



**USER GUIDE**

*Excess11*



# WELCOME ABOARD

We share a common passion for the sea; we, EXCESS, 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 EXCESS 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 their 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 EXCESS 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.





# 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. Some of the equipment mentioned in this guide are optional fittings.

## ■ 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.

---



# CONTENTS

---

1. SPECIFICATIONS..... PAGE 7	5. ONBOARD COMFORT..... PAGE 49	9. WINTER STORAGE..... PAGE 87
1.1 I D of your boat	5.1 Refrigerator - Freezer	9.1 Laying up
1.2 Technical specifications	5.2 Microwave oven	9.2 Protection
1.3 Helm stations	5.3 Oven, hotplates	
1.4 Electrical panel	5.4 Television	
		10. HANDLING ..... PAGE 91
2. HULL / DECK ..... PAGE 15	6. WATER SYSTEMS..... PAGE 55	10.1 Preparation
2.1 Construction	6.1 Bilge pump system	10.2 Crane lifting
2.2 Careening	6.2 Grey water	10.3 Mast stepping - Mast unstepping
2.3 Helmsman seats	6.3 Black water	
2.4 Deck equipment	6.4 Fresh water	
2.5 Cockpit	6.5 Watermaker	
2.6 Sunroof		11. SAFETY ..... PAGE 95
2.7 Gangway	7. ELECTRICITY ..... PAGE 67	11.1 Prevention
2.8 Steering system	7.1 12 V circuit	11.2 Gas system
2.9 Anchoring	7.2 Converter	11.3 Fire
2.10 Deckwash pump	7.3 Solar panels	11.4 Bilge pump system
2.11 Davits	7.4 110 V - 220 V circuit	11.5 Safety equipment
	7.5 Electronics	11.6 General specifications
3. RIGGING / SAILS ..... PAGE 29	8. MOTORIZATION..... PAGE 79	
3.1 Sailing	8.1 Engines	
3.2 Standing rigging	8.2 Fuel	
3.3 Running rigging	8.3 Propellers - Anodes	
3.4 Sails	8.4 Dash board	
		12. MAINTENANCE..... PAGE 107
4. ACCOMMODATIONS ..... PAGE 43		12.1 Maintenance schedule
4.1 Saloon - Galley		
4.2 Lighting		
4.3 Portholes - Deck hatches		
4.4 Curtains - Window blinds		





# 01

## SPECIFICATIONS

**1.1 I D of your boat**

**1.2 Technical specifications**

**1.3 Helm stations**

**1.4 Electrical panel**



# 01 | SPECIFICATIONS

*Excess11*

## 01.1 | I D of your boat

NAME OF YOUR BOAT: .....

VERSION: .....

DELIVERY DATE:.....

REGISTRATION NUMBER: .....

N° OF THE BOAT EN TRY KEY: .....

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: .....

.....

.....

.....

NAME OF THE OWNER: .....

ADDRESS: .....

.....

.....

E-MAIL ADDRESS: .....

TELEPHONE: .....

CELLPHONE: .....

EMERGENCY CONTACT



[www.excess-catamarans.com](http://www.excess-catamarans.com)

162, quai de Brazza - 33100 Bordeaux - France • Tel. 33 (0) 557 80 92 80 • Fax 33 (0) 557 80 92 81 • E-mail: [info@excess-catamarans.com](mailto:info@excess-catamarans.com)

## DESIGN CATEGORIES

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.

# 01 | SPECIFICATIONS

*Excess11*

## 01.2 | Technical specifications

Overall length .....	12.18 m / 38'5"
Waterline length .....	11.33 m / 37'58"
Max. width.....	6.59 m / 22'2"
Air draught .....	17.26 m / 56'61"
Air draught - Pulse line version.....	18.25 m / 59'86"
Draught .....	1,15 m / 4'5"
Light displacement .....	9541 kg
Maximum load (cat. A).....	2930 kg
Maximum load (cat. B).....	3210 kg
Maximum load (cat. C).....	3330 kg
Maximum load (cat. D).....	3590 kg

### Version Standard Mast

Maximum load displacement (cat. A) .....	12393 kg
Maximum load displacement (cat. B).....	12673 kg
Maximum load displacement (cat. C).....	12793 kg
Maximum load displacement (cat. D).....	13053 kg

### Version Performance Mast

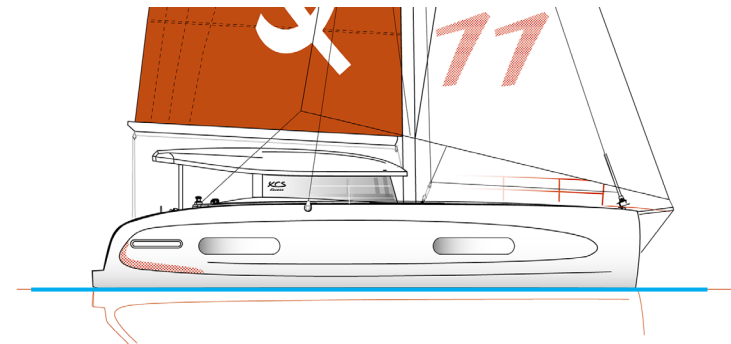
Maximum load displacement (cat. A) .....	12413 kg
Maximum load displacement (cat. B).....	12693 kg
Maximum load displacement (cat. C).....	12813 kg
Maximum load displacement (cat. D).....	13073 kg

Water capacity.....	300 l + 300 l (option)
Fuel capacity .....	2 x 200 l
Refrigeration capacity .....	130 l at positive temperatures
.....	90 l (option) at negative temperatures

### BATTERY CAPACITY

Standard.....	2 x 140 Ah (12 V)
Option Onboard Batteries.....	2 x 140 Ah (12 V)
Motors.....	2 x 120 Ah (12 V)
Engine power .....	2 x 29 CV

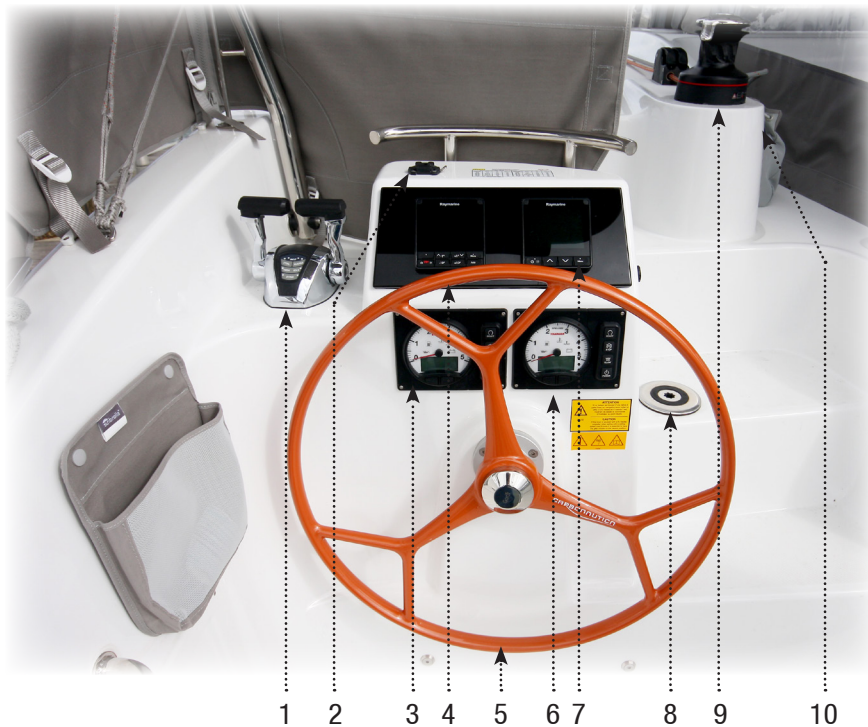
CE category	Maximum number of persons
A.....	8 persons
B .....	12 persons
C .....	16 persons
D .....	20 persons



Bottom surface: approx. 51 m<sup>2</sup>

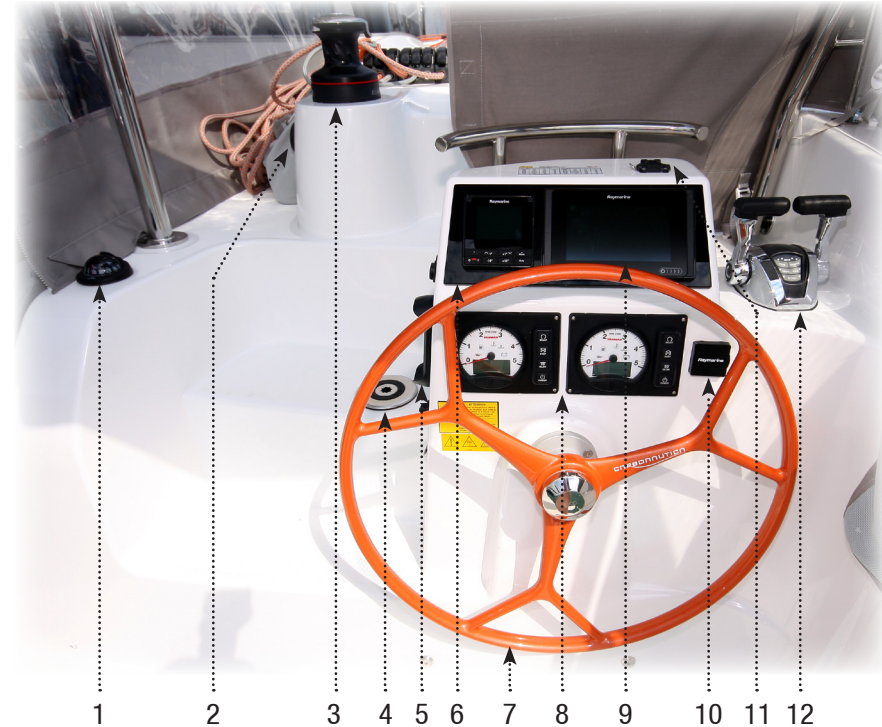
### HELM STATIONS

#### PORT HELM STATION



- |   |                                       |
|---|---------------------------------------|
| 1 - Engine reverse control (option).                    | 5 - Carbon helm wheel (option).       |
| 2 - Support and battery charger for tablet PC (option). | 6 - Engine panel (option).            |
| 3 - Engine panel (option).                              | 7 - Navigation screen (option).       |
| 4 - Automatic pilot control (option).                   | 8 - Emergency tiller cover.           |
|   | 9 - Electric winch (option).          |
|   | 10 - Electric winch control (option). |

#### STARBOARD HELM STATION



- |                                       |  |
|---------------------------------------|--|
| 1 - Compass.                          | 7 - Carbon helm wheel (option).                          |
| 2 - Electric winch control (option).  | 8 - Engine panels.                                       |
| 3 - Electric winch (option).          | 9 - 7" navigation screen (option).                       |
| 4 - Emergency tiller cover.           | 10 - Chartplotter (option).                              |
| 5 - VHF (option).                     | 11 - Support and battery charger for tablet PC (option). |
| 6 - Automatic pilot control (option). | 12 - Engine reverse control (option).                    |

# 01 | SPECIFICATIONS

*Excess11*

## 01.4 | Electrical panel



1 - Control touch screen.  
This screen displays battery charge and voltage levels, as well as gauges for freshwater tanks and fuel tanks.

2 - Electronics.  
3 - Navigation lights.  
4 - Steaming lights.  
5 - Deck searchlight.  
6 - Mooring light.

7 - Internal lighting.  
8 - Port bilge pump.  
9 - Starboard bilge pump.  
10 - Water pump.  
11 - Refrigerated unit.





# 02

## HULL / DECK

**2.1 Construction**

**2.2 Careening**

**2.3 Helmsman seats**

**2.4 Deck equipment**

**2.5 Cockpit**

**2.6 Sunroof**

**2.7 Gangway**

**2.8 Steering system**

**2.9 Anchoring**

**2.10 Deckwash pump**

**2.11 Davits**

## HULL PROTECTION - HELMSMAN SEATS

PROTECTIVE FENDERS



HELMSMAN SEAT  
FOLDED POSITION



HELMSMAN SEAT  
LOCKING MECHANISM



HELMSMAN SEAT  
UNFOLDED POSITION



HELMSMAN SEAT  
OPEN POSITION



HELM STATION BIMINI



### 02.1 | Construction

The Excess 11 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 deck and roof of the Excess 11 are injection-moulded.

#### **WARNING**

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

### 02.2 | 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.

### 02.3 | Helmsman seats

#### • HELMSMAN SEATS

The starboard helm station is fitted with a benchseat with fold-down back that provides access to the rear transom.

The port helm station can be fitted with an identical benchseat (option).

- To install a benchseat, hold and pull on the tab located on the inner front.
- Pull the benchseat down, and unfold the two seats until they come up against the support on the shell side.
- Unfold the seat backs.

Proceed in the reverse order to fold the seats away.

#### **WARNING**

In the folded position, make sure that the locking mechanism holds the seat correctly in the vertical position.

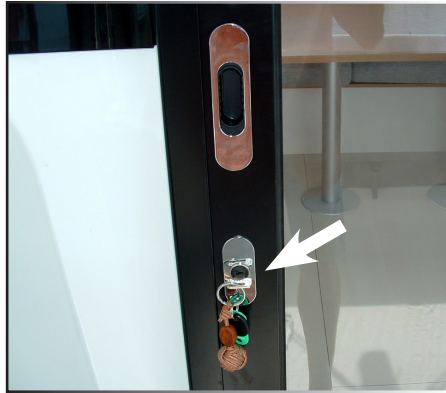
#### • HELM STATION BIMINI

Helm stations may be optionally fitted with a bimini with integrated windshield.

Rinse the windshield with fresh water on a regular basis.

## DECK EQUIPMENT

EXTERNAL LOCKING SYSTEM  
FOR THE ENTRANCE DOOR



INTERNAL LOCKING SYSTEM  
FOR THE ENTRANCE DOOR



SWIM LADDER IN TRANSOM



AFT TRANSOM  
SHOWER



### 02.4 | Deck equipment

- DECK FITTINGS

The fittings on the deck of your Excess 11 have been selected according to quality criteria.

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

- Rinse the equipment 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

Monitor the wear and tear of textile lifelines.

Check for corrosion, in particular on the connections.

- PLEXIGLASS

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

- Rinse the plexiglass 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.

### 02.5 | Cockpit

- ACCESS 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 locking it.

- SWIM LADDER

A stainless steel swimming ladder is located on the port transom.

#### 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 port transom.

## SUNROOF

SUNROOF IN THE  
CLOSED POSITION



SUNROOF IN THE  
OPEN POSITION



REAR BIMINI ZIP



LOCKING CATCHES



SUNROOF HANDLE



OPENING / CLOSING SYSTEM



### 02.6 | Sunroof (option)

The boat may be optionally fitted with a sunroof over the cockpit.

To open the sunroof, push the handle towards the front of the cockpit.

Note: if your boat is fitted with the aft bimini option, unwind the bimini and unzip it on each side before opening the sunroof.

The roof slide rails have locking catches at 5 cm intervals.

#### RECOMMENDATION

Block the sunroof in one of the locking catches before setting sail.

#### WARNING

If sailing in strong winds or rough seas, keep the sunroof in the fully open or fully closed position.

To lock the sunroof in the closed position, use the handle, taking care to keep it perpendicular to the sunroof's slide rails.

#### WARNING

Do not go on the sunroof.

Do not store any equipment on the sunroof.

Keep the sunroof closed when it's raining, and when you are not on the boat.

- WORKING ON THE MAINSAIL

If you have to work on the mainsail or the boom, position the boom on one of the roof flaps.

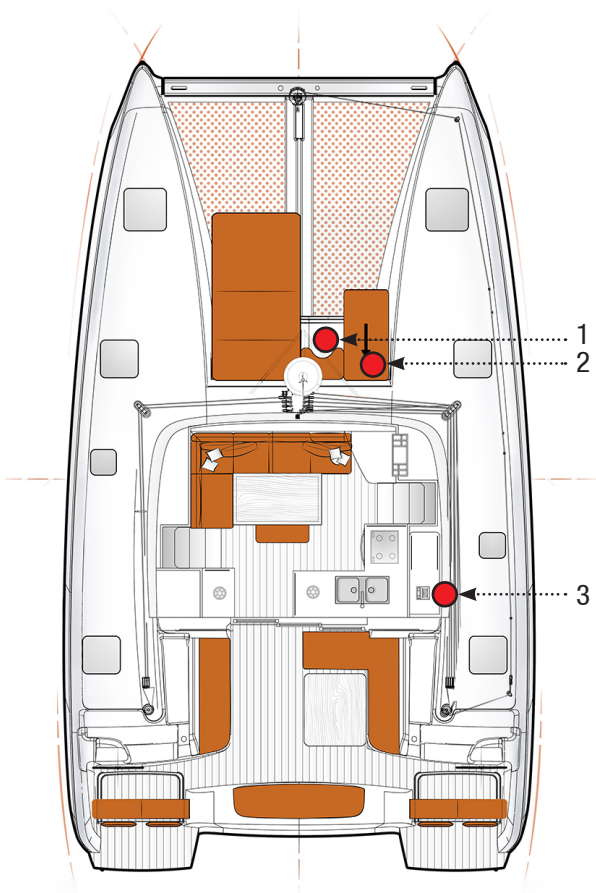
For easy access to the rear of the boom, position it on the centre line, open the sunroof, pay out the lazy jacks and use the topping lift to lower the boom so that it can be reached from the cockpit.

#### WARNING

Do not lower the boom onto the sunroof when it is closed.

Make sure to follow all necessary safety instructions and procedures when working on the mainsail or the boom.

## STROP - ELECTRIC WINDLASS



- 1 - Electric windlass.
- 2 - Electric windlass control.
- 3 - Windlass automatic breaker.

STROP CIRCUIT



ELECTRIC WINDLASS



WINDLASS SWITCH



WINDLASS  
AUTOMATIC BREAKER





### 02.7 | Gangway (option)

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.

### 02.8 | Steering system

The steering system is made up of textile steering cables and an aluminium quadrant.

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

The suspended rudders are fitted with stainless steel stocks.

Only WD 40 should be used to maintain nylon ertalon or teflon bushings.

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

### 02.9 | Anchoring

- WINDLASS

The electric windlass works with the 12 V domestic batteries.

Operate the windlass using the switch in the locker starboard of the foredeck.

#### **RECOMMENDATION**

Use the electric windlass when one or two engines are operating.

If the electric windlass does not function properly, check its automatic breaker located in the cupboard in front of the aft starboard cabin berth.

For the maintenance of the windlass, please refer to the manufacturer's guide.

- PREPARATION FOR MOORING

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

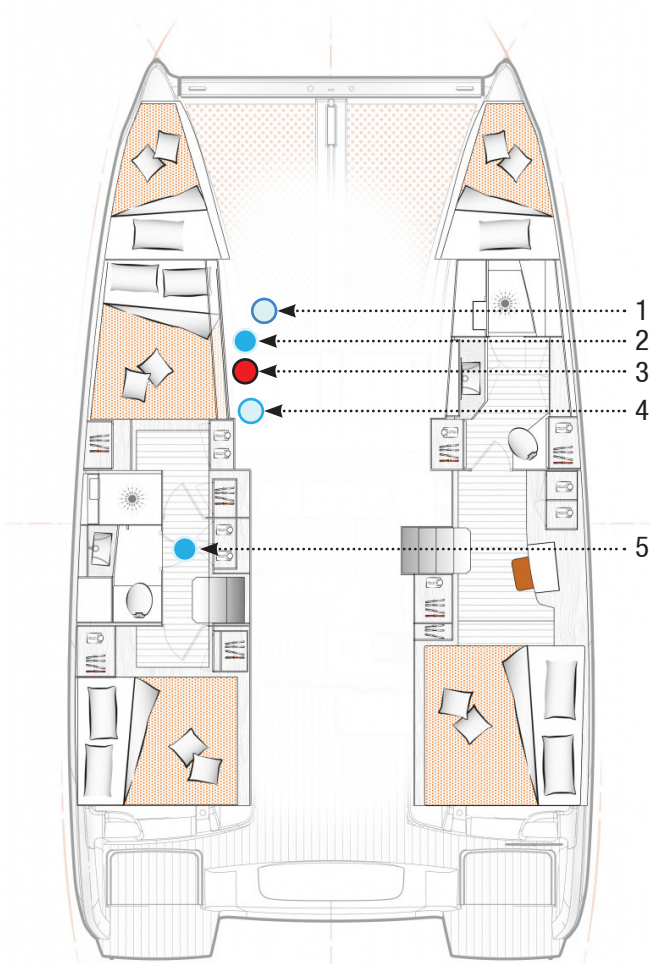
Insert the strop inside the stem anchor roller.

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

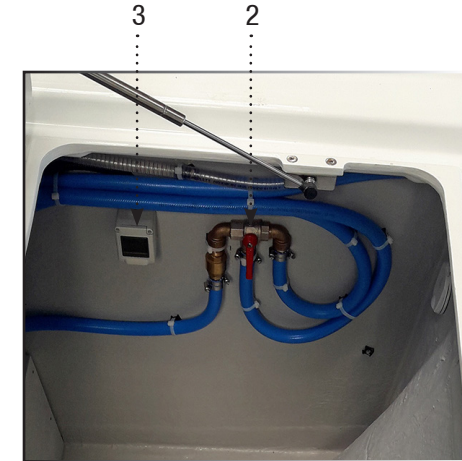
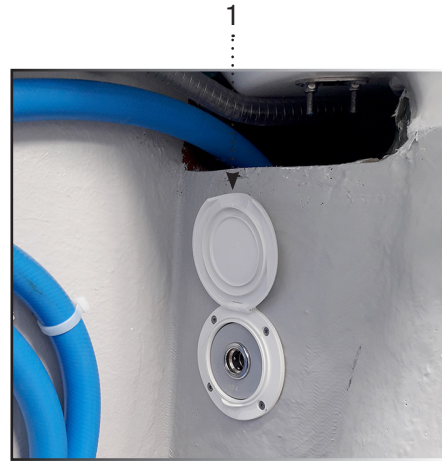
#### **RECOMMENDATION**

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

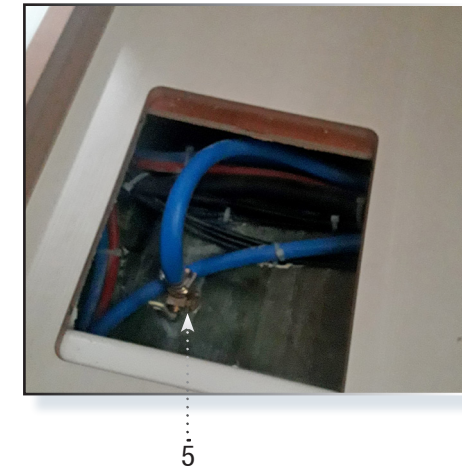
## DECKWASH PUMP



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



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



- 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).

Visually check the final metres until the anchor makes contact with the anchor roller.

Check the position of the anchor on the stemhead fitting.

Disconnect the strop.

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

In case of electric failure, use the winch handle on the windlass to raise the ground tackle.

### **WARNING**

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

### **02.10 | Deckwash pump (option)**

The deckwash pump is located in the port locker of the foredeck.

It provides sea water or fresh water from tanks.

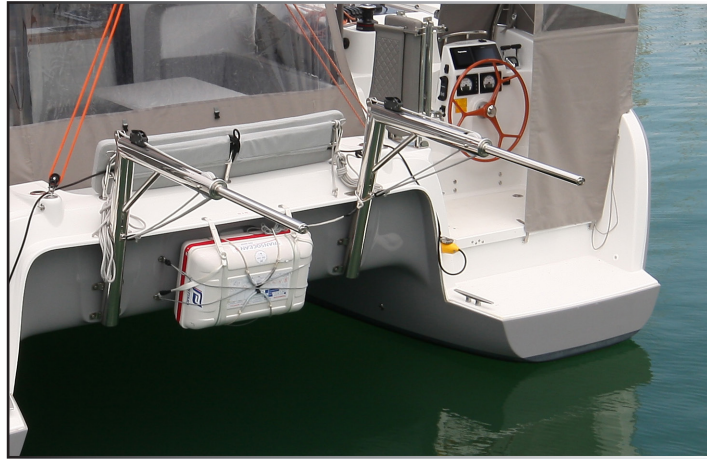
The fresh or sea water selector valve is located in the port locker of the foredeck.

The seawater intake valve is located under the floor of the port passageway.

The deckwash pump is activated using its switch located in the port locker of the foredeck.

## DAVITS

DAVITS



### 02.11 | Davits

The boat can be fitted with davits with manual winch (option).

#### **WARNING**

The davits are provided for supporting a tender with a maximum length of 2.9 metres and a maximum load of 57 kg excluding the engine (6 CV engine weighing 27 kg).

- **INSTALLING A TENDER ONTO THE DAVITS**

After having taken away everything from the tender and removed the cap:

- Fix the davit rope hooks to the front and rear parts of the tender.
- Lock the jammers located on the davits.
- Take the front part of the tender half way up using the cockpit winch.
- Do the same for the rear part.
- Alternatively lift up the front part then the rear part of the tender until it touches the davits.

- **LAUNCHING A TENDER FROM THE DAVITS**

Put the water drain plug back into position in the tender.

Make fast the tender.

- Check that the jammers located on the davits are locked.
- Run the davits pennant attached to the rear of the tender around the winch (spin at least three times around it).
- Open the jammer and slack the pennant half-way.

- Lock the jammer.
- Do the same for the front part.
- Let the tender go down alternately front and rear until it touches water.

#### **WARNING**

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

Tie up the tender during manoeuvres.

When sailing, remove the tender engine and store it on board.

Moor the tender considering the sea state and the route.

Put in the tender the security equipment in conformity with the registration country of the boat.



# 03

## RIGGING / SAILS

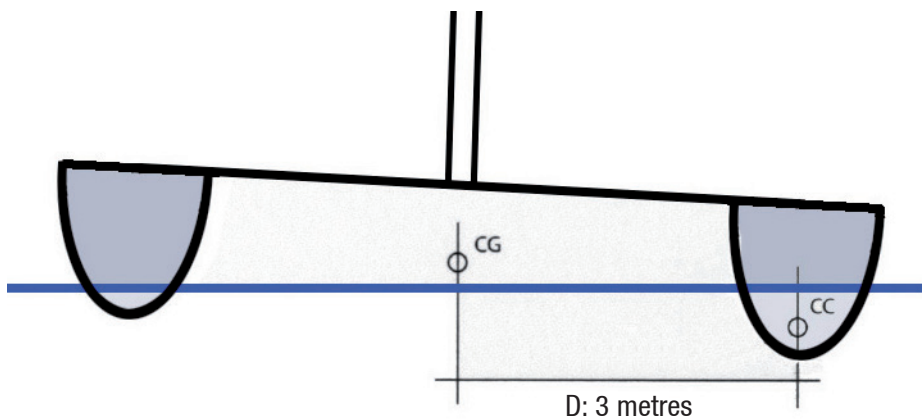
**3.1 Sailing**

**3.2 Standing rigging**

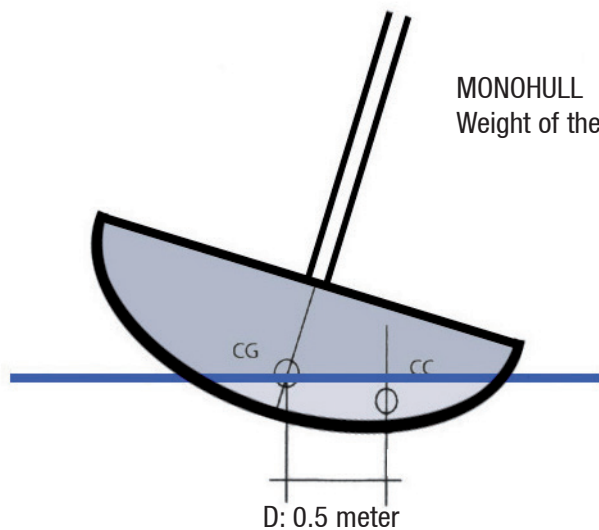
**3.3 Running rigging**

**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**



### 03.1 | 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, 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 5 knots: full sail, mainsail and code 0.
- From 0 to 23 knots: full sail, mainsail and jib.
- From 23 to 28 knots: 1 reef, full jib.
- From 28 to 33 knots: 1 reef, 75% jib.
- From 33 to 38 knots: 2 reef, 60% jib.
- From 38 to 45 knots: 2 reefs, jib 40%.
- From 45 to 55 knots: 3 reefs only (or try sail, or lying to).
- Over 55 knots: lying to, sea anchor, or preferably scudding.

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

Wind force given in apparent wind

- From 0 to 16 knots: full sail, mainsail and code 0.
  - From 0 to 20 knots: full sail, mainsail and jib.
  - From 20 to 24 knots: 1 reef, full jib.
  - From 24 to 30 knots: 2 reefs, jib 75%.
  - From 30 to 34 knots: 3 reefs, (or mainsail lowered), jib 60%.
  - From 34 to 38 knots: 3 reefs, (or mainsail lowered), jib 40%.
  - From 38 to 55 knots: mainsail lowered, jib 25%.
  - 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.

### WARNING

If there is a radar aerial on the mast, keep an eye on the jib when you put about or gybe in order to avoid any risk of damage.

■ **Sails**



**STANDARD VERSION:**

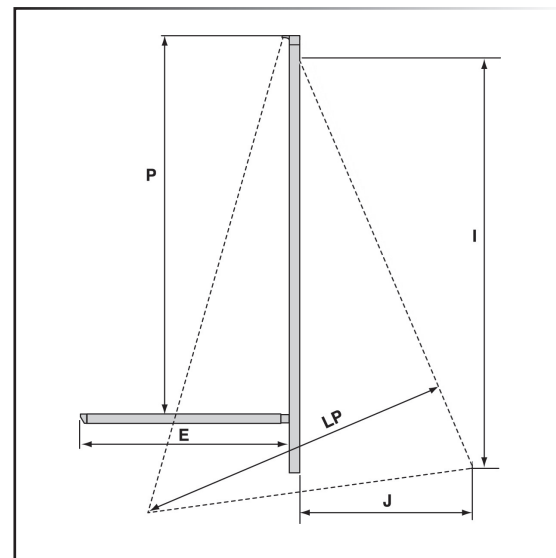
Cruising square top mainsail .... 54,5 m<sup>2</sup> / 586 sq.ft  
 Self-tacking jib ..... 22 m<sup>2</sup> / 236 sq.ft  
 Code 0 (option) ..... 54 m<sup>2</sup> / 581 sq.ft

I..... 13,19 m / 43'26"  
 J ..... 4,32 m / 14'17"  
 P..... 13,87 m / 45'50"  
 E..... 5,47 m / 17'94"

**PULSE LINE VERSION:**

Cruising square top mainsail .... 58,6 m<sup>2</sup> / 631 sq.ft  
 Self-tacking jib ..... 23 m<sup>2</sup> / 247 sq.ft  
 Code 0 (option) ..... 62 m<sup>2</sup> / 667 sq.ft

I..... 14,03 m / 47'30"  
 J ..... 4,32 m / 14'17"  
 P..... 14,83 m / 48'64"  
 E..... 5,47 m / 17'94"



### 03.2 | Standing rigging

The rigging and sails of the Excess 11 were adjusted by the shipyard and by the mast manufacturer at the time of the initial 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 turnbuckles and check the condition of the shrouds.

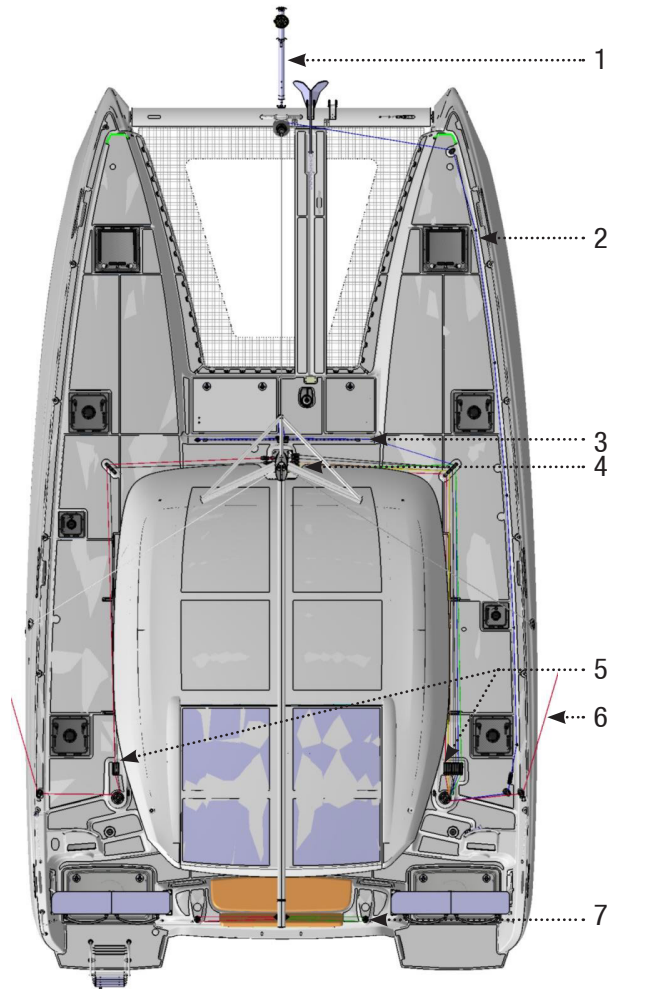
#### RECOMMENDATION

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

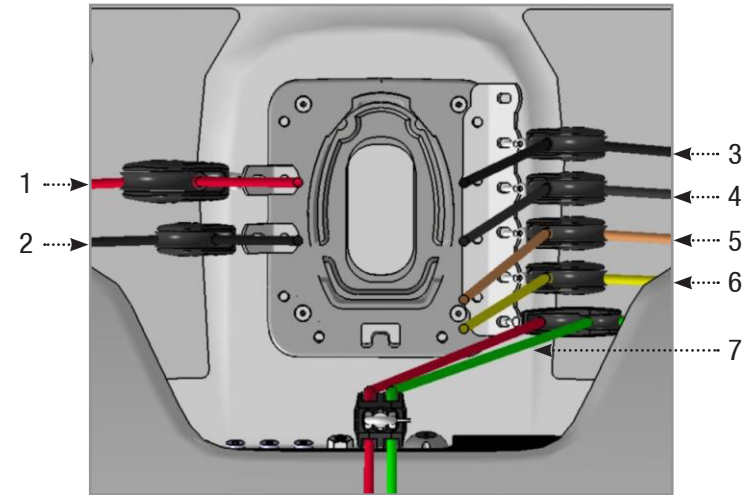
To hoist a crew member up to the top of the mast, use the topping lift. Belay the crew member with a bowline on the bosun's chair ring (do not use snap shackle or shackle).

Description of the ropes	Length (m)	Diameter (mm)
Reeved mainsail halyard	57	12
Mainsheet	22	12
Mainsail topping lift	42	10
Reef 1	25	12
Reef 2	40	12
Strap	0.6	10
Jib halyard	36	12
Jib sheet	20	10
Spinnaker halyard / Code 0 (option)	45	12
Spinnaker sheet / Code 0 (option)	30 x 2	12
Tack line	8	12
Loop	0.35	8

## MANOEUVRING PLAN - RUNNING RIGGING



- 1 - Code 0 bow sprit (option).
- 2 - Roller furler circuit.
- 3 - Self-tacking jib.
- 4 - Mast step circuit  
(see details opposite).
- 5 - Manoeuvre areas.
- 6 - Code 0 sheet (option).
- 7 - Mainsail circuit.



- 1 - Spinnaker halyard (option).
- 2 - Genoa halyard.  
(optional port winch).
- 3 - Mainsail halyard.
- 4 - Topping lift.
- 5 - Reef 2.
- 6 - Reef 1.
- 7 - Mainsail sheets.

### AUTOMATIC BREAKERS FOR THE ELECTRIC WINCH (OPTION)



### 03.3 | Running rigging

The mainsail and jib sheets, the topping lift, the reefing lines, the mainsail, jib and spinnaker halyards, are led back to the manoeuvre station.

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

The automatic breakers for the winches are located in the cabinet in front of the aft starboard cabin berth.

#### 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.

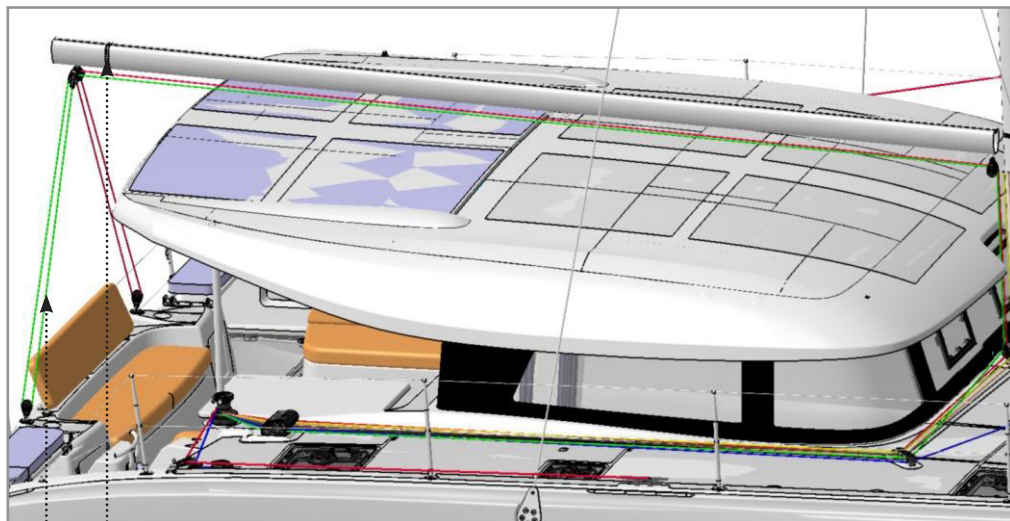
Close the pivoting rings of the switches after use.

#### 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).

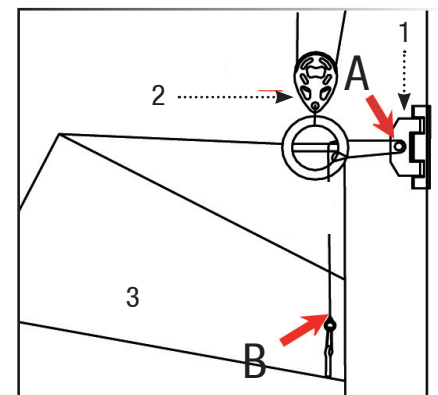
## RUNNING RIGGING – CRUISING SQUARE TOP MAINSAIL CIRCUIT



1 2

- 1 - Mainsail sheet.
- 2 - Slings.

### FASTENING OF THE SQUARE TOP MAINSAIL



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

### 03.4 | Sails

- Square top mainsail

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

See the illustration 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.

### WARNING

A cruising square top mainsail is more powerful than a standard mainsail.  
Shorten the sails earlier, depending on the wind conditions.

Note: this system is patented by the INCIDENCE sailmaker.

- HOISTING THE 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.

To lower the mainsail:

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

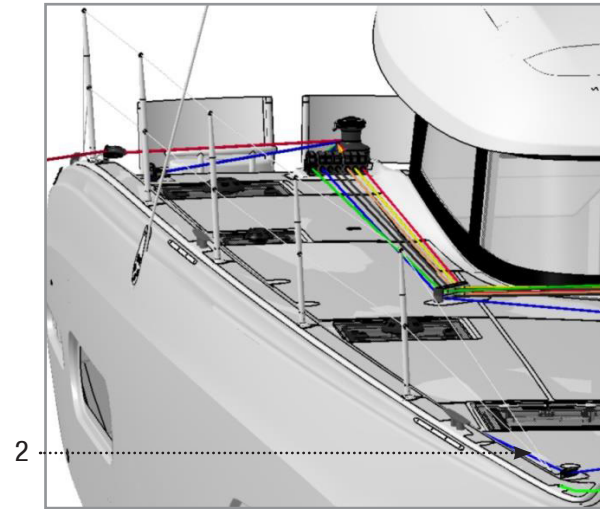
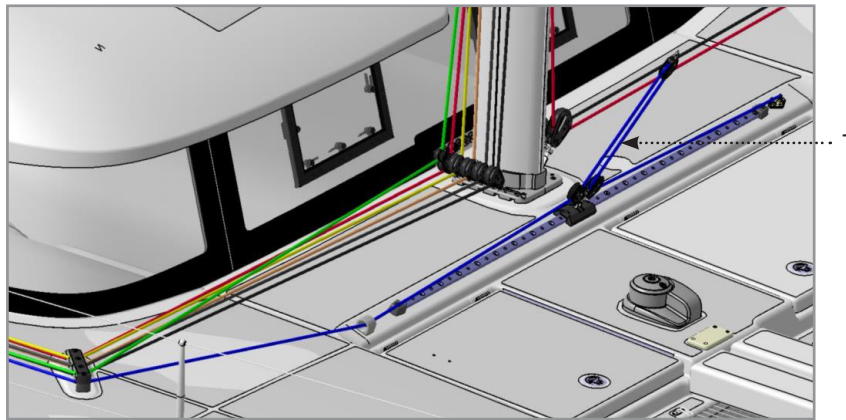
- SHORTENING THE SAILS

Automatic reefing system:

- Move into the wind.
- Ease off the mainsail a bit.
- Ease off the mainsail halyard.
- Take up the reef tack line.
- Tension the mainsail halyard.
- Set the mainsail.

During automatic reefing, the mainsail halyard must not be dropped too far (risk of incorrect pulley positioning).

## RUNNING RIGGING - JIB CIRCUIT



- 1 - Jib sheet.
- 2 - Jib furling line.



- SELF-TACKING JIB

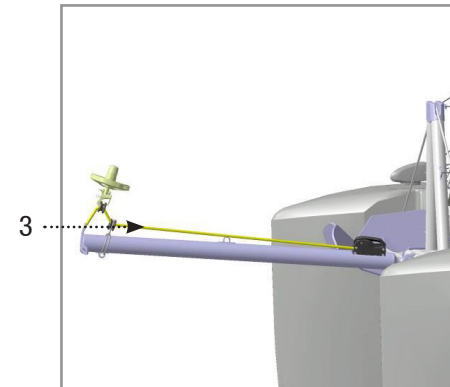
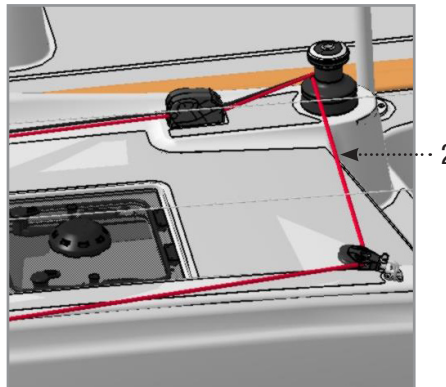
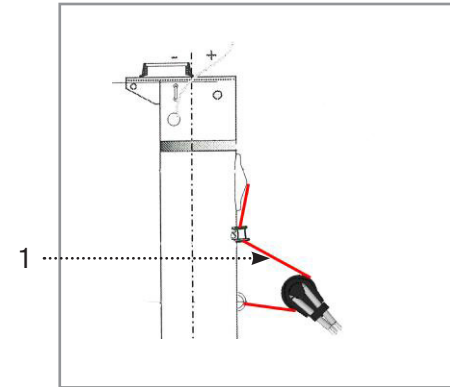
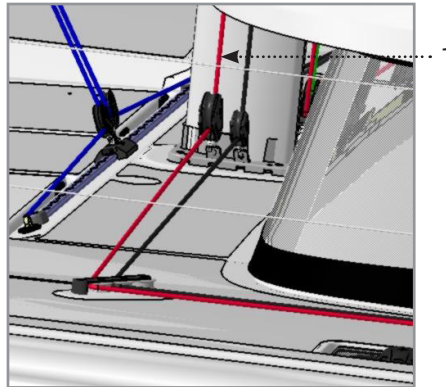
Hoist the jib before you get under way, taking advantage of a windless period of time.

- Secure the head.
  - Secure the halyard to the slide-swivel.
  - Secure the tack to the drum and secure the sheets.
- 
- Insert carefully the bolt rope into the hole, hoist the sail and take care you do not tear it.
  - Haul the halyard taut enough but sway it up less than a sail on a standard stay.
  - Hoist it until the horizontal creases disappear (the tension of the luff shall be adjusted after a few sea trips).
  - Pull on the line from the cockpit to furl the jib.

### RECOMMENDATION

Hand pre roll the drum to set the jib furling line on it.  
Pay attention to the drum furling direction: the sacrificial strip of the genoa shall be wrapped outside.  
Never force when you furl or unfurl the head sails in case it seizes.  
Make sure a halyard is not caught in the roller furler.

## RUNNING RIGGING - CODE 0



- 1 - Code 0 halyard.
- 2 - Code 0 sheet.
- 3 - Code 0 tack (Version Pulse Line).

- CODE 0 (OPTION)

Remove the forward lifelines when using the code 0 (risk of damage). 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 snap shackle.
- 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.
- Have the sheets go on the outside of the stay and shrouds and above the guardrails.
- Make fast the sheet leading blocks to the chainplates.
- Reroute the sheets to the genoa 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).



# 04

## ACCOMMODATIONS

**4.1 Saloon – Galley**

**4.2 Lighting**

**4.3 Portholes – Deck hatches**

**4.4 Curtains – Window blinds**

## SALOON - LIGHTINGS



ELECTRICAL PANEL



LIGHT SWITCHES  
ACCESS DOOR



### 04.1 | Saloon – Galley

- FLOORBOARDS

The floorboards in the passageways can be lifted up to access the various technical components onboard.

#### 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 drawers in the galley have an automatic closing function.

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

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

### 04.2 | Lighting

After having turned on the onboard 12 V circuit and the lighting circuit using the switch located on the electrical panel on the side of the chart table, you can turn the light on using the relevant switch.

## PORTHOLES - HATCHES - WINDOWS

CABIN PORTHOLE



BLIND AND MOSQUITO SCREEN  
ON DECK HATCH



CABIN BLIND



SALOON PORTHOLES





### 04.3 | 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.

Deck hatches are fitted with dorade boxes that provide passive ventilation.

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

Their handling shall be done carefully.

### 04.4 | Curtains – Window blind

All the windows have blinds.

#### **RECOMMENDATION**

Pull and push the blinds carefully.

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



# 05

## ONBOARD COMFORT

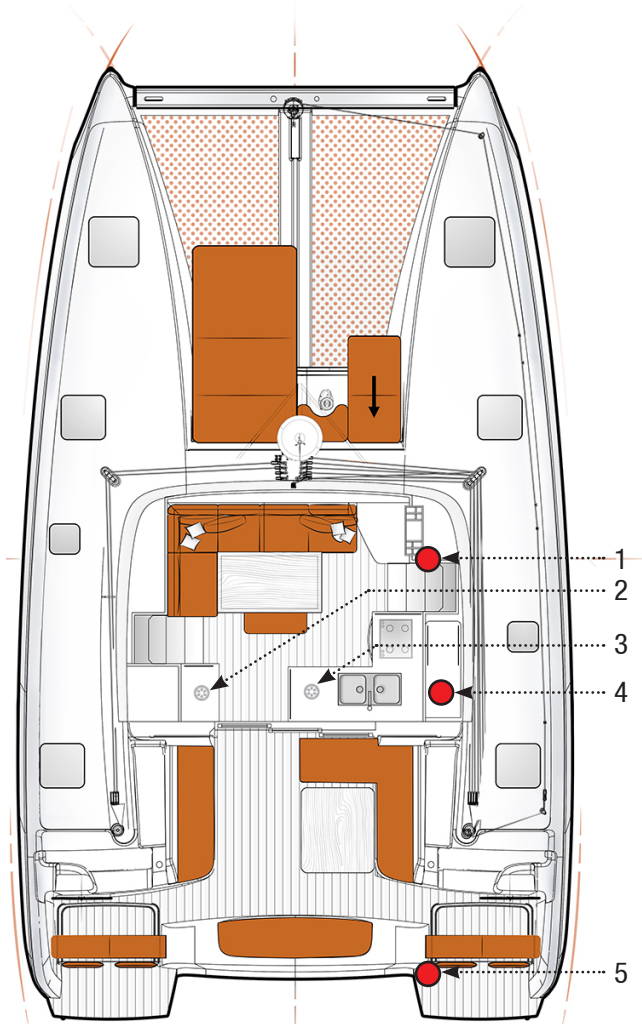
**5.1 Refrigerator – Freezer**

**5.2 Microwave oven**

**5.3 Oven, hotplates**

**5.4 Television**

## REFRIGERATOR - FREEZER - MICROWAVE OVEN



- 1 - Converter switch (option).
- 2 - Freezer (option).
- 3 - Refrigerator.
- 4 - Microwave oven (option).
- 5 - Shore socket (option).

REFRIGERATOR



FREEZER (OPTION)



MICROWAVE OVEN (OPTION)



### 05.1 | Refrigerator – Freezer

Standard features on the boat include a 130 l refrigerator located in the galley.

The boat may be optionally fitted with a freezer (90 l) in the cabinet at the saloon's port entrance.

Once the general 12 V onboard circuit has been powered up, switch on the appliances using the refrigerated unit switch on the electrical panel in the companionway next to the chart table.

#### **RECOMMENDATION**

Defrost and then drain the refrigerator and the freezer before switching off the onboard 12 V circuit.

### 05.2 | Microwave oven (option)

The boat may optionally be fitted with a microwave oven located in the galley.

- Check the microwave plugging.
- Check that the socket outlet automatic breakers located on the electrical protection panel in the cabinet in front of the aft starboard cabin berth are switched on.

#### POWER SUPPLY

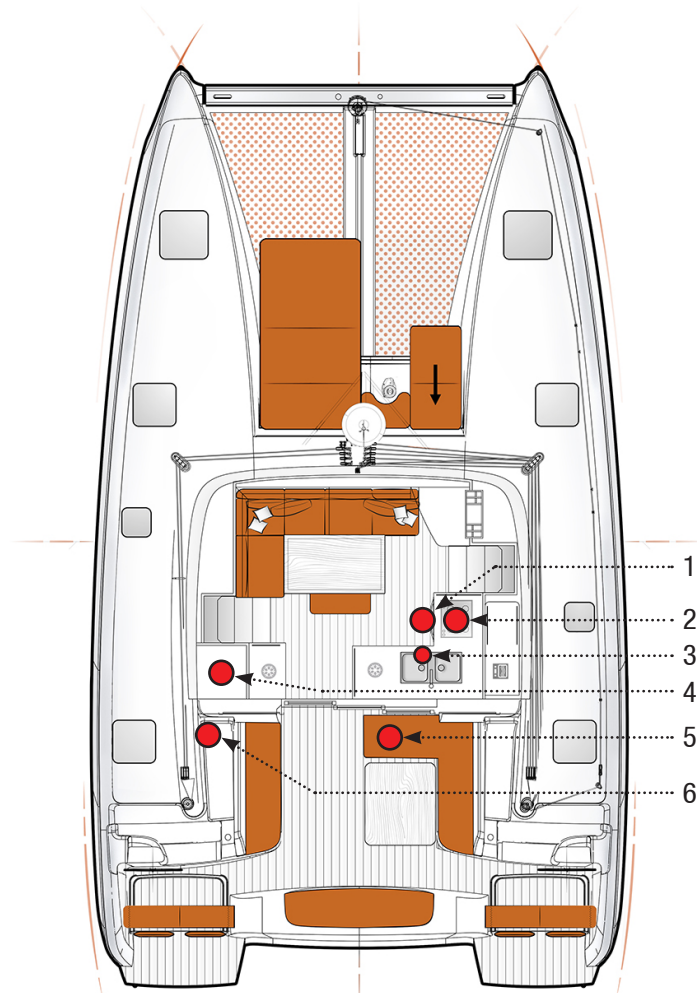
Connect the shore power socket located in the aft starboard transom or switch on the converter using its switch located in the starboard companionway.

#### **RECOMMENDATION**

Check the battery charge during the use of the converter.

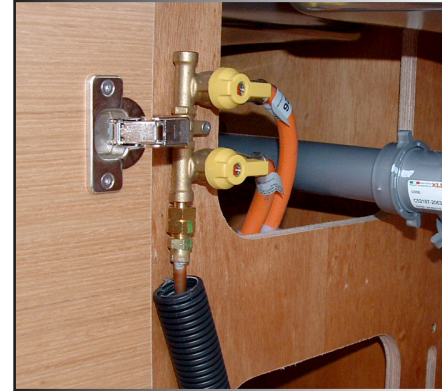
For the use and maintenance of the microwave oven, please refer to its instruction guide.

## OVEN - HOTPLATES - TELEVISION

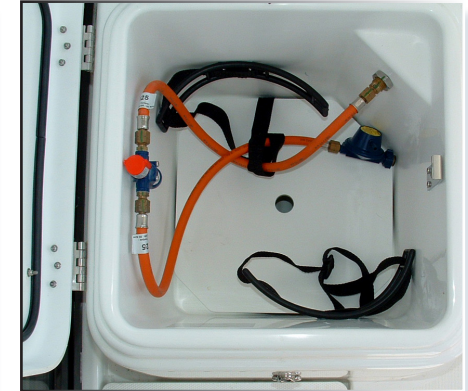


*Please note: you can find the same locations in the other accommodation versions.*

**GAS VALVES**

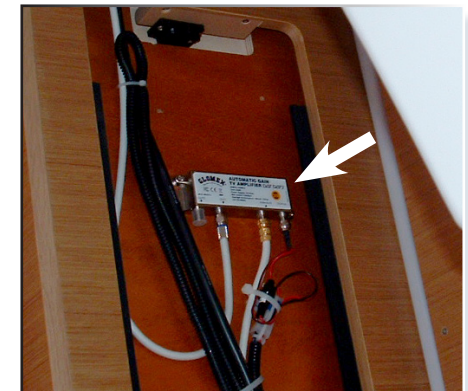


**LOCKER OF GAS BOTTLES**



- 1 - Oven.
- 2 - Hotplates.
- 3 - Gas valves.
- 4 - Television.
- 5 - Gas bottles.
- 6 - TV antenna booster.

**TELEVISION AERIAL AMPLIFIER**



### 05.3 | Oven, hotplates

The boat is standard fitted with gas oven and hotplates.

The gas valves are located in the cupboard under the sink.  
The gas bottles are located in the cockpit forward locker.

#### **RECOMMENDATION**

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

### 05.4 | Television (option)

The saloon can be equipped with a TV (option) that can be turned on after switching on the onboard 12 V power supply when the boat is equipped with a 12 V / 110 V - 220 V / 2000 Va converter (option).

#### **RECOMMENDATION**

Check the battery charge during the use of the converter.

If there is no converter, the TV is powered using the 220 V supply via the shore socket.

An antenna amplifier is located behind a hatch facing the berth in the aft port cabin.

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





# 06

## WATER SYSTEMS

**6.1 Bilge pump system**

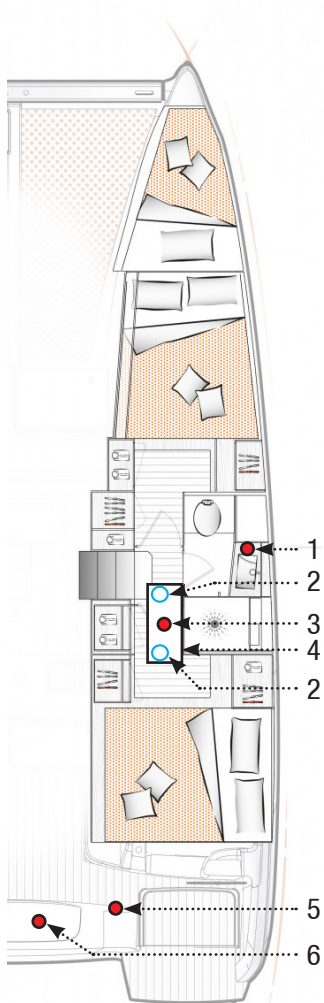
**6.2 Grey water**

**6.3 Black water**

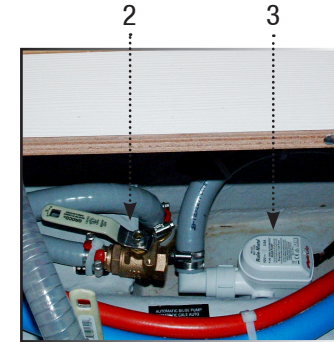
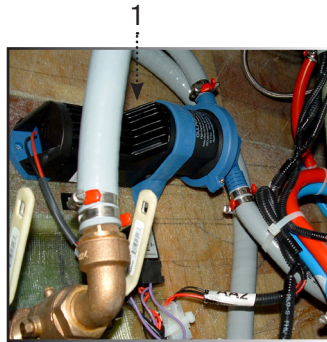
**6.4 Fresh water**

**6.5 Watermaker**

## BILGE PUMP SYSTEM - GREY WATERS



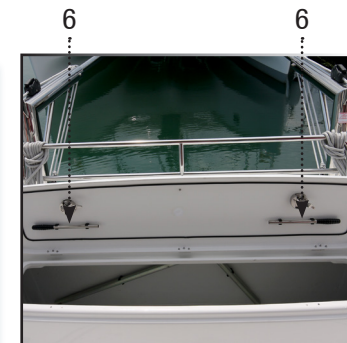
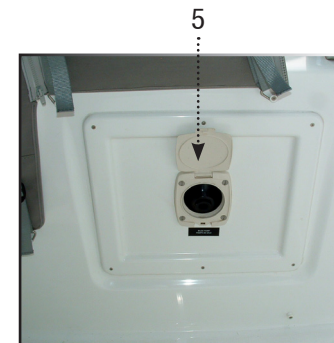
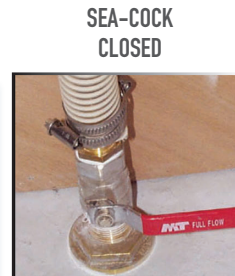
*Note: each hull has the same components. The same layout can be observed in the other version.*



- 1 - Shower drain pump.
- 2 - Front / aft compartment outlet valve.
- 3 - Electric bilge pump.

- 4 - Hull sump.
- 5 - Manual bilge pump.
- 6 - Manual bilge pump levers.

Note: each valve in the boat is identified.



### 06.1 | 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 floorboards).

Each well is emptied by two bilge pumps:

- One manual cockpit pump (pump levers in the cockpit's rear locker).
- An electric pump with manual and automatic release (electrical panel switch) located in the well.

#### 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.

#### 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.

#### RECOMMENDATION

Always keep the bilge pumps switched on the automatic mode with alarm.

We advise you to test the bilge pumps every time you put out to sea.

### 06.2 | Grey water

Grey waters (sink, washbasins) are discharged directly via sea-cocks with valves.

Please note: a valve is closed when its handle is perpendicular to the hose and it is open when its handle is in line with the hose.

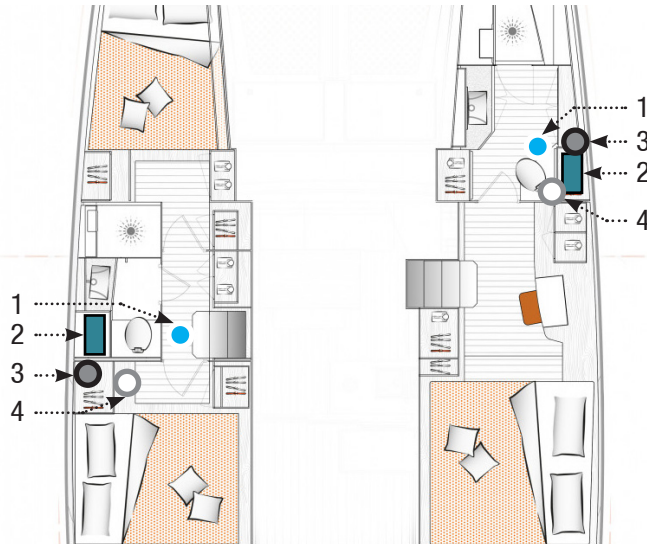
Grey waters from the showers are emptied via pumps located behind the hatches under the sinks.

The pumps are switched on from the 12 V domestic circuit.

#### RECOMMENDATION

When mooring in a harbour, if possible, use the sanitary facilities provided by the port authority.

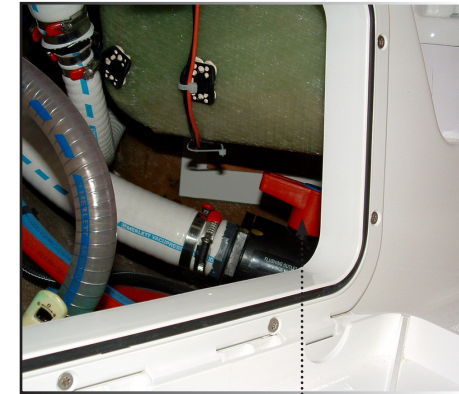
## BLACK WATERS



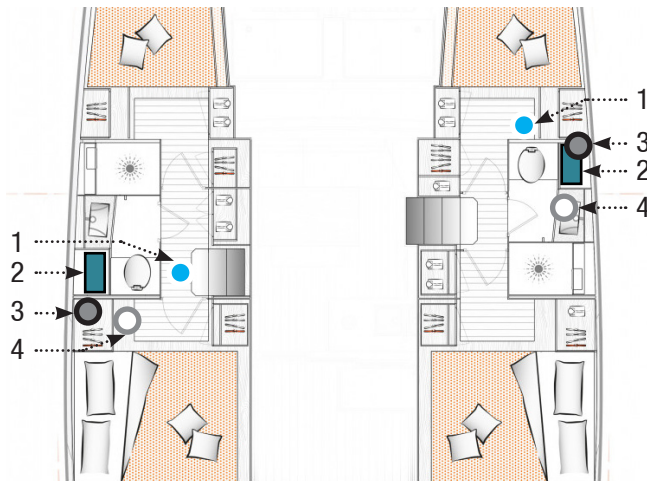
3-cabin version with 2 bathrooms.



1



4



4-cabin version with 2 bathrooms.

- 1 - WC water inlet valve.
- 2 - Holding tank.
- 3 - Drain bung hole on deck.
- 4 - Drain valve on hull.
- 5 - Switch of the electric toilets.



### 06.3 | Black water

The boat is fitted with manual toilets and 80 liters holding tanks in all the washrooms.

She may be fitted with optional electric toilets.

- 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

The electric toilets are rinsed with sea water.

Electrical pumps, filters, and supply valves are located in different wet rooms under the washbasin.

- Switch on the 12 V domestic circuit.
- Open the water inlet and drain valves.

One of the switches next to the toilets makes possible a water intake cycle and a water outlet cycle.

The second switch makes possible to carry out a rinse cycle.

Rinse the toilets with fresh water and regularly clean the filters.

Close the valves after each use.

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

- USE OF THE HOLDING TANKS

Tanks can be reached through the wet rooms.

Make sure the drain valve of the tank is closed in order to avoid any inadvertent discharge (the valve is closed when the handle is perpendicular to the hose).

Tank drainage:

- In an authorized area, open the drain valve.

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

- Start the pump of the suction system.

Regularly rinse the holding tank.

The tanks shall be emptied when the boat is berthed in negative temperatures.

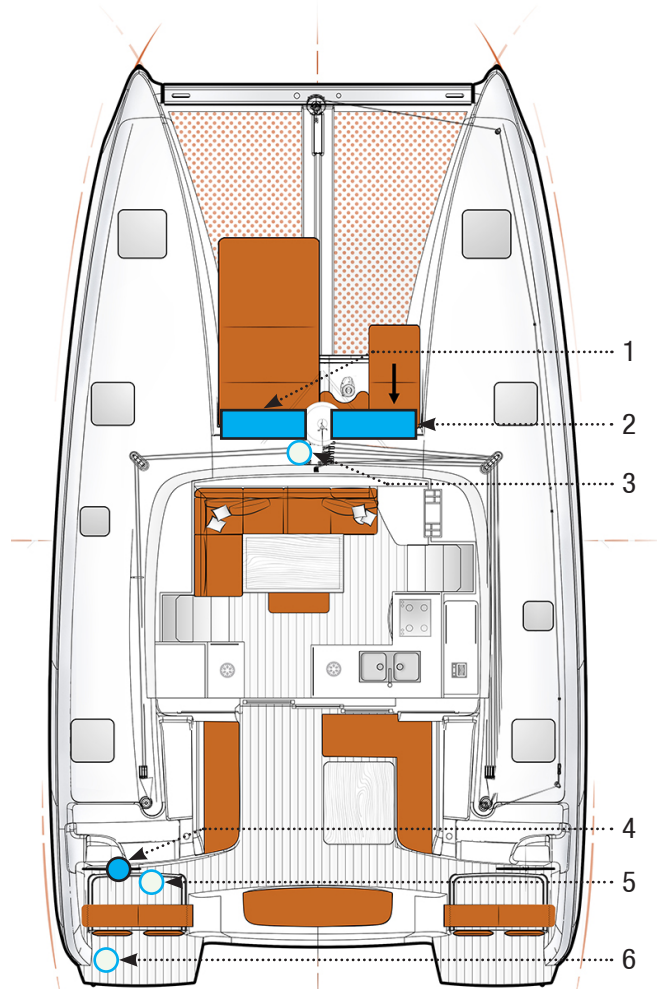
### WARNING

In some harbours or countries, wastewater disposal is forbidden. You will then have to use the waste tank.

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

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

## FRESH WATER



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



1



4

5

- 1 - Tank (standard).
- 2 - Tank (optional extra).
- 3 - Deck filler.
- 4 - Pressure water pump.
- 5 - Fresh water supply valve.
- 6 - Shore fresh water supply (option).



6

## 06.4 | Fresh water

- FRESH WATER TANKS

Standard features on the boat include a 300-litre tank located in the foredeck port locker.

As an option, the boat may be fitted with a second 300-litre tank in the foredeck starboard locker.

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

A front filler is provided to fill the tank.

During filling, avoid handling contaminants near the fillers.

Open and close the filler caps with the right key.

Check the filler cap seal 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.

### 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.

Please note: 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 port engine compartment.

Its starting is done by using a switch on the electrical panel.

### RECOMMENDATION

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

Check the different water filters for condition.

- WATER GAUGE

Check the water level in the tank(s) via the gauge displayed on the touch screen in the chart table in the saloon.

- SHORE FRESH WATER SUPPLY (OPTION)

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

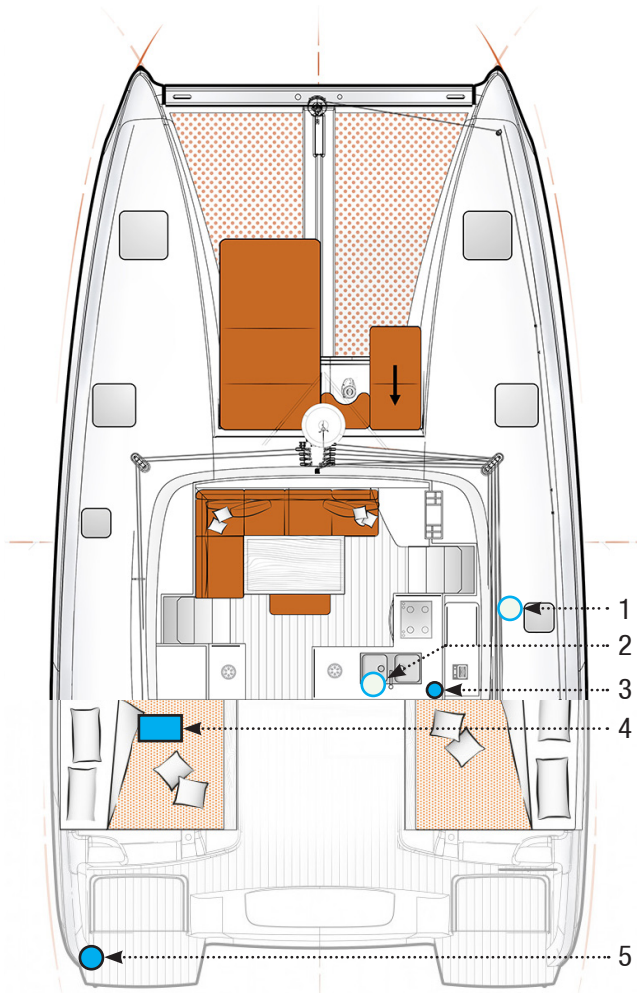
To use the marina fresh water:

- Connect the shore supply.
- Set the pressure water pump switch to 'OFF'.

### RECOMMENDATION

When you leave the boat unattended, systematically disconnect the shore fresh water supply.

## SEA WATER PUMP - WATER HEATER



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



2



3

- 1 - Sea water supply valve.
- 2 - Electric sea water pump.
- 3 - Electric pump switch.
- 4 - Water heater.
- 5 - Shower.



4



- EXTERIOR SHOWER

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

It is supplied by the pressure water pump.

### **WARNING**

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

- WATER HEATER

The water heater is located under the berth of the aft port cabin.

It has a capacity of 25 litres.

The water heater functions automatically when the engine is on or when set on the 110 V - 220 V circuit (shore supply socket) after having activated its automatic breaker on the electrical protection panel in front of the aft starboard cabin berth.

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

### **RECOMMENDATION**

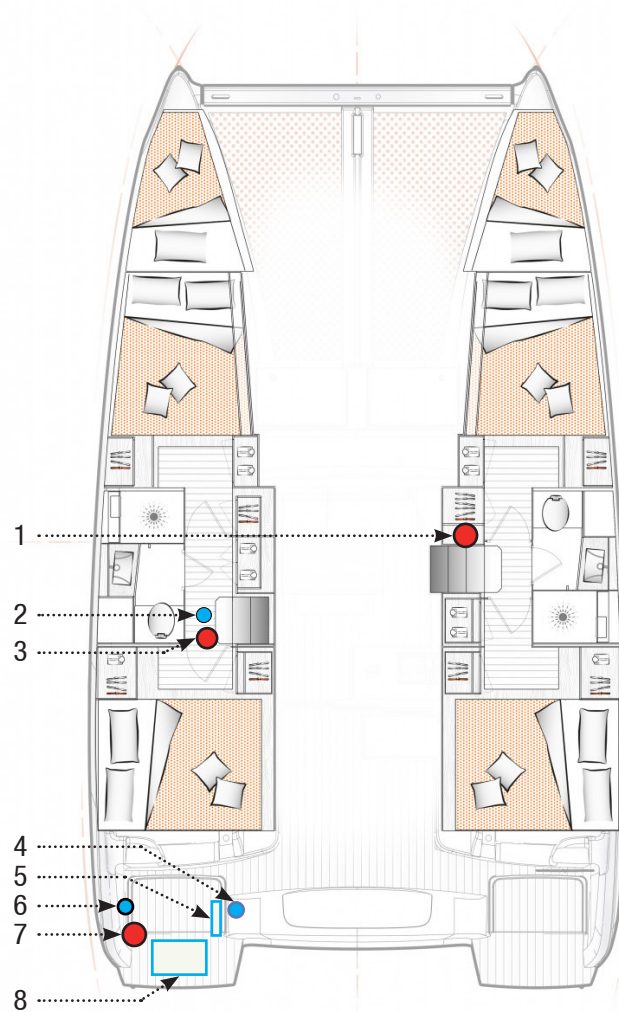
When the water heater is not used, switch it off using its 110 V - 220 V circuit. Before you switch it on using the 110 V - 220 V circuit, check the water heater is full of water.

- SEA WATER PUMP

Depending on the finish, the boat can be equipped with an electric pump that can supply a sink tap with seawater.

After switching on the onboard 12 V circuit, press the switch on the side of the galley sinks.

## WATERMAKER



- 1 - Automatic breaker.
- 2 - Sea water supply valve.
- 3 - Booster pump.
- 4 - Drain valve.
- 5 - Membranes.
- 6 - Sea water filter and purging electrovalve.
- 7 - Control.
- 8 - Watermaker.

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

### 06.5 | Watermaker (option)

The boat may optionally be fitted with a watermaker (63 l / hour) located in the port engine compartment.

#### OPERATION

The watermaker operates with 12 V.

Check that the relevant automatic breaker located in a cupboard to the left of the companionway in the starboard float is switched to ON. Check that the seawater intake valve (accessed via the port passage-way floor) and the drain valve (accessed via the port engine compartment) are both open.

#### POWER SUPPLY

Switch the watermaker on using the switch on its panel (in the port engine compartment).

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

Regularly clean the different system filters.

### RECOMMENDATION

The watermaker shall be used exclusively in clear waters.

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



# 07

## ELECTRICITY

**7.1 12 V circuit**

**7.2 Converter**

**7.3 Solar panels**

**7.4 110 V – 220 V circuit**

**7.5 Electronics**

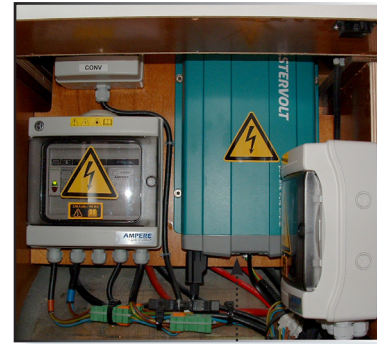
## 12 V ELECTRICAL EQUIPMENT



1



2



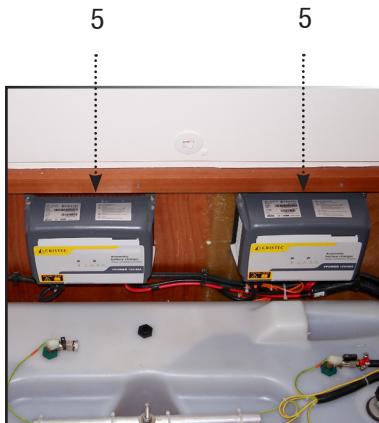
3



4

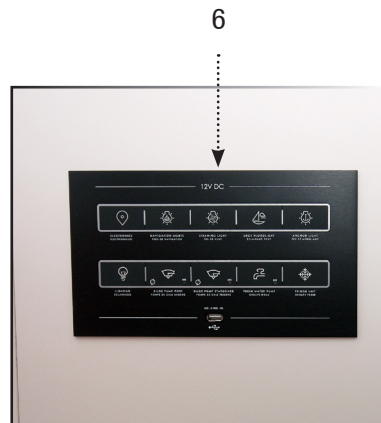
- 1 - Switch of the converter.
- 2 - Automatic breaker of the converter.
- 3 - 12 V / 110 V - 220 V converter.
- 4 - 12 V service batteries.

- 5 - Battery chargers.
- 6 - Electrical panel.
- 7 - Coupling / batteries + port engine cut-out.
- 8 - Onboard and starboard engine cut-out.



5

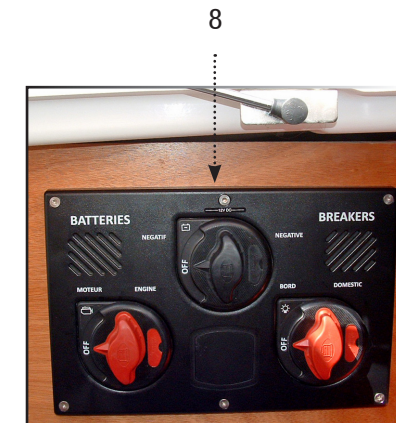
5



6



7



8

### 07.1 | 12 V circuit

The main domestic circuit is supplied in 12 V.  
The service batteries are located under the aft starboard cabin berth.  
The starboard engine battery and the port engine battery are located in their respective engine compartments.

The starboard engine and service battery cut-outs are located in the starboard engine compartment.  
The port engine cut-out is located in the port engine compartment.  
For safety reasons, a coupling system for the engine batteries (cut-out located in port engine compartment) can be used to start the engine with a faulty battery.

#### BATTERY CHARGERS

The batteries can be charged either by the engine alternator (12 V - 125 A) or by the 110 V - 220 V / 12 V - 40 A battery charger.  
According to the lay out, the boat may optionally be fitted with an extra 110 V - 220 V / 12 V - 40 A charger.  
The battery chargers are located behind the aft starboard cabin berth.

#### CHARGER POWER SUPPLY

Connect the shore supply located in the aft starboard transom.

The automatic breakers for 12 V consuming appliances are located behind a hatch in the forward starboard cabin.  
They can be wound by pressing a black lug.

### 07.2 | Converter (option)

The boat is optionally equipped with a 12 V / 110 V - 220 V / 2000 Va converter located behind a hatch to the left of the companionway in the starboard float.

The converter supplies the galley sockets with 110 V - 220 V.

The converter power switch is located next to the electric panel, in the starboard companionway.

### RECOMMENDATION

Check the battery charge during the use of the converter.

Check that the switch on the converter is in REMOTE position in order for the main switch to be turned on.

### 07.3 | Solar panels (option)

The boat may be optionally equipped with four (120 W) solar panels on the davits.

In case of solar panel malfunctioning, check the automatic breaker located in the port engine compartment under the cut-out.

# SHORE POWER SOCKET - TOUCH SCREEN - AUTOMATIC BREAKERS

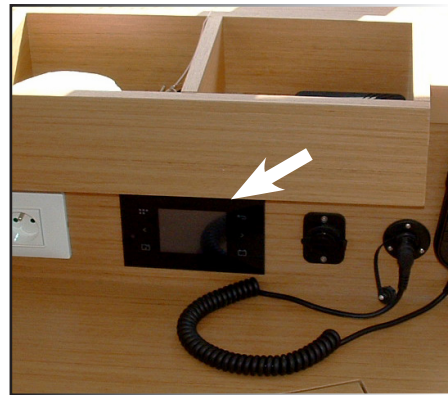
SHORE POWER SOCKET



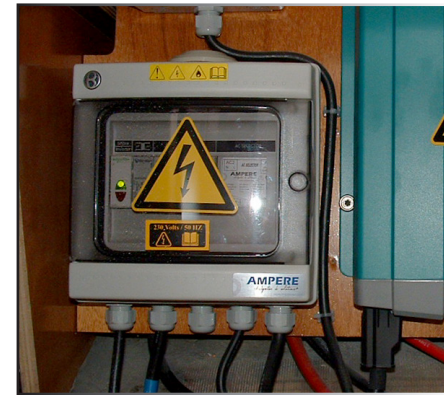
SHORE POWER SOCKET AUTOMATIC BREAKER



TOUCH SCREEN



AUTOMATIC BREAKERS  
FOR CONSUMING APPLIANCES





## 07.4 | 110 V - 220 V circuit

### • SHORE POWER SOCKET

The boat may be optionally fitted with a shore power socket on the aft starboard transom

This socket supplies the 220 V circuit and the battery chargers.

### **WARNING**

Before using the shore power socket, imperatively check the shore power is 32 Ah.

Before you plug in or unplug the boat / shore power supply cable, disconnect 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 power socket.

Unplug the boat / shore supply cable on shore first.

Close the shore power socket cover when not in use.

### **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.

The shore power socket is protected by automatic breakers located in the starboard engine compartment (in addition to a differential circuit-breaker located in the aft starboard cabin).

### • USE OF THE 110 V - 220 V POWERED APPLIANCES

#### SWITCHING ON THE APPLIANCES

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

- Make sure that the automatic breakers are switched OFF on the 110 V - 220 V automatic breaker panel.
- Switch on the 110 V - 220 V supply (connect the shore power socket or activate the converter using its switch in the starboard companionway).

### **RECOMMENDATION**

Check the battery charge during the use of the converter.

- Turn on the automatic breakers for the units to be used by using the 110 V - 220 V automatic breaker panel.

Then start the appliance with its own controls.

When switching on 110 V - 220 V powered appliances, wait for 10 to 15 seconds between the start-up of each appliance.

#### SWITCHING OFF 110 V - 220 V POWERED APPLIANCES

To switch off 110 V - 220 V powered appliances (microwave oven, etc.), do as follows:

- Switch the appliance off using its own controls.

To switch off 110 V - 220 V powered appliances, wait for 10 to 15 seconds between switching off each appliance.

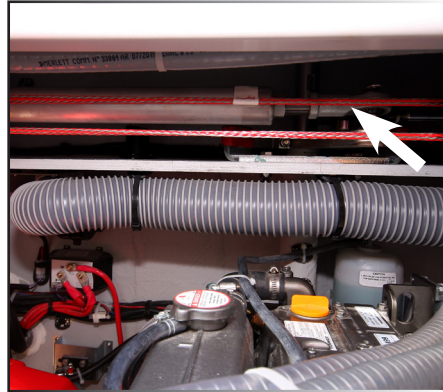
- Turn off the unit automatic breakers by using automatic breaker panel.
- Disconnect the shore power socket or switch off the converter.

### **WARNING**

Before switching off the 110 V - 220 V power supply, make sure that all relevant appliances are switched off (risk of an electric arc).

## ELECTRONICS

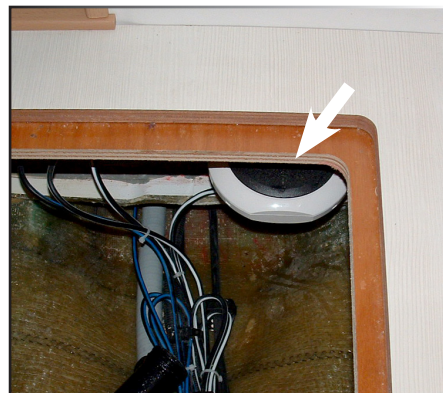
AUTOMATIC PILOT RAM



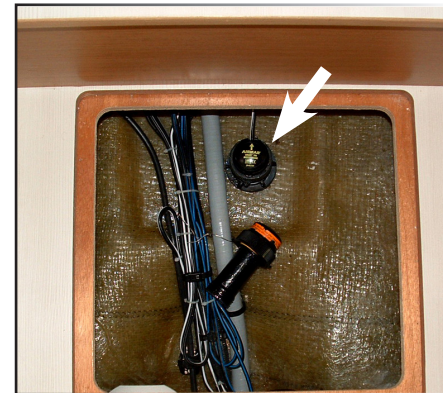
AUTOMATIC PILOT FUSE



AUTOMATIC PILOT COMPASS



DEPTH FINDER / SPEED AND LOG SENSOR



### 07.5 | Electronics

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

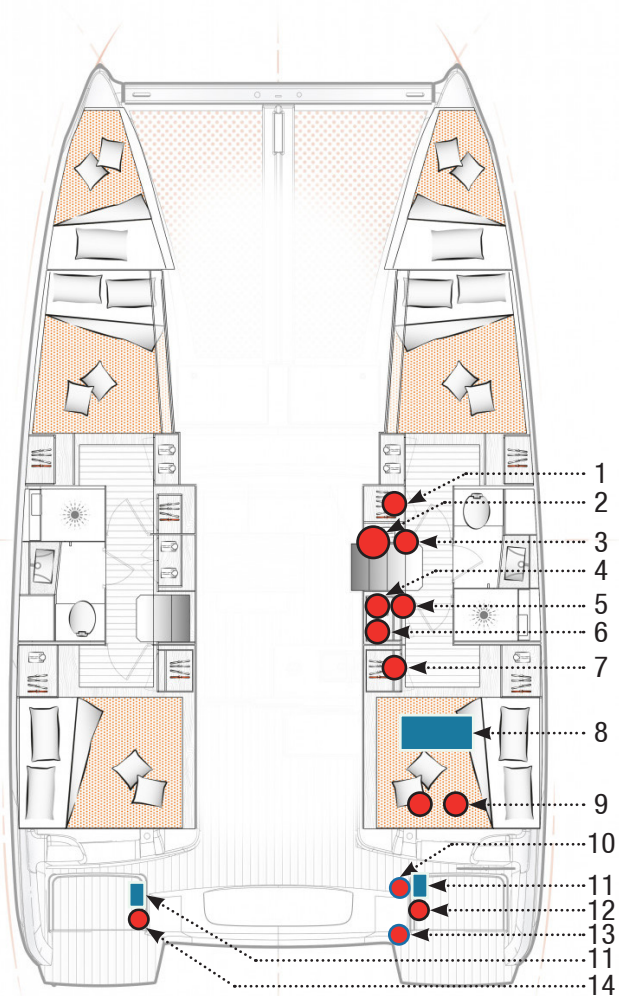
The ram, the auto pilot and the computer are located in the starboard engine compartment.

The autopilot fuse is located below the circuit cut-offs in the starboard engine compartment

The compass and depth finder / speed and log sensor are located under the floor in front of the forward port cabin berth.

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

## ELECTRIC LAYOUT



- 1 - 12 V terminal block.
- 2 - Electrical panel.
- 3 - Converter control.
- 4 - 12 V / 110 V - 220 V converter.
- 5 - Automatic breaker for the converter.
- 6 - Automatic breakers for 220 V powered appliances.
- 7 - Automatic breakers for 12 V powered appliances.
- 8 - 12 V service batteries.
- 9 - Battery chargers.
- 10 - Automatic breaker for the shore power socket.
- 11 - Engine battery.
- 12 - Onboard and starboard engine cut-outs.
- 13 - 110 V - 220 V shore power socket.
- 14 - Port engine cut-out +  
coupling / engine batteries cut-out.

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

## SUMMARY FOR THE 12 V COMPONENTS

### CHARGE AND ELECTRICAL CONVERSION

1 x 220 V / 12 V - 40 A charger	Engines + board
1 x 220 V / 12 V - 40 A charger (option)	Engines + onboard
2 x 12 V - 125 A alternators	Recharge service bank and engine batteries

### BATTERIES / CONSUMING APPLIANCES

12 V CURRENT	VOLTAGE	START (+ PROTECTION)	PROTECTION
Service batteries	12 V - 140 Ah (standard)		
Navigation electronics	12 V	12 V electrical panel	
Lighting	12 V	12 V electrical panel	
Navigation lights	12 V	12 V electrical panel	
Refrigerator, freezer (option)	12 V	12 V electrical panel	
Electric toilets (option)	12 V	12 V electrical panel	
Deck washer pump (option)	12 V	12 V electrical panel	
Bilge pumps	12 V	12 V electrical panel	
Winches (option)	12 V	Onboard 12 V	Aft starboard cabin
Windlass	12 V	Onboard 12 V	Aft starboard cabin
Watermaker (option)	12 V	Onboard 12 V	Aft starboard cabin
VHF,	12 V	Onboard 12 V	12 V terminal block
HiFi (option)	12 V	Onboard 12 V	12 V terminal block
Autoradio	12 V	Onboard 12 V	12 V terminal block
12 V sockets	12 V	Onboard 12 V	12 V terminal block
Engine batteries (x2)	12 V - 120 Ah		
Onboard batteries	12 V - 140 Ah		



## SUMMARY FOR THE 110 V - 220 V COMPONENTS

### SHORE POWER SOCKET (OPTION)

Onboard shore power socket 220 V - 50 Hz

32 A Single shore power socket

Connection on the aft starboard transom

Onboard shore power socket 110 V - 60 Hz (US Version)

32 A single shore power socket

Connection on the aft starboard transom

### CHARGE

1 x 220 V / 12 V - 40 A charger

Recharge of the service bank by shore power supply

1 x 220 V / 12 V - 40 A charger (option)

Engine batteries recharge by shore power supply

## SUMMARY FOR THE 110 V – 220 V COMPONENTS

CONSUMING APPLIANCES	VOLTAGE	PROTECTION
Television (option)	220 V	Converter or 220 V panel
Outlets	220 V	Converter or 220 V panel
Water heater	220 V	200 V Electrical panel





# 08

## MOTORIZATION

**8.1 Engines**

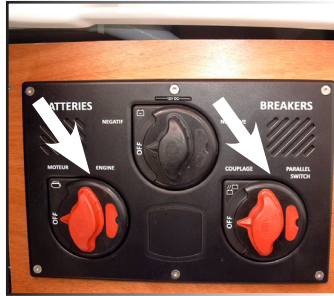
**8.2 Fuel**

**8.3 Propellers – Anodes**

**8.4 Dash board**

## ENGINE LAYOUT

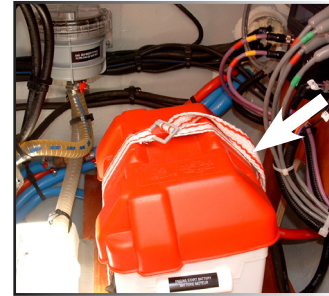
PORT ENGINE + BATTERY COUPLING CUT-OUT



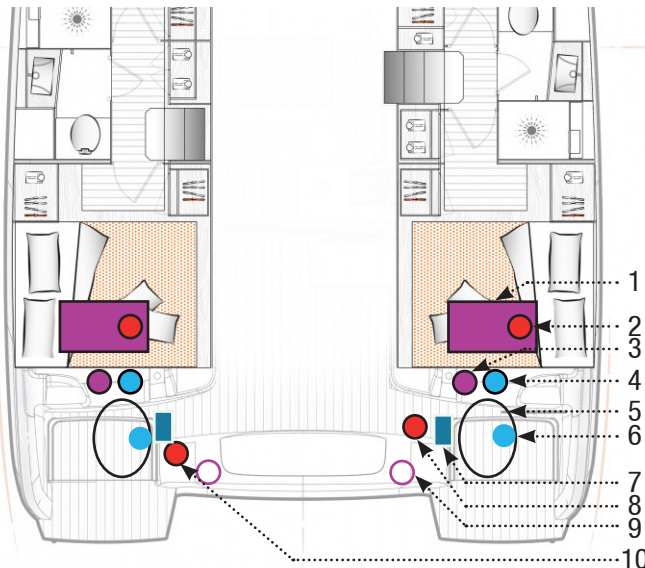
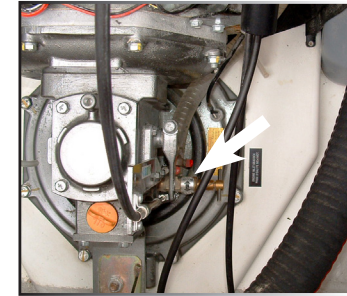
STARBOARD ENGINE CUT-OUT



STARTER BATTERY



ENGINE WATER INTAKE VALVE

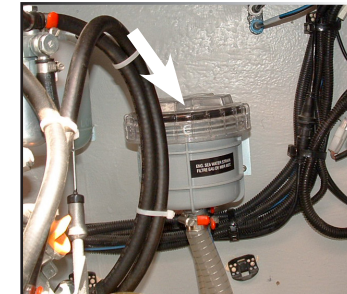


Note: The same layout can be observed in the other version.

- 1 - Fuel tank.
- 2 - Fuel valve.
- 3 - Fuel filter.
- 4 - Sea water filter.
- 5 - Engine.
- 6 - Engine water intake.
- 7 - 12 V battery.
- 8 - Starboard engine cut-out.
- 9 - Fuel tank filler.
- 10 - Port engine + battery coupling cut-out.

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

WATER FILTER



### 08.1 | Engines

- ACCESS

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

#### **WARNING**

Stop the engines before opening the hatches.

If you have to intervene when the engines are 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 the fuel valves are open (access under the aft cabins berths, on the port and starboard tanks).
- Open the valves of the engine cooling system.
- Switch on the electrical circuit, setting the engines cut-outs to 'ON' (accessed in the port and starboard engine compartments).

After having checked that the reverser handles are set on neutral, start the engines.

Please carefully read the engine instruction guide supplied with the boat; it gives you detailed explanations as to the best use of the engines and relative operations.

- ENGINE START WITH BATTERY COUPLING

If one of the start batteries is not available:

- Activate (ON position) the coupling cut-out located in the port engine compartment.
- Start the engine concerned.
- When the engine starts, turn the coupling cut-out back to the OFF position.

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

- ENGINE MAINTENANCE

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

- ENGINE WATER INLETS

The water inlet valves of the engines (access through the engines compartments) shall absolutely be open before you start the engines.

Keep the strainers of the engine water inlet valves in the best possible state of cleanliness.

Brush the strainers when the boat is careened.

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

Get used to checking immediately after starting the engines if water is expelled with the exhaust gases.

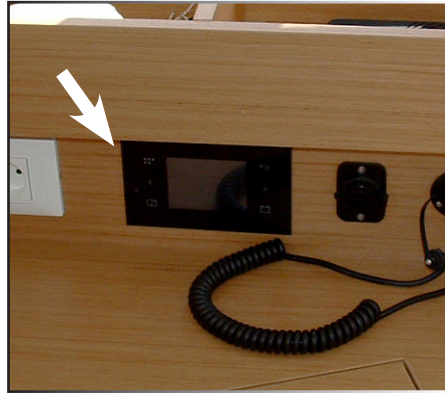
If water does not flow out:

- Stop the engines immediately.
- Check the valves are open.

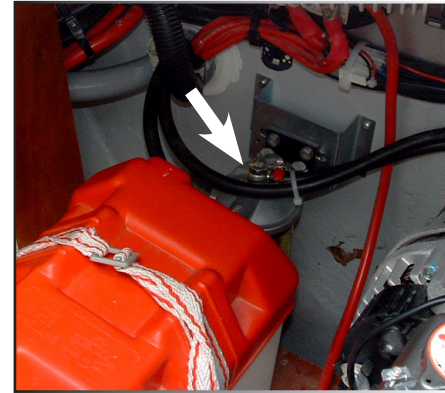
Close the water inlet valves if the boat is left unattended for long.

# FUEL

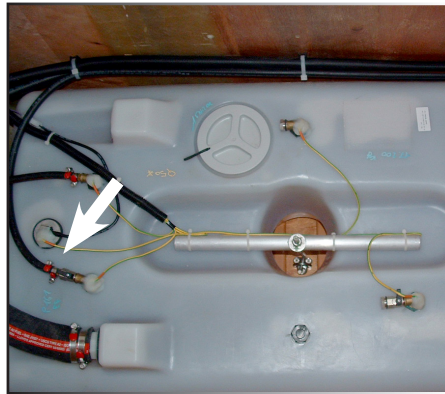
FUEL GAUGE  
TOUCH SCREEN



FUEL FILTER



FUEL VALVE



FUEL TANK DECK FILLER



Inspect and clean the water strainers regularly (access through the engine holds).

- VENTILATION OF THE ENGINE BAY

The engine bay fans start up automatically as soon as the engines start.

### 08.2 | Fuel

- FUEL TANKS

The boat is fitted with two tanks.

Each of them is filled separately.

Check the fuel gauge on each tank using the touch screen on the chart table.

- 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 right key.

Use both fillers to fill the tanks with fuel.

### **DANGER**

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

- MAINTENANCE OF THE TANKS

Regularly check the O rings of the fillers for good condition (to prevent water from 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.).

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

Please note: the capacity of the tanks (that is indicated in the page 'SPECIFICATIONS') may be not completely usable 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.

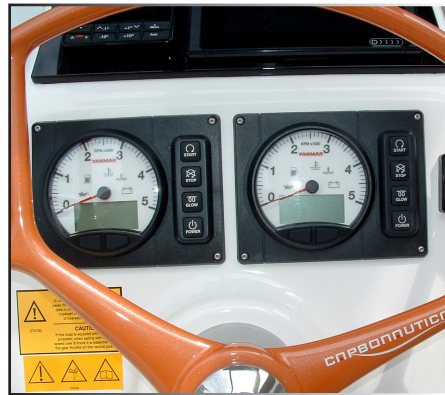
Drain it by undoing the knurled screw (but do not remove it) on the base of the decantation bowl.

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).

## DASH BOARDS - FOLDING PROPELLER - ANODE

DASH BOARDS



FOLDING PROPELLER + ANODE



### 08.3 | 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.

### 08.4 | Dash board

On the starboard dash board you can find all the functions to monitor the engine.

Please refer to the engine instruction guide supplied with the boat; it gives you explanations about dashboard screen displays.





# 09

## WINTER STORAGE

**9.1 Laying up**

**9.2 Protection**



### 09.1 | Laying up

- Take ashore all the ship's log, the ropes that are not used for mooring her, the galley equipment, supplies, clothes, the safety equipment.
- 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.

### 09.2 | 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 ventilators of the deck hatches in open position to avoid condensation, mold and oxidation.
- 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 / icebox 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.



# 10

## HANDLING

**10.1 Preparation**

**10.2 Crane lifting**

**10.3 Mast stepping – Mast unstepping**

## DIMENSIONS FOR CRANE LIFTING



### 10.1 | Preparation

The initial launching and the first tests of the different equipment 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 must be carried out with the highest care by professionals.

If the Excess boatyard is not in charge of your handling operations, it shall not provide any guarantee with regard to 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.

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.

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

### **DANGER**

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

### 10.3 | Mast stepping – Mast unstepping

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





# 11

## SAFETY

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



## 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 equipment to cope with them as well.

Risk of fire:

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

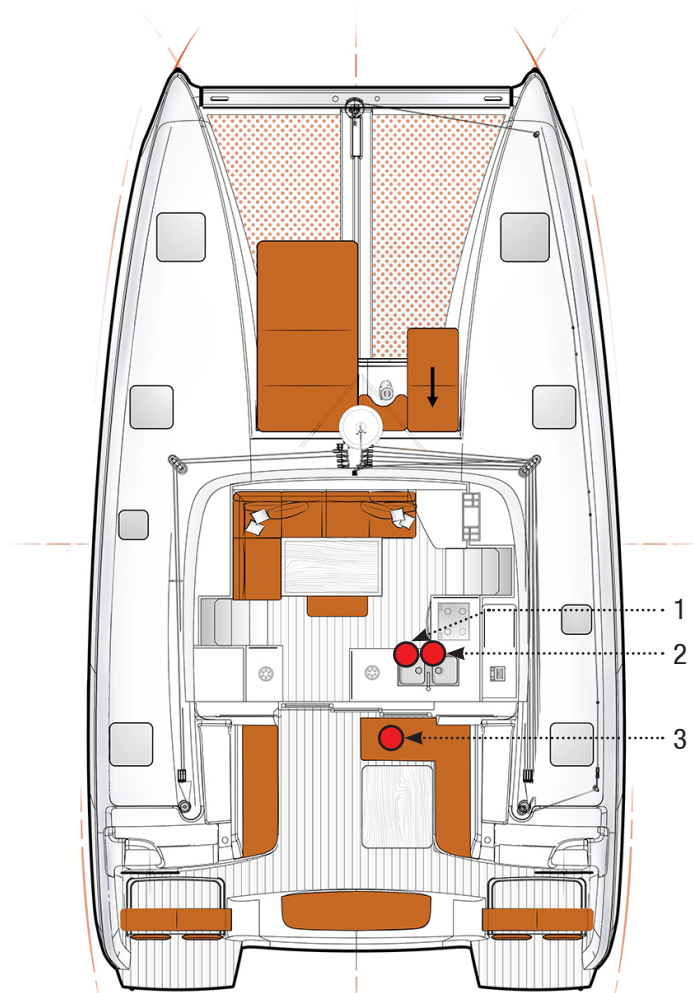
Risk of leak:

- Water systems (chapter 6)

### RECOMMENDATION

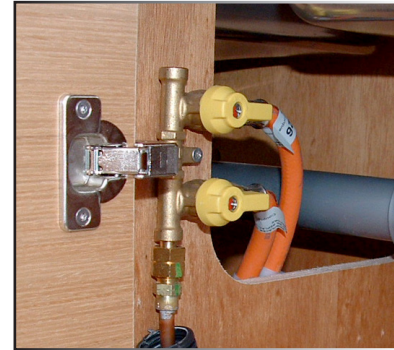
In emergency situation, it is essential to be able to locate quickly all the appropriate safety equipment.

## GAS SYSTEM



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

GAS VALVES



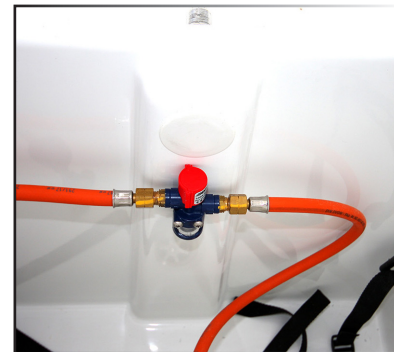
- 1 - Gas valves.
- 2 - Electrovalve switch (version U.S.).
- 3A - Locker / storage space of gas bottles.

ELECTROVALVE SWITCH (US VERSION)



- 3B - BubbleLeak Detector.
- 3C - Electrovalve (U.S. version).
- 3D - Leakdetection gauge (version U.S.).

BUBBLELEAK DETECTOR  
LEAKDETECTION GAUGE



(US VERSION)



## 11.2 | Gas system

The cockpit forward locker has been designed to store two gas cartridges.

The opening / closing valves for the circuits are located in the cabinet under the galley sinks.

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

Operate the electrovalve using its switch in the cabinet under the galley sinks.

### RECOMMENDATION

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

- GAS LEAK DETECTION

The gas circuit is equipped with a leak detection system.

Standard version: a bubble leak detector is placed on the circuit after the regulator in the cylinder storage container.

When the cylinder is open (system pressurised) and the valve under the gas appliance is closed, press the red button on the detector.

If nothing happens, the circuit is sealed.

The appearance of bubbles in the detector liquid signals a leak on the gas circuit.

US version: a pressure gauge is placed on the circuit after the regulator in the cylinder storage container.

When the cylinder is open (system pressurised) and the valve under the appliance is closed, the pressure on the manometer must remain constant. If the pressure drops then this means that there is a leak on the gas circuit.

### DANGER

In case of a leak, turn off the gas circuit immediately.

Call a professional immediately to repair gas system.

## 11.3 | Fire

The boat is delivered with no extinguisher.

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.

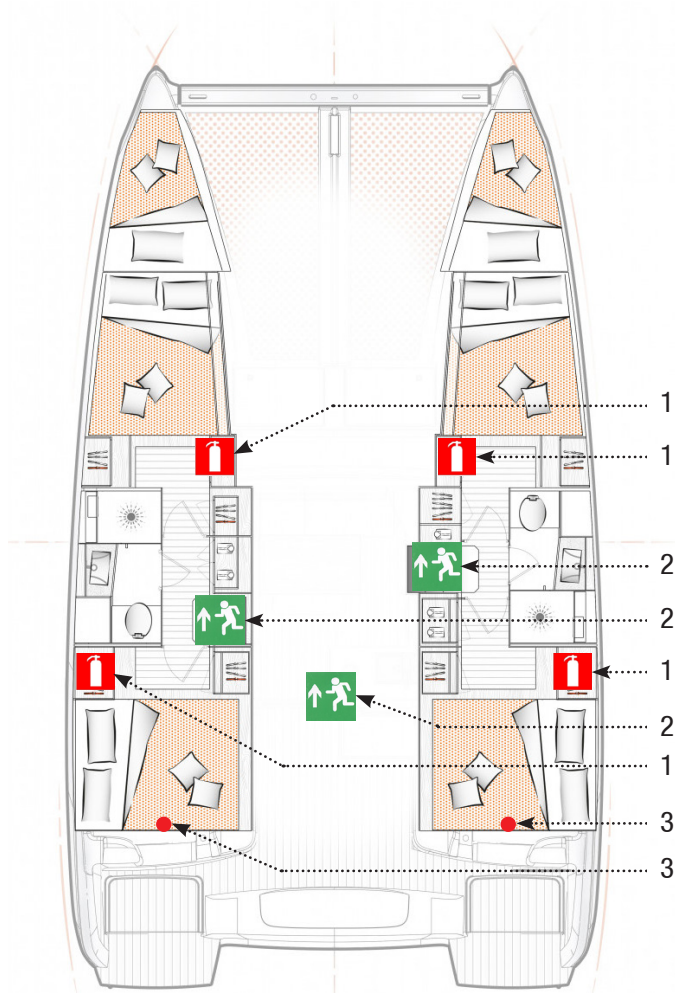
Tell the crew:

- where the extinguishers are and how they work.

- where the extinguisher hole in the engine bay is (under the aft cabins berths, both on the port and starboard sides).

- where the emergency exits are.

## INSIDE SAFETY EQUIPMENT



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

- 1 - Extinguisher.
- 2 - Emergency exit.
- 3 - Extinguisher vent.
- 4 - Distress flares.
- 5 - First aid kit..
- 6 - VHF (optional extra).
- 7 - .....
- 8 - .....
- 9 - .....
- 10 - .....
- 11 - .....
- 12 - .....
- 13 - .....
- 14 - .....
- 15 - .....

EXTINGUISHER VENT



### RECOMMENDATION

Some components do not have a pre-determined place for them.

Fill-in this drawing according to your own boat safety equipment.

- 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 bays 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.

- PROCEDURE TO FOLLOW IN THE EVENT OF FIRE

## DANGER

Use CO2 extinguishers only to fight electrical fires.

Evacuate the area immediately after discharging the product to prevent asphyxia.

Ventilate before entering.

- 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.

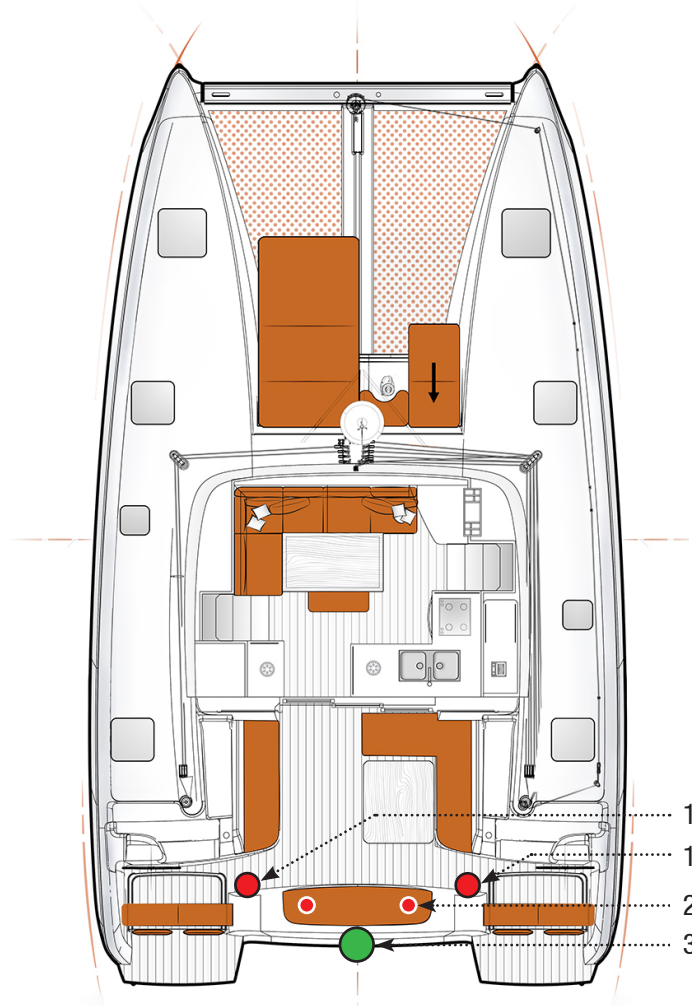
If fire broke out in an engine hold:

- Turn off the engines if operating.
- Cut off the power supply, the fuel supply and gas supply if required.
- Shut off the air supply using towels to block off the engine air inlets, intakes and outlets.
- Cast the extinguisher product using the extinguisher vent located at the back of the aft cabins berths.
- 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



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

- 1 - Manual bilge pump.
- 2 - Location of the pump lever.
- 3 - Location of the life raft.
- 4 - Extinguishers.
- 5 - Life buoy location.
- 6 - .....
- 7 - .....
- 8 - .....
- 9 - .....
- 10 - .....
- 11 - .....
- 12 - .....
- 13 - .....
- 14 - .....
- 15 - .....

### RECOMMENDATION

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

MANUAL  
BILGE PUMP



LOCATION OF THE  
PUMP LEVERS



LIFE RAFT





## 11.4 | Bilge pump system

- BILGE PUMPS

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

- an electric pump automatic release located in the well.
- a manual cockpit pump.

For further information, please refer to Chapter 'WATER SYSTEMS'.

- MANUAL BILGE PUMPS

If the electric bilge pumps fail or do not suffice, you can operate the manual bilge pumps using levers (stored in the lid of the cockpit's rear locker).

- 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 equipment.

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

### WARNING

The list of the compulsory safety equipment 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 liferaft storage location is at the stern of the boat.

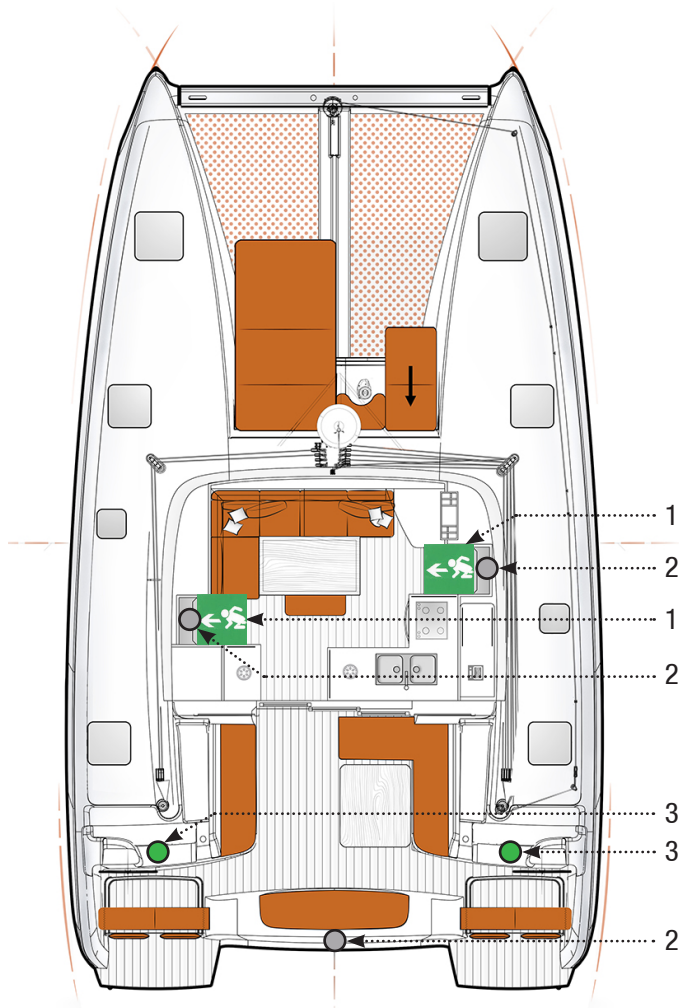
Fit your boat with a life raft in pursuance of the regulations of the country where the boat is registered.

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.

## EMERGENCY TILLER - MAN HOLES

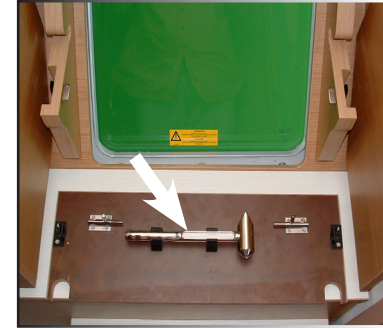


*Please note: you can find the same locations in the other accommodation versions.*

MANHOLE HATCH



EMERGENCY HAMMER



- 1 - Man hole.
- 2 - Emergency hammer.
- 3 - Emergency tiller cover.

EMERGENCY HAMMER



EMERGENCY TILLER COVER



- EMERGENCY TILLER

The emergency tiller is stored in the cockpit's rear locker. It shall be kept easily accessible.

To operate the tiller:

- Use a winch handle to unscrew one of the emergency tiller covers located on the side of the helm stations.
- Insert the tiller into the rudder stock, making sure it is well fitted into the tiller head block.
- Unplug every device connected to the spindles of the rudders.

- CAPSIZING

Two "man holes" are provided in each hull passageway.

A hammer to break the glass is provided under a step in each float and behind the liferaft, at the rear of the boat.

## WARNING

Regularly check the safety equipment 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 specifications

- 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).



# 12

## MAINTENANCE

### 12.1 Maintenance schedule

**12.1 | Maintenance schedule**

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.....QUARTERLY
- Clean s/s parts.....QUARTERLY
- Dismount, clean and grease winches .....ANNUAL
- Check the watertightness of the sea-cock fittings ..... BI-ANNUAL
- Clean the sea cock fittings and strainers  
from the outside ..... BI-ANNUAL

**MOORING / WINDLASS**

- Rinse ground tackle and anchor  
locker with fresh water ..... WHEN USED
- Check the gypsy and anchor/chain  
fastening device .....BI-ANNUAL
- Check locking / braking system ..... QUARTERLY
- Check mooring lines and fenders .....BI-ANNUAL
- Check the electric connections  
(remote control, relay, etc.) ..... QUARTERLY

**RUNNING / STANDING RIGGING / SAILS**

- Lubricate the different travellers with Teflon..... QUARTERLY
- Check and tighten the different shackles ..... QUARTERLY
- Check the running rigging tightening ..... QUARTERLY
- Check the halyard and sheet for wear points ..... QUARTERLY
- Rinse the whole running rigging  
and sails ..... QUARTERLY
- Check the mainsail battens  
and main seams ..... QUARTERLY

# 12 | MAINTENANCE

*Excess11*

## UPHOLSTERY AND COVERS

Rinse / clean the various protective covers ..... QUARTERLY  
Dry the outside upholstery before its storage ..... WHEN USED

## REFRIGERATION UNIT

Defrost the refrigerator and freezer ..... QUARTERLY  
Check the door joints ..... QUARTERLY

## ELECTRICITY

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

## ENGINES

Check oil level ..... QUARTERLY  
Check belt tension ..... QUARTERLY  
Clean the sea water filters ..... QUARTERLY  
Check for leaks (oil, water, fuel) and smokes ..... QUARTERLY  
Check and drain the decanter filters (fuel) ..... QUARTERLY  
General overhaul..... REFER TO THE ENGINE MANUFACTURER'S GUIDE

## WATERMAKER

Check and clean the sea water suction filters ..... QUARTERLY  
General inspection by the manufacturer ..... ANNUALLY

## PLUMBING

Check the automatic bilge pumps and alarms ..... QUARTERLY  
Rinse the black water tanks ..... QUARTERLY  
Check the manual bilge pumps ..... QUARTERLY  
Check the pressure water pump ..... QUARTERLY  
Check the various drains and scuppers ..... QUARTERLY  
Open and close the various valves on board + grease if necessary ..... BI-ANNUAL





# PERSONAL NOTES

*Excess11*

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....



This document is not contractually binding. The descriptions, illustrations, etc. are given for information only. Our models may undergo certain improvements or modifications with no prior notice.





