



USER GUIDE

Excess15

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.

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01

SPECIFICATIONS

1.1 I D of your boat

1.2 Technical specifications

1.3 Helm stations

1.4 Electrical panel

01 | SPECIFICATIONS

Excess15

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 |
|-------------------|
| |



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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

Excess15

01.2 | Technical specifications

| | |
|--|-----------------------|
| Overall length | 16.20 m / 53'1" |
| Waterline length | 14.76 m / 48'5" |
| Max. width..... | 8.03 m / 26'4" |
| Air draught | 27.9 m / 91'6" |
| Draught | 1,40 m / 4'7" |
| Light displacement | 19 056 kg / 42018 lbs |
| Maximum load displacement (cat. A) | 27 013 kg / 59563 lbs |
| Maximum load displacement (cat. B)..... | 26 733 kg / 58946 lbs |
| Maximum load displacement (cat. C)..... | 26 723 kg / 58924 lbs |
| Maximum load displacement (cat. D)..... | 27 833 kg / 61371 lbs |
| Maximum load (cat. A)..... | 8 040 kg / 17728 lbs |
| Maximum load (cat. B)..... | 7 760 kg / 17110 lbs |
| Maximum load (cat. C)..... | 7 750 kg / 17088 lbs |
| Maximum load (cat. D)..... | 8 860 kg / 19536 lbs |

| | |
|------------------------------|--|
| Water capacity..... | 2 x 240 l + 2 x 175 l (option) |
| Black waters capacity..... | 2 x 120 l + 2 x 120 l (option) |
| Grey waters capacity | 2 x 120 l (option) |
| Fuel capacity | 2 x 520 l |
| Refrigeration capacity | 190 l + 100 l (option) + 40 l (option) |

BATTERY CAPACITY

| | |
|----------------------------|------------------------|
| Standard..... | 6 x 140 Ah (12 V) |
| Option Gel batteries | 6 x 120 Ah (12 V) |
| Engines | 2 x 50 Ah gel (12 V) |
| Generator | 50 Ah gel (12 V) |
| Engine power | 2 x 57 CV to 2 x 80 CV |

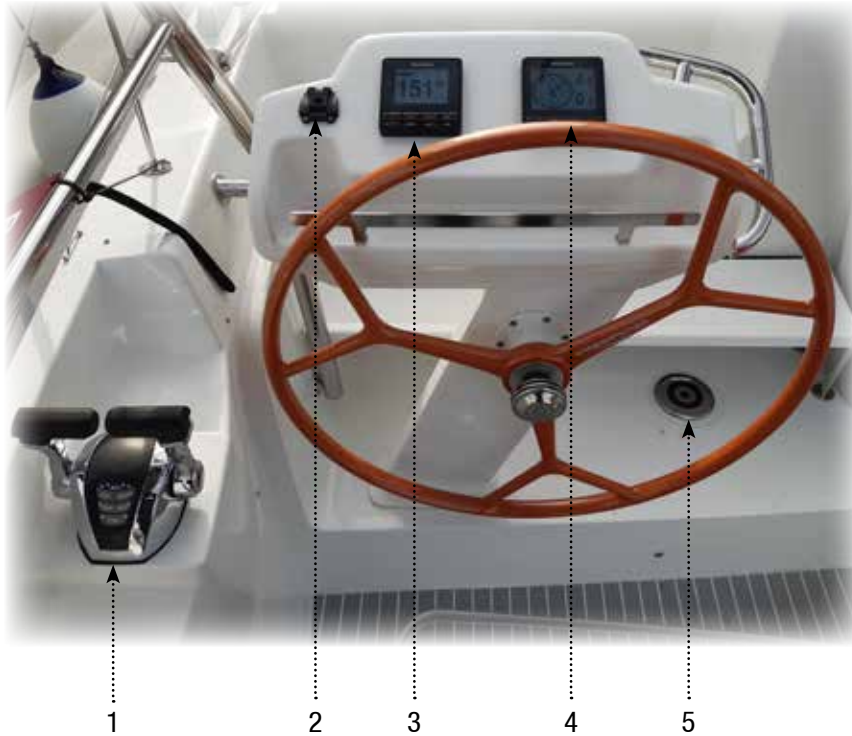
| CE category | Maximum number of persons |
|-------------|---------------------------|
| A..... | 14 persons |
| B..... | 14 persons |
| C..... | 16 persons |
| D..... | 30 persons |



Bottom surface: approx. 72 m²

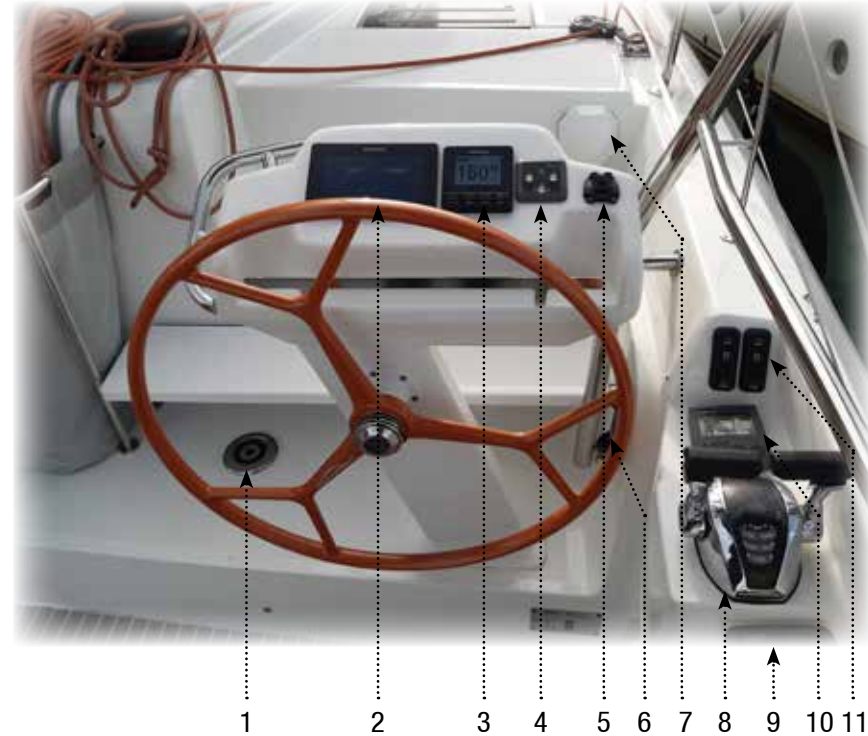
HELM STATIONS

PORT HELM STATION (OPTION)



- 1 - Engine reverse control (optional).
- 2 - Support and battery charger for tablet PC (optional).
- 3 - Screen / repeater for electronic (optional).
- 4 - Screen / repeater for electronic (optional).
- 5 - Emergency tiller cover.

STARBOARD HELM STATION



- 1 - Emergency tiller cover.
- 2 - 7" navigation screen (optional).
- 3 - Automatic pilot control (optional).
- 4 - Bow thruster control (optional).
- 5 - Support and battery charger for tablet PC.
- 6 - VHF.
- 7 - Compass.
- 8 - Engine reverse control.
- 9 - Engine keyboard.
- 10 - Windlass control + chain counter (optional).
- 11 - Engine start controls.

01 | SPECIFICATIONS

Excess15

01.4 | Electrical panel



1 - Electronics.

2 - Navigation lights.

3 - Steaming lights.

4 - Deck searchlight.

5 - Mooring light.

6 - Internal lighting.

7 - Port bilge pump.

8 - Starboard bilge pump.

9 - Water pump.

10 - Refrigerated unit.

Behind the 12 V panel:

1 - Source selector - Option 230 V or 110 V.

2 - Source selector - Option Air Conditioning.

3 - Emptying the black water tanks.

4 - Black water tank level alarm.

5 - General control screen: batteries, gauges, lighting.

6 - Indicator light - black water tank full + alarm switch.

7 - Generator control.

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 Bow thruster

2.12 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 15 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.

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 | Helmsmans seats

• HELMSMAN SEATS

Helmstations are fitted with benchseats with fold-down backs, and provide access to the aft transoms.

- Release the benchseat by pulling the tab on the inside front, while holding the benchseat in place.
- Pull the benchseat down, and unfold the two seats until they come up against the support on the shell side.
- Unfold the seat backs.

Repeat the operation in reverse to fold the helmsman seats.

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 BLOCKING SYSTEM
FOR THE ENTRANCE DOOR



EXTERNAL LOCKING SYSTEM
FOR THE ENTRANCE DOOR



INTERNAL BLOCKING SYSTEM
FOR THE ENTRANCE DOOR



AFT SWIM LADDER



ROOF LADDER



AFT TRANSOM
SKIRT SHOWER



02.4 | Deck equipment

- DECK FITTINGS

The fittings on the deck of your Excess 15 were 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.

- PLEXIGLAS

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.

- ROOF LADDER

The boat has a removable roof ladder.

- SWIM LADDER

A stainless steel swim ladder is located on the starboard transom skirt.

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 starboard transom skirt.

- ACCOMMODATION LADDER

The boat is fitted with an accommodation ladder.

SUNROOF

SUNROOF IN THE
CLOSED POSITION



OPENING / CLOSING SYSTEM



SUNROOF IN THE
SEMI-OPEN POSITION



LOCKING CATCHES



SUNROOF IN THE
OPEN POSITION



CLOSING THE SUNROOF



02.6 | Sunroof (option)

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

To open the sunroof, pull on the strap provided towards the front of the cockpit.

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 close the sunroof, use the handle, taking care to keep it perpendicular to the sunroof's slide rails.

WARNING

Do not walk on the sunroof.
Do not store any equipment on the sunroof.

- WORKING ON THE MAINSAIL

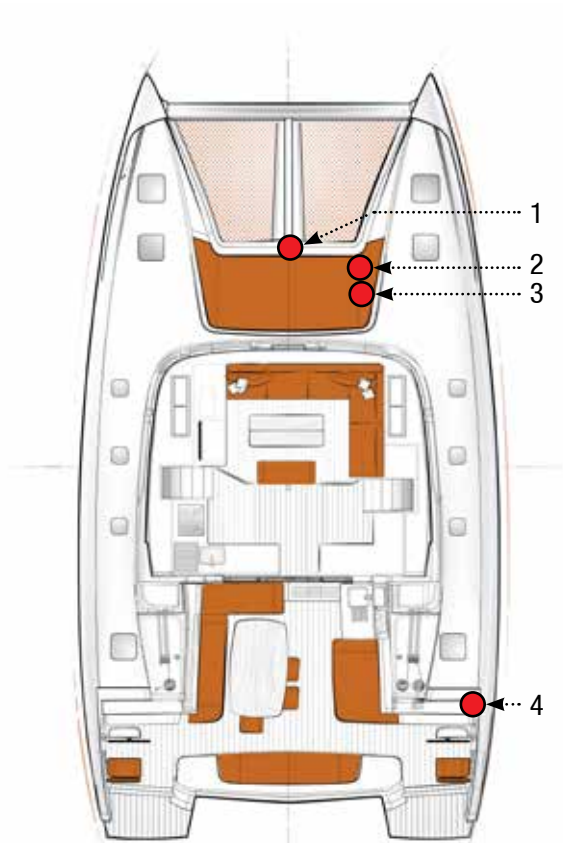
Access the roof via the foredeck ladder if you have to work on the mainsail or the boom.

Position the boom on one of the roof flaps.

WARNING

Do not lower the boom onto the sunroof, whether closed or open.
Make sure to follow all necessary safety instructions and procedures when working on the mainsail or the boom.

STROP - ELECTRIC WINDLASS

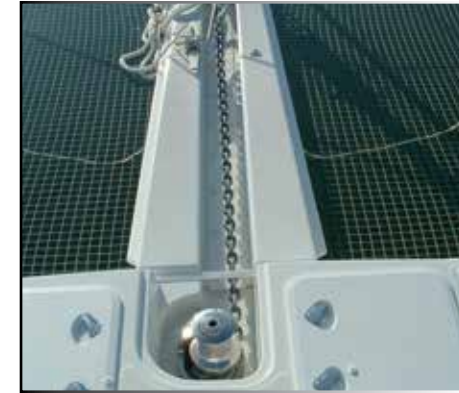


- 1 - Electric windlass.
- 2 - Windlass automatic breaker.
- 3 - Electric windlass control.
- 4 - Windlass control + chain counter (optional).

STROP CIRCUIT



ELECTRIC WINDLASS



WINDLASS CONTROL + CHAIN COUNTER



WINDLASS CONTROL + AUTOMATIC BREAKER



02.7 | Gangway (optional)

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 two aluminium quadrants.

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 On-board 12 V batteries.

The windlass is operated using the control located in the starboard locker on the forward deck or in the chain counter box (optional) in the starboard helm station.

RECOMMENDATION

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

If the electrical windlass does not function properly, check its automatic breaker located in the starboard locker on the forward deck. 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.

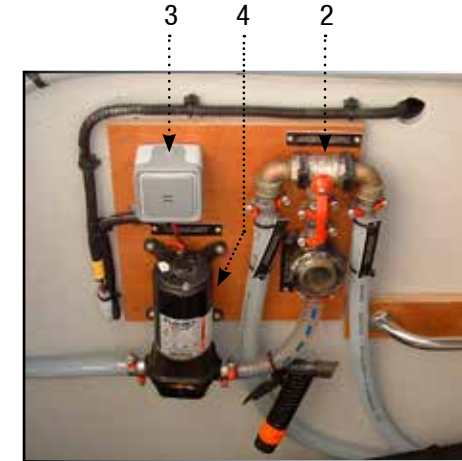
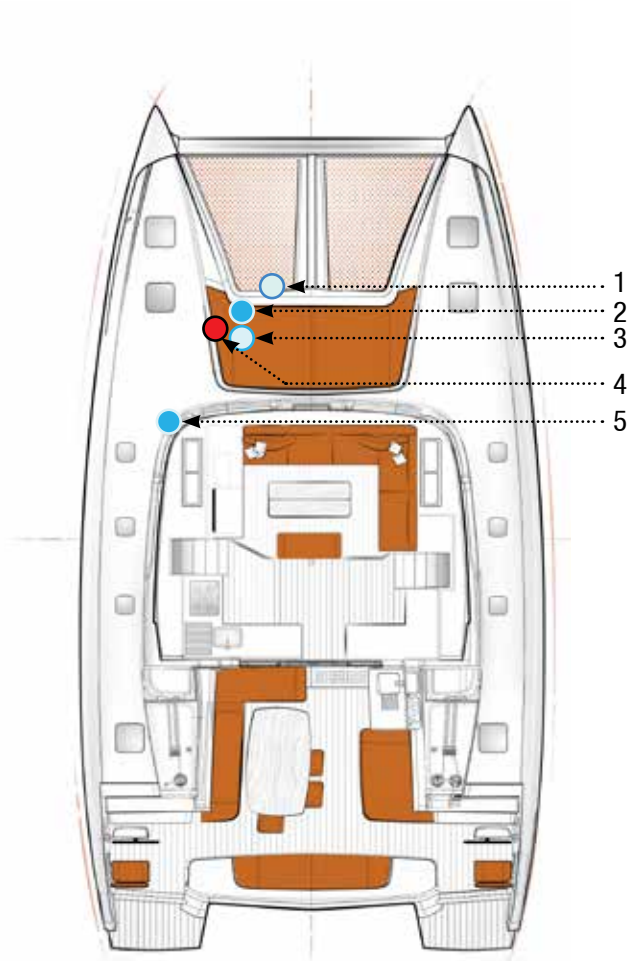
Insert the strop inside the stem anchor roller.

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



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

Note: you can find the same locations in the other fitting out 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).

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.

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

Refer to the manufacturer's instructions for windlass maintenance.

Note: the boat may be optionally fitted with a chain counter in the starboard helm station.

The chainmeter box has a fitted windlass control.

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

Refer to instructions for its use and maintenance.

WARNING

- 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.

02.10 | Deckwash pump (optional)

The boat may be optionally fitted with a deck wash pump.

The deck wash pump is located in the port locker of the forward cockpit.

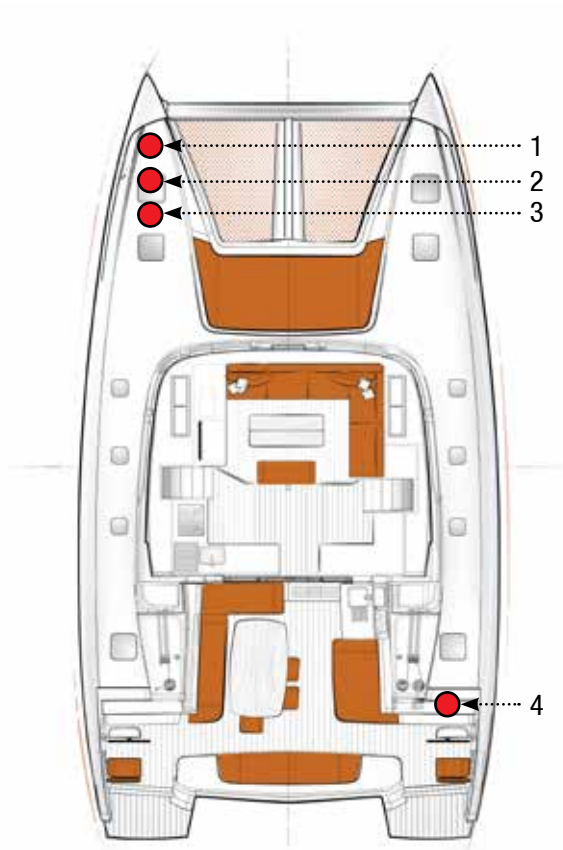
It provides sea water or fresh water from tanks.

The fresh or sea water selector valve is located next to the pump, in the port locker of the forward cockpit.

Switch on the deck wash pump using the switch on top of the pump.

Open the sea water inlet valve located under the floor of the forward cabin portside.

BOW THRUSTER



- 1 - Thruster battery bank.
- 2 - Fuse + automatic breaker + charger.
- 3 - Bow thruster.
- 4 - Thruster control.

BOW THRUSTER



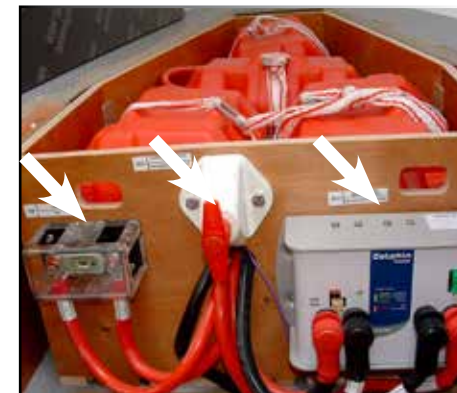
THRUSTER BATTERY BANK



BOW THRUSTER CONTROL



THRUSTER FUSE + AUTOMATIC BREAKER + CHARGER



02.11 | Bow thruster

The boat may be optionally fitted with a bow thruster.

The bow thruster operates with 24 V using a separate battery bank (4 x 50 Ah / 12 V).

The bow thruster and its batteries, automatic breaker, fuse and charger are located in the forward peak portside.

The 12 / 24 V charger recharges the Thruster's battery bank with 24 V using the On-board 12 V service battery bank.

The charger starts automatically as soon as the On-board power supply is switched on.

Check the voltage of the Thruster battery bank via the multifunction screen.

The bow thruster is operated via the starboard helm station.

Once you have switched on the On-board automatic breaker, the thruster automatic breaker and started the engines:

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

The yellow LED, which flashes when the thruster is powered up, stays on. The control is now operational.

- Manoeuvre using the button indicated on the control.

- Press the yellow switch again to disconnect the control. The LED starts flashing again.

Note: after 3 minutes of downtime, the thruster automatically switches OFF.

Should the thruster fail, check its fuse located in the forward peak portside.

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

DAVITS

DAVITS



02.12 | Davits

The boat is fitted with davits with manual winch.

WARNING

The davits are designed to support a maximum load of 250 kg and a tender which is maximum 3.20 metres long.

• 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.

Always make sure that the fore and aft of the tender is attached to the cleats on the inside of the transom.

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

03

RIGGING / SAILS

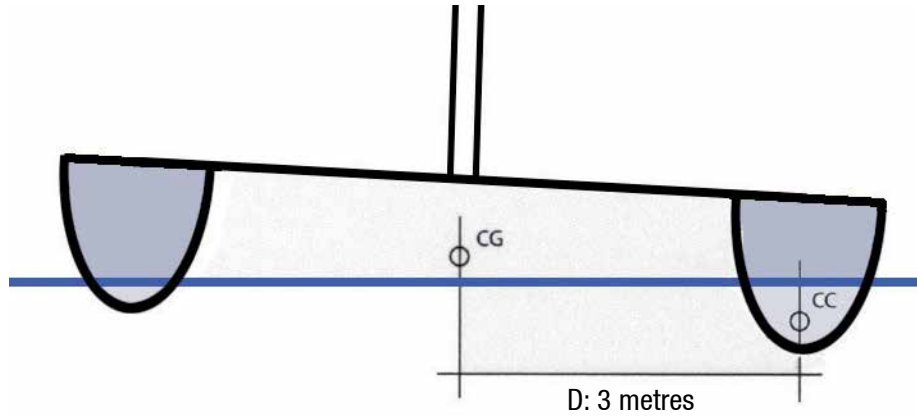
3.1 Sailing

3.2 Standing rigging

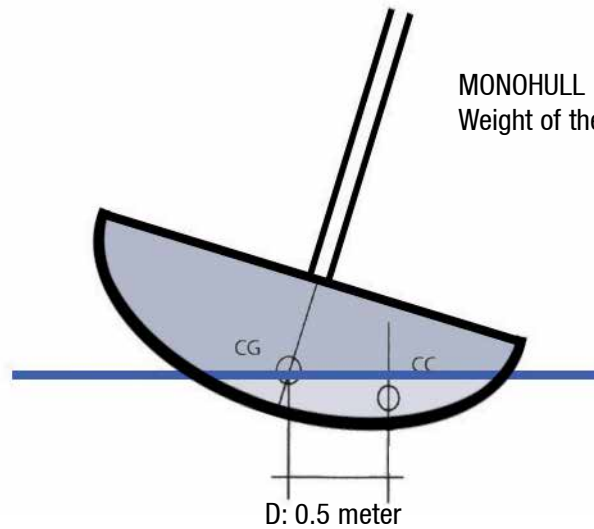
3.3 Running rigging

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 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, jib 75%.
- From 33 to 38 knots: 2 reefs, jib 60%.
- 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 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, jib 60%.
 - From 34 to 38 knots: 3 reefs, jib 40%.
 - From 38 to 50 knots: mainsail lowered, jib 25%.
 - Over 50 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:

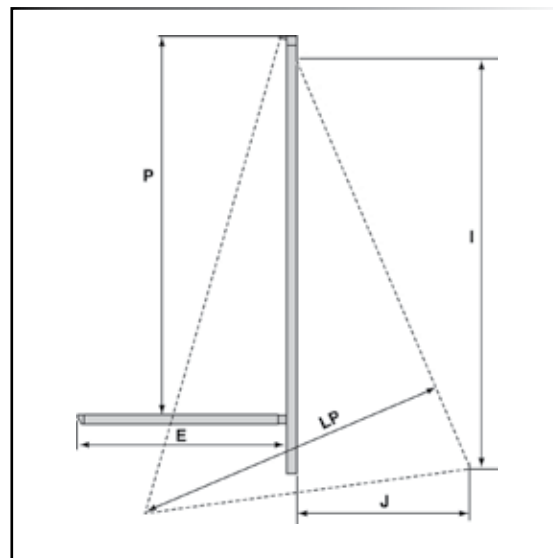
Cruising square top mainsail 99 m² / 1065 sq.ft
 Self-tacking jib 55 m² / 592 sq.ft
 Code 0 (optional) 117 m² / 1259 sq.ft

I..... 19,215 m / 68'58"
 J 7,228 m / 23'38"
 P..... 22,198 m / 67'80"
 E..... 5,895 m / 18'07"

PULSE LINE VERSION:

Cruising square top mainsail ... 106 m² / 1141 sq.ft
 Self-tacking jib 59.35 m² / 639 sq.ft
 Code 0 (optional) 127 m² / 1367 sq.ft

I..... 20,824 m / 66'53"
 J 7,228 m / 23'70"
 P..... 23,653 m / 77'58"
 E..... 5,895 m / 19'34"



03.2 | Standing rigging

The Excess 15 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 turnbuckles and check the condition of the shrouds.

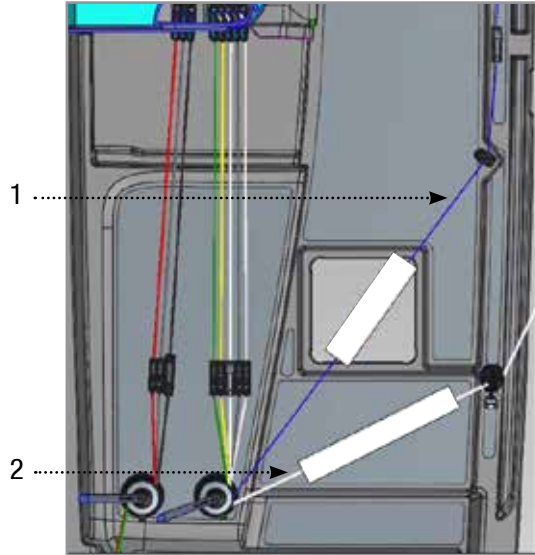
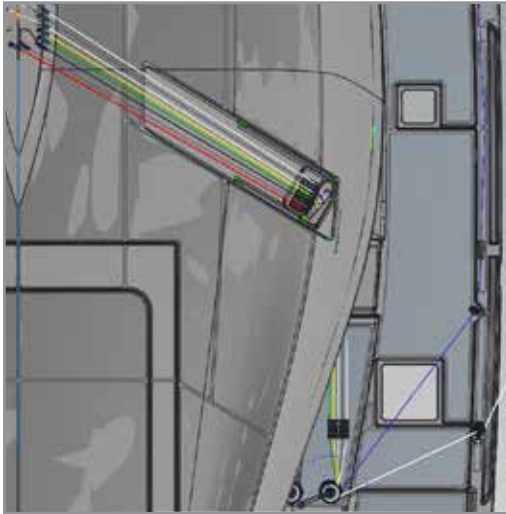
RECOMMENDATION

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

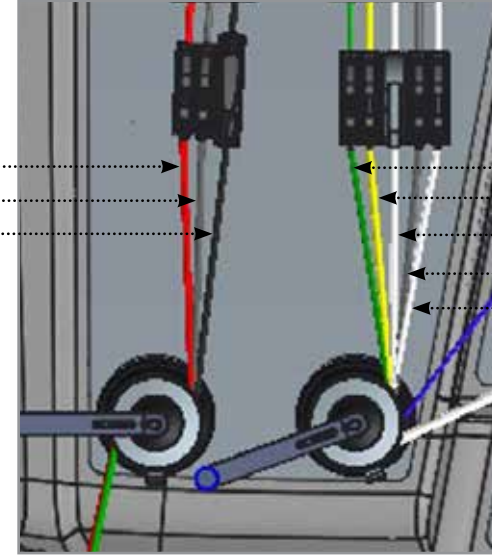
To hoist a crew member up to the top of the mast, use the topping lift. Belay the crew member with a bowline on the bosun's chair ring (do not use snap shackle or shackle).

| Description of the ropes | Length (m) | Diameter (mm) |
|---------------------------------------|------------|---------------|
| Reeved mainsail halyard | 80 | 12 |
| Mainsheet | 37 | 14 |
| Mainsail topping lift | 60 | 12 |
| Reef 1 | 32 | 14 |
| Reef 2 | 47 | 14 |
| Reef 3 | 40 | 14 |
| Mainsail traveller | 2 x 25 | 12 |
| Line driver (optional) | 12 | 10 |
| Barber hauler | 25 | 10 |
| Jib halyard | 54 | 12 |
| Jib sheet | 32 | 14 |
| Furling line. | 29 | 10 |
| Spinnaker halyard / Code 0 (optional) | 84 | 12 |
| Spinnaker sheet / Code 0 (optional) | 2 x 35 | 12 |

MANOEUVRING PLAN - RUNNING RIGGING



- 1 - Jib furler.
- 2 - Starboard sheet code 0.



- 1 - Reef 1.
- 2 - Mainsail sheet.
- 3 - Reef 3.
- 4 - Reef 2.
- 5 - Topping lift.
- 6 - Mainsail halyard.
- 7 - Jib halyard.
- 8 - Jib sheet.

AUTOMATIC BREAKERS
FOR THE ELECTRIC WINCHES



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 electric winches are located in the starboard engine hold.

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.

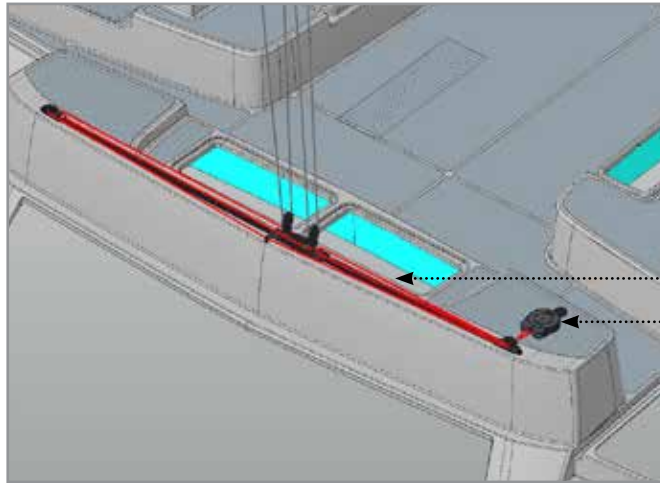
Close the pivoting rings of the switches after use.

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

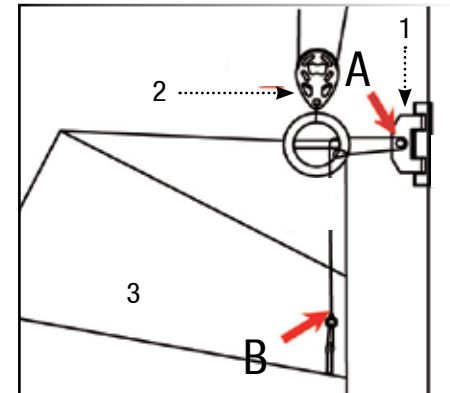


- 1 - Mainsail sheet.
- 2 - Line driver.

FASTENING OF THE SQUARE TOP MAINSAIL



ELECTRIC LINE DRIVER (OPTIONAL)



- 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.

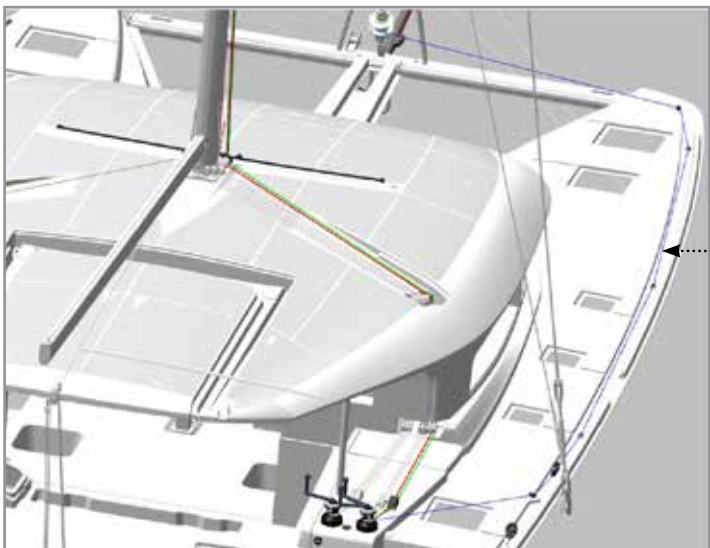
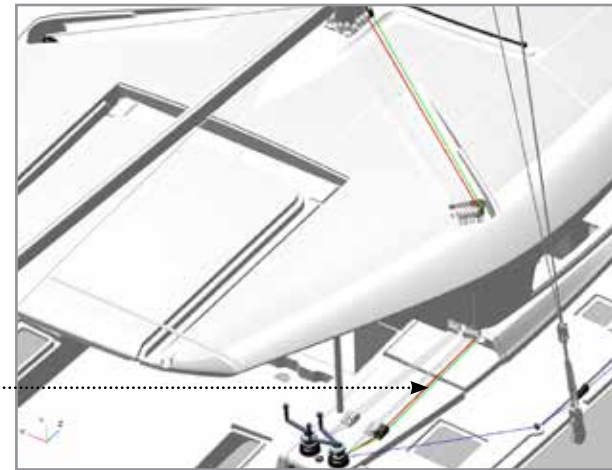
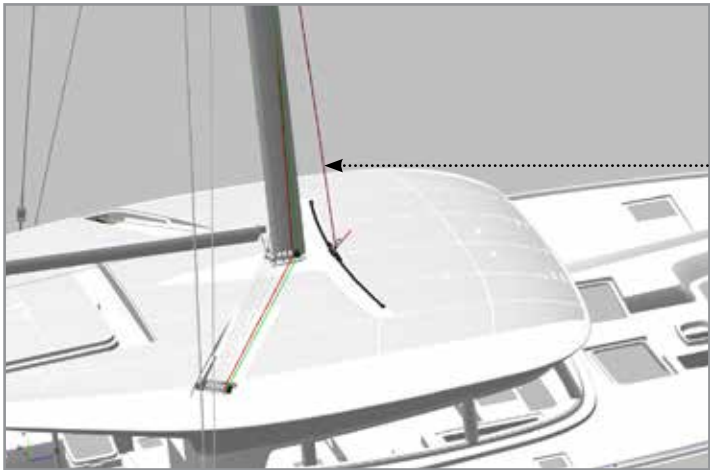
- SHORTENING THE SAILS

Automatic reefing system:

- Move into the wind.
- Release the tension on the downhaul.
- Ease off the mainsail a bit.
- Ease off the mainsail halyard.
- Take up the reef tack line.
- Tension the mainsail halyard.
- Set the mainsail.
- Retension the downhaul if necessary.

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 halyard.
- 3 - 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

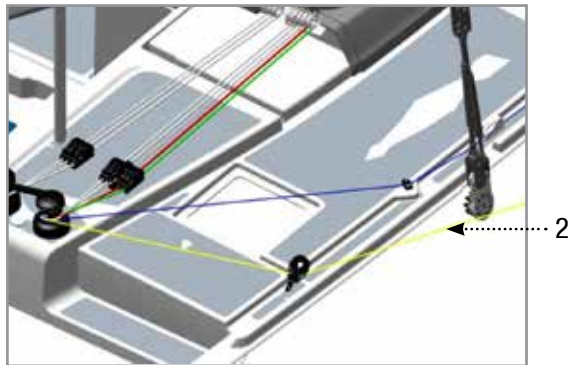
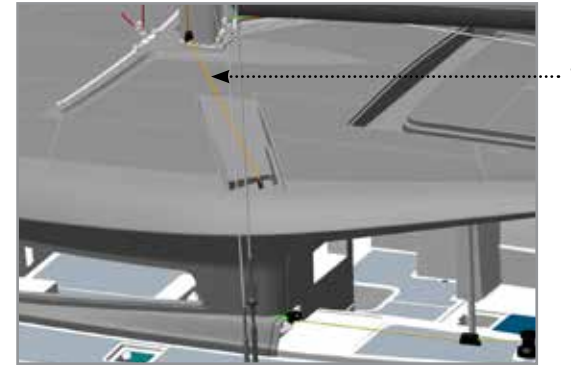
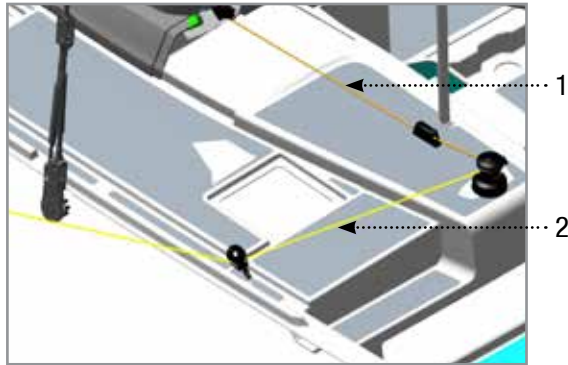
Hand pre roll the drum to set the jib furling line on it.

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 (OPTIONAL)

Remove the forward lifelines when using the code 0 (risk of damage).

If you are planning to use the code 0 when sailing, you are advised to raise it before setting sail, at a time when the wind is down.

Otherwise, follow the recommendation at the end of this chapter.

- Secure the swivel to the code 0 headboard.
- Secure the furling system to the tack clew.
- 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.

RECOMMENDATION

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



SALOON BENCHSEAT FIXATION



04.1 | Saloon – Galley

- FLOORBOARDS

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

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.

- BENCHSEAT

The saloon may be fitted with a removable benchseat. Make sure the benchseat is securely fixed before setting sail.

- 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

There are many ways of lighting the saloon, directly or indirectly, depending on the atmosphere you want to create.

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

PORTHOLES - HATCHES - WINDOWS

DECK HATCH



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.

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.

04.4 | Curtains – Window blinds

All the windows have blinds.

The opening hatches 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.

05

UTILITY ABOARD

5.1 Refrigerators – Icebox

5.2 Wine cellar

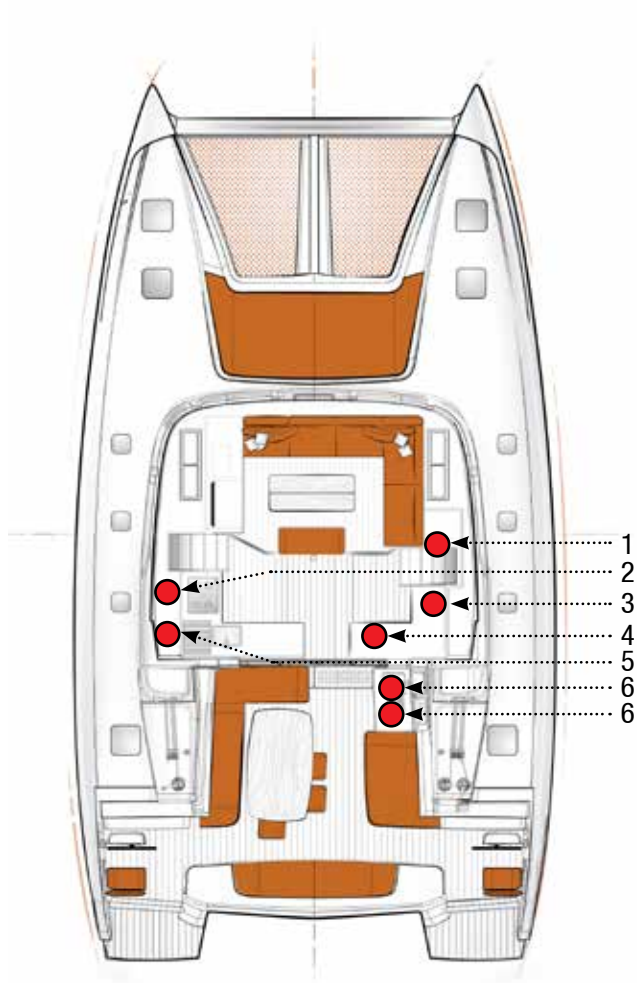
5.3 Microwave oven

5.4 Oven, hotplates

5.5 Television

5.6 Air conditioning

REFRIGERATORS - ICEBOX - MICROWAVE OVEN



Note: you can find the same locations in the other fitting out versions.

- 1 - Source selection panel (110 V - 220 V).
- 2 - Refrigerator or icebox (optional).
- 3 - Wine cellar (optional).
- 4 - Refrigerator.
- 5 - Microwave oven (optional).
- 6 - Icemaker (optional).
- 7 - Cockpit refrigerator (optional).

REFRIGERATOR



WINE CELLAR (OPTIONAL)



PORT PASSAGEWAY REFRIGERATOR (OPTIONAL)



05 | UTILITY ABOARD

Excess15

05.1 | Refrigerators - Icebox

The boat's standard features include a 130 l refrigerator located in the galley.

It may optionally be fitted with an icebox or refrigerator (100 l) located in the cupboard of the port passageway.

Once the general 12 V onboard circuit has been powered up, switch on the appliances using the refrigerated unit switch located on the electrical panel in the starboard companionway.

RECOMMENDATION

Defrost then drain the refrigerators and icebox before you stop the on-board 12 V circuit.

05.2 | Wine cellar (optional)

The boat can be fitted with an optional wine cellar in the starboard cupboard in the galley.

The wine cellar is powered via the inverter when the boat is fitted with the optional 12 V / 110 V - 220 V / 2000 Va inverter.

If there is no inverter, the wine cellar is powered when 220 V is supplied from the shore or a generator.

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

05.3 | Microwave oven (optional)

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

- Check the microwave plugging.

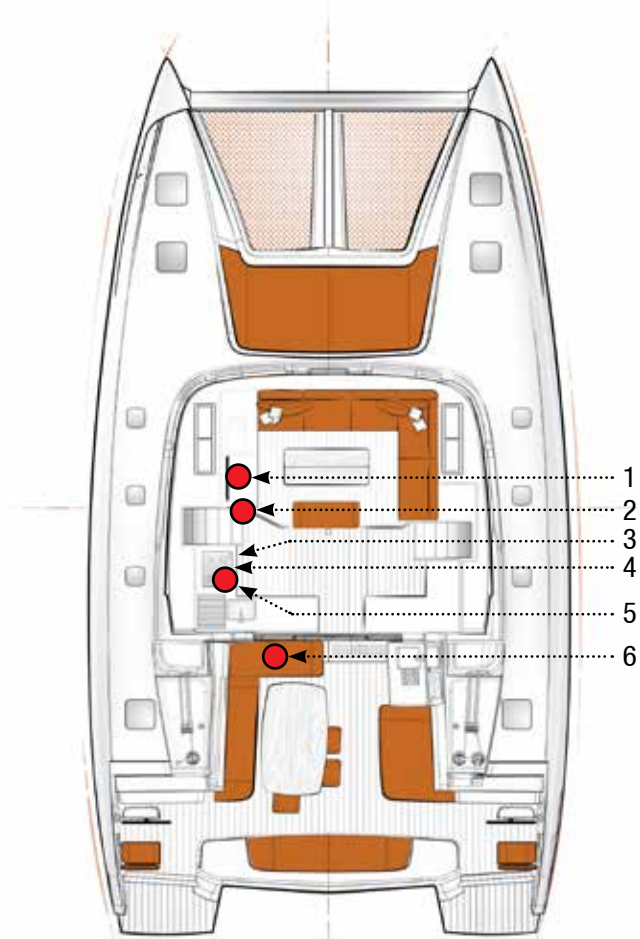
Check that the automatic breakers for the socket outlets on the protection panel in the cupboard to the left of the companionway towards the starboard float are switched on.

POWER SUPPLY

Select the power supply source (generator or supply shore socket) using the left hand selector on the 110 V - 220 V selector panel (behind the 12 V panel, in the starboard companionway).

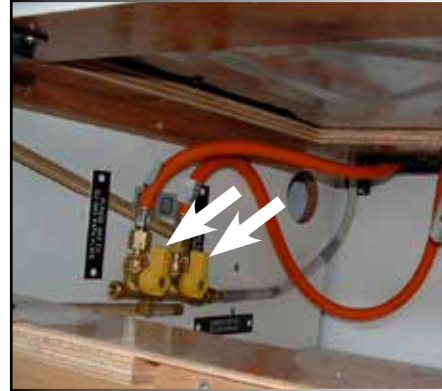
For the use and maintenance of the microwave oven, please refer to its instruction guide.

OVEN - HOTPLATES - TELEVISION



- 1 - Retractable TV.
- 2 - TV raise / lower switch.
- 3 - Oven.
- 4 - Hotplates.
- 5 - Gas valves.
- 6 - Gas bottles.

GAS VALVES
OVEN AND HOTPLATES



LOCKER OF GAS BOTTLES



RETRACTABLE TELEVISION



TV RAISE / LOWER SWITCH



05.4 | Oven, hotplates

The boat is standard fitted with a gas-powered oven and hotplates.

The gas valves are located in the cupboard under the oven.
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.

RECOMMENDATION

Please see the chapter Safety § 11.2 for the relevant safety instructions.

05.5 | Television (optional)

The saloon may be optionally fitted with a retractable TV in the saloon's portside cabinet.

This TV 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 inverter option.

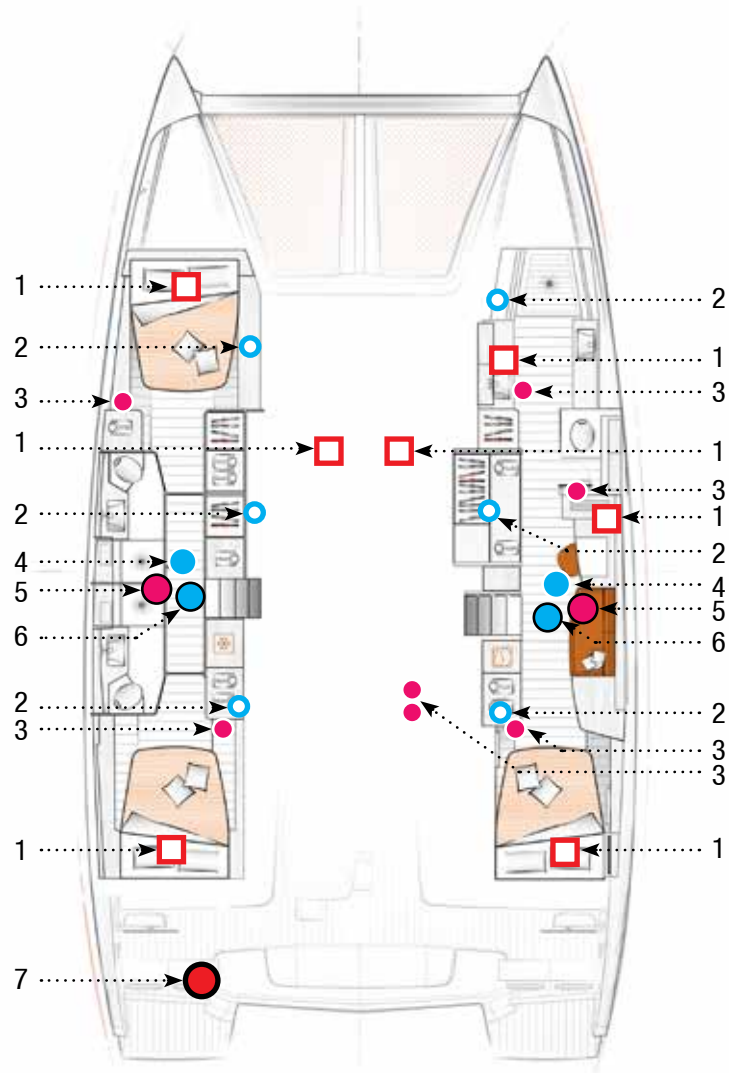
If there is no inverter, the TV is powered via the 220 V supply from the shore or a generator.

- Check that the relevant automatic breaker located on the protection panel in the cupboard to the left of the companionway in the starboard float is set to "ON".

- Press the switch on the side of the cabinet to raise the TV.
Lower the TV to its retracted position when sailing.

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

AIR CONDITIONING



Note: the locations vary depending on the fitting out version.

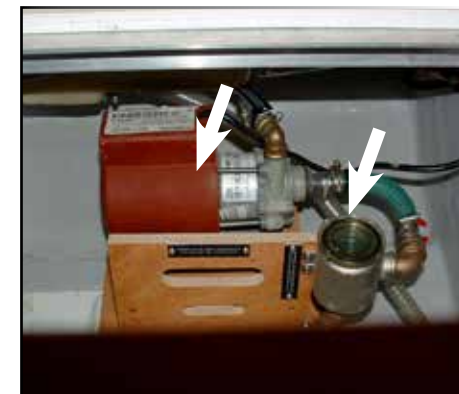
AIR CONDITIONING CONTROL



AIR CONDITIONING HEATING UNIT



SEA WATER PUMP + SEA WATER FILTER



- 1 - Heating unit.
- 2 - Air conditioning drain valve.
- 3 - Air conditioning control.
- 4 - Sea water filter.
- 5 - Electric pump.
- 6 - Sea water valve.
- 7 - Air conditioning unit automatic breakers.

05.6 | Air conditioning (optional)

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

The air conditioning units are located in the cabins and in the saloon. You will find vents in every cabin, header and in the saloon.

Before you start the system:

Open the circulating seawater systems (suction valves located under the floors of the port and starboard passageways, at the bottom of the companionways).

POWER SUPPLY

Select the power supply source (generator or supply shore socket) using the right hand selector on the 110 V - 220 V selector panel (behind the electrical panel in the starboard companionway).

Check that the pumps and air conditioning units are turned on using the automatic breakers located in the port engine hold.

Start the air conditioning unit in the desired area, select hot or cold and set the temperature using its control.

Regularly clean the filters on the conditioned-air systems and sea water suction valves.

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

06

WATER SYSTEMS

6.1 Bilge pump system

6.2 Grey waters

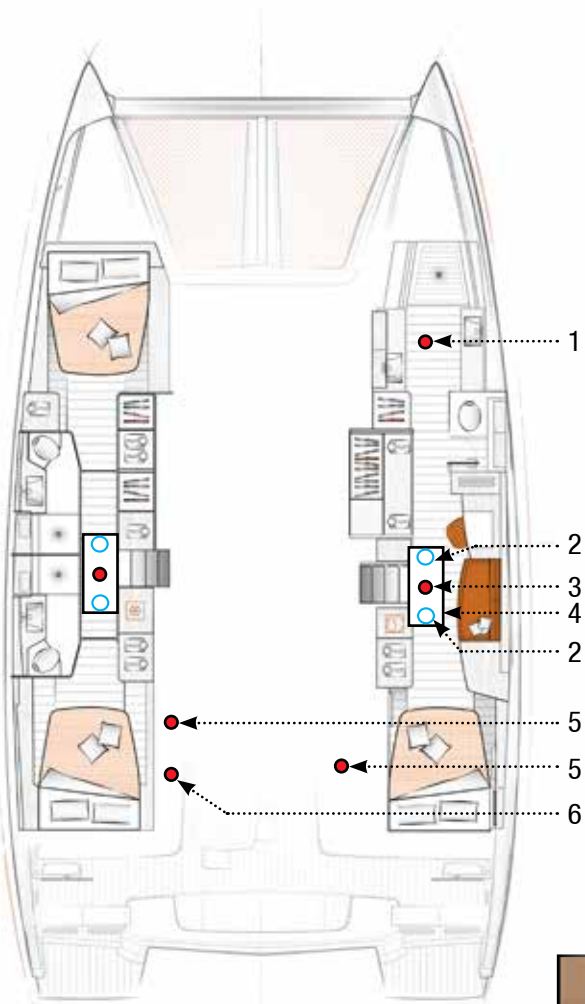
6.3 Black waters

6.4 Fresh water

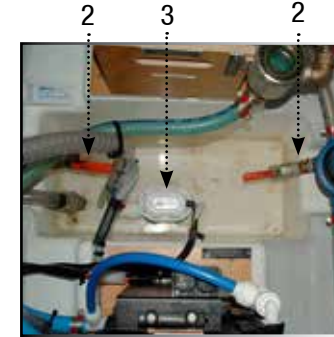
6.5 Sea water pump

6.6 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 crank.
- Note: each valve in the boat is identified.

SEA-COCK
OPEN



SEA-COCK
CLOSED



5



6



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

An alarm sounds if the water level in the sump is too high:

- pump rate too low for the amount of water to be drained,
- pump failure,
- faulty pump actuator.

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.

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.

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.

06.2 | Grey waters

The grey waters in each head (sinks and showers) are collected in the shower sump and evacuated via the pumps under the floors of the port and starboard passageway.

The pumps are switched on from the On-board 12 V circuit.

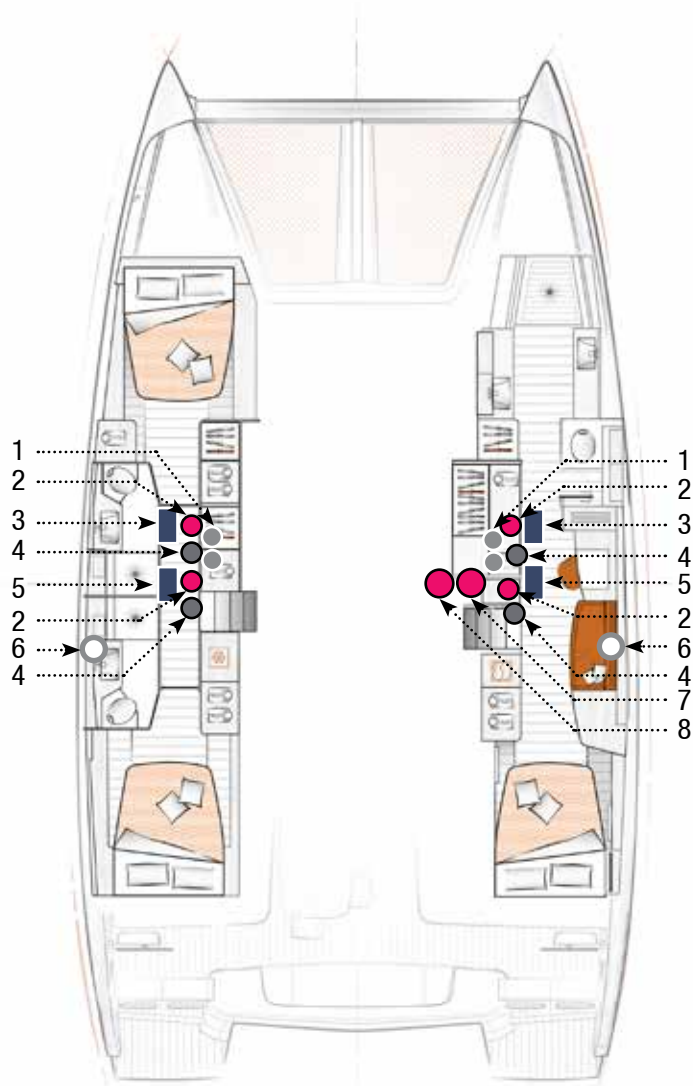
The galley sink drains directly to the sea, via a through-hull inlet.

RECOMMENDATION

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

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.

BLACK WATERS



WC MANUALS



SEA WATER VALVE



- 1 - Overboard discharge valves.
- 2 - Electric pump.
- 3 - Black water tank (optional).
- 4 - Pump selector valve.
- 5 - Black water tank (standard).
- 6 - Black water drain hole.
- 7 - Switching on the fresh water unit.
- 8 - Black water tank gauge
+ overboard discharge switches.

ELECTRIC TOILET SWITCHES



06.3 | Black waters

- **MANUAL WCs** The boat's standard fittings include 3 to 6 manual WCs depending on the version and black water tanks (one in each hull). 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.

- **ELECTRIC WCs**

The boat can be optionally fitted with 3 to 6 electric WCs depending on the version.

The electric WCs are flushed using fresh water from the onboard system (approx. 0.6 litre per flush).

- **USE OF THE ELECTRIC TOILETS**

First, make sure that the On-board 12 V circuit is on and that the water unit switch on the electrical panel is set to "ON".

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.

RECOMMENDATION

Only use water-soluble toilet paper to avoid clogging the system.

Warning: to avoid blockages, never throw sanitary towels, panty liners or similar products into the toilets and the black water tank.

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

Close the valves after each use.

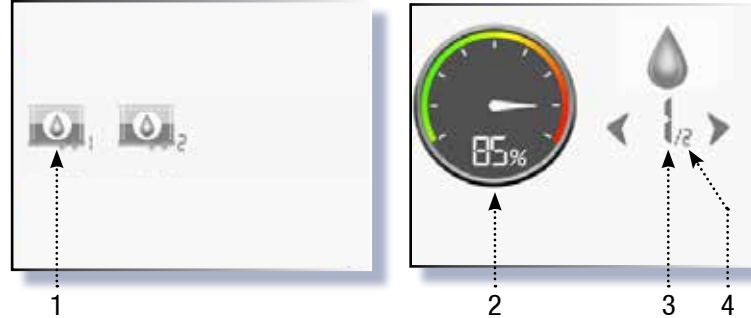
For the use and maintenance of the electric toilets, please refer to their instruction guide.

BLACK WATERS

BLACK WATER TANK



CONTROL TOUCH SCREEN.
CHOICE OF GAUGE TO READ



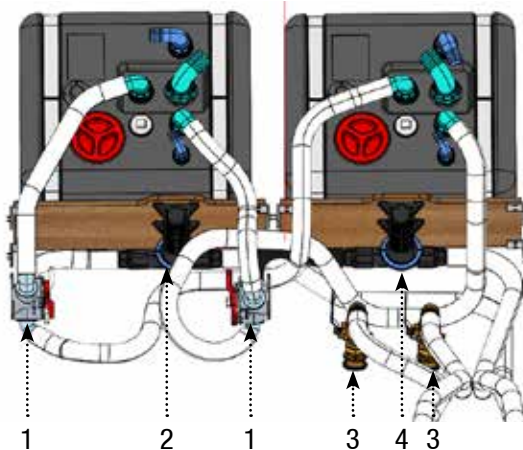
1 - Access to the tank gauges.
2 - Tank level.

3 - Tank number.
4 - Number of tanks on board.

OVERBOARD DISCHARGE VALVES



BLACK WATER TANK
OPERATING SCHEMA



1 - 3-way valve (by-pass)
2 - Forward pump.
3 - Drain valve.
4 - Aft pump.

BLACK WATER TANK
DRAIN SWITCHES



• USE OF THE HOLDING TANKS

The tanks are accessed via the floors of the port and starboard passageways.

Monitor the levels in the black water tanks using the touch screen in the cupboard on the side of the chart table.

Managing tank levels:

An audible alarm with date capture button warns the user of a high level in one of the tanks.

The level control panel (connected to a separate gauge system) lets you identify which tank to drain.

The black water tanks are drained by two electric pumps.

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

Each tank has a drain redundancy system.

- Either 2 pumps connected to the same tank, (configuration 1 tank per float)
- Or 1 pump for each tank, with a by-pass system (configuration 2 tanks per float).

Draining the tanks:

- Switch on the On-board 12 V circuit and open the tank's drain valves (accessed via the floors in the passageways).
- In an authorised area, press the switches located on the electrical panel on the side of the chart table.

Never leave the pumps to idle.

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.

When you reach a port with an organic waste suction system:

- Fit the suction hose into the tank via the corresponding deck hole (see locations on the diagram on the previous page).
- Start the pump of the suction system.

• CLEANING THE BLACK WATER TANKS

The risk of generating unpleasant odours increases when sewage remains in the tank for long periods of time.

- Empty the tanks regularly and as soon as possible without waiting for them to fill.
- Each time you drain the a tank, fill it with approx. 5 litres of fresh water and add an appropriate detergent additive (available from ship chandlers).

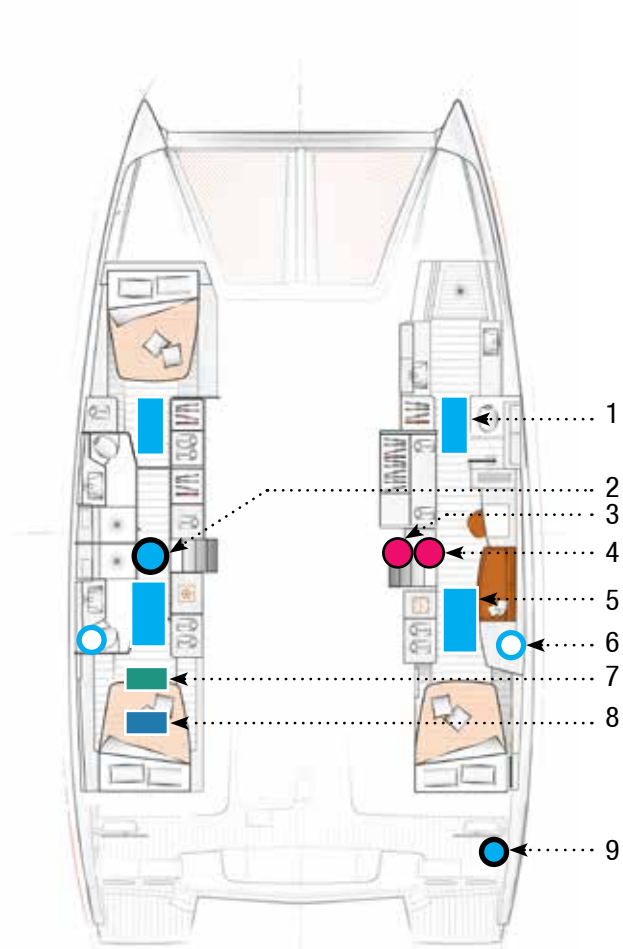
The simplest solution is to add some bicarbonate of soda that cleans and disinfects at the same time.

Before wintering, rinse the tank well with fresh water, filling it via the "WASTE" deck hole, and then drain it completely.

DISINFECTION

- Disinfect the tank once a year by filling it with a bleach solution (ratio 1 : 1000).

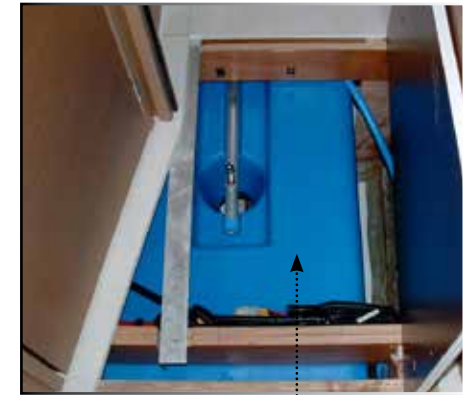
FRESH WATER



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



2



5

- 1 - Optional 175 L tank.
- 2 - Water pump.
- 3 - Water unit switch.
- 4 - Touch screen (tank gauges).
- 5 - Fresh water tank 240 l.
- 6 - Deck filler.
- 7 - Watermaker.
- 8 - Water heater.
- 9 - Shore fresh water supply.



9

06.4 | Fresh water

- FRESH WATER TANKS

The boat's standard fittings include two 240-litre fresh water tanks, and two additional 175-litre tanks (optional).

Each hull has two tanks that are inter-connected, but separate between the port and starboard hulls.

The tanks in each hull are inter-connected and filled via a single deck hole in each hull.

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 unit is located under a floor at the level of the port sump. 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 tanks via the gauge displayed on the touch screen behind the 12 electrical panel in the starboard companionway.

- SHORE FRESH WATER SUPPLY (OPTIONAL)

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

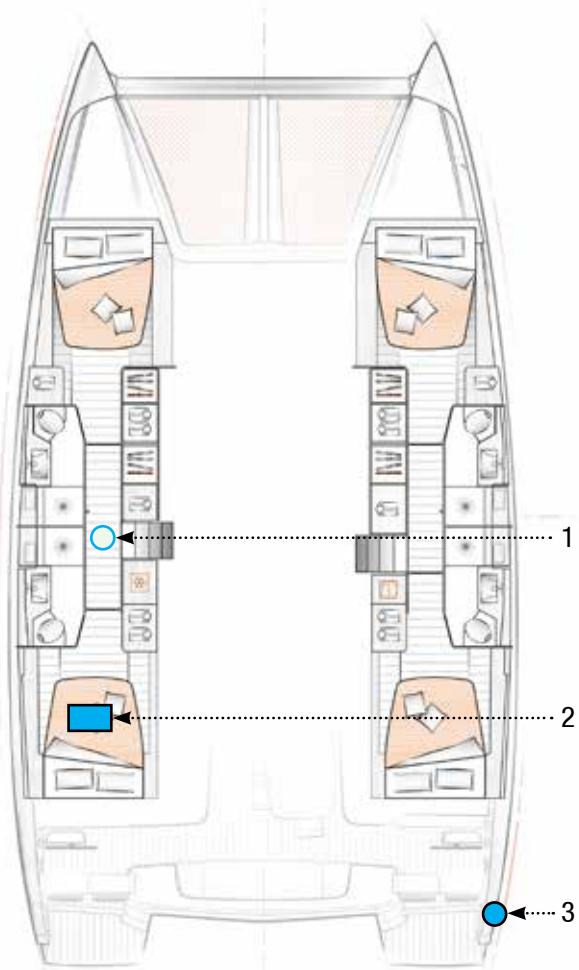
To use the marina fresh water:

- 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.

WATER HEATER - SHOWER - SEA WATER PUMP



1



2

- 1 - Sea water pump.
- 2 - Water heater.
- 3 - Shower.



3

*Note: you can find the same locations
in the other fitting out versions.*

- 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 volume of 60 l. It can be extended to 100 l (optional).

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 automatic breaker on the electrical panel in the saloon.

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.

If there are any leaks, use the valves located on the engines to isolate the water heater circuit.

06.5 | Sea water pump (option)

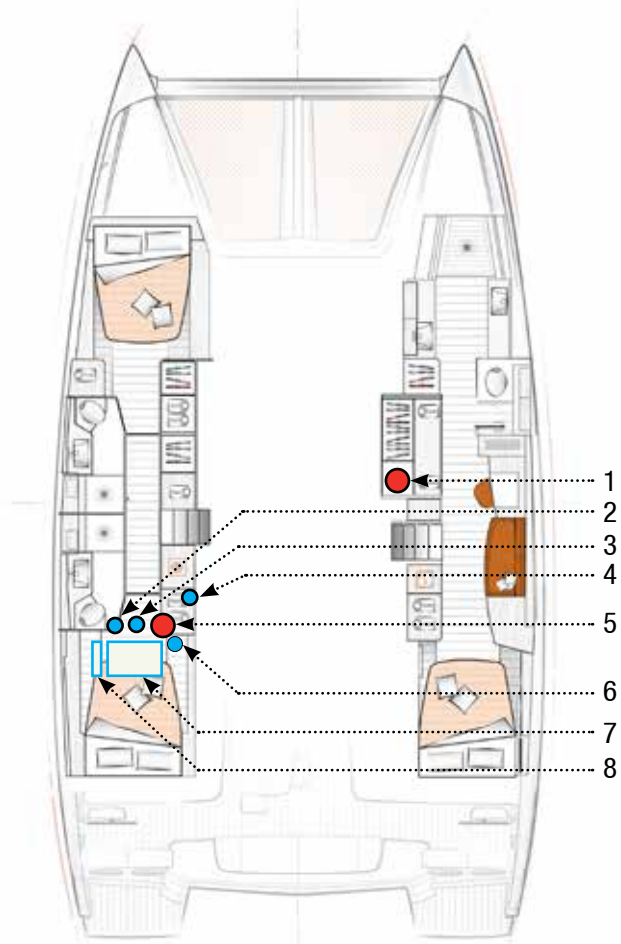
- SEA WATER PUMP

The boat can be optionally equipped with an electric pump that can supply a sink tap with seawater.

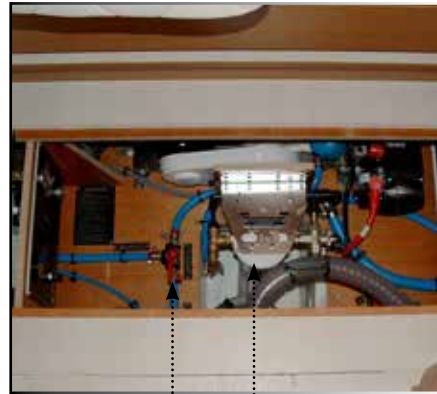
The pump is located under the floor in front of the port companionway.

After switching on the on-board 12 V circuit, press the switch on the side of the kitchen cabinet at the saloon entrance.

WATERMAKER



Note: you can find the same locations in the other fitting out versions.



2 3



8

- 1 - Automatic breaker.
- 2 - Tank selector valve.
- 3 - Filter.
- 4 - Through-hull drain.
- 5 - Control panel.
- 6 - Sea water supply valve.
- 7 - Watermaker.
- 8 - Membranes.



5

06.6 | Watermaker (optional)

The boat may optionally be fitted with a watermaker located in front of the berth in the aft port cabin.

OPERATION

The watermaker operates when the generator is powered up. Open the sea water inlet valve (accessed via the floor in front of the berth in the aft port cabin).

To switch the watermaker on:

- Check that the relevant automatic breaker located on the protection panel in the cupboard to the left of the companionway in the starboard float is set to "ON".
- Switch the watermaker on using its switch on the side of the watermaker.

The watermaker circuit has a 3-way valve used to supply the port or starboard tank with fresh water. This valve is located in front of the watermaker.

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

RECOMMENDATION

The watermaker shall be used exclusively in clear waters.

The watermaker has an automatic rinse function at the end of the cycle.

Make sure that the water unit is operating when using the watermaker.

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

07

ELECTRICITY

7.1 12 V circuit

7.2 Inverter

7.3 Solar panels

7.4 110 V – 220 V circuit

7.5 Electronics

12 V ELECTRICAL EQUIPMENT



1



2



3



4

- 1 - 12 V / 110 V - 220 V inverter.
- 2 - Automatic breaker of the inverter.
- 3 - 12 V service batteries.
- 4 - Touch screen.

- 5 - Battery chargers.
- 6 - 12 V electrical panel.
- 7 - Coupling / batteries + port engine cut-outs.
- 8 - On-board and starboard engine cut-outs.

5



6



7



8



07.1 | 12 V circuit

The main on-board circuit is supplied in 12 V.

The service batteries are located in the starboard engine hold.

The generator battery (optional extra) is located in the starboard locker of the forward swim deck.

The starboard engine battery and the port engine battery are located in their respective engine compartments.

The starboard engine and on-board cutouts 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) allows the engine to start if the relevant battery is faulty.

The generator includes its own cut-outs located in the starboard locker of the forward swim deck.

BATTERY CHARGERS

The batteries can be charged either by the engine alternator or by the 110 V - 220 V / 12 V - 60 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 in the starboard engine compartment.

SUPPLY OF THE CHARGERS

Select the power supply (generator or shore socket) using the left hand selector on the 110 V - 220 V selector board (behind the electrical panel in the companionway by the starboard hull).

07.2 | Inverter

The boat is optionally equipped with a 12 V / 220 V - 220 V / 2000 Va inverter located behind the electrical panel in the starboard companionway.

The inverter supplies the onboard sockets.

RECOMMENDATION

Check the battery charge during the use of the inverter.

The inverter operates once the 12 V onboard circuit is switched on.

If it doesn't work, check the automatic breaker located under the inverter.

07.3 | Solar panels (optional)

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

SHORE POWER SOCKETS - GENERATOR

ON-BOARD + AIR CONDITIONING
SHORE POWER SOCKETS



SHORE AIR CONDITIONING + ON-BOARD
AUTOMATIC BREAKERS



GENERATOR



TANK / GENERATOR SELECTION PULL ROD



CIRCUIT-BREAKERS +
CHARGER AUTOMATIC BREAKERS



CUTOUT
AUTOMATIC BREAKERS



07.4 | 110 V - 220 V circuit

- SHORE POWER SOCKETS

Both shore supply sockets are located in the starboard transom. They supply the 220 V circuit and the battery chargers, as well as the air conditioning.

One socket only supplies power to the 110 V circuit, the battery chargers and air conditioning.

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 you do not use the plug.

The shore sockets are protected by automatic breakers located in the starboard engine compartment.

WARNING

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

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 (optional extra) is located in the starboard locker of the forward swim deck.

Its function is to re-supply the batteries via the chargers and supply 110 V - 220 V electricity on board.

OPERATION

After turning ON the cut-outs located in the starboard locker of the forward swim deck, the generator can be turned on either using the switch on the generator or using the switch behind the 12 V panel, in the starboard companionway.

- Make sure that the seawater cooling valve (access under the floor of the starboard passageway) and separator drain valve (access under the floor of the starboard passageway) are open.

- Select the fuel tank using the pull rod located in the starboard locker of the forward swim deck.

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

SELECTORS - AUTOMATIC BREAKERS

SOURCE SELECTION
PANEL (110 V - 220 V)



AUTOMATIC BREAKERS BOX (110 V - 220 V)



- CHECKING OF THE 110 V - 220 V CONSUMING APPLIANCES
SELECTION PANEL (in the cupboard behind the 12 V panel, in the star-board companionway):

The panel is composed of selectors allowing to choose the electrical power source for the different 110 V - 220 V consuming appliances on board.

The boat's 110 V - 220 V distribution circuit switches automatically to the shore supply as soon as the plug is inserted (with voltage present).

LEFT-HAND SIDE SELECTOR:

- for appliances powered by a 110 V - 220 V current from the generator or the shore supply.

RIGHT-HAND SIDE SELECTOR:

- for the air conditioning system powered by a 110 V - 220 V current from the generator or the shore supply.

- 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 source (start the generator or connect a shore power socket to shore).
- Select this source on the selection panel so that this source supplies the boat (110 V - 220 V electrical selection panel) or turn on the inverter for the outlets.

RECOMMENDATION

Check the battery charge during the use of the inverter.

- 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.

To start 110 V - 220 V elements, wait for 10 to 15 seconds between the start up of each new component (in order to allow the generator to become stabilized and be able to give the power necessary for the starting up).

STOPPING THE 110 V - 220 V POWERED APPLIANCES

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

- Stop the appliance with its own controls.
- To stop 110 V - 220 V elements, wait for 10 to 15 seconds between the stop of each new component (in order to allow the generator to become stabilized).
- Turn off the unit automatic breakers by using automatic breaker panel.
- Turn to OFF the 110 V - 220 V source selector (generator or shore power) or turn off the inverter.

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).

AUTOMATIC PILOT RAM



LOCH SOUNDER DEPTH FINDER



AUTOMATIC PILOT COMPASS



07.5 | Electronics

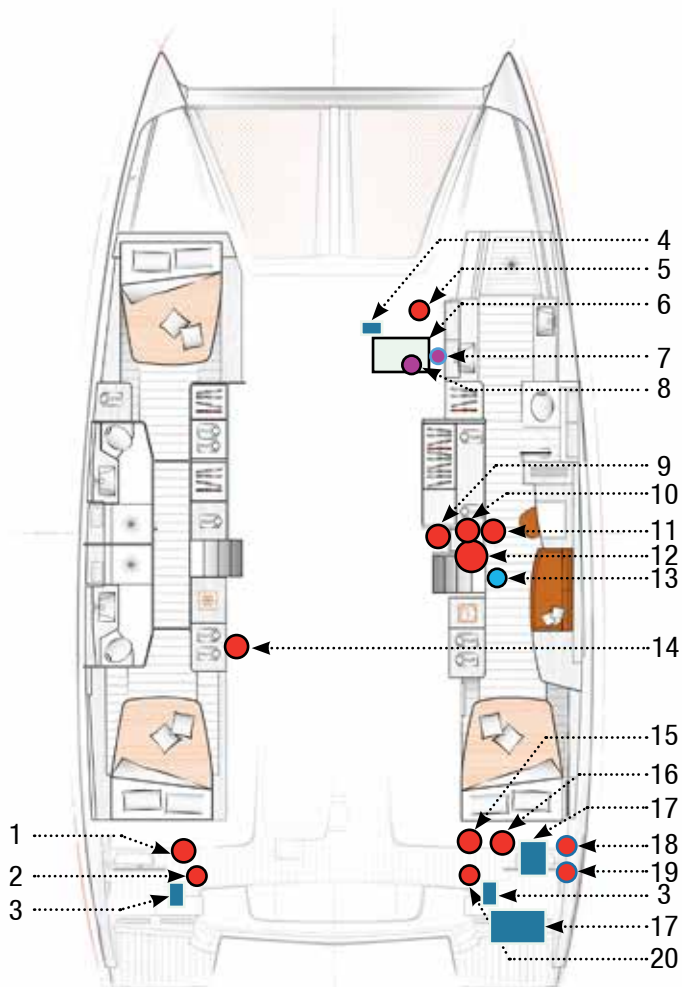
The boat may be fitted with an optional electronic pack and different navigation aid accessories.

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

The ram, the auto pilot and the calculator are located in the port engine compartment.

The compass and the sounder of the speedo / depth finder are located under the floor of the forward head to starboard.

ELECTRIC LAYOUT



Note: you can find the same locations in the other fitting out versions.

- 1 - Automatic breakers for air-conditioning elements.
- 2 - Port engine cut-out +
Cut out coupling / engine batteries.
- 3 - Engine battery.
- 4 - Generator battery.
- 5 - Generator cut-out.
- 6 - Generator.
- 7 - Fuel tank selection pull rod port / starboard.
- 8 - Generator fuel filter.
- 9 - On-board automatic breakers.
- 10 - Source selectors 220 V, touch screen,
generator control.
- 11 - Inverter 12 V / 110 V - 220 V + automatic breaker.
- 12 - 12 V electrical panel.
- 13 - Water inlet valve + generator water filter.
- 14 - 12 V protections.
- 15 - 12 V power bar.
- 16 - Battery chargers.
- 17 - 12 V service batteries.
- 18A - Automatic breaker of the shore power socket - Board.
- 18B - Automatic breaker of the shore power socket - Air conditioning.
- 19A - 110 V - 220 V shore power socket / Board.
- 19B - 220 V shore power socket / Air conditioning.
- 19C - 110 V - 220 V shore power socket / Board + Air conditioning.
- 20 - Onboard and starboard engine cut-outs.

SUMMARY FOR THE 12 V COMPONENTS

CHARGE AND ELECTRICAL CONVERSION

| | |
|--|--|
| 1 x 220 V / 12 V - 60 A charger | Engines + board |
| 1 x 220 V / 12 V - 40 A charger (optional) | Engines + board |
| 2 x 12 V - 80 A alternators | Recharge service bank, engines and generator batteries |

BATTERIES / CONSUMING APPLIANCES

| 12 V CURRENT | VOLTAGE | START (+ PROTECTION) | PROTECTION |
|-----------------------------------|--------------------------|-----------------------|--------------------------------------|
| Service batteries | 12 V - 140 Ah (standard) | | |
| Navigation electronics | 12 V | Electrical panel 12 V | |
| Lighting | 12 V | Electrical panel 12 V | Fuses under the saloon benchseat |
| Navigation lights | 12 V | Electrical panel 12 V | |
| Refrigerators, Freezer (optional) | 12 V | Electrical panel 12 V | |
| Electric toilets (optional) | 12 V | Electrical panel 12 V | Port side passageway |
| Deck washer pump (optional) | 12 V | Electrical panel 12 V | Port side passageway |
| Bilge pumps | 12 V | Electrical panel 12 V | |
| Winches | 12 V | On-board 12 V | Starboard engine hold |
| Line driver | 12 V | On-board 12 V | Port engine hold |
| Windlass | 12 V | On-board 12 V | Starboard locket - forward swim deck |
| Watermaker (optional) | 12 V | On-board 12 V | Port side passageway |
| VHF, | 12 V | On-board 12 V | Terminal bloc 12 V |
| Hifi (optional) | 12 V | On-board 12 V | Terminal bloc 12 V |
| Autoradio | 12 V | On-board 12 V | Terminal bloc 12 V |
| 12 V sockets | 12 V | On-board 12 V | Terminal bloc 12 V |
| Engine batteries (x2) | 12 V - 110 Ah | | |
| Generator battery | 12 V - 50 Ah | | |
| On-board batteries (x6) | 12 V - 140 Ah | | |



SUMMARY FOR THE 110 V - 220 V COMPONENTS

GENERATOR

| | |
|---------------------------|-------------------------------------|
| Force 7/11 Kva in 220 V | 100% of its charge in 220 V - 50 Hz |
| Force 9/13,5 Kva in 110 V | 100% of its charge in 110 V - 60 Hz |

SHORE POWER SOCKETS

| | | |
|--|--------------------------------|------------------------------|
| On-board shore power socket 220 V - 50 Hz | 32 A simple shore power socket | Starboard transom connection |
| Air Conditioning shore power socket 220 V - 50 Hz | 32 A simple shore power socket | Starboard transom connection |
| On-board shore power socket 110 V - 60 Hz (US Version) | 50 A simple shore power socket | Starboard transom connection |
| Air Conditioning shore power socket 110 V - 60 Hz (US Version) | 50 A simple shore power socket | Starboard transom connection |

ELECTRIC DISTRIBUTION

| | |
|----------------|---|
| Right selector | Air conditioning supplied by generator or shore power |
| Left selector | On-board supplied by generator or shore power |

CHARGE

| | |
|--|---|
| 1 x 220 V / 12 V - 60 A charger | Recharge of the service bank by generator or shore power |
| 1 x 220 V / 12 V - 40 A optional charger | Engine batteries charger supplied by the generator or the shore |
| 1 x 220 V / 12 V - 25 A optional charger | Generator batteries charger supplied by the shore power |

SUMMARY FOR THE 110 V – 220 V COMPONENTS

| CONSUMING APPLIANCES | VOLTAGE | PROTECTION |
|------------------------------------|---------|-------------------------|
| Television (optional) | 220 V | Inverter or 220 V panel |
| Electric sockets (optional) | 220 V | 220 V panel or inverter |
| Water heater | 220 V | 220 V Electrical panel |
| Wine cellar (optional) | 220 V | 220 V Electrical panel |
| Extractor hood (optional) | 220 V | 220 V Electrical panel |
| Dishwasher (optional) | 220 V | 220 V Electrical panel |
| Washer-drier (optional) | 220 V | 220 V Electrical panel |
| Induction hob (optional) | 220 V | 220 V Electrical panel |
| Electric grill and oven (optional) | 220 V | 220 V Electrical panel |
| Watermaker (optional) | 220 V | 220 V Electrical panel |
| Air Conditioning (optional) | 220 V | 220 V Electrical panel |

08

MOTORIZATION

8.1 Engines

8.2 Fuel

8.3 Propellers - Anodes

8.4 Dash board

ENGINE LAYOUT

BATTERIES + STARBOARD ENGINE
COUPLING CUT-OUT



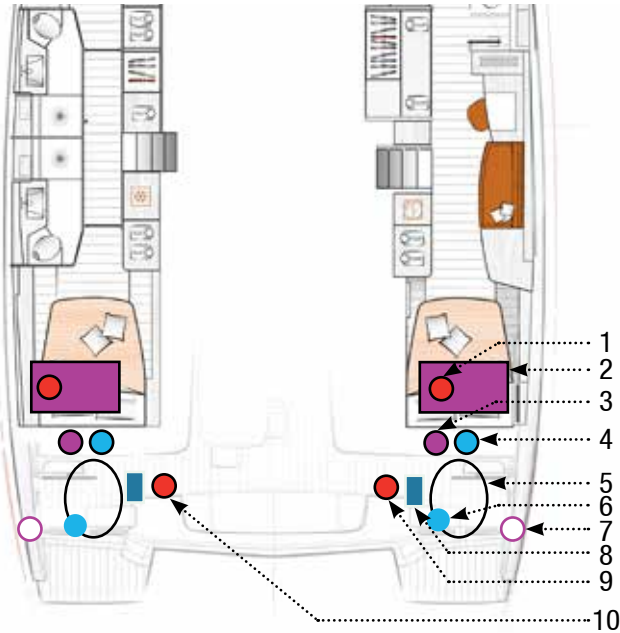
CUT-OUT
PORT ENGINE



SWITCH
EMERGENCY ENGINE CUT-OUT



ENGINE WATER
INTAKE VALVE



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

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

In case 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).
- Check that the power supply switches on the engines (red knobs) are in the RUN position.

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

In case 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.
- 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 and the filters 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 VALVE



FUEL FILTER



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 from the touch screen in front of 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).



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 dashboard you can find all the functions to monitor the engines.

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

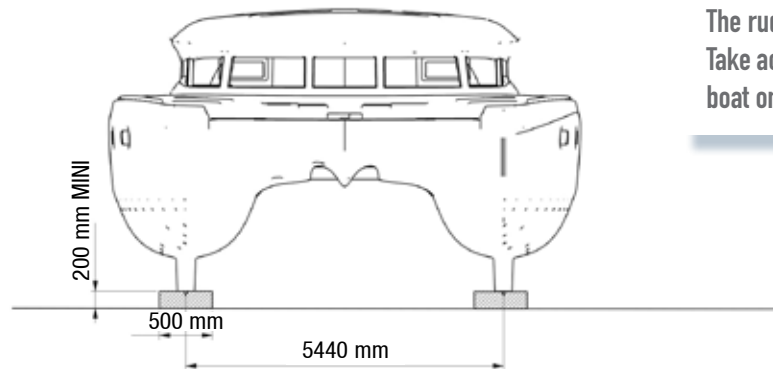
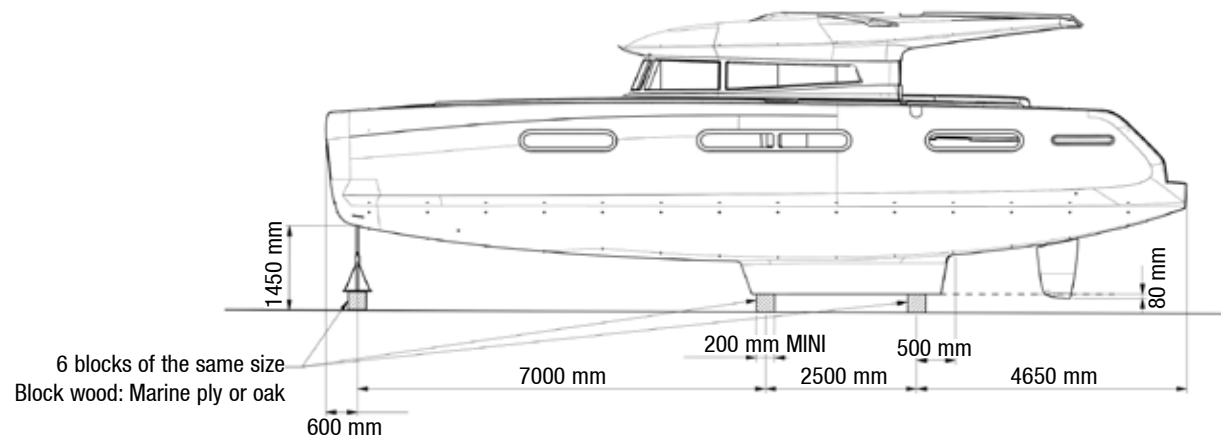
09

WINTER STORAGE

9.1 Laying up

9.2 Protection

BLOCKING DIAGRAM



WARNING

The rudders protrude by 80 mm under the keels. Take account of this measurement when placing the boat on the blocks.

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, mould 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

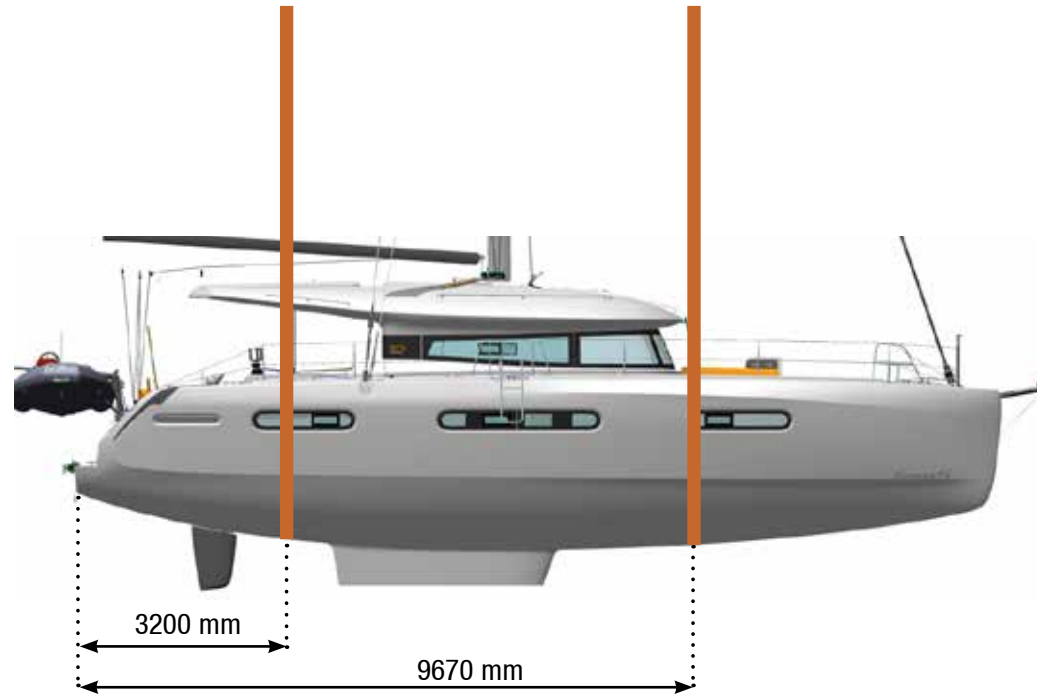
HANDLING

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 shall be carried out with the highest care by professionals.

If the EXCESS 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.

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 remarks



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)

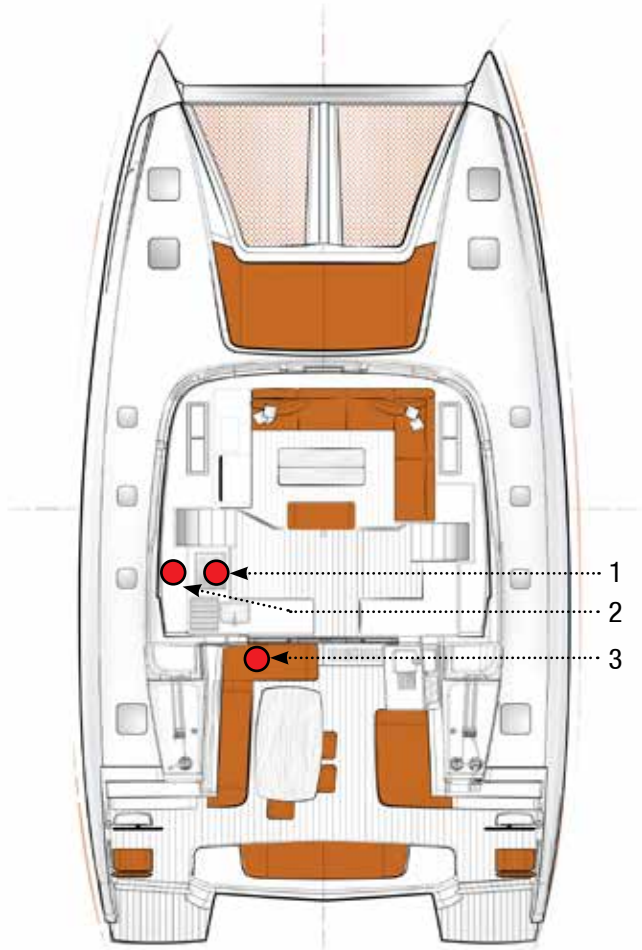
Risk of leak:

- Water systems (chapter 6)

RECOMMENDATION

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

GAS SYSTEM



Note: you can find the same locations in the other fitting out versions.

GAS VALVES



LOCATION OF THE GAS VALVES



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

BUBBLE LEAK DETECTOR



LOCKER OF GAS BOTTLES



11.2 | Gas system

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

The circuits opening / closing valves are located in the cupboard under the oven.

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

Switch the electrovalve on using its switch on the flat rim by the hot-plate.

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.

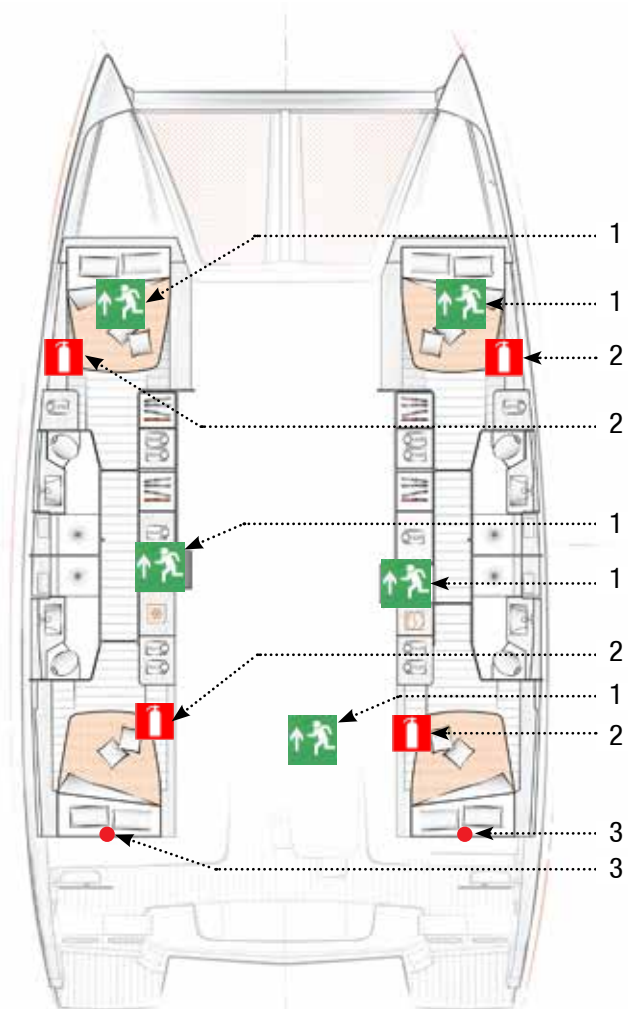
Be sure:

- 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.

INTERIOR SAFETY EQUIPMENT



Note: you can find the same locations in the other fitting out versions.

- 1 - Emergency exit.
- 2 - Extinguisher.
- 3 - Extinguisher vent.
- 4 - Distress flares.
- 5 - First aid kit.
- 6 - VHF (optional extra).
- 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.

OPERATION OF THE EMERGENCY EXIT
FORWARD CABINS



EXTINGUISHER VENT



- 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.

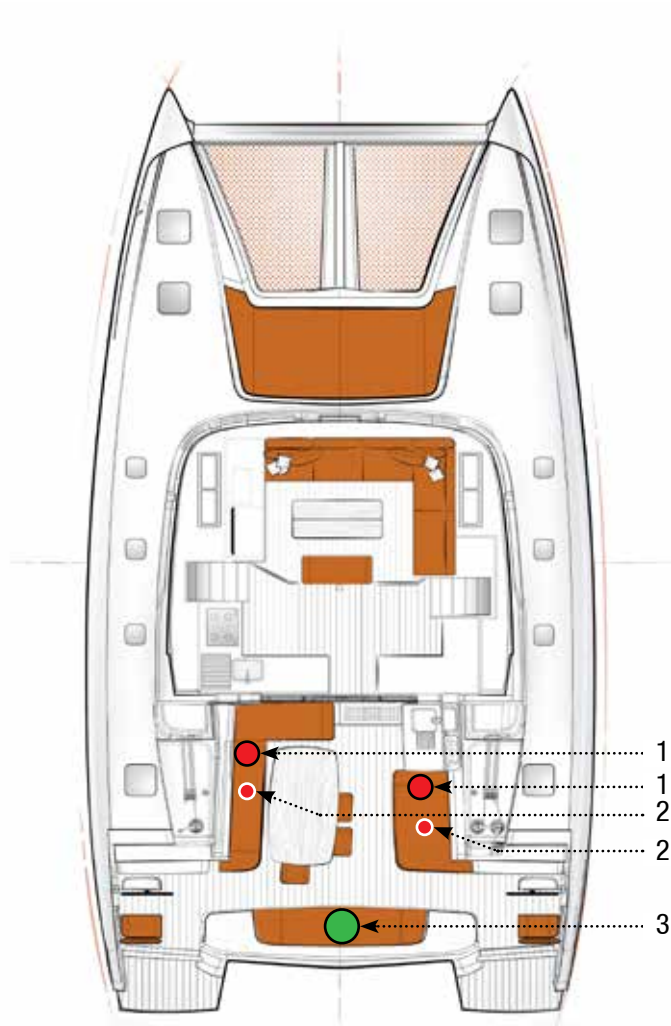
If fire broke out in an engine hold:

- Turn off the engines if operating.
- Cut off the power supply, the fuel supply and gas supply if required.
- If possible, 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



Note: you can find the same locations in the other fitting out versions.

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

MANUAL
BILGE PUMP



MANUAL BILGE PUMP TIP-UP



LIFERAFT LOCATION



RECOMMENDATION

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

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

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

In case of failure or if the electric bilge pumps are not enough, you can use the manual bilge pumps with cranks (stored in the cockpit lockers).

- 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 life raft storage compartments are located in the aft beam.

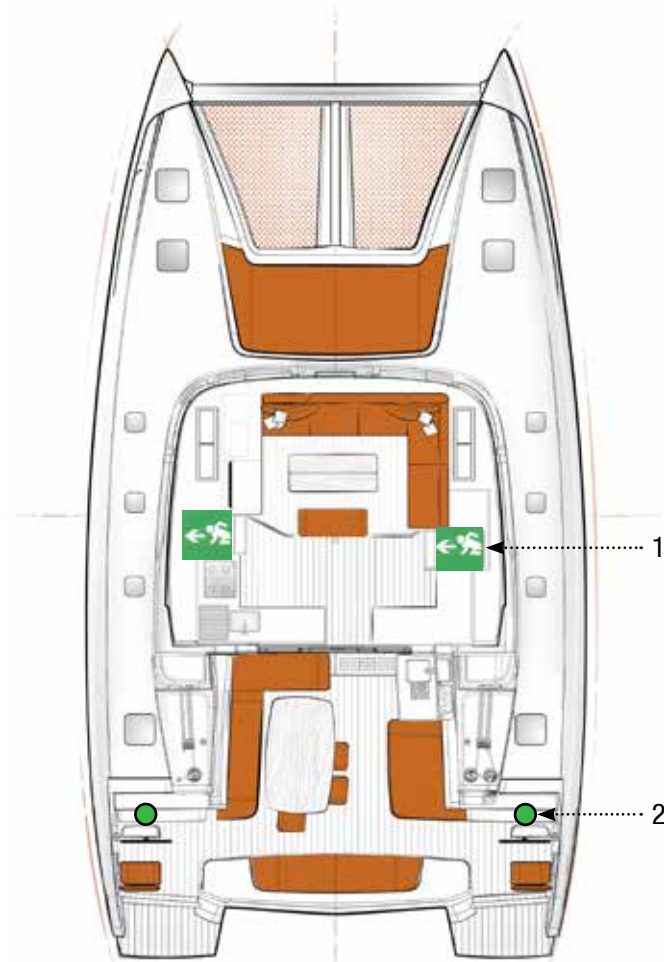
If the boat capsizes, remove the rings and then push the pins to open the access panels to the life rafts.

Fit your boat with life rafts according to the regulations of the country where the boat is registered.

RECOMMENDATION

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

EMERGENCY TILLER - MAN HOLES



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

*Note: you can find the same locations
in the other fitting out versions.*

EMERGENCY TILLER COVER



MANHOLE HATCH



- EMERGENCY TILLER

The emergency tiller is stored in a 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.
- Unplug every device connected to the spindles of the rudders.

- CAPSIZING

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

A hammer to break the glass is provided under a step of the companionway in each float.

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 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.
- Make sure the engine control is in the neutral position before pressing the start button.

- 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

Excess15

UPHOLSTERY AND COVERS

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

REFRIGERATION UNIT

Defrost the refrigerators and freezer QUATERLY
Check the door joints QUATERLY

AIR CONDITIONING

Check the sea cock and clean / change the different sea water filters QUATERLY
Dust off the unit heater fans ANNUALLY
General overhaul.....REFER TO THE MANUFACTURER'S GUIDE

ELECTRICITY

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

ENGINES AND GENERATOR

Check oil level QUATERLY
Check belt tension QUATERLY
Clean the sea water filters QUATERLY
Check for leaks (oil, water, fuel) and smokes..... QUATERLY
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 filters..... QUATERLY
General inspection by the manufacturer ANNUALLY
General overhaul.....REFER TO THE MANUFACTURER'S GUIDE

PLUMBING

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

