabin ceiling lighting	1 Aft starboard cabin ceiling lighting	1 Aft starboard cabin ceiling lighting	1 Aft starboard cabin ceiling lighting
	2 Aft starboard cabin desk zone lighting	2 Aft port cabin desk zone lighting	2 Aft starboard cabin desk zone lighti	2 Central starboard cabin ceiling lighting
	3 Aft starboard cabin indirect lighting	3 Aft port cabin indirect lighting	3 Aft starboard cabin indirect lighting	3 Aft starboard cabin indirect lighting
	4 Aft starboard cabin wardrobe zone light	4 Starboard passageway lighting	4 Starboard passageway lighting	4 Starboard passageway lighting
	5 Forward starboard bathroom washbas	5 Forward starboard cabin ceiling light	5 Forward starboard cabin ceiling ligh	5 Forward starboard cabin ceiling lighting
	6 Forward starboard bathroom toilet light	6 Forward starboard cabin indirect light	6 Forward starboard cabin indirect lig	6 Forward starboard cabin indirect lighting
7 Starboard hull	1 Starboard forward companionway inte	1 Starboard forward companionway in	1 Starboard forward companionway i	1 Starboard forward companionway interior courtes
	2 starboard beam spotlight	2 starboard beam spotlight	2 starboard beam spotlight	2 starboard beam spotlight
	3 starboard navigation light	3 starboard navigation light	3 starboard navigation light	3 starboard navigation light
	4 Aft starboard cabin indirect lighting	4 Aft starboard toilet lighting	4 Aft starboard toilet lighting	4 Aft starboard toilet lighting



MOTORIZATION

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8.1 Engines

8.2 Fuel

8.3 Propellers - Anodes

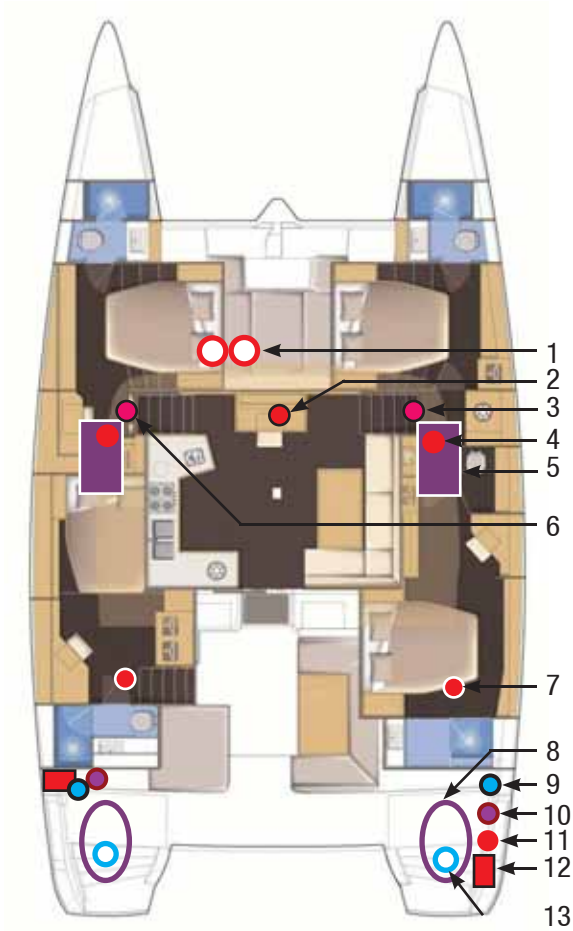
8.4 Optional controls

8.5 Bow thruster

ENGINE LAYOUT

MOTORIZATION

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Nota: each valve in the boat is identified.

EXTERIOR ENGINE CONTROLS



- 1 - Fuel tanks deck fillers.
- 2 - Inside engine controls (optional extra).
- 3 - Engine fuel shut-off handle.
- 4 - Fuel valve
- 5 - Fuel tank.
- 6 - Engine / generator fuel shut-off handle.
- 7 - Release pull handle of engine extinguisher.
- 8 - Engine.
- 9 - Sea water filter.
- 10 - Fuel filter.
- 11 - Engine cut outs + coupling (starboard).
- 12 - 12 V battery.
- 13 - Engine water inlet valve.

ENGINE START



- 1 - Start.
- 2 - Stop.
- 3 - Preheating.
- 4 - Switch on.

EMERGENCY STOP CONTROL ON EACH ENGINE



■ 8.1 Engines

• ACCESS

You have access to the engines through the transom extension hatches.

RECOMMENDATION

**Stop the engine before opening the hatches.
In case you have to intervene when the engine is running:**

- Stay away from belts and mobile parts.
- Be careful with full clothes, long hair, rings, etc. (they may be caught).
- Wear appropriate clothes (gloves, caps, etc.).

• STARTING

Before starting the engines:

- Check that the fuel valves are open (handles located at the bottom of the companionway to the forward port cabin and at the bottom of the companionway to the starboard passageway).
- Open the valves of the engine cooling systems.
- Switch on the electric system turning their engine cutouts to ON (access in the engine bilges).
- After having checked that the inverter controls are set on Neutral, start the engines.

• INVERTER CONTROLS USE

The boat is fitted with an inverter case located on the wheelhouse and a second optional case located at the chart table.

The electric inverter controls require 12 V supply.

When functioning, you can see two red diodes turned on on the inverter control case.

To enable the other inverter controls:

- Check the enabled case controls are set on Neutral.
 - Press the black button located at the bottom of the case you wish to enable. The two red diodes light up.
- The diodes of an ineffective case would be switched off.

To disconnect the engines:

- Press the black button while operating a control. The red diode flashes on and off, the engine may be accelerated to the neutral.
- Do the same with the second control in order to accelerate the second engine to the neutral.

To get back the inverter function:

- Put the control back on neutral. The red diode stops flashing.
- Every time the control is set to neutral (whether clutched or not), you will hear an informative tone.

If you hear an alarm when the boat is energised:

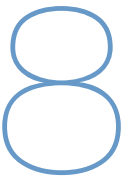
- Press the black button located at the bottom of one of the controls (outside or saloon) to stop the alarm.

In case of an emergency stop, take into account the lag of the electronics protecting the engines.

The control case generates a time-lag which only allows the shifting from a sailing trim (forward or backward) to the other when the rating is close to the idle speed.

• ENGINES MAINTENANCE

Please follow the instructions for maintenance appearing in the guide supplied with the engines.



BATTERY COUPLING - FUEL PULL ROBS - WATER INLET - DECK FILLERS

**COUPLING + STARBOARD
ENGINE CUT OUTS**



**SHUT-OFF HANDLES FOR FUEL
VALVES TO PORT**



**SHUT-OFF HANDLES FOR FUEL
VALVES TO STARBOARD**



MOTORIZATION

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ENGINE WATER INLET



DECK FILLERS



- ENGINE START WITH BATTERY COUPLING

In case one of the start batteries is not available:

- Turn to the ON position the coupling cutout (starboard engine bilge).
- Start the engine concerned.
- Turn the coupling cutout back to the OFF position.

Nota: in the standard configuration, the engine batteries are recharged by their respective engines.

- ENGINE WATER INLETS

The engine water inlets (access through the engine holds) must be open before starting the engine.

Keep the engine water inlet rose boxes as clean as possible.

Brush the strainers when the boat is carrenned.

Be careful: do not cover the strainers with antifouling paint.

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

If water does not flow out:

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

Close the water inlet valve if the boat is left unattended for long.

Inspect and clean the water strainers regularly (access in the engine bilges).

- VENTILATION OF THE ENGINE BILGES

The engine bilge ventilators start up automatically as soon as the engines start.

■ 8.2 Engines

- FUEL TANKS

The boat is fitted with two tanks.

Each of them is filled separately.

Each of them has a gauge which can be checked from the multifunction touch screen.

- FILLING

To prevent any handling mistake, never fill the water and fuel tanks at the same time.

During filling, avoid handling contaminants near the fillers.

Open and close the filler caps with the suitable key.

Use both fillers to fill the tanks with fuel.

DANGER

Stop the engine and put out your cigarettes when you are filling the fuel tanks.

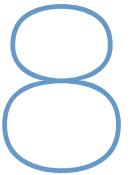
- MAINTENANCE OF THE TANKS

Regularly check the O ring of the fillers for good condition (in order to prevent water entering the tanks).

Do not turn off the fuel taps after each use (except in case the boat is unattended for long).

Keep the fuel tanks as full as possible (to avoid condensation).

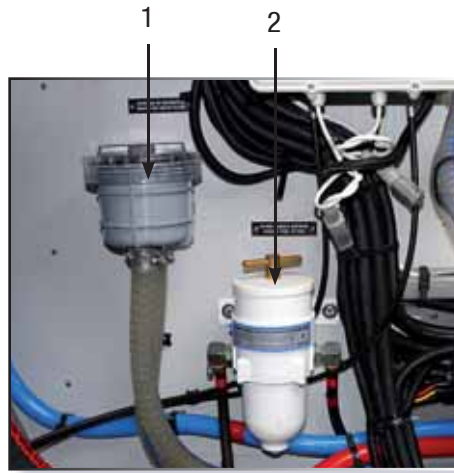
Every year check the fuel system for condition (hose, valves, etc.).



WATER FILTER - FUEL FILTER - FOLDING PROPELLER

MOTORIZATION

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- 1 - Water filter.
- 2 - Fuel filter.

FOLDING PROPELLER



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

Nota: the capacity of the tanks indicated in the page 'SPECIFICATIONS' may be not completely useable according to the trim and load of the boat.

Always keep 20% fuel as a reserve.

- **FUEL FILTERS**

In order to prevent any water infiltration, the fuel runs through two filters: the first one is on the pipe that links the tank to the engine (designed as a water decanter and pre-filter), the second one is an integral part of the engine (designed to filter fuel finely). To know when you have to intervene and how frequently you have to change them, please refer to the engine instruction guide.

Drain it by undoing the knurled screw on the base of the decantation bowl (but do not remove it).

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

Do it several times a year.

Change the pre-filter at least once a year (access to it when you remove the bowl).

■ 8.3 Propellers - Anodes

- **PROPELLERS**

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

Do not change them without consulting a specialist.

- **FOLDING PROPELLERS (OPTIONAL EXTRA)**

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

Grease the thrust bearing surfaces and teeth.

Check that the blades move easily.

- **ANODES**

Regularly check the sacrificial anodes corrosion.

The wear of the anodes depends on numerous factors and their lives may highly vary. Change them whenever necessary.

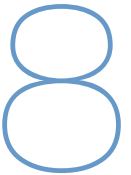
Never paint an anode.

Ask a professional to check and maintain the whole propulsion system.

■ 8.4 Optional controls

The boat may optionally be fitted with an extra engine control and with joystick in the saloon.

Please refer to the appropriate user's manual regarding the engines (with double control) and how to use them (joystick).



BOW THRUSTER

1 - BATTERIES + FUSE + CUT-OUT



3 - BATTERY CHARGER + CHARGER FUSE



4 - BOW THRUSTER CONTROL



- 1A - 24 V Batteries.
- 1B - 200 Amp Fuse.
- 1C - Cut-out.
- 2 - Bow thruster.
- 3 - Battery charger.
- 4 - Thruster control.

MOTORIZATION

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■ 8.5 Bow thruster

The bow thruster functions with 24 V off an independent battery bank (4 x 50 Ah / 12 V).

The bow thruster and its batteries, cut-out and fuse are located in the bow on the starboard side.

A 12 V / 24 V charger is located in the foredeck technical room. It recharges the thruster battery bank with 24 V using the 12 V on board service battery bank.

The charger works automatically once the on board circuit is switched on.

Monitor the thruster battery bank voltage using the multifunction touch screen.

The bow thruster is controlled from the helm station.

Having switched on the on board and thruster cut-outs and started the engines:

- Press for three seconds on the yellow thruster control switch.

The yellow LED - which flashes when the thruster is switched on - remains lit. The control can then be operated.

- Manoeuvre by using the required button on the control.

- Disconnect the control by pressing on the yellow switch a second time. The LED will start flashing again.

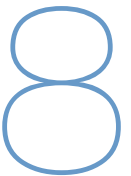
Note: after 3 minutes without operation, the thruster goes OFF.

In case of malfunctioning, check the fuse located in the bow on the starboard side.

DANGER

Never extract the fuse while the bow thruster is operating.

Please refer to the user manual for information about the use and maintenance of the bow thruster.

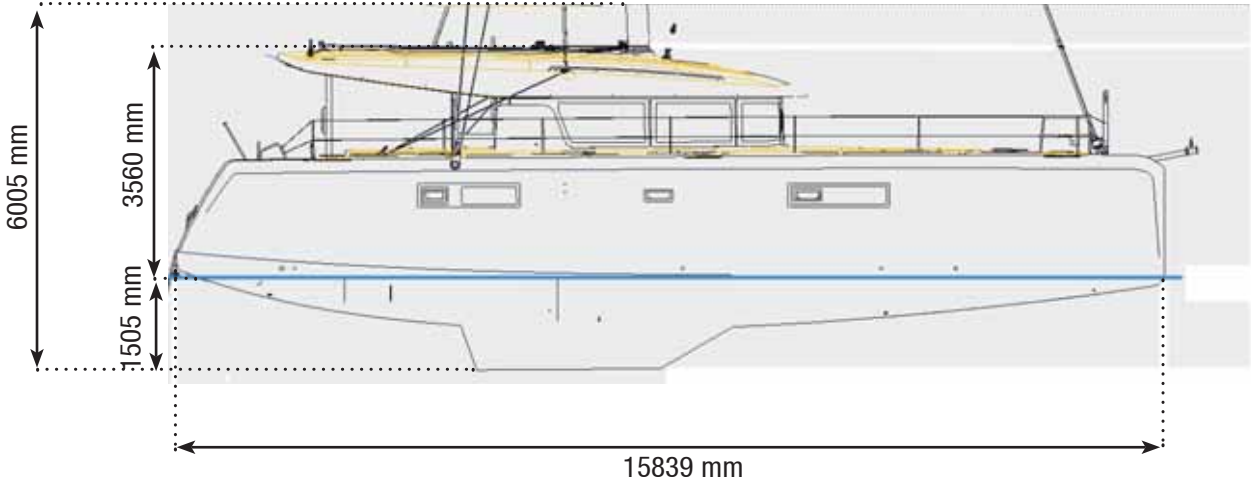


WINTER STORAGE

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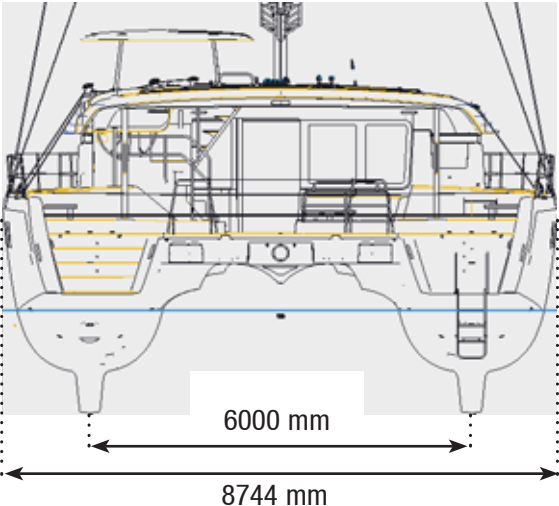
- 9.1 Laying up**
- 9.2 Protection**

PACKING



WINTER STORAGE

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■ 9.1 Laying up

Take ashore all the ship's log, the ropes that are not used for mooring, the galley equipment, supplies, clothes, the safety equipment, domestic batteries, the gas cylinders.

Check the expiry dates of the safety equipment.

Have the liferaft overhauled.

Take advantage of this laying up to draw up a complete inventory of the equipment.

■ 9.2 Protection

• WATER SYSTEM

- Drain the fresh water system.

Let water run from the taps until the system runs dry.

Check that there is no water left in the pipes and hoses (possible low points).

- Take off the filters, remove the water.

Clean the filters if necessary then put them back.

- Drain the water heater.

Check that there is no water left.

Close the drain.

- Lubricate all the water inlet valves and sea cock fittings.
- Rinse and completely drain the toilets bowls.

• INSIDE

- Seal air inlets as much as you can.

- Install an air dehumidifier in the saloon and leave the cabin and storage unit doors open (stowage cupboards, icebox).

- Leave the cushions outside for long before putting them back into the boat in the upright and side position in order to have minimum contact surfaces.

- Drain and clean the bilges.

- Possibly place the floorboards in a vertical position to make possible the ventilation of the different compartments.

- Open the refrigerators / freezer doors.

• OUTSIDE

- Carefully drain the cockpit shower.

- Thoroughly rinse the hull and deck.

- Lubricate all the mechanical and mobile parts with vaseline (bolts, hinges, locks, etc.).

- Protect all ropes and mooring lines against chafing.

- Protect the boat to the highest degree with fenders.

- Make sure the boat is properly moored.

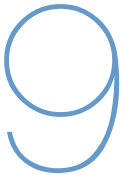
• ENGINES

The engines winterizing has to be prepared by a specialist.

The preparation for winterizing is different according to the place where the boat will be stored - either in the water or on the shore.

RECOMMENDATION

All these recommendations do not make up an exhaustive list. Your dealer will give you the advice you need and will carry out the technical maintenance of your boat.



HANDLING

10

10.1 Preparation

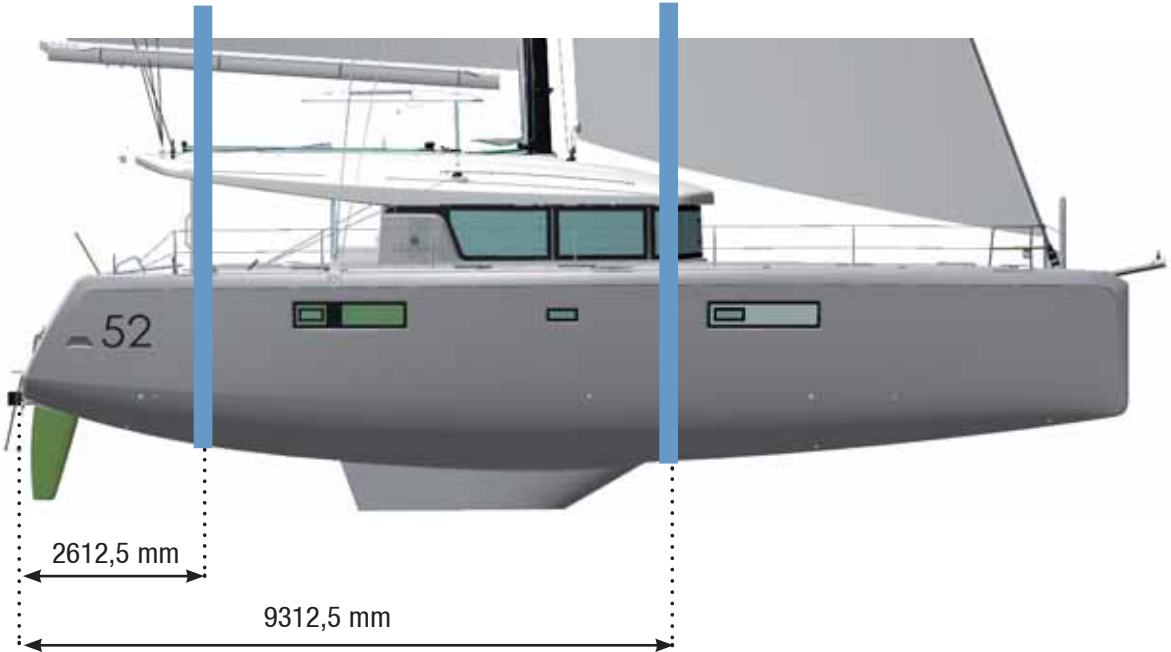
10.2 Crane lifting

10.3 Mast stepping - Mast unstepping

DIMENSIONS FOR CRADLE POSITIONING

HANDLING

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■ 10.1 Preparation

The initial launching and the first tests of the different equipments shall be carried out by your dealer so that you can expect to enjoy the warranty in case of some equipment failure.

All further handling shall be carried out with the highest care by professionals.

If the LAGOON boatyard are not involved in your handling operations, they cannot cover under guarantee any possible accidents linked to handling.

If later you have to launch your boat yourself, you should take the following precautions:

- Retract the sensors under the hull into their housings (they may be damaged by the handling slings).
- Check the water suction boxes for cleanliness.
- Turn off all the water inlet and drain valves (grey waters, black waters, engines).
- Check the anodes are in good condition and properly installed. An anode shall never be painted.

■ 10.2 Crane lifting

- Install a bow mooring rope, a stern mooring rope and fenders.
- When using a crane to move the boat, check that slings cannot touch any device (depth finder, speedometer, etc.) nor the propellers.

Loosen the guard lines and pass the straps to the outside of them.

The crane hook will be fitted with a gantry or a spreader system with two slings.

The slings shall not be connected directly onto the hook, as it would result in unusual compressive stresses on the hull.

DANGER

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

- Crane lifting should be carried out slowly.
- Control the movement of the boat using mooring ropes.

■ 10.3 Mast stepping - Mast unstepping

Mast stepping and mast unstepping shall be carried out by a specialist.

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HANDLING

SAFETY

11

- 11.1 Prevention**
- 11.2 Gas system**
- 11.3 Fire**
- 11.4 Bilge pump system**
- 11.5 Safety equipment**
- 11.6 General remarks**



SAFETY

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■ 11.1 Prevention

• THE CREW

For your own safety and your crew's, you shall respect some basic principles:

- Before you sail, check the different components of your safety equipment, their location and their expiry dates.
- Check the location and validity of the official documents as well.
- Tell the crew where the safety equipment is, how it works and the elementary safety procedures to follow.

When sailing, always be able to indicate your precise position.

In case an incident on board should happen and help be asked, this will be the very first question you will be asked.

RECOMMENDATION

Equip the children (and depending on the weather, the whole crew as well) with life jackets or harnesses.

WARNING

Do not exceed the number of persons indicated in Chapter 'SPECIFICATIONS'.

If you do not take the number of persons into account, the combined weight of the persons and equipment should never exceed the maximum load recommended by the builder.

• THE BOAT

For the sake of prevention and to be able to feel confident to face successfully the possible dangers on board (fire, leak), learn to recognize and locate the different elements which might be the cause of these disorders and the equipments to cope with them as well.

Risk of fire:

- Electrical system (chapter 7)
- Engines (chapter 8)
- Gas system (chapter 11)

Risk of leak:

- Water systems (chapter 6)

RECOMMENDATION

In emergency situation, it is essential to be able to locate quickly all the appropriate safety equipments.

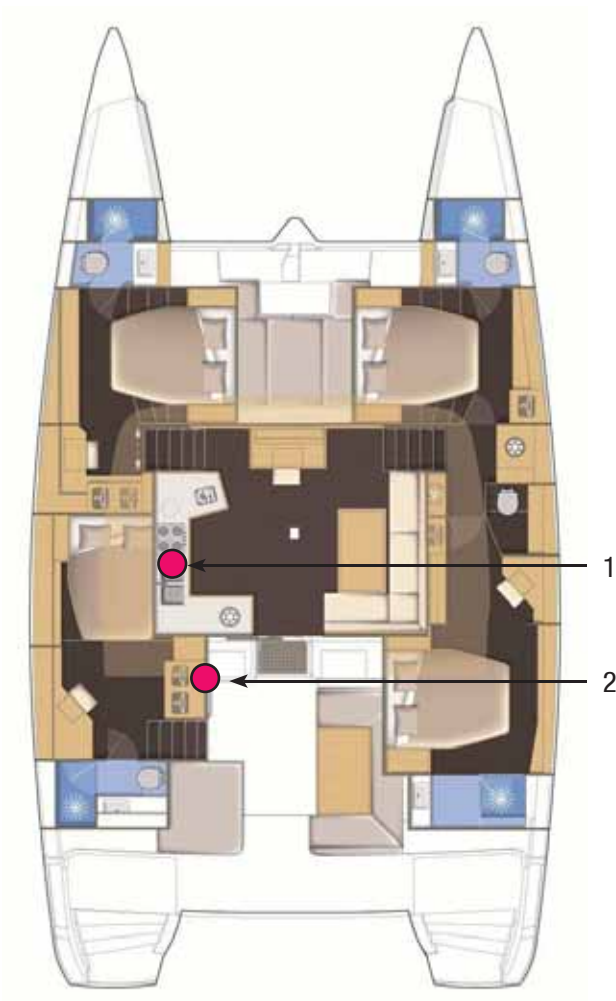


SAFETY

GAS SYSTEM

SAFETY

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- 1 - Gas valves.
- 2 - Locker / storage space of gas bottles.

1 - GAS VALVES



2 - LOCKER / STORAGE SPACE FOR GAS BOTTLES



■ 11.2 Gas system

A locker at the port forward cockpit is designed to hold the gas bottle.

The circuit opening / closing valves are located in the under-sink cupboard.

The boat in her U.S. version has an electrovalve located in the locker where the bottles are stored.

Switch on the electrovalve using its switch located under the microwave oven unit, at the port entrance to the galley.

RECOMMENDATION

Close the gas valve and turn off the regulator tap when the stove and oven are not used.

• SAFETY INSTRUCTIONS

A gas-powered appliance uses the oxygen and releases combustion products. Ventilate your boat when you use this appliance.

Regularly check and replace the rubber tubings that link the bottle to one end of the circuit and the stove to the other one, depending on the standards and regulations in force in your country.

Close the valves before you change bottles and immediately in case of emergency.

In case you smell gas or find that the burners have gone out, turn off the valve of the appliance. Do ventilate the boat in order to get rid of any residual gas. Find the cause of the problem.

Use only the compartment the gas bottles are allowed to store them.

■ 11.3 Fire

The boat has a fixed extinguishing system meant only for the engine bilges as standard equipment.

Check that mounted fire extinguishers have their pins removed before unberthing.

Nota: replacing the pins in mounted fire extinguishers is recommended during prolonged work in the engine holds in order to avoid any untimely activation.

Be sure:

- To fit the boat with extinguishers in pursuance of the regulations of the country where your boat is registered.
- To have the extinguishers checked in accordance with the instructions given.
- To refill or replace the extinguishers by similar equipment if the extinguishers have been used or are out of date.
- Make sure the extinguishers are accessible when people are on board.

Tell the crew:

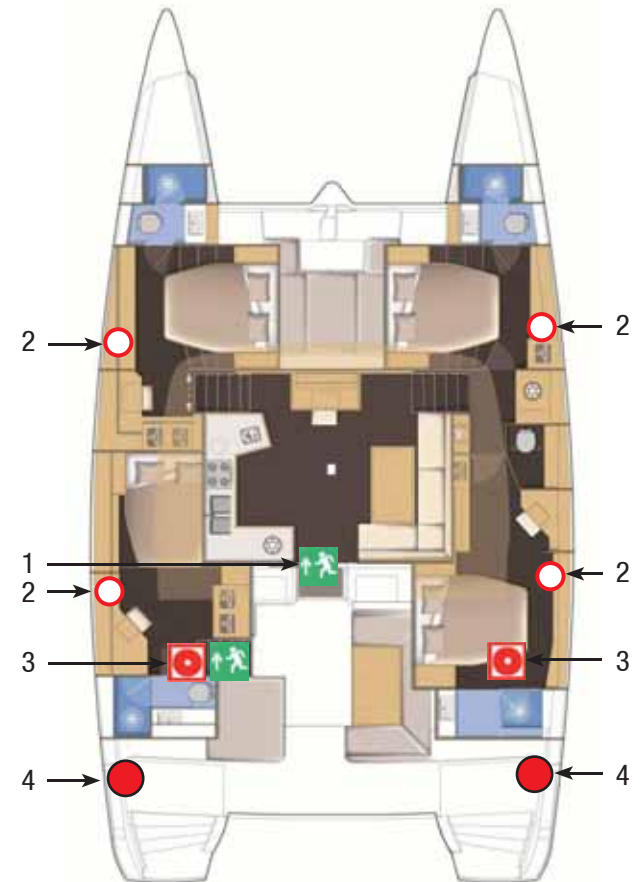
- Where the extinguishers are and how they work.
- Where the release pull handles of the extinguishers in the engine bilges are (at the foot of the port and starboard companionways).
- Where the emergency exits are.



INSIDE SAFETY EQUIPMENT



- 1 - Emergency exit.
- 2 - Extinguisher space.
- 3 - Release pull handle of engine bilge extinguisher.
- 4 - Engine extinguisher.
- 5 - Distress flares.
- 6 - First aid kit.
- 7 - VHF (optional extra).
- 8 -
- 9 -
- 10 -
- 11 -
- 12 -
- 13 -
- 14 -
- 15 -



RELEASE PULL HANDLE OF
3 - PORT EXTINGUISHER 4 - STB EXTINGUISHER

EXTINGUISHER



RECOMMENDATION

Some components do not have a pre-determined place for them. Fill-in this drawing according to your own boat safety equipments.



• ESSENTIAL PRUDENCE RULES

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 when an engine is running or a stove or heater is on.
- Smoke while handling fuels.

Make sure that engine holds are clean at all times and regularly check that there are no fumes or fuel and gas leaks.

Do not store flammables products in the engine holds.

WARNING

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.

DANGER

Use CO2 extinguishers only to fight electrical fires. Evacuate the area immediately after discharging the product to prevent asphyxia. Ventilate before entering.

• PROCEDURE TO FOLLOW IN THE EVENT OF FIRE

- Turn off the engines if operating.
- Cut off the power supply, the fuel supply.
- Cut off all sources of air (smother the fire using blankets).
- Hold the extinguisher upright and aim at the heart of the fire.

If fire broke out in an engine hold:

- Turn off the engines if operating.
- Cut off the power supply, the fuel supply (handles located at the bottom of the companionway to the forward port cabin and at the bottom of the companionway to the starboard passageway) and gas supply if required.
- Shut off the air supply using towels to block off the engine air inlets, intakes and outlets.
- Spread the extinguishing product using the trigger mechanism of the motor extinguisher. Starboard engine room: handle located in the rear baseboard of the bed in the aft starboard cabin; port engine room: handle located at the foot of the companionway to the aft port cabin.
- Make sure that the fire is completely under control.
- Open the bay access hatch to make any necessary repair.

DANGER

Always keep an extinguisher handy in case the fire should start again.



OUTSIDE SAFETY EQUIPMENT

SAFETY

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- 1 - Manual bilge pumps.
- 2 - Location of the liferaft.
- 3 - Extinguishers.
- 4 - Life buoy.
- 5 -
- 6 -
- 7 -
- 8 -
- 9 -
- 10 -
- 11 -
- 12 -
- 13 -
- 14 -
- 15 -

1 - MANUAL BILGE PUMPS



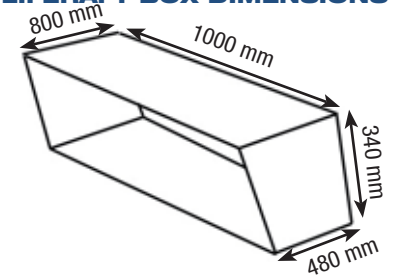
2 - LOCATION OF THE LIFERAFT



RECOMMENDATION

Some elements do not have a pre-determined location for them.
Fill-in this drawing according to your own safety equipments.

LIFERAFT BOX DIMENSIONS



■ 11.4 Bilge pump system

- BILGE PUMPS

The boat is fitted with four bilge pumps in each hull:

- Two manual (from the panel next to the chart table) and automatic release pumps, located in the sump and the engine room.
- An electric pump automatic release located in the well.
- A manual pump at the front of the boat.
- A cockpit manual pump.

For further information, please refer to Chapter 'WATER SYSTEMS'.
See page 91 for their protection.

- MANUAL BILGE PUMPS

In case of electric bilge pump slowdown or failure, it is possible to use the manual bilge pumps.

They are located on the sides at the back of the cockpit.

They suck up water from the hull sump wells.

Two manual pumps are located in the forward swim deck.

They pump water from the forward compartments.

- PROCEDURE TO FOLLOW IN THE EVENT OF A LEAK

Make sure that the electric bilge pumps are switched on.

If it is not enough to overcome the water level, ask a crew man to use a manual pump.

■ 11.5 Safety equipment

Before you sail, list the compulsory safety equipments.

Do not exceed the number of persons indicated in Chapter 'SPECIFICATIONS'.

WARNING

The list of the compulsory safety equipments corresponds to a certification category, a design category as well as to the regulations in the country where the boat is registered.

- LIFE RAFT

The life raft is to be stored under the rear beam.

Fit your boat with a life raft in pursuance of the regulations of the country where the boat is registered.

You shall use the life raft only if all else fails.

RECOMMENDATION

Before you sail to sea, carefully read the launching instructions on the life raft.



SAFETY

EMERGENCY TILLER

SAFETY

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1 - Emergency tiller cover.

USE OF EMERGENCY TILLER



VALVE OF AUTOMATIC PILOT CYLINDER IN BY-PASS POSITION



- **EMERGENCY TILLER**

The emergency tiller is stored in a cockpit locker. It shall be kept easily accessible.

To operate the tiller:

- Use a winch handle and unscrew one of the tiller covers situated on one of the aft transom extensions.
- Insert the tiller into the rudder stock, making sure it is well fitted into the tiller head block.
- Insert the fastening screw across the stock and tighten the nut (access by the engine bilge).
- Turn to the by-pass position the ram valve situated in the engine bilge of the concerned side.

The rudder is then isolated from the steering system.

Lock the second rudder in right-hand position.

- **EMERGENCY LADDER**

An emergency ladder (swim ladder) is located in the aft starboard transom.

WARNING

Regularly check the safety equipments are in good working order.

Follow the service programme without fail.

Generally speaking, take particular care of all the safety equipment of your boat.

■ 11.6 General remarks

- **MANOEUVRES**

- Know where your crew members are and inform them before you manoeuvre on the boat.
- Carefully manoeuvre on the deck and always wear shoes.

- **ENGINES**

- Systematically stop the engines before you dive or swim next to the boat.
- Never try to free a fishing net or a piece of rope that is caught on a propeller when the latter is rotating.

- **TOWING**

If you have to tow another boat, tow her at a reduced speed and as smoothly as you can.

Be particularly careful when throwing or catching the towing line (It may catch on the propellers).



MAINTENANCE

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The information given hereafter are only examples and it is not an exhaustive list.

They must be adapted, depending on the use of your boat.

WARNING

Follow without fail the recommendations given in the instruction guides by the manufacturers of the components added to your boat.

HULL / DECK FITTING / HULL

- Clean the hull with appropriate products QUATERLY
- Clean s/s parts..... QUATERLY
- Dismount, clean and grease winches..... ANNUAL
- Check the watertightness of the sea-cock fittings BI-ANNUAL
- Clean the seacock fittings and strainers from the outside BI-ANNUAL

MOORING / WINDLASS

- Rinse ground tackle and anchor locker with fresh waterWHEN USED
- Check the gypsy and anchor/chain fastening deviceBI-ANNUAL
- Check windlass brake systemQUATERLY
- Check mooring lines and fenders.....BI- ANNUAL
- Check the electric connections (remote control, relay, etc.)..... QUATERLY

RUNNING / STANDING RIGGING / SAILS

- Lubricate the different travellers with teflonQUATERLY
- Check and tighten the different shackles QUATERLY
- Check the running rigging tighteningQUATERLY
- Check the halyard and sheet for wear points QUATERLY
- Rinse the whole running rigging and sailsQUATERLY
- Check the mainsail battens and main seamsQUATERLY

UPHOLSTERY AND COVERS

Rinse / clean the different covers QUATERLY
Dry the outside upholstery before its storage WHEN USED

REFRIGERATION UNIT

Defrost the refrigerators, icebox and icemaker.....QUATERLY
Check the door jointsQUATERLY

AIR CONDITIONING

Check the sea cock and clean / change the different
sea water filtersQUATERLY
Dust off the unit heater fans ANNUAL

ELECTRICITY

Check and tighten the battery terminal connections
and main switch connections..... BI-ANNUAL
Check and tighten the main relay terminals
(winches, windlass, etc.)..... BI-ANNUAL

ENGINES AND GENERATOR

Check oil levelQUATERLY
Check belt tensionQUATERLY
Clean the sea water strainerQUATERLY
Check for leaks (oil, water, fuel) and smokesQUATERLY
Check and drain the decanter filters (fuel)QUATERLY
General overhaul.....REFER TO THE ENGINE MANUFACTURER'S GUIDE

WATERMAKER

Check and clean the sea water suction strainers..... QUATERLY
General inspection by the manufacturer..... ANNUAL

PLUMBING

Check the automatic bilge pumps and alarms.....QUATERLY
Rinse the black water tanksQUATERLY
Check the manual bilge pumps.....QUATERLY
Check the pressure water pumpQUATERLY
Check the different drains and scuppers.....QUATERLY
Open and close the different valves on board
+ grease if necessary BI-ANNUAL



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