

F4.9



Owner's Manual



PRESTIGE®

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Introduction



For each piece of equipment on your boat, please read the instruction manuals provided by the manufacturer.

Notes

- Please store this owner's manual in a safe location and pass it on to the new owner if you sell the boat.
- You are advised to keep any user's guides supplied by the manufacturers of any equipment for your boat (accessories, etc.), together with your manual.

Your dealer will be able to advise you and assist you with how to operate and maintain your yacht.

The first time you use your boat a high level of skill and attention will be required. The proper functioning of all equipment will depend on the initial set-up being carried out correctly. For this reason the first launch must be carried out under your dealer's supervision.

Read this Owner's Manual carefully and take time to get to know your boat before you use it.

The better you know your vessel, the better your experience will be when sailing it.

Introduction

- This manual is written to help you enjoy your boat in safety. It contains details of the boat and of all the equipment provided and installed on your boat, as well as instructions for its use. Please read it carefully and familiarise yourself with the boat before using it.
- This owner's manual is not in any way a navigation or mariner's training manual. If this is your first boat or if you have changed to a type of boat with which you are not familiar, make sure that you learn how to use it and manoeuvre safely and with ease before taking the helm alone. Your dealer, national sailing or motorboat association, or yacht club will be very happy to tell you about navigation schools or qualified instructors in your area.
- Make sure that the wind and sea conditions forecast are appropriate for the design category of your boat and that you and your crew are capable of manoeuvring the boat in these conditions.
- Even when your boat is classified for the conditions, sea and wind conditions corresponding to design categories A, B and C vary from strong gales for category A to severe conditions at the top of category C, subject to the risks of freak waves or gusts of wind. These are therefore dangerous conditions in which only an experienced, fit, and trained crew can satisfactorily sail the boat.
- This owner's manual is not intended as a detailed maintenance or repairs manual. In the event of difficulties, please contact your dealer or their representative for boat maintenance.
- Always use the services of an experienced professional for the maintenance of your boat, for fitting accessories and for any modifications. Any alterations which may affect the safety specifications of the boat must be assessed, carried out and recorded by persons qualified to do so. The boat manufacturer cannot be held responsible for any modifications not approved by them.
- Some countries require you to hold a Certificate of Competency or other such qualifications, or there may be other specific regulations in force. Local requirements regarding road transport may also apply.
- Always properly maintain your boat and bear in mind how it deteriorates over time or, where applicable, through heavy or inappropriate usage.
- Any boat, regardless of how robust it is, may be severely damaged if it is not used correctly. Inspect the boat regularly, particularly after any suspected incidents of damage. Always adjust the speed and heading of your boat according to the sea conditions.
- If your boat is equipped with a life-raft, read the instruction manual carefully. the crew should have all necessary safety equipment on board (lifejackets, harnesses, etc.) for the type of boats, the weather conditions, etc.. In some countries it is mandatory to have this safety equipment onboard. The crew should be familiar with the use of all safety equipment and emergency safety manoeuvres (man overboard, towing, etc.). Sailing schools and clubs regularly organise training sessions.
- All persons should wear appropriate personal flotation devices (life jackets/buoyancy aids) when they are on deck. Note that, in certain countries, it is mandatory to wear a personal flotation device at all times, in accordance with national legislation.

Notes on reading this manual

The various symbols used throughout the manual for crucial safety information are as follows:



Danger

Indicates an imminent danger situation which, if not avoided, will lead to death or serious injury.



Warning

Indicates a potentially dangerous situation which, if not avoided, may lead to death or serious injury.



Caution

Indicates a potentially dangerous situation which, if not avoided, may lead to minor or moderate injury.

Note

Indicates information considered to be important but not linked to a danger, for example concerning damage to property.

- While some of the information and illustrations in this manual may show details which are slightly different from those found on your boat, the key information remains the same. Future versions of this manual will show any possible modifications as required.
- Due to the constant desire to improve the products, SPBI S.A. reserves the right to make any changes considered necessary to the design or to the equipment. The specifications and information given are not contractual and may be modified without prior notice or updates.



- This owner's manual is written in several languages. French is the authentic reference language.
- This owner's manual was written and formatted by SPBI S.A.. Any reproduction of this manual, direct or indirect, provisional or permanent, by whatever means, whether in whole or in part, as well as any modification by third parties for commercial reasons, is forbidden.

Technical specifications

1.1 Construction

- Model..... F4.9
- Architect Garroni Design / Michael Peters yacht design
- Builder SPBI S.A
- Principal means of propulsion Motor

1.2 General dimensions

- L.O.A (L_{max})* 15,48m
(Including the removable parts which can be dismantled (stem roller, forward pulpit) without affected the structure of the boat)
- Hull length (L_h)* 13,44m
(Excluding: removable parts that can be dismantled without affecting the structure of the boat)
- Overall width (B_{max})* 4,49m
(Including: removable parts that can be dismantled without affecting the structure of the boat)
- Beam(B_h)* 4,44m
(Excluding: removable parts that can be dismantled without affecting the structure of the boat)
- Air draft - Empty vessel:
 - Traditional version 5,34m
 - Hard top version 7,17m
- Draught - Boat fully laden 1,17m

1.3 Engine

- Nominal maximum propulsion power (at the propeller output)..... 706Kw
- Maximum recommended engine size..... 2 x 920kg

1.4 Capacities

- Fuel capacity:
 - Tank 1 (*) 650L
 - Tank 2 (*) 650L
- Fresh water capacity:
 - Tank 1 (*) 380L
 - Tank 2 (*) 206L
- Blackwater capacity (Toilet):
 - Tank (*) 170L
 - Skipper's cabin (*) 50L

It may not be possible to use these capacities fully depending on the trim and load of the boat. It is recommended that you keep a reserve of 20% in the fuel tanks.

(*): Refer to the corresponding chapter to locate the position of the tank (each tank number corresponds to its position on board).

Total mass of liquid contents of fixed tanks when full 1 892kg

Notes

- The density of a liquid can vary according to its temperature and quality.
- The volume masses chosen are:
 - 0,86kg/L for diesel fuel,
 - 1kg/L for water.

Design categories and displacement

Design category	B	C	D
Maximum number of people on board (CL *)	8	10	10
Maximum number of people on the flying bridge	4		
Light displacement (Mlc *)	15 174kg		
Recommended maximum load (MI *)	5 175kg	5 239kg	
Displacement with maximum load (Mldc *)	20 349kg	20 413kg	
Maximum load on the manufacture's plate, in kg (Mmbp *)	18 507kg	18 571kg	

Remark: It is normal for the weight shown on the manufacturer's plate (boat with empty tanks) and the maximum weight indicated in the owner's manual (boat with full tanks) to be different.

* Definition

CL: Crew Limit

Recommended maximum number of people on board when the boat is underway.

Mlc: Mass of the boat in light craft condition

includes the weight of the boat in the standard ready-to-navigate configuration, keel, standard equipment, engine(s) and sails (if the boat is a sailing boat).

MI: Maximum load

Load that the boat is expected to support in addition to the light ship condition, including:

- the maximum number of crew weighing 75 kg each;
- the personal effects of the crew;
- provisions and cargo (where applicable), dry goods, consumable liquids;
- the content of all permanently installed tanks filled to 95% of the maximum capacity, including fuel, drinking water, black and grey water, lubrication and hydraulic oil, bait and/or fish tanks, plus ballast water at 100% of the tanks' capacity;
- the consumable liquids in the removable tanks (drinking water, fuel) filled to 95% of their maximum capacity;
- the tender or other craft expected to be transported onboard, and any outboard motor for said craft;
- life raft(s) in addition to the minimum number required for the essential safety equipment;
- non-edible foodstuffs and equipment normally transported onboard and not included in the list of standard manufacturer's equipment, for example interior movable equipment, tools, spare parts and the anchors.

Mldc: Mass of the boat in Maximum load condition

Includes light ship mass (Mlc) + maximum load (MI).

Mmbp: Maximum mass on builder's plate

Maximum load on the manufacture's plate: the maximum load recommended by the manufacturer and shown on the manufacturer's plate EXCLUDES the fixed tanks when they are full (fuel, freshwater, greywater, black water).

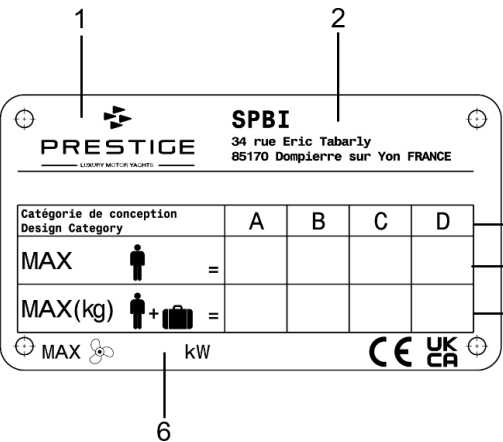
2 Design categories and displacement



- Do not exceed the recommended maximum number of people onboard. However many people are onboard, the total, combined load of people and any gear or equipment must never exceed the recommended maximum load.
- Always use the seats or seating areas provided.
- When loading the boat, never exceed the recommended maximum load. Always load the boat with care and distribute weight evenly in order to maintain the optimum trim (more or less horizontal).
- Avoid placing heavy loads high up in the boat.

Some information is shown on the manufacturer's plate fixed to the boat. Explanations of the information given can be found in the relevant chapters of this manual.

Name plate



1. Brand name
2. Shipyard of construction
3. Design category
4. Maximum number of people onboard
5. Maximum load on the manufacture's plate, in kg (*Mmbp* *)
6. Maximum power of engine(s)

2.1 Design categories

Remark

The life rafts are not included as essential safety equipment for categories C and D.

The boat has been designed for personal, private use. It can also be used commercially, for charters with or without crew. However, the boat has not been designed as a "workboat" as defined by standard ISO 12215.

Category A

A boat which has been assigned design category A is deemed to have been designed for sailing with wind speeds below Beaufort force 10 and the associated significant wave heights.

Remark

These conditions may typically be encountered during long voyages, for example across oceans, but they can also occur close to the shore when the area is not protected from the wind and waves for several hundred nautical miles. Depending on atmospheric conditions, wind speeds may reach gusts of up to 32 m/s.

Category B

A boat which has been assigned design category B is deemed to have been designed for sailing with wind speeds of less than or equal to Beaufort force 8 and the associated significant wave heights of up to 4 m.

Remark

These conditions may typically be encountered when sailing a sufficient distance off shore but may also occur close to shore when shelter may not be immediately available. These conditions may also be encountered on lakes of sufficient size to generate the aforementioned wave heights. Depending on atmospheric conditions, wind speeds may reach gusts of up to 27 m/s.

Category C

A boat which has been assigned the design category C is considered to have been designed for sailing in strong winds typically less than or equal to Beaufort 6 and the associated waves of a significant height of up to 2 m..

Remark

These conditions may typically be encountered in exposed inland waters, estuaries and coastal zones in moderate weather. Depending on atmospheric conditions, wind speeds may reach gusts of up to 27 m/s.

Category D

A boat which has been assigned the design category D is considered to have been designed for sailing in strong winds typically less than or equal to Beaufort force 4 and the associated significant wave heights of up to 0,3 m and occasional waves of up to 0,5 m.

Remark

These conditions may be encountered in sheltered inland waters and coastal areas in fine weather. Depending on atmospheric conditions, wind speeds may reach gusts of up to 12 m/s.

Stability and buoyancy

3.1 Stability information



All of the watertight hatches must remain closed when at sea.



The skipper is responsible for ensuring that the normal operating mode is maintained. This means that the boat's speed is appropriate for the sea state and it is used with a sense of "good seamanship".

- Fully laden displacement was used to evaluate the stability and buoyancy of the boat. The value of this displacement can be found in the "Technical specifications" paragraph at the beginning of this manual.
- Any change to the disposal of weight on board (for example, the addition of a raised structure for fishing, radar, change of engine etc) can noticeably affect the boat's stability, trim and performance;
- It is important to keep water in the bilges to a minimum;
- Stability is affected by the addition of weight above the main deck;
- In heavy weather it is important to close all the hatches, lockers and doors to minimise the risk of water pouring in;
- The boat's stability can be reduced when towing a boat or when using a davit to lift a heavy load;
- Breaking waves are a serious threat to stability.

3 Stability and buoyancy

The following openings are marked "MUST BE CLOSED WHEN UNDERWAY", ensure that this warning is adhered to. "Under way" means the boat is not anchored or moored to the ground, nor is it aground.

Forward cabin



Aft cabins



Heads



- It is important to take additional precautions in the event of strong winds, rough seas or breaking waves.
- Do not install an engine in this boat with a higher power rating than indicated on the manufacturer's plate of the boat.
- Do not drive the boat at high speed with a negative trim of the propulsion equipment (bow down). This can make the boat heel and cause it to be unstable when turning.
Use a negative trim to make the transition from displacement speed to planing speed, and at lower speeds in choppy seas (applicable to boats equipped with a system for directing the propeller thrust).
- Do not drive at top speed in areas of heavy boat traffic or in situations of reduced visibility, strong winds or heavy seas. Reduce the boat's speed and wake out of courtesy and for your own safety and the safety of others. Observe speed limits and "NO WASH" signs.
- Observe right of way as defined by the rules of marine traffic and required by international regulations to prevent collisions at sea (RIPAM / Col Reg).
- Ensure that you always have sufficient room to stop or manoeuvre if necessary in order to avoid a collision.
- Avoid abrupt manoeuvres at full speed.
- Do not sit on the forward section of the cockpit when the boat is moving at high speed.
- Reduce speed in large waves for your comfort and safety.

3.2 Access to the boat



- It is essential that both the cockpit and the engine compartment are kept closed when at sea.
- When at sea close the guardrail side-opening or openings.
- Slamming an access hatch may cause injury : always close the hatch gently and carefully.
- Do not allow children to open or close the hatches unsupervised.



- It is essential that the access doors to the saloon are kept closed when at sea.
- Close the deck hatches and portholes before each trip.
- Close all access doors and hatches in heavy weather or when the sea is rough.

Advice-Recommendation

When under way, keep hull valves and fillers in the closed position to minimise the risk of flooding.

Manoeuvrability

4.1 Visibility from the steering station



- Manoeuvrability is reduced at excessive speeds.
- There is a risk of loss of control during tight turns.
- Reduce speed before making a turn in any direction.
- The helmsman's field of vision from the internal steering station is limited: keep lookout as required.

- The helmsman's view from the steering station may be obscured by the boat heeling significantly or because of other factors caused by one or more of the following variable conditions:
 1. Angle of outdrive (on boats fitted with an angle regulator for the outdrive);
 2. Angles of level control flaps (On boats fitted with level control flaps, powered or fixed, installed on the transom);
 3. Load and load distribution;
 4. Speed;
 5. Rapid acceleration;
 6. Transition from displacement mode to planing mode;
 7. Sea conditions (i.e. rain, darkness or fog);
 8. Interior lighting;
 9. Position of the covers or curtains;
 10. Persons or mobile equipment located in the helmsman's field of view.
- The international rules and regulations for avoiding collisions at sea (Col Reg / RIPAM) require a full and constant lookout as well as observance of the rules of right-of-way. Observance of these rules is essential.

4.1.1 Demister

Control

Location: Steering station



4.1.2 Horn

Control

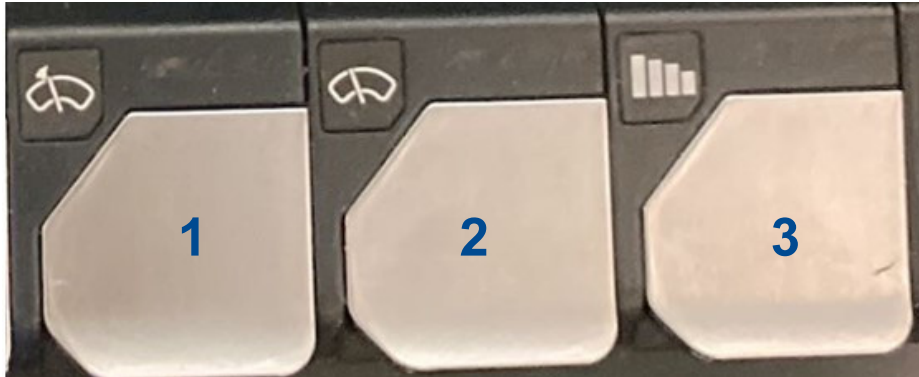
Location: Steering station



4.1.3 Wiper

Control

Location: Steering station



1. Port windscreen wiper
2. Starboard windscreen wiper
3. Windscreen wiper operating speed

4.1.4 Windscreen washer

Control

Location: Steering station



4.1.5 Deck searchlight

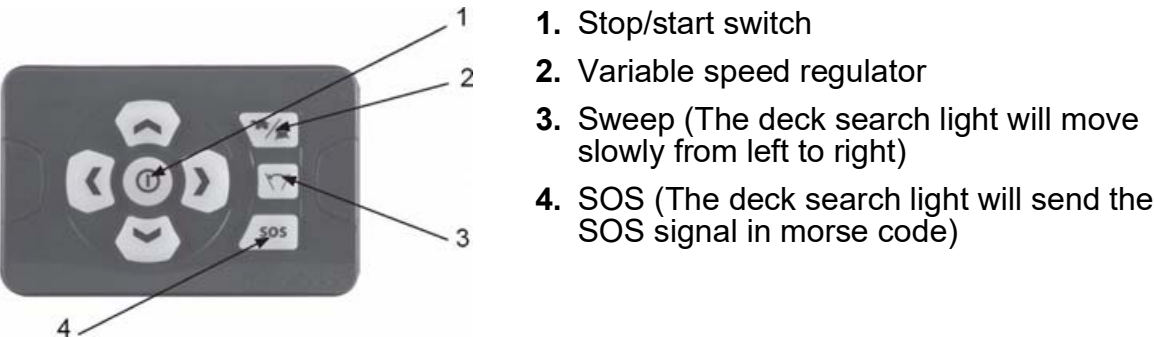
Deck searchlight control

Location: Steering station



Control

Location: Steering station



4.1.6 Navigation lights

The navigation lights are located on the flying bridge. These are LED lights with a power of 2,4 W each.

Control

Location: Steering station



Safety

5.1 Preventing man overboard situations and means of reboarding

5.1.1 Prevention of man overboard

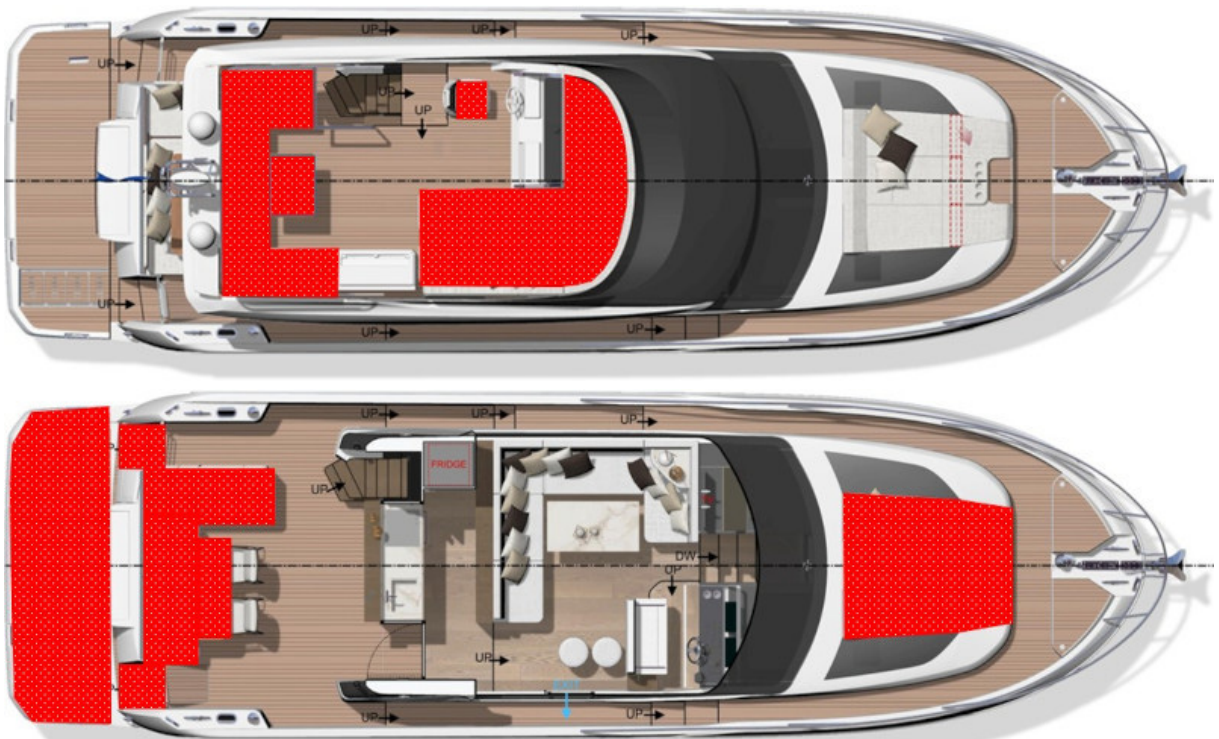


Use the seats provided.

- The off-limits areas of the working deck when under way are cross-hatched below:

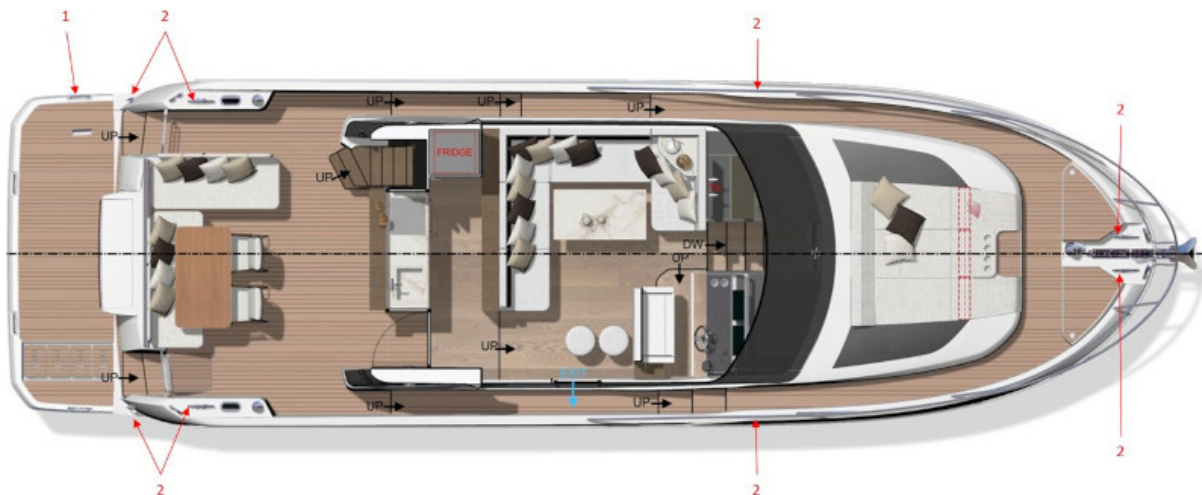


- "Working deck" refers to the exterior parts of the boat where people stand or walk during normal use.



NOTE: Standing on the sunbed must be strictly avoided.

5 Safety



1. Reboarding device

2. Mooring cleats


- Regularly check the tension of the lifelines and the attachment points.
- Regularly check the guardrails:
 - With metal guardrails look out for signs of corrosion (particularly at connecting points).
 - With synthetic guardrails, change them as soon as they show signs of wear due to chafing or UV.

5.1.2 Reboarding

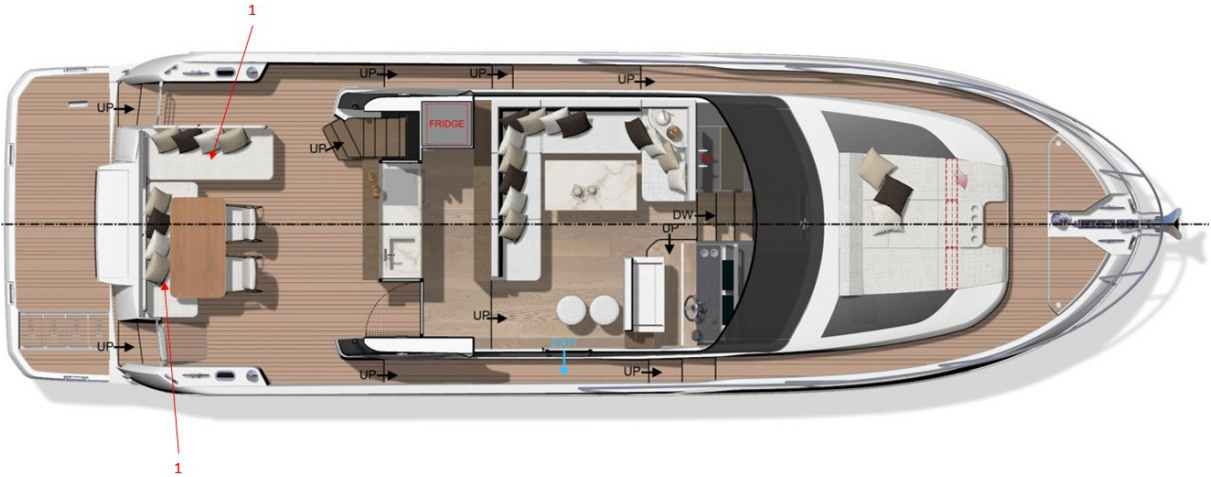


- Some types of reboarding equipment have a locking device when folded up: It is important to keep the means for getting back onboard deployed and ready to use once the boat is in use (at anchor, moored or at sea).
- Make sure that means for getting back onboard are readily accessible and easy to use by someone alone in the water.

5.2 Storing the liferaft



- Before putting to sea, carefully read the launching instructions shown on the liferaft.
- It is the responsibility of the skipper to ensure regularly that the liferaft is properly secured in place.



The liferaft (not supplied) must be stored in the space provided for it (Ref 1).

B I B

A pictogram allows for easy location.

5.3 Securing moveable items

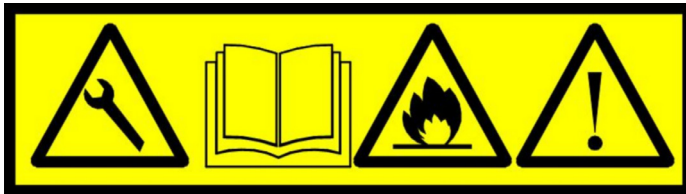


Technical areas may not be used as storage compartments.



- Ensure that movable items are firmly secured when sailing.
- Do not store anything below the floorboards.

- The technical areas are identified in the boat by the pictogram below:



- The electrical technical areas are identified in the boat by the pictogram below:



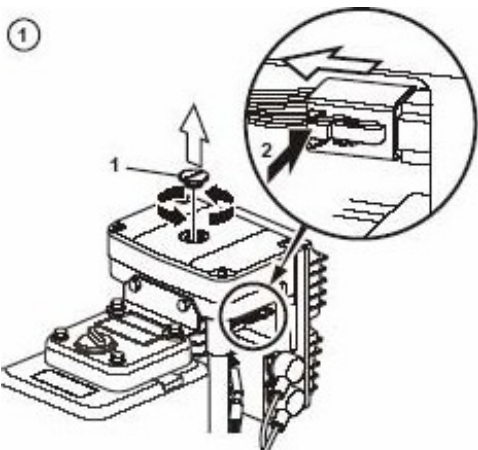
5.4 Emergency systems in case of steering gear failure



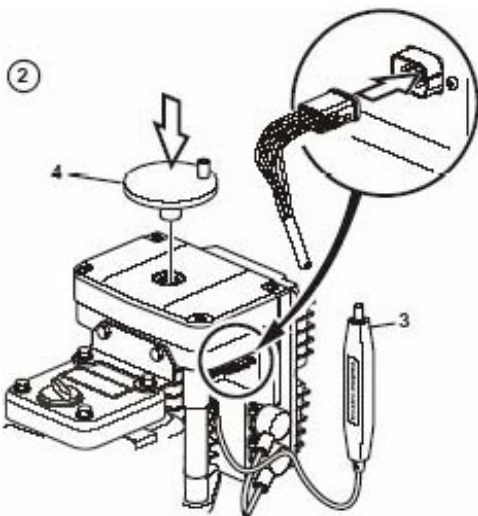
Refer to the manufacturer's instructions for detailed use of the system.

In the event of damage to the helm preventing the boat from being steered with the wheel, it is possible to align the bases manually to put them in line with the boat. The boat can then be steered using the control lever.

Procedure for aligning the motor bases manually

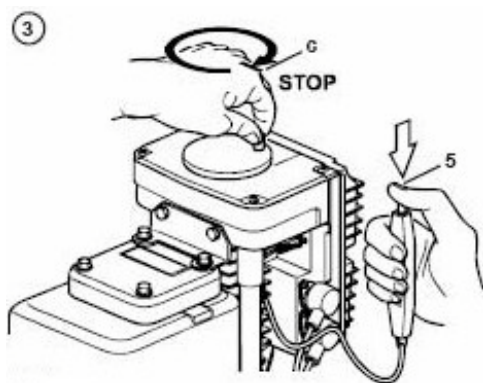


Remove the screw (Ref 1). Disconnect the cable (Ref 2).

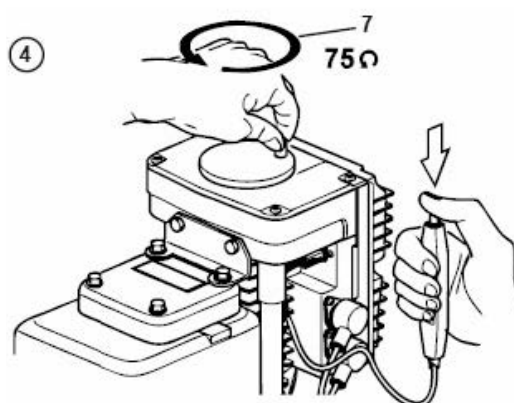


Connect the connector (Ref 3). Put the handle arm in position (Ref 4).

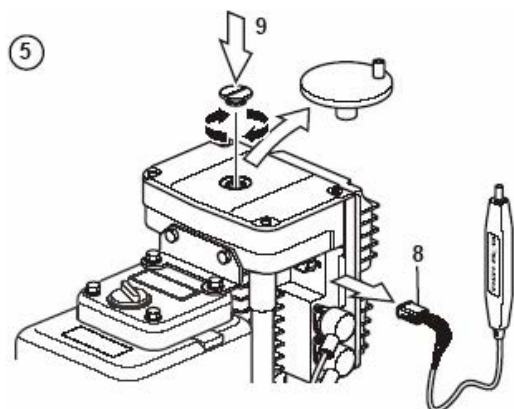
5 Safety



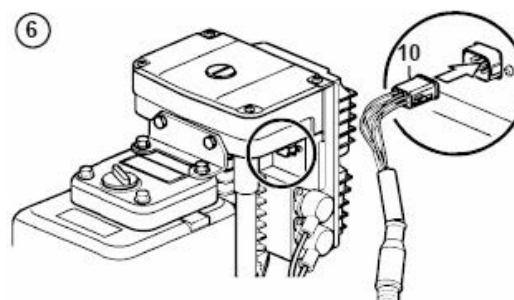
Press the button (Ref 5) and keep it pressed whilst turning the handle arm (Ref 6) until it comes to a stop. Do not force it once it has reached the stop.



Turn the handle arm through approximately 75 turns: The base is now aligned with the boat's axis.

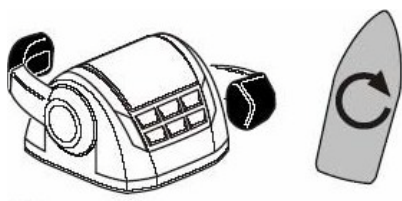


Remove the handle arm. Disconnect the connector (Ref 8). Return to original position (Ref 9).

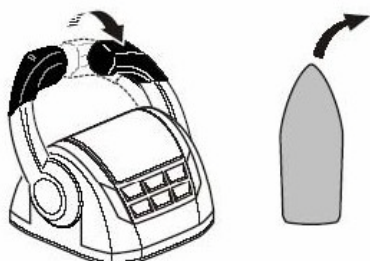


Reconnect the cable (Ref 10).

Emergency steering using the engine control lever



once the bases have been aligned according to the above procedure.



5.5 Information on lightning-related risks

- If the boat has been struck by lightning, the compass and electronic and electrical equipment must be examined to determine whether any damage or calibration change has occurred.
- If the vessel has been struck by lightning, the lightning protection device must be inspected for damage and to verify the integrity of the device and continuity of the earthing.

5.6 Informations in case of grounding of impact



The outer skin of your boat is strong enough to withstand the design pressure but it is not designed to withstand local damage caused by impacts from hard or sharp objects. If the outer skin is damaged, it must be repaired immediately.

- In the event of grounding or impact with an unidentified floating object, lift the floors and check that there is no leakage of seawater.
- If there is a leak of seawater (even a small one), reduce speed, contact the emergency services and follow their advice.
- Take the boat out of the water immediately and have it professionally inspected.
- In the event of grounding, it is recommended to get a professional to carry out an ultrasound test to inspect the keel and its connection with the hull.

Information relating to fire risks and risks of explosion

6.1 Propulsion engines and other fuel-burning equipment



The risks associated with motorisation are described in the ENGINE chapter.

Note concerning the boat's tender



The risks associated with other fuel-burning equipment are described in the FUEL-BURNING EQUIPMENT OTHER THAN FOR PROPULSION chapter.

- If the tender is fitted with a more powerful outboard motor than 25kW, it must have on board a portable extinguisher with a rating equal to or greater than 8A / 68B.
- Place for storage of tender petrol tank: on deck.

6.2 Electrical system



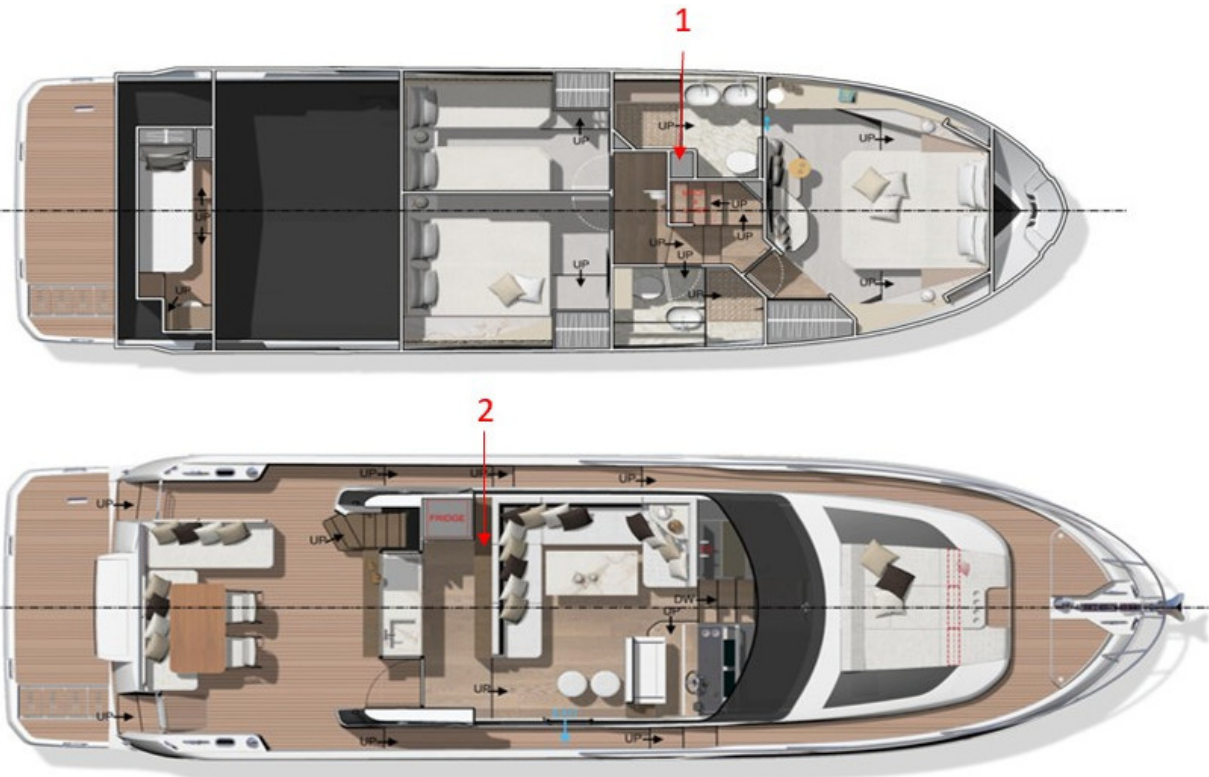
The risks associated with the electrical systems are described in the ELECTRICAL SYSTEM chapter.

6.3 Fire fighting and prevention equipment

6.3.1 Fire-fighting equipment

Portable fire-extinguishers and fire blanket (not supplied)

- When in use, this boat must be equipped with portable fire extinguishers of the following extinguishing capacities, located in the following places:



Reference	Location (Portable fire extinguisher)	Minimum extinguishing capacity
1	Passageway stowage	5A / 34B
2	Galley stowage	5A / 34B

- The location of the portable fire extinguishers is shown by the pictogram below:



- When in use, this boat must be equipped with a fire blanket to protect the cooking equipment and/or the galley, installed in the following place: near the cooking equipment.



Never:

- Obstruct the passages leading to the emergency exits and the hatches;
- Obstruct or block safety controls, for instance fuel shut-off valves, gas taps, electrical system circuit-breakers;
- Obstruct the access to the portable extinguishers stored in lockers;
- Leave the boat unsupervised when cooking equipment and/or heating equipment is in use;
- Modify any of the boat's installations (especially the electrical, fuel or gas installations) or allow unqualified personnel to proceed with modifying these installations;
- Fill the fuel tanks or replace gas bottles while the engine is running or while cooking or heating equipment is in use;
- Use gas lamps in the boat;
- Smoke when handling fuel or gas;
- Obstruct the ventilation of the compartments or spaces, in particular those containing the engines, tanks or batteries.

Maintenance of the fire-fighting equipment

The owner/person operating the boat must:

- Have fire-fighting equipment checked as frequently as recommended by the manufacturer;
- Replace portable fire extinguishers, if outdated or discharged, with extinguishing apparatus of equal capacity;
- Have fixed fire extinguishing systems filled or replaced if they have been discharged or have expired.

Responsibility of the owner/boat operator

It is the responsibility of the owner/boat operator to:

- Ensure that the fire-fighting equipment (portable extinguishers, bucket and fire blanket) is readily accessible when there are people onboard;
- Ensure that the engine compartment fire extinguisher discharge port is readily accessible;
- Show the members of the crew:
 - The location and use of the fire-fighting equipment;
 - Location of discharge ports in engine compartment;
 - The location of evacuation routes and fire exits.
- Equip the vessel with one or more portable extinguishers whose heads are compatible with the diameter of the opening in vertical use.
- Unlock all deck hatches and fire escape openings when the vessel is occupied.

6 Information relating to fire risks and risks of explosion

Notes for the attention of the boat user

General points

- Check that the bilges are clean and frequently check that there are no fuel/gas vapours or fuel leaks.
- When replacing components of the fire-fighting equipment, use only appropriate components of the same code designation or with the equivalent technical capacity and fire resistance.
- Do not install free-hanging curtains or other fabrics near or above the cooking appliances or other equipment with a naked flame.
- Do not store combustible materials in the engine compartment. If non-combustible materials are stored in the engine compartment they must be secured so there is no danger of them falling on the engine shaft and they do not obstruct access to and from the compartment.
- The fire exits other than the door or main companionway are identified by the following symbol:



6.3.2 Smoke alarm



- The smoke detector is not a gas detector.
- The smoke detector is sensitive to dust and steam: avoid exposing the detector to these environments to prevent the triggering of unwanted alarms.
- Never use a rechargeable battery.
- Never trigger the alarm deliberately to check the operation of the detector.
- A dirty detector may activate incorrectly or late. It is important to clean each detector for the safety of people onboard.
- Never cover the smoke detector (with paint or ceiling panels, for example) and in general do not alter the appearance of the detector.
- Do not fit the smoke detector in a different location from the one specified for the purpose.

General points

- The smoke detector is a photoelectric detector which operates with a 9 V alkaline battery (battery included).
- The detector emits a flashing red light every minute in normal operation.
- The smoke detector is designed to operate between 0° and + 50°C.
- Whenever any smoke is detected, the 85 dB alarm is triggered.
- The smoke detector is not designed to stop a fire from breaking out. It serves to warn the people onboard of the danger.
- The detector is a device which warns people onboard in the event of smoke.
Actions to take if the alarm is triggered: The skipper should check the source of the smoke and attempt to extinguish the fire with the resources at his/her disposal. If the fire spreads, the skipper must immediately evacuate the entire crew.
- The service life of the smoke detector is approximately 10 years. Beyond 10 years, replace the smoke detector with an identical device.

Commissioning of the boat

When the boat is first delivered, ensure that the battery protector is removed.

6 Information relating to fire risks and risks of explosion

Maintenance

The smoke detector must be routinely tested when boarding or weekly if staying onboard for a prolonged period of time. If the device is faulty, change the battery. If the device is still faulty after changing the battery, replace the detector with the same model (consult your dealer).

Changing the battery

- The smoke detector will emit an audible beep every minute for a month when the battery level is too low to operate.
- In that case, change the battery as described below:
 - Remove the detector from its mounting (turn anti-clockwise), remove the empty battery and replace it with the same model of alkaline 9 V battery, ensuring a battery life of 5 years.
 - Connect the battery as shown in its housing (ensure the battery polarity +/- is correct).
 - Return the detector to its mounting (turn clockwise) until it fits perfectly.

Annual routine maintenance

- Remove the detector from its housing (turn anti-clockwise) and clean the vents on the side of the device with a vacuum cleaner or a soft brush.
- Use a damp cloth to clean the exterior of the detector cover.

Winterisation

- To ensure optimal operation, it is recommended that the smoke detector is stored for winter in a fresh and well-ventilated place, having removed the battery.
- Once one person is onboard, it is important to replace the smoke detector in the position specified for the purpose, having first reinstalled the battery.

6.4 Emergency exits in case of fire



1. Companionway
2. Forward cabin deck hatch
3. Sliding hatch
4. Flying bridge ladder

Electrical system

7.1 General information about the electrical system

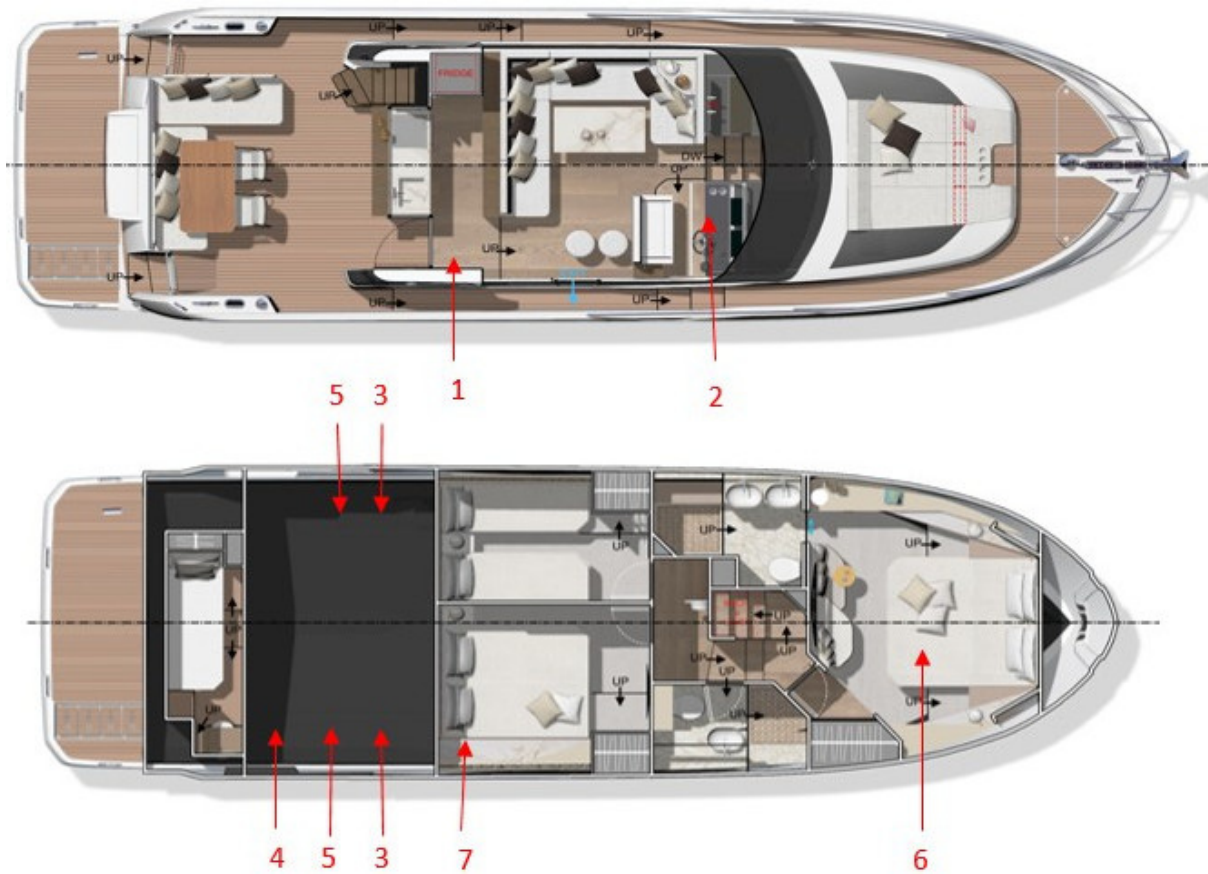


- A risk of fire or explosion may result from careless use of the DC and AC systems.
- A risk of electrocution may result from careless use of the AC system.



- Never:
 - work on a live electrical system;
 - modify the electrical system of the vessel or the relevant diagrams: It is important that installation, maintenance and any modifications be carried out by a qualified marine electrician;
 - change or modify the strength of the safety devices protecting against power surges;
 - Install or replace the electrical devices or equipments with components that exceed the rated current of the circuit;
 - leave the boat unsupervised when the electrical system is live, apart from when the automatic bilge pump and the boat's fire protection and security system are in use (where installed).
- Electrical connections change over time. It is necessary to have the boat's electrics checked regularly and at least once every two years by a professional. Special attention should be paid to the tightness of the electrical connections.

7 Electrical system



1. Touch screen & Battery switch control
2. Switches (24V)
3. Batteries & Power unit (Battery switches, Fuses, Power distributor)
4. Circuit breakers (24V) & Battery chargers
5. Service batteries
6. Bow thruster battery
7. Circuit breakers (24V)

7.2 DC installation (24V)

7.2.1 Battery use and distribution




- All work carried out on a battery must only be carried out by someone qualified to do so. Whenever working on a battery, wear safety goggles and protective clothing.
- Never smoke or produce a spark near a battery: this may cause an explosion.
- If any acid accidentally splashes on your skin or in your eyes, rinse it off immediately and thoroughly with fresh water. See a doctor immediately.
- Never touch the battery terminals: you may suffer an electric shock.
- It is essential that you disconnect the battery charger before disconnecting the battery terminals for maintenance (either by disconnecting the AC shore power socket or by cutting the AC circuit breaker of the battery charger).
- Refer to the manufacturer's instructions for use and maintenance.

General points

- It is essential that a professional engineer connects the batteries when the boat is first launched.
- Always check the condition of the batteries and charge system before putting to sea.
- The battery banks are isolated from one another by a charge divider.

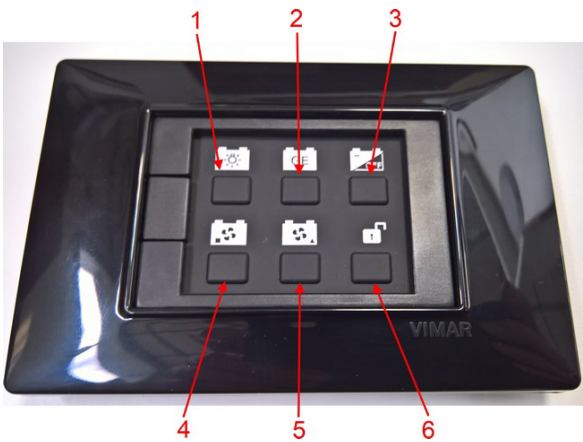
7.2.2 Battery switches



- Turn off all battery isolators before leaving the vessel: **failure to do so may result in critical damage to the entire battery bank.**
- Avoid touching the battery isolators when they are live.
- Never switch off the battery isolators when the boat's engine is running (risk of serious damage to the charging circuit).

Control panel for electrically controlled battery breakers

Location: Wheelhouse entrance



1. Service battery positive switch control
2. generator option
3. Common battery negative isolator control
4. Starboard engine battery positive isolator control
5. Port engine battery positive isolator control
6. Lock switch

7.2.3 Power distributor

- The electronic charge dividers isolate the battery banks from each other and allow the charge to be directed automatically to the battery with the lowest charge. They provide the advantage of preventing a drop in voltage.
- The charge divider is electronic. It is designed to distribute the charging current with a low voltage drop between the battery banks (engine and service batteries). It prevents the current from circulating from one battery to another. When the voltage of the charger or alternator is available, the charge divider indicator lights up green.
- The load distributor is integrated in the power unit.

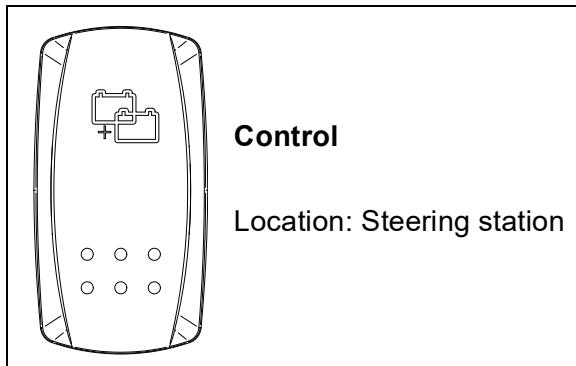
7.2.4 Connection of the battery bank

Definition

The coupling switch is a momentary relay.

Operation

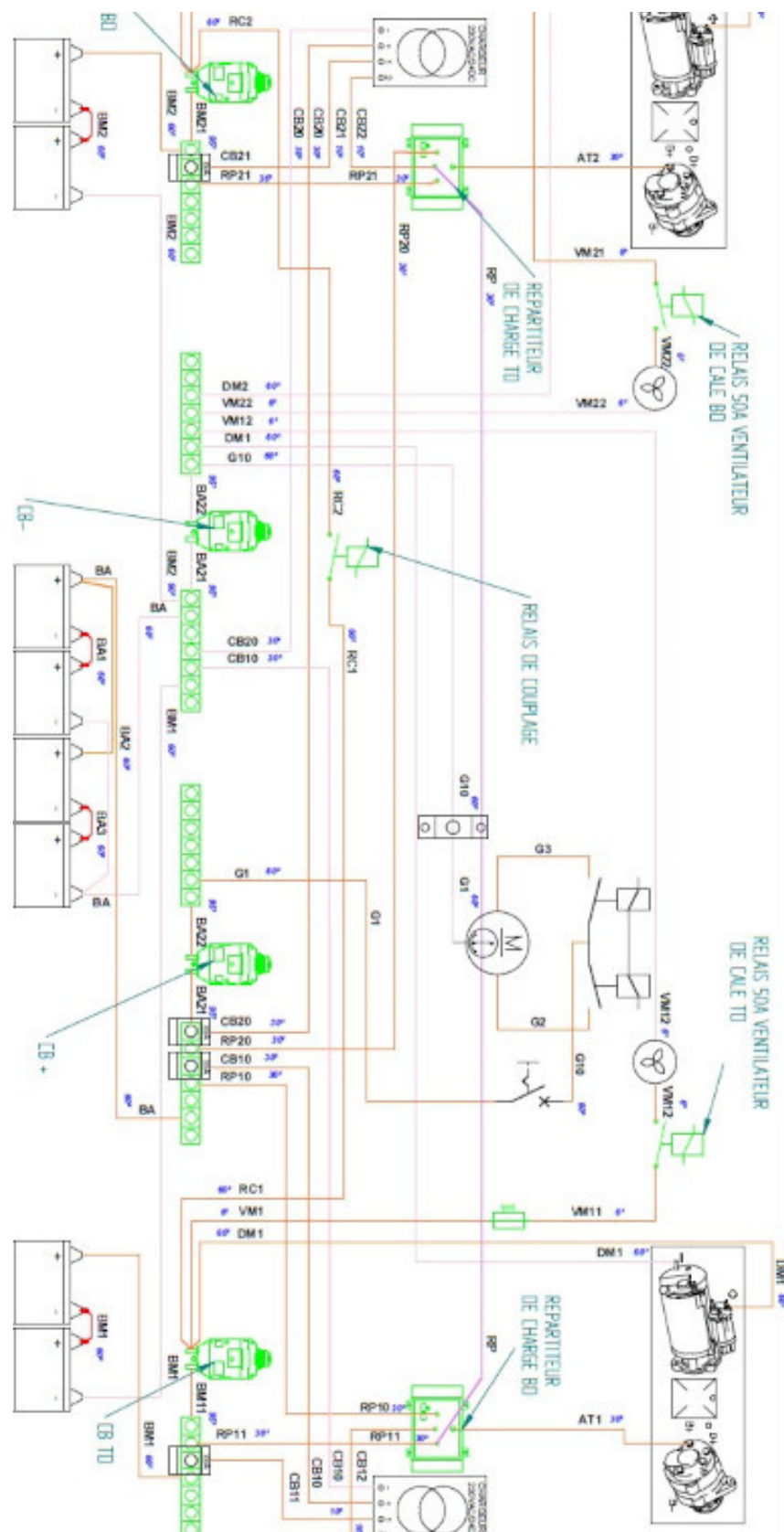
Hold the switch down until the motors start up, then release.



7.2.5 Battery charger

- The battery charger runs on AC power.
- A breaker protects the electrical circuit.
- The battery charger charges all of the batteries onboard while keeping the service battery bank isolated from the engine's battery bank.

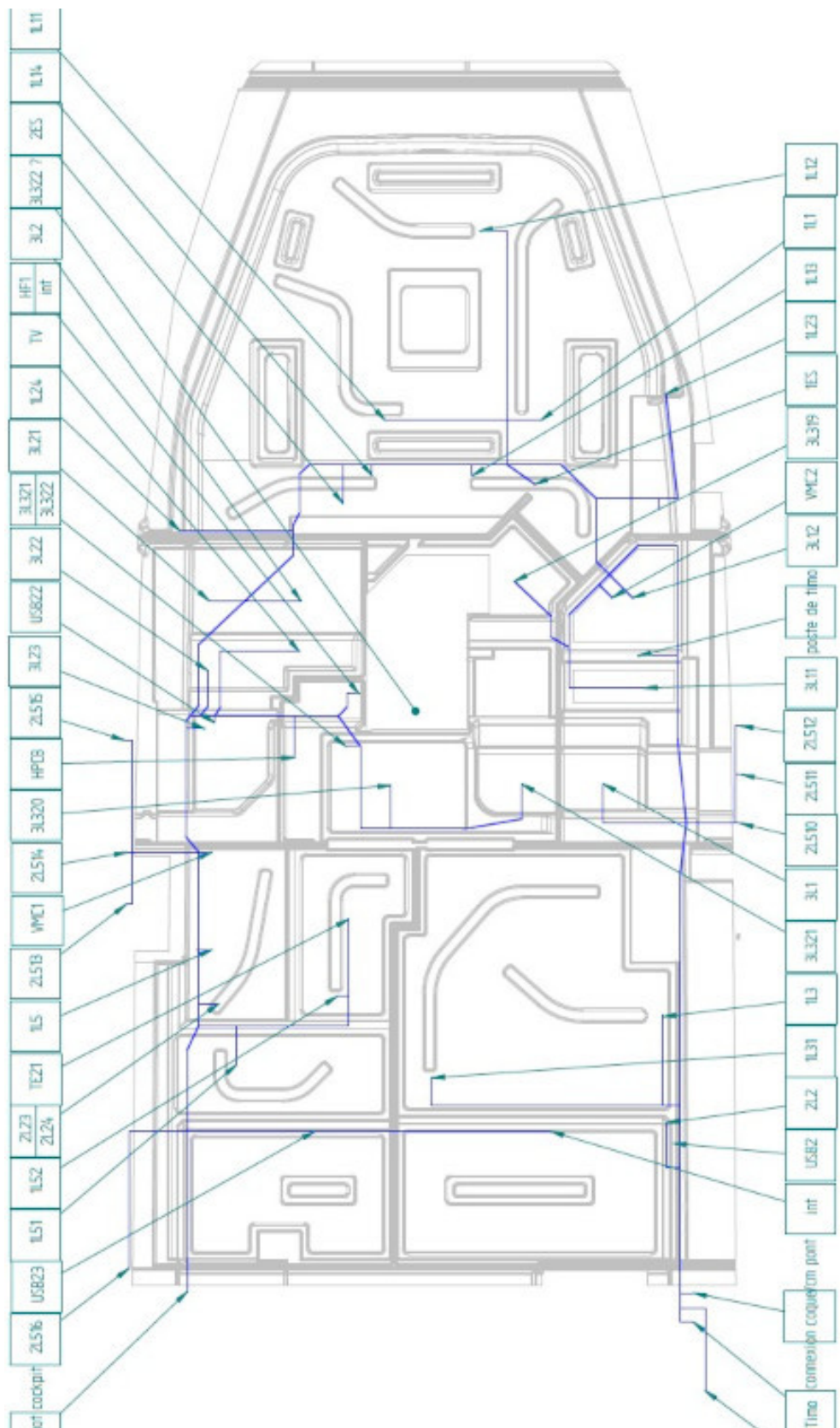
7.2.6 Diagram of layout – DC electrical circuit



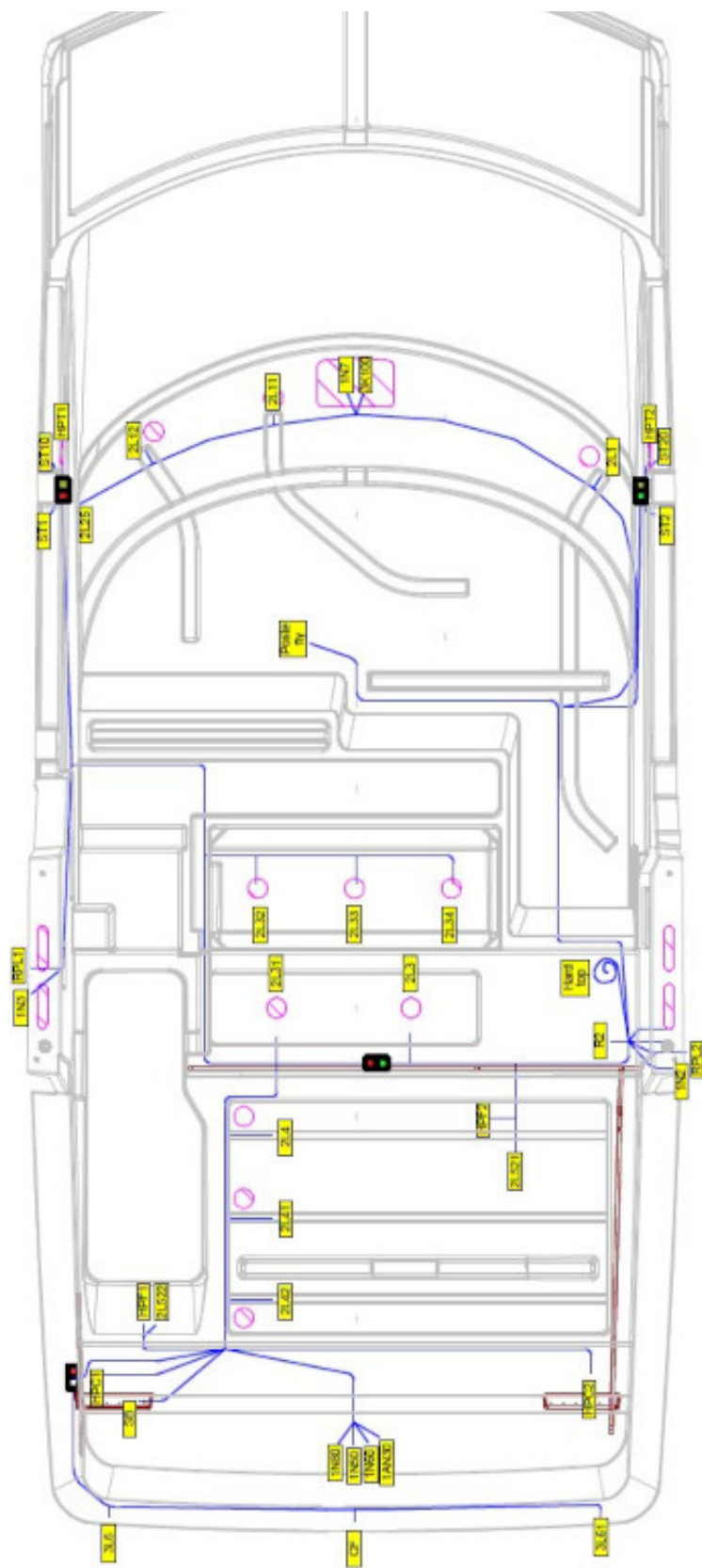
7.2.7 Layout of hull wiring looms - DC circuit



7.2.8 Layout of deck wiring looms - DC circuit

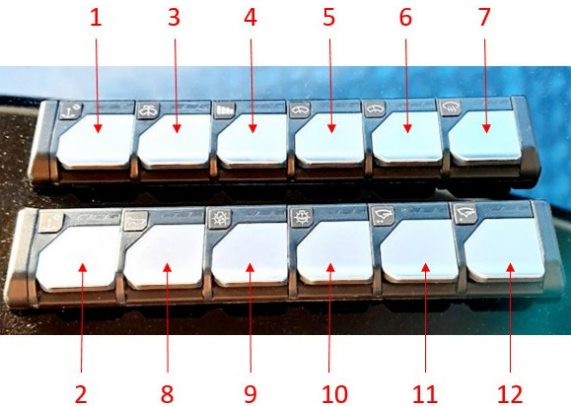


7.2.9 Diagram of flying bridge inner moulding wiring looms - DC circuit

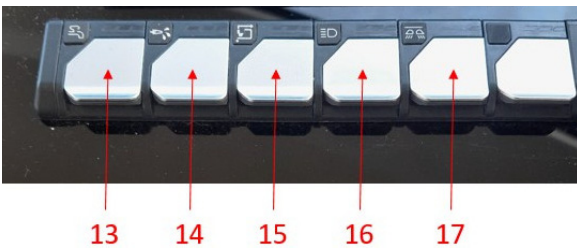


7.2.10 Steering station switches

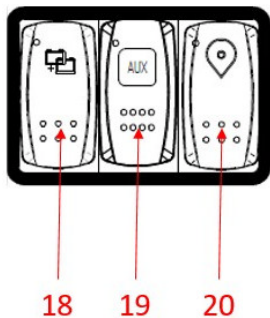
Location: Wheelhouse



- 1. "Raise" control - Windlass
- 2. "Lower" control - Windlass
- 3. Windscreen washer
- 4. Setting the windscreen wiper speed
- 5. Port windscreen wiper
- 6. Starboard windscreen wiper
- 7. Demister
- 8. Horn
- 9. Navigation light
- 10. 360° light
- 11. Electric bilge pump 1
- 12. Electric bilge pump 2

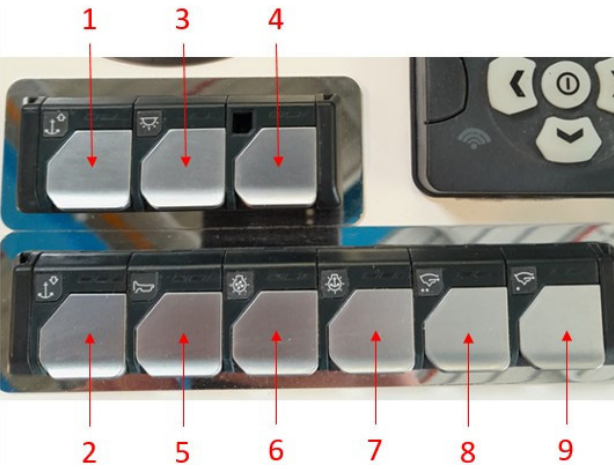


- 13. Water unit
- 14. Deck wash
- 15. WC drainage
- 16. Aft deck searchlight
- 17. Underwater light



- 18. Battery coupling
- 19. Gyroscopic stabiliser
- 20. Electronics

Location: Fly



- 1. "Raise" control - Windlass
- 2. "Lower" control - Windlass
- 3. Cockpit lighting
- 4. Hard-Top lighting
- 5. Horn
- 6. Navigation light
- 7. 360° light
- 8. Electric bilge pump 1
- 9. Electric bilge pump 2

7.2.11 Circuit breakers

Location: Engine compartment



1. Passerelle
2. Windlass
3. Tender lift
4. Port capstan
5. Inverter

7.2.12 Fuses



When replacing fuses/circuit-breakers, always ensure replacements are of the correct capacity (see the colour-codes)



A fuse protects an electrical circuit from excess current. If it blows, you must replace it with another fuse of the same rating.

7.3 AC system (110V or 220V)

Guidelines for using the AC electrical system correctly



- If a DC/AC converter is fitted on board: it is essential to switch off the DC and AC circuits before working on the cabin AC sockets.
- Never let the end of the boat/shore supply cable hang in the water: This may result in an electric field that could injure or kill nearby swimmers.
- Incorrect use of alternating current systems will result in a danger of electrocution.
- Do not work on a live AC system.



To reduce the risk of electric shock and fire:

- Switch off the switch on the boat's shore cable before connecting or disconnecting the power cable from the shore cable.
- Connect the shore cable to the boat's power supply input connector before connecting it to the shore socket.
- If the reverse polarity indicator is activated, immediately disconnect the switch of the shore to boat cable (if fitted).
- If the reverse polarity indicator is activated immediately disconnect the cable.
- First disconnect the shore line on the quay.
- Ensure the protective cover of the power supply input of the shore to boat cable is properly closed.
- Do not alter the connections of the shore power supply cable: only use compatible plugs and sockets.

Advice / Recommendation

Every month, you are advised to test the circuit breaker or residual current differential switch, recognisable by its "test" button.

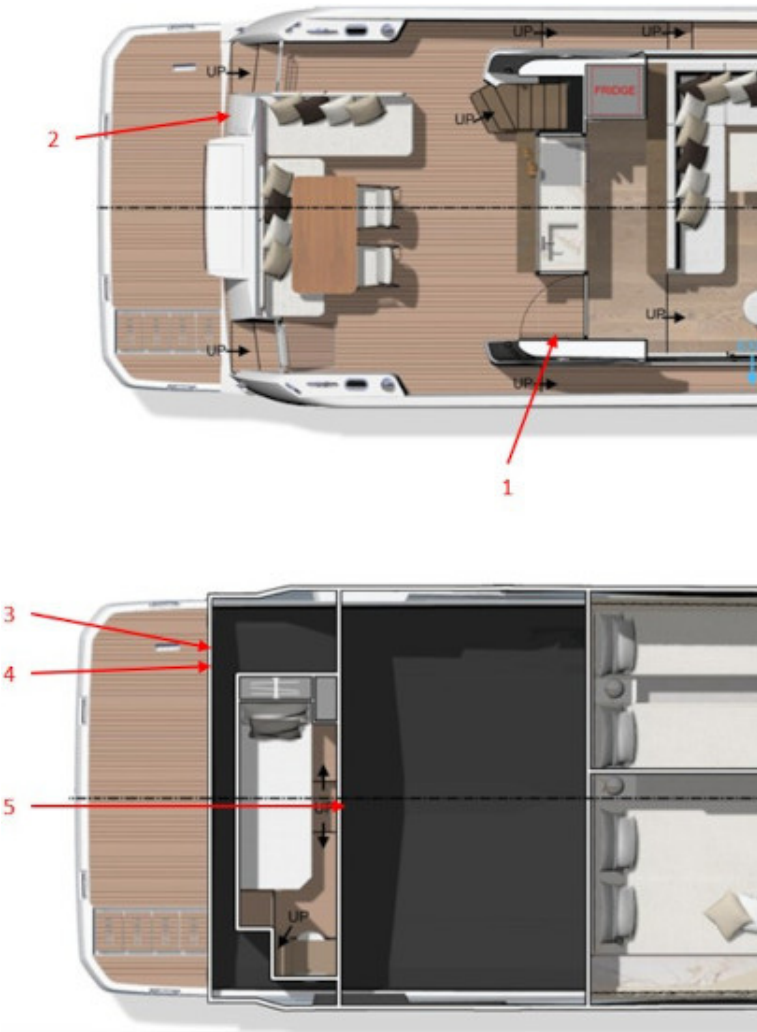
- Do not modify the vessel's electrical installations or the relevant diagrams. Installation, maintenance and modifications must be carried out by an electrician qualified in marine electricity. Have all electrical installations checked (tightening and connections) every year.
- Disconnect the boat's shore power when the system is not in use.
- Connect the relay boxes or metal casings of the installed electrical equipment to the boat's protective conductor (green or green with yellow stripe).
- Use double-insulated or earthed appliances.
- If the reverse polarity indicator is activated, do not use the electrical installation. Rectify the polarity fault before using the vessel's electrical installation (this applies only to polarised circuits with a polarity indicator).

7.3.1 AC shore socket



If the power cable falls into the water, it is recommended that the cable is replaced to prevent any risk of fire.

Location of components



- 1. Touch screen
- 2. AC shore socket
- 3. DC/AC converter
- 4. AC breakers (Shore power socket)
- 5. AC Source selector, AC breakers

7.3.2 AC source selectors

- The shore-generator switch is the actuator for:
 - switching between the different AC sources available on the boat. These include the dock socket(s) and the generator.
 - measuring the voltage, frequency and current of the power sources connected to it.
 - generator start (selector no°1 "onboard") or air conditioning (selector no°2 "air conditioning").
 - an isolated measurement (galvanic) of the generator battery.
- In the event of system failure, the switch can be operated manually using the handle on the device. Engage the handle, then switch to the right or left of the device to select the desired AC source.
- Maintaining switching positions does not require power consumption.

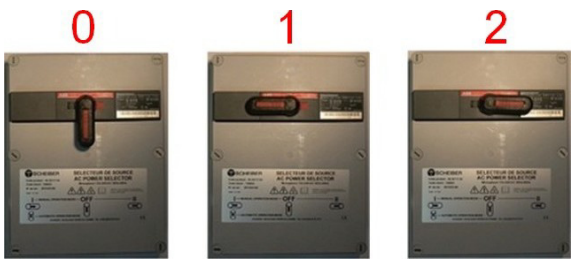
Source selectors

Location: Starboard aft cabin



- 1. Source selector "onboard": fitted if the boat features a generator.
- 2. Source selector "Air conditioning": fitted if the boat is equipped with a generator + air conditioning.

Handle



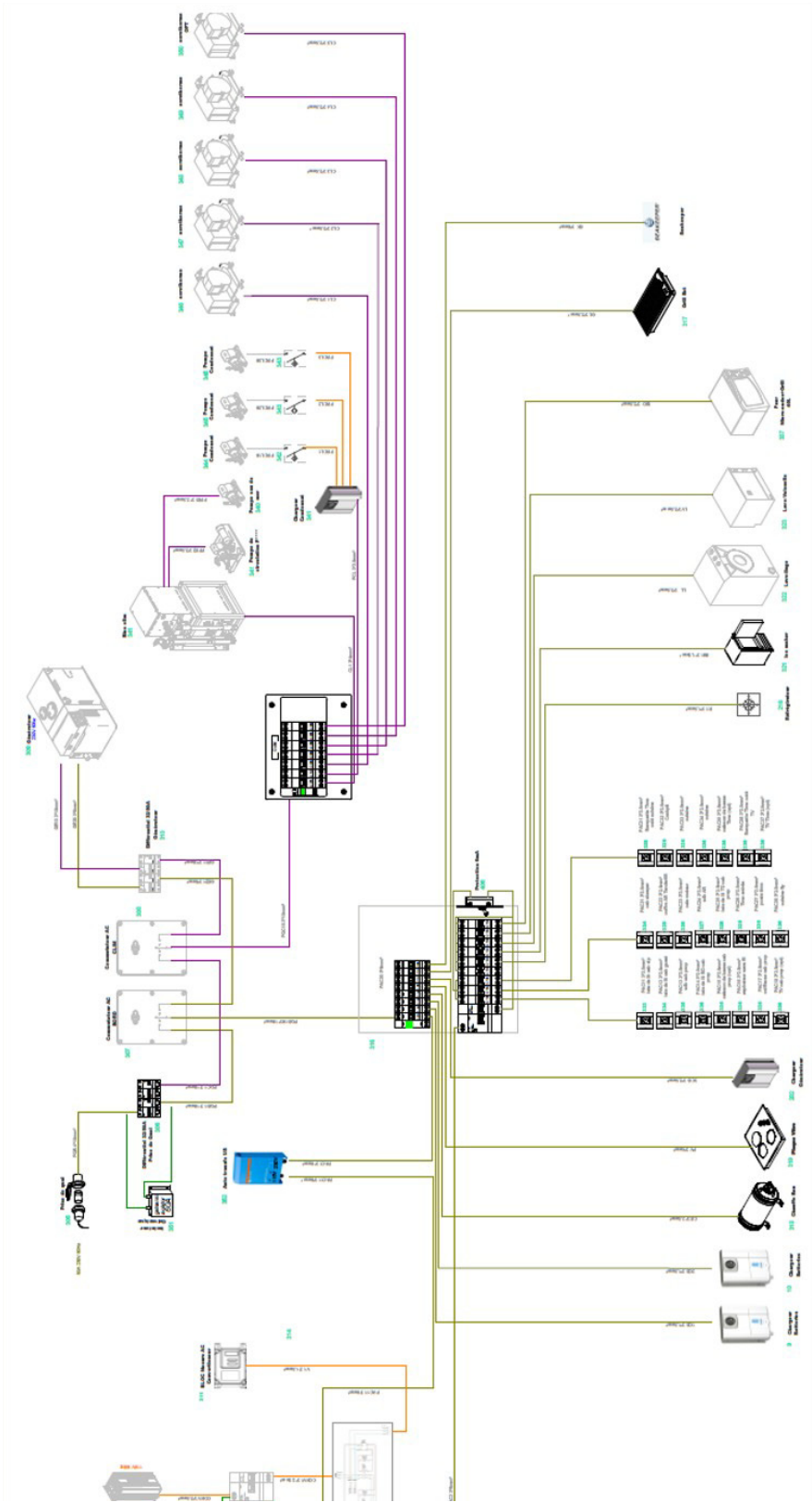
- 0. No selection
- 1. AC supply via generator
- 2. AC supply via shore power

Manual use

7 Electrical system

US Version (110V / 60Hz)

This functions on the principle of isolating the earth of the boat from that of the shore using a galvanic isolator. This assembly protects the motors from electrolysis in the event of faulty insulation between the negative side of the battery and the boat's earth.



7.3.4 DC/AC converter



Never:

- connect the inverter AC lead to an AC terminal or to the onboard generator.
- disconnect the wiring from the inverter when in use.
- open the inverter.

Description

- The inverter converts the DC voltage of the service battery bank to AC voltage. The circuit between the inverter and the batteries is protected by a fuse or a circuit-breaker.
- The inverter is earthed by an earthing plate located under the hull (see Chapter: EARTHING PLATES).
- The voltage measurement delivered at the converter output is visible on the touch screen.

Operation

- Power supply for the 220V AC electric sockets in the cabins:
 - Once there is sufficient nominal voltage coming from the AC switch panel, AC power is supplied by the onshore socket or by the generator.
 - If there is insufficient nominal voltage coming from the AC switch panel, the AC power supply automatically switches over to the inverter. In this way, the power for the 220V sockets in the cabins can be supplied by the inverter, itself supplied by the service battery bank. Be careful to disconnect the inverter circuit to prevent the AC power supply automatically switching over and to prevent accidental discharge of the service battery bank. This can be done by:
 - setting the inverter's circuit-breaker to the OFF position; or,
 - setting the switch located on the inverter to the OFF position.
- Simply cutting the AC power supply at the switch panel does not cut the AC power supply to the cabins: it is also necessary to disconnect the DC supply.

Operation

- The inverter is fully automatic.
- A remote control is located near the boat's switch panel. To start the converter put the switch on the inverter in the "REMOTE" position then put the switch located on the remote control in the "ON" position.
- The DC/AC converter can also be controlled from Ship Control.
- If the switch on the inverter is in the "OFF" position, you cannot use the remote control to start it.
- The DC/AC converter operates by default when shore power is not supplied. It is controlled by a relay connected to the shore power supply. This converter powers the indoor sockets and some onboard appliances.
- When shore power is not connected, the relay automatically connects the inverter to a part of the onboard AC circuit.
- When the shore power socket is plugged in and powered, the relay automatically disconnects the inverter.

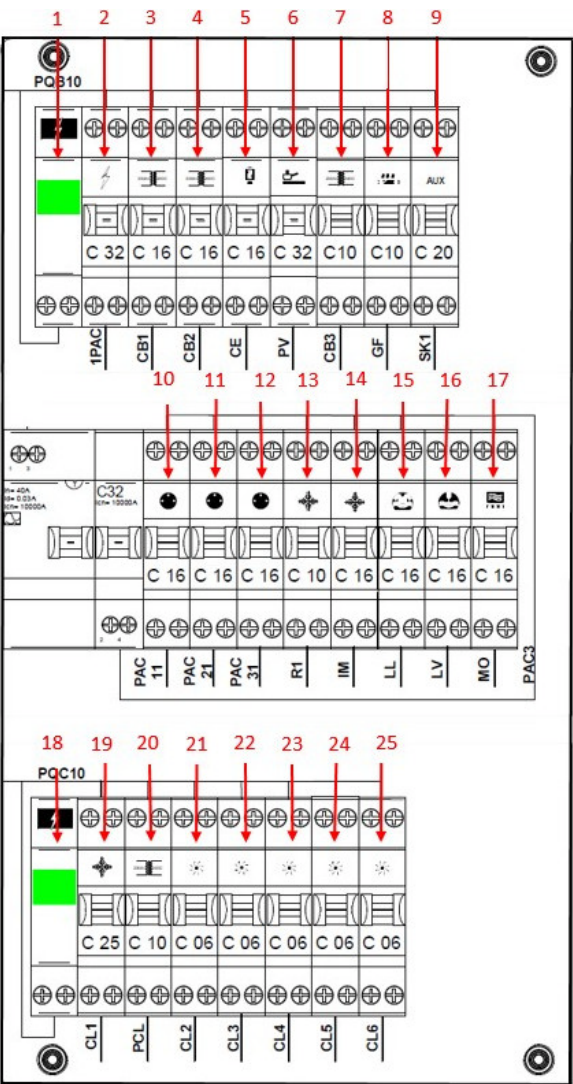
7 Electrical system

Maintenance

- Check at least once a year that the inverter cables and connections are securely tightened.
- Clean the inverter by removing any accumulated dust to ensure good ventilation.

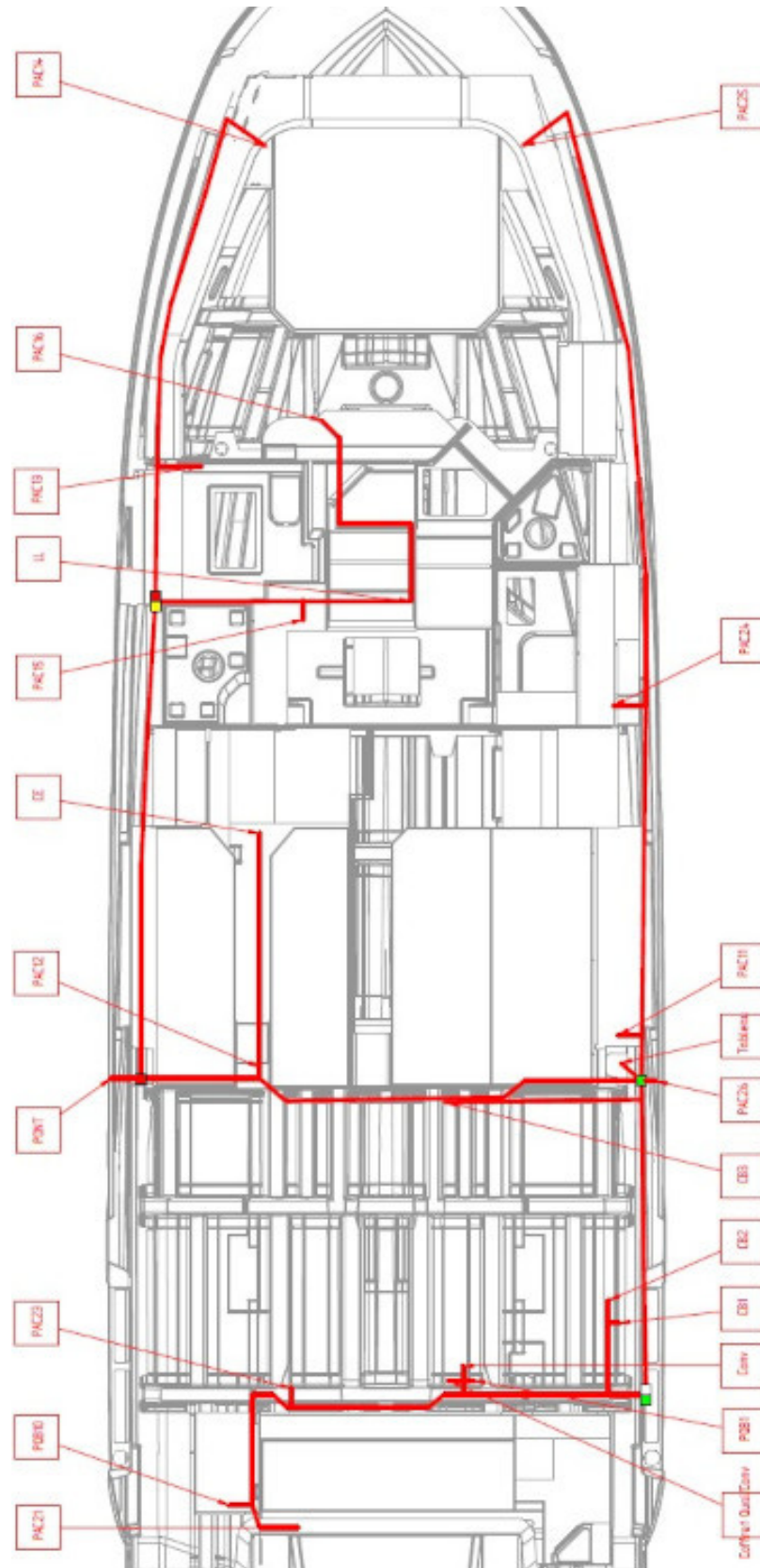
7.3.5 AC breakers

Location: Engine compartment

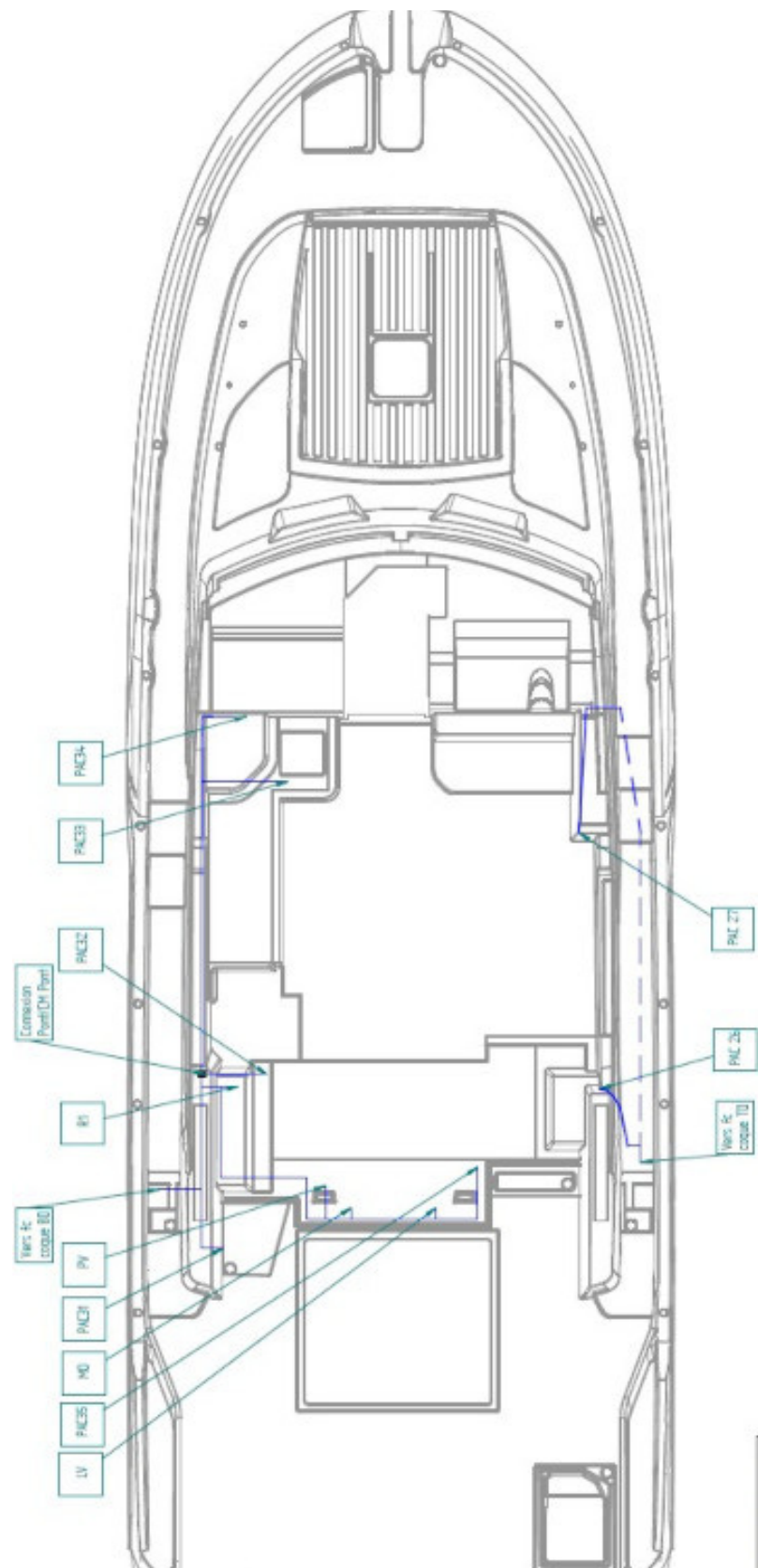


1. Mains power
2. AC supply
3. Battery charger 1
4. Battery charger 2
5. Water heater
6. Hot plate
7. Generator battery charger
8. External grill
9. Gyroscopic stabiliser
10. Interior AC socket
11. Interior AC socket
12. Interior AC socket
13. Fridge (Galley)
14. Ice maker
15. Washer
16. Dishwasher
17. Microwave oven
18. General air conditioning supply
19. Refrigeration compressor
20. Air conditioning pump inverter (Condensate)
21. Heating unit (Aft cabins)
22. Heating unit (Forward cabin)
23. Heating unit (Port side wheelhouse)
24. Heating unit (Starboard wheelhouse)
25. Heating unit (Skipper's cabin)

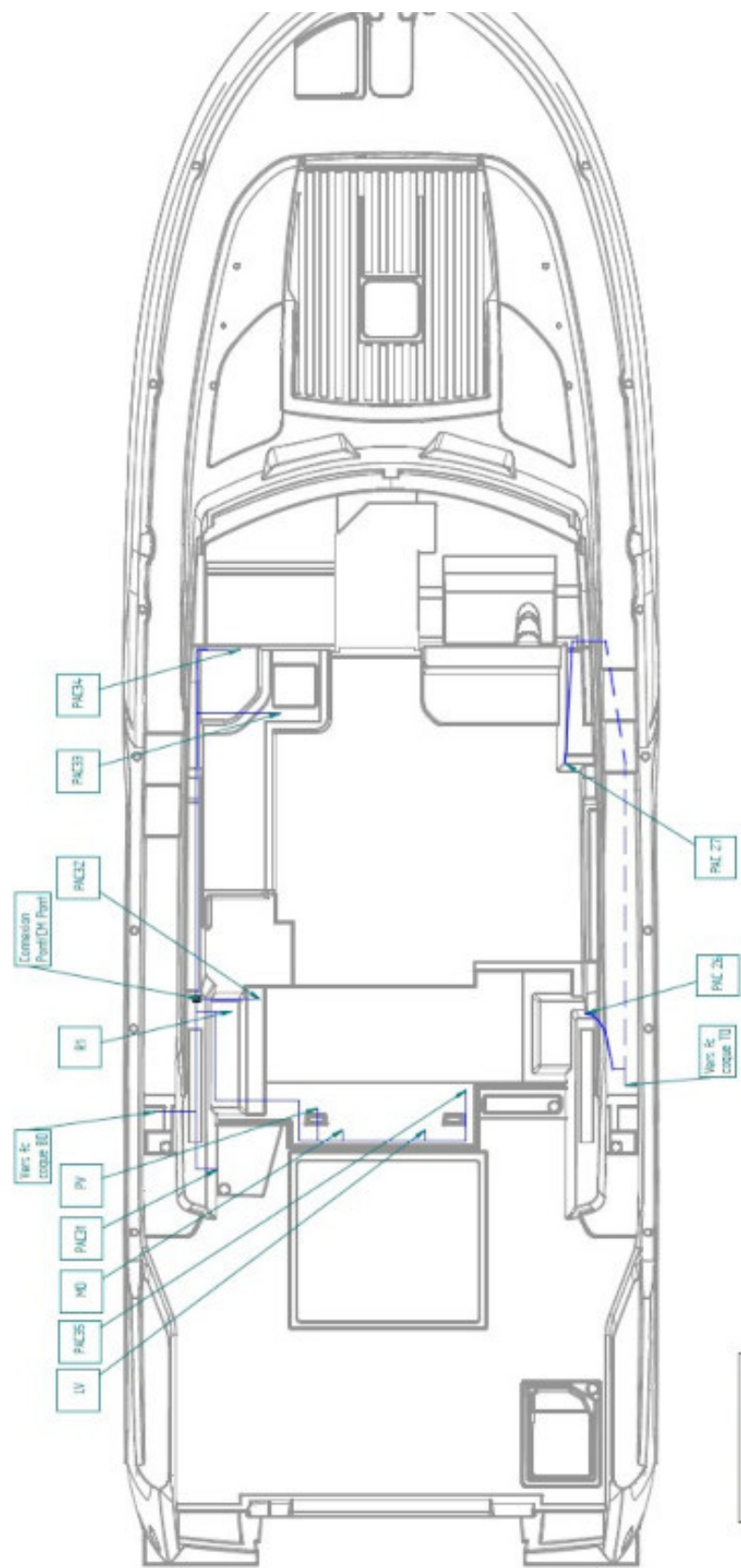
7.3.6 Layout of hull wiring looms - AC circuit



7.3.7 Layout of deck wiring looms - AC circuit



7.3.8 Diagram of flying bridge wiring looms - AC circuit



7.3.9 Transformer 220V / 115V (US Version)

- The transformer allows the current to be transformed from 220V to 115V to supply the sockets for the electrical domestic equipment.
- The other onboard AC equipment operates on 220V (Air conditioning, Battery chargers, Water heater).
- The transformer operates completely automatically.
- The transformer does not need any special maintenance.

7.4 Protection against electrolysis / Earthing plate

7.4.1 Anodes



- Never cover the anodes in antifoul.
- During the first few weeks that the boat is in the water, check the anodes and replace them if necessary: they erode very rapidly during this period.

General points

- The sacrificial anode protects the submerged elements of the boat against electrolysis.
- A sacrificial anode is a consumable part that protects submerged metal parts by its dissolution (oxidation). The anodes used are made of a metal that is more readily reductive than the metal they are protecting.
- On a new boat, all the underwater metallic components seek to reach the same electric potential, which leads to the rapid deterioration of the anodes during the first few weeks in the water.
- You can put several anodes on the hull.

Maintenance

- At least 2 times a year, check the corrosion on all of the anodes. Change the anode if necessary (Before it has lost 50% of its weight).
- Use the appropriate anodes for the cruising area: magnesium anodes for fresh water; zinc anodes for seawater.
- If the motor mountings are raised, the anodes are out of the water: in this case the anodes can no longer protect the sterndrive: take note of the skipper's recommendations.
- When the boat is kept in a dry dock, a light deposit of dust will settle on the anodes: clean the anodes before relaunching.

Replacing the anodes

- The anodes are fastened with screws and nuts. First, remove the screws and nuts that hold the anode, then clean the contact surface. Press the new anode to obtain a good electrical contact.
- Change all the anodes every year.

7.4.2 Earthing plates



Never antifoul over the earthing plates.

- An earthing plate is a shot-peened plate mounted on the hull to recreate an earth neutral point on the electrical circuit of the equipment supplying AC power (AC/DC convertor). The earthing plate earths this equipment.
- The earthing plate is not an anode: it must not be allowed to deteriorate.
- If the earthing plate deteriorates, consult a professional immediately to determine the cause. Because it is mounted across the hull below the waterline, deterioration of the earthing plate puts the boat at risk of sinking.

Water systems

8.1 General points



- Regularly check water-tightness of joints in the water system installations. Check that screws and bolts are well tightened and replace them if they are worn or corroded.
- Disconnect the onshore shore water supply before leaving the boat (if fitted).
- If the boat is sailing in temperatures below freezing, antifreeze can be used in the water systems: use a non-toxic antifreeze for potable water.
- Never use automobile antifreeze: risk of poisoning.

- It is essential to rinse the entire on-board water system the first time the boat is used (the water system is protected in the factory by a non-toxic antifreeze).
- The water tanks may have had an anti-algae treatment using a copper sulphate based product. It is advisable to renew the treatment according to the area in which the boat is sailing.
- Drain all the water systems during winterisation (in particular the cockpit shower and water heater) to avoid damage from freezing.
- Clean/change the filters regularly.
- The onboard water from the boat's tank(s).
- Particular care must be taken when filling the tank(s) to prevent contamination of the entire plumbing circuit with water which is not fit for drinking or food use.

8.2 Information on flooding risks and boat stability

8.2.1 Hull openings

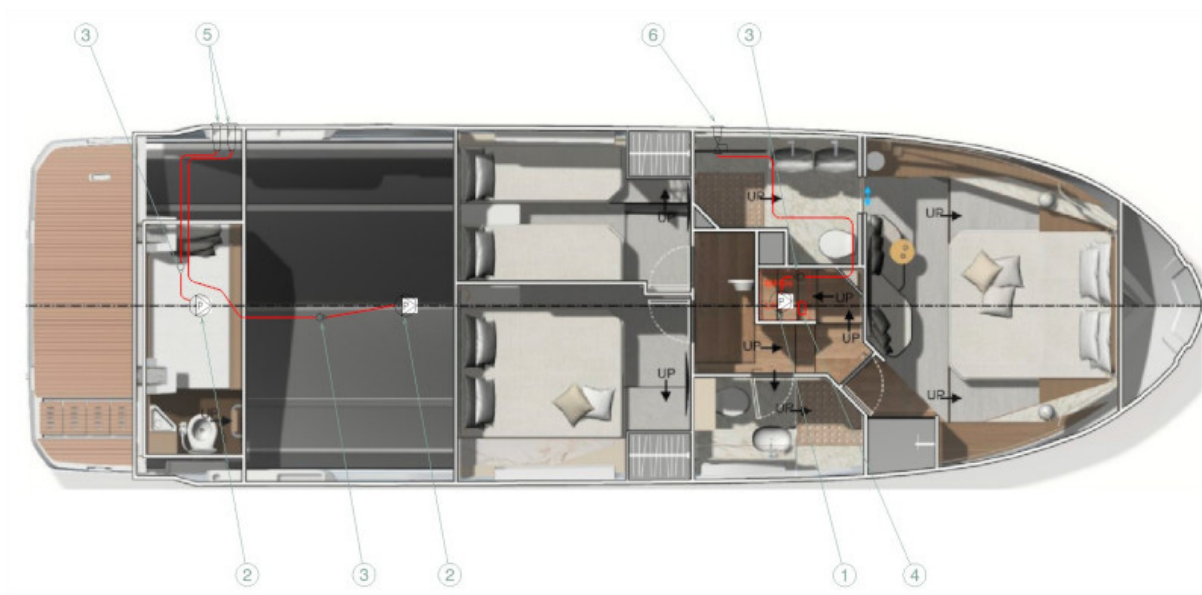
Valves, thru-hull inlets and other brass or bronze fittings have a lifespan of around 5 years. All valves, thru-hull inlets and other brass or bronze accessories must be checked by a professional every year and replaced as necessary.

8.2.2 Drainage system

General points

- It is the responsibility of the skipper to have at least one bailer or bailing bucket on board, lashed down to prevent it being accidentally lost.
- The inner moulding of the hull is equipped with channels: these are the draingage channels. The drainage channels allow the water to drain down to the lowest point in the boat, where it can be discharged. It is important to allow the water to flow freely down to this lowest point of the boat, which means.
- regularly cleaning the lowest point of the boat and the drainage channels.

Diagram of Layout – Bilge pumps



1. Main electric bilge pump (Rate: 106L/minute)
2. Secondary electric bilge pump (Rate: 69L/minute)
3. Non-return valve
4. Activator
5. Kitchen sink thru-hull drainage
6. Drainage valve

Main drainage system

Electric bilge pumps

The electric bilge pump must only be used to discharge stagnant water at the bottom of the bilge. It must not be used to pump out any oil-based products (petrol, oil) or inflammable liquids.

Control

Location: Steering station



Operation:

- I. Turn on the battery switches.
- II. Switch on the bilge pump.

Remark

If the boat is equipped with an automatic bilge pump, the switch has an always-on position.

Bilge pump maintenance

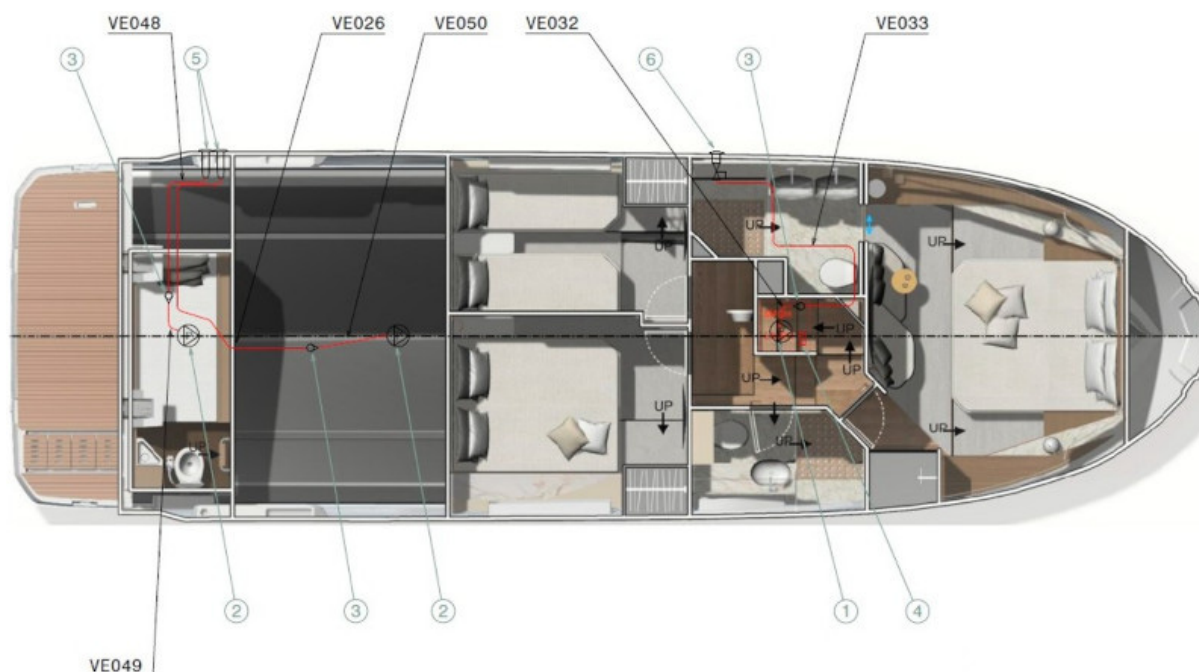


- The total capacity of the bilge pump system is not designed to drain the boat in case of damage.
- Keep the water level in the bilges to a minimum.
- Never store anything at the very bottom of the boat: Allow bilge water to flow freely down to the lowest point of the boat.
- The bilge pump system is not designed to cope with a breach of the hull.

Advice / Safety precautions

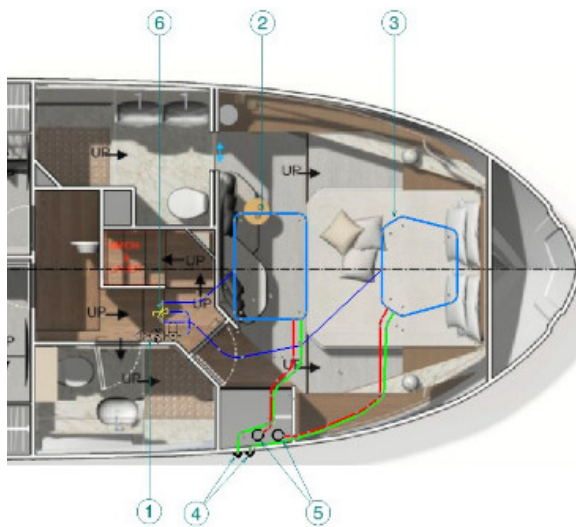
- Check that each bilge pump is working at regular intervals.
- Clear the points and suction filters of the bilge pump of any debris that could clog them.
- Drains must be kept clean and unobstructed.
- If valves are installed in the watertight partitions which isolate the forward peaks, these must be kept closed under normal conditions and only opened to drain water into the main bilges.

Diagram of Layout – Drying out the bilge



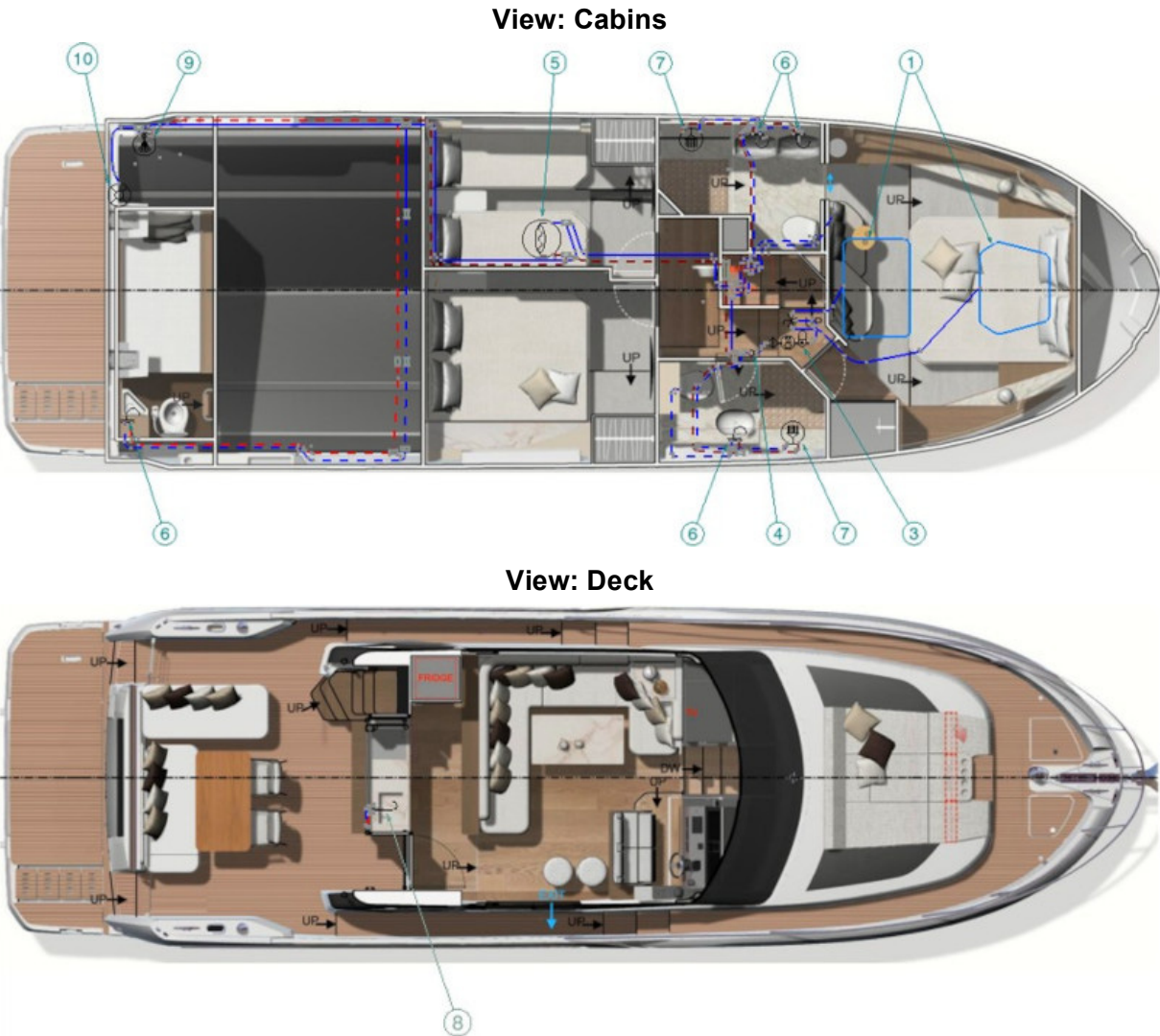
1. Main bilge pump
2. Secondary bilge pump
3. Non-return valve
4. Activator
5. Kitchen sink thru-hull drainage
6. Drainage valve

8.3 Fresh water filling system

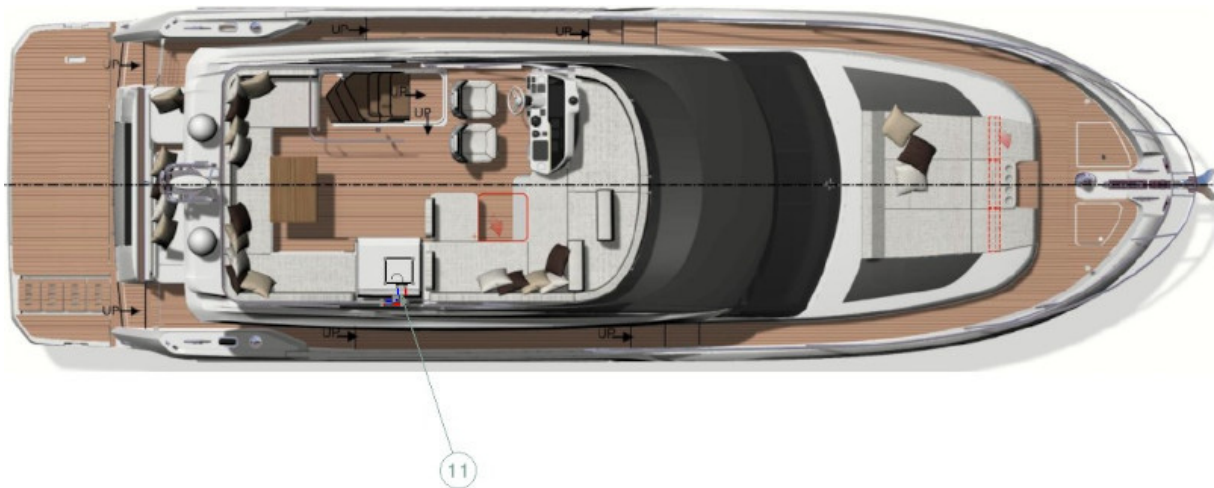


1. Water unit
2. Water tank
3. Water tank
4. Vent
5. Filler cap
6. 3 way selector valve

8.4 Fresh water distribution system



View: Flying bridge



1. Fresh water tank
2. 3 way valve
3. Water unit
4. Non-return valve
5. Water heater
6. Washbasin mixer tap
7. Mixer shower
8. Sink mixer tap
9. Cockpit shower

Options

10. Fresh water shore supply
11. Sink mixer tap (Fly)

8.5 Water unit

General points

- It supplies all the boat's plumbed-in equipment with fresh water. It is fitted with a pressure switch that activates the flow when the pressure in the water system falls.
- The water unit is switched on at the electrical panel.
- Make sure that the water unit never runs dry.

Control

- When the water unit is powered by the DC circuit, the switch lights up in red.
- When the ON indicator turns green, the water unit is operating.

8.6 Blackwater system (Toilet)

- Regularly check the valves and thru-hull seacocks for proper operation and watertightness.
- Regularly check the tightness of the flexible pipe clamps and connections.

Diagram of blackwater system



1. Holding tank
2. Vent
3. Suction fitting
4. Electric toilet / Manual toilet
5. Switch
6. Non-return valve
7. Macerator pump
8. Drainage valve
9. Sea water suction valve
10. Anti-odour filter

Your boat is fitted with a blackwater tank

To minimise odours from this tank, we suggest following the use and maintenance guidelines below:

Holding tank

- A blackwater tank is used solely for the temporary collection of water from the toilets.
- The tank can be emptied in 2 ways:
 - By connection to a pumping system that empties the tank by suction. This system uses the "WASTE" deck connection.
 - Via the thru-hull fitting, which empties directly into the sea (provided that the laws of the country in which the vessel sails permit dumping into the sea).
- Only use water-soluble toilet paper to avoid blockages.

Remark

Sanitary towels and other items (paper handkerchiefs, dressings etc.) in the toilets and blackwater tank will result in blockages.

- Faecal matter causes the formation of unpleasant odours in the blackwater tanks, to which the use of salt water for flushing the toilets also contributes. Algae present in salt water also give off unpleasant odours.
- Completely empty the blackwater system before leaving the vessel unattended in temperatures below freezing.
- Ask for information about the laws in force in your country or your marina about discharging your waste waters into the sea.

Use of toilets

- Every time the toilets are used, flush afterwards with copious amounts of water in the bowl using the toilet pump (manual or electric).
- When you are leaving the boat for several days, flush with fresh water. You may wish to use the shower in the head for this purpose. Seawater allowed to stagnate in the bowl gives off bad odours.

Maintenance of blackwater tank

Advice / Recommendation

Respect local regulations regarding the emptying of blackwater tanks.

- Whenever possible empty the tank regularly, even before it is full.
- Every time the tank is emptied put in about 5 litres of fresh water and add an appropriate detergent additive (available from chandleries). A very simple method is to add soda salts, which clean and disinfect at the same time.
- Before winterising, flush the tank with copious amounts of fresh water filling it through the 'WASTE' deck connection. Leave at least 5 litres of fresh water mixed with a detergent additive.
- Disinfecting: Disinfect the tank once a year by filling it with a solution of Javel water (1 to 1000).

Using the drainage valve



Beware of any unintentional draining.

The direct-to-sea drainage valve can be sealed by means of the drilled hole on the handle.

Use of the marine heads

- I. Open the seawater intake valve.
- II. Fill the bowl by using the manual toilet pump.
- III. Using the toilet.
- IV. a. To empty the organic waste in the tank:
 - Make sure the draining valve is closed.
 - Empty the bowl using the manual toilet pump.
- IV. b. For direct discharge into the sea:
 - Open the thru-hull seacock.
 - Empty the bowl using the manual toilet pump.
- IV. c. To discharge through the deck:
 - Open the deck connection marked "WASTE".
 - Use the pump-out system where fitted at a port.

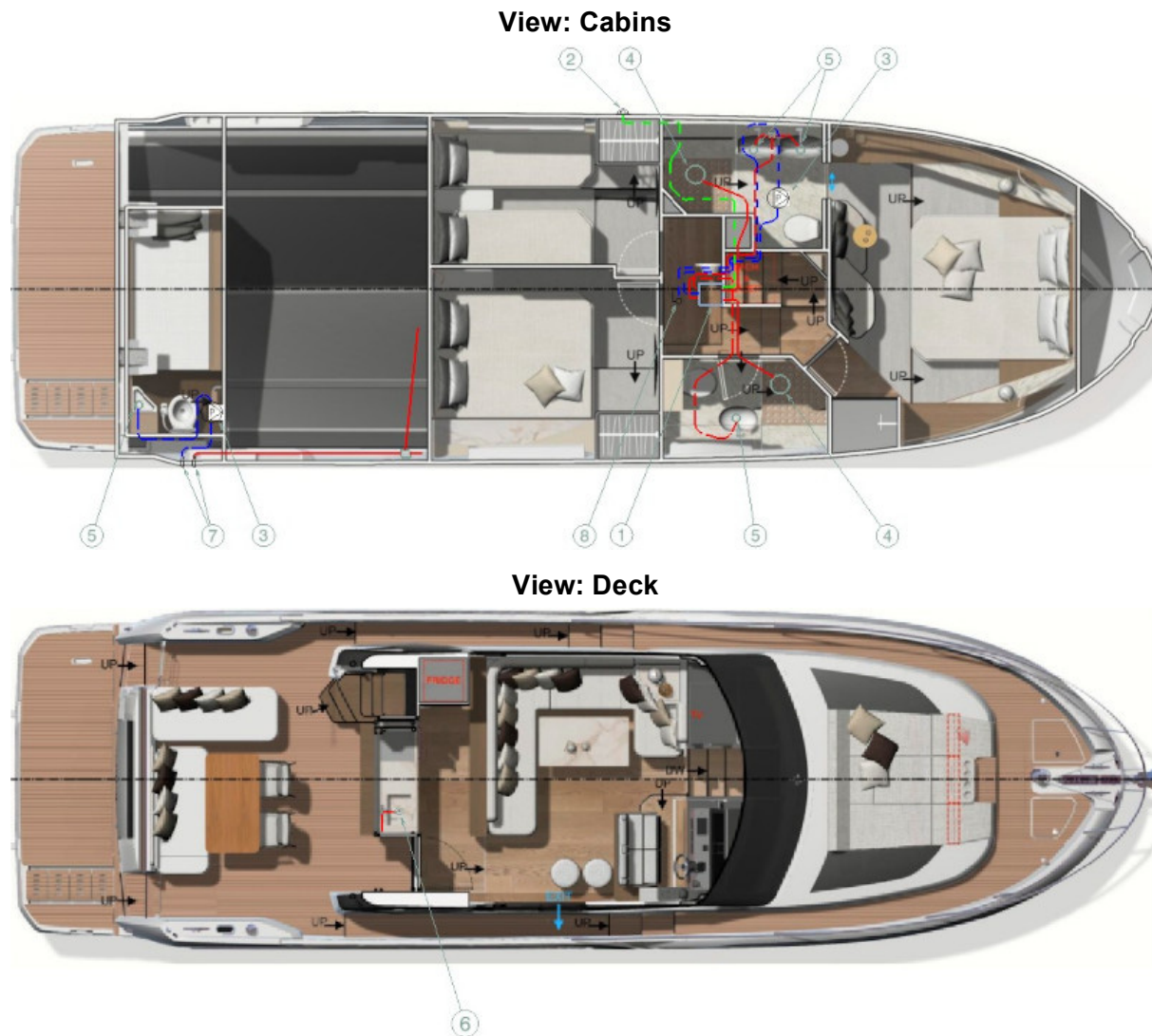
Use of electric toilets

- I. Turn on the fresh water unit.
- II. Fill the bowl by pressing the fill button.
- III. Using the toilet.
- IV. a. To empty the organic waste in the tank:
 - Make sure the draining valve is closed.
 - Empty the bowl by pressing the empty button.
- IV. b. For direct discharge into the sea:
 - Open the thru-hull seacock.
 - Empty the bowl by pressing the empty button.
- IV. c. To discharge through the deck:
 - Open the deck connection marked "WASTE".
 - Use the pump-out system where fitted at a port.

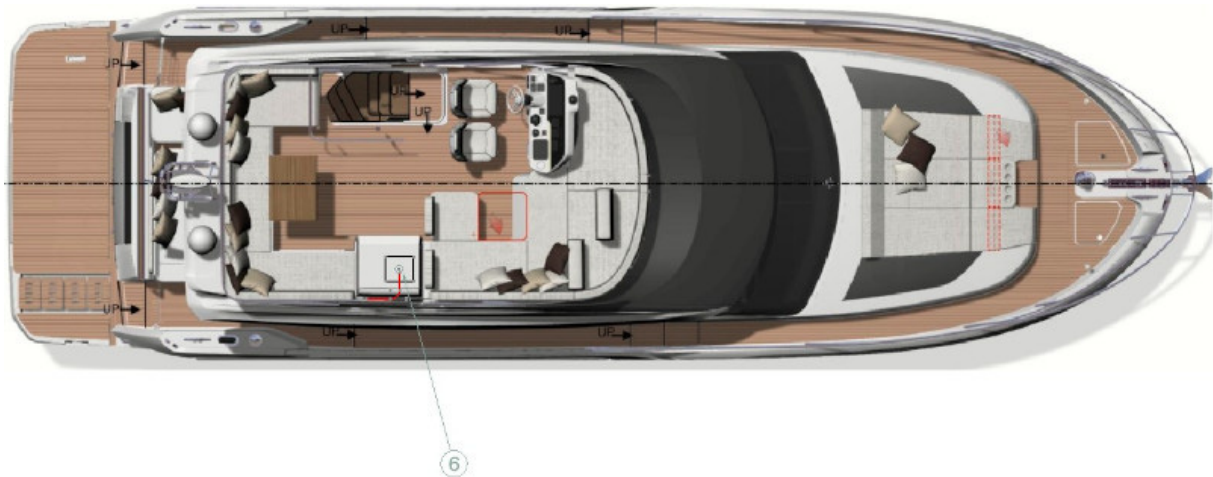
8.7 Waste water system

- Regularly check the valves and thru-hull seacocks for proper operation and watertightness.
- Regularly check the tightness of the flexible pipe clamps and connections.

Diagram of waste water circuit installation



View: Flying bridge



1. Collector (8L)
2. Vent
3. Drainage pump
4. Shower plug hole
5. Washbasin drain plug
6. Sink plug hole
7. Kitchen sink thru-hull drainage
8. Drainage valve

Engine

9.1 Information relating to fire risks and risks of explosion



Never store fuel tanks or tanks containing petrol in any area not specifically designed for storing petrol.



Be aware of the risk of drowsiness due to CO with petrol or diesel engines.

- Make sure that the coolant is circulating properly.
- Ensure that the engine compartment ventilation air inlets are kept clear.
- Stop the engine and refrain from smoking while the fuel tank is being filled.
- Have your fuel circuit checked regularly by a professional engineer.
- Avoid any contact between inflammable materials and the hot sections of the engine.
- Never switch off or cut off energy to the electric system when the engine is running.
- Never block access to the fuel supply valve.
- Never turn the engine over when the boat is on land.
- Fuel stored outside the tanks (jerrycans, portable fuel tanks, etc.) must be stowed on deck and protected from bad weather and mechanical damage.
- Regularly check that the engine compartment is clean and dry.
- The fuel lines may become worn with age or be damaged by some impacts, pinch points or abrasion. Some lines, particularly those with a steel core, are subject to corrosion. For safety reasons, it is important to visually inspect their condition and operation at regular intervals and replace defective parts.

9.2 Danger from moving mechanical parts

- Keep away from the drive shafts and the mechanical parts of the engine when they are in motion (including belts, moving parts and hot components).
- Be careful if you have long hair, bulky clothing, rings etc. (these may become caught).

9.3 General points



Do not install engine(s) on this boat which are more powerful than the recommended power output, this may cause a loss of control of the boat and lead to serious injuries or death.

Advice / Recommendation

- Regularly check that the O ring on the filler cap is in good condition to prevent water ingress.
 - Keep the fuel tank as full as possible to prevent condensation.
 - Follow the engine manufacturer's instructions exactly.
 - Never switch off the battery isolators when the boat's engine is running (risk of serious damage to the charging circuit).
 - Regularly check the oil level (a gauge is provided for this on the engine).
 - Regularly drain the engine according to the engine manufacturer's instructions.
-
- Make sure you have enough fuel before sailing.
 - Stop the engine before opening the engine compartment.
 - Do not close the fuel supply valve between each use of the engine (except in the event of prolonged disuse).
 - Get the whole propulsion system checked at least once a year by a professional engineer. (see Chapter: MANOEUVRABILITY).
 - Always start the engine with the control handle in neutral.
 - Maintenance information for the exhaust system is described in the manufacturer's instructions.

9.4 Starting the engine



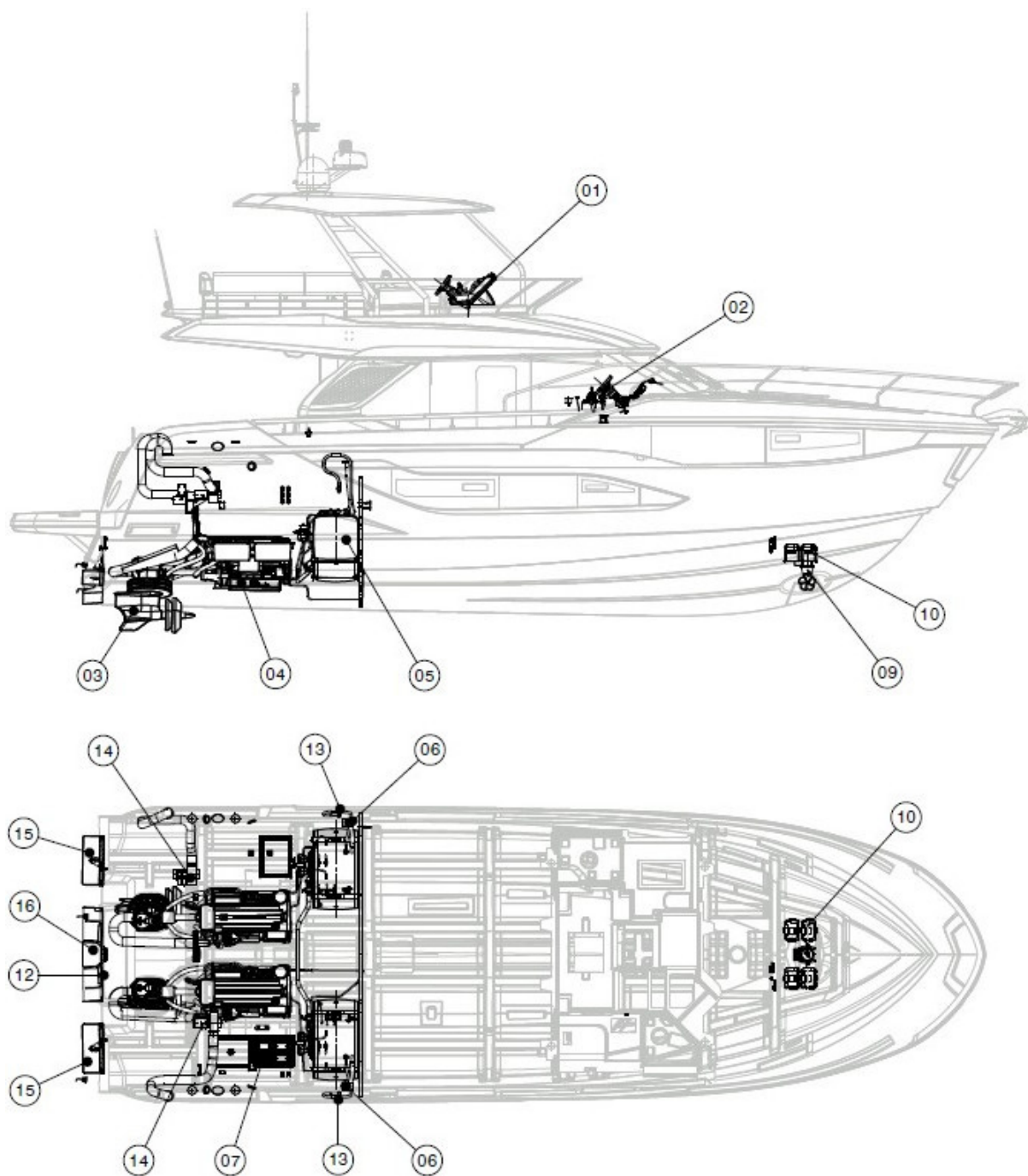
Learn how to judge the necessary distance of deceleration for the vessel to come to a complete stop (the reverse gear is not a brake).

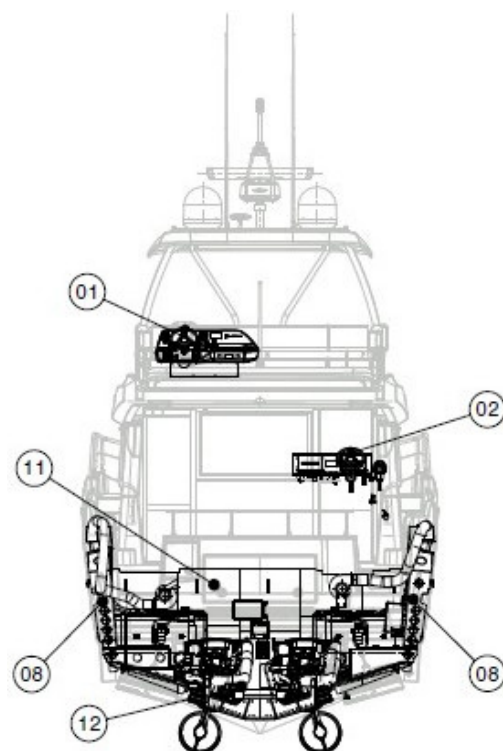


Information about the propulsion inverter are contained in the manufacturer's documentation.

- Check the coolant flow.
- The bilge fan of the engine compartment is automatically switched on as soon as the engine is contacted.

9.5 Engine installation





1. Flying bridge steering station
2. Interior steering station
3. POD (Engine base)
4. Motor
5. Fuel tank
6. Fuel filler
7. Engine battery
8. Fan (Engine compartment)
9. Bow thruster
10. Bow thruster battery
11. Insulating foam
12. Anodes
13. Fuel tank vent
14. Hot air extractor fan
15. Electric trim tabs
16. Fixed flaps

9.6 Propeller



Respect speed limits.

- The propeller delivered with the boat is specifically selected after trials carried out in collaboration with the engine manufacturer. Never change the propeller without first consulting a professional engineer.
- Propeller efficiency will drop if the propeller blades are damaged or dirty: clean the blades regularly and attentively.
- During lift-out, check the propeller: it should turn freely on its axis and there should be no play.

Pitch of the propeller

Boats with twin engines are equipped with counter-rotating propellers.

9.7 Fuel-burning equipment for purposes other than propulsion (Generator)

General points

- Make sure that the ventilation openings in the engine (and, if installed, generator) compartment are well-cleared.
- Stop the engine and refrain from smoking while the fuel tank is being filled.
- Have your fuel circuit checked regularly by a professional engineer.
- Avoid any contact between inflammable materials and the hot sections of the engine.
- Take all necessary precautions to avoid contact with naked flames and other hot areas.
- Do not obstruct or modify the ventilation system.
- Fuel stored outside the tanks (jerrycans, portable fuel tanks, etc.) must be stowed on deck and protected from bad weather and mechanical damage.

9.7.1 Generator



- Never start the generator when the air conditioning is already on. Always turn off the air conditioning before turning off the generator.
- Never connect the shore power to the generator: you may suffer an electric shock.
- An extinguisher access port is provided on the generator in the event of a fire starting in the generator.

General points

Make sure that the ventilator in the generator compartment is working.

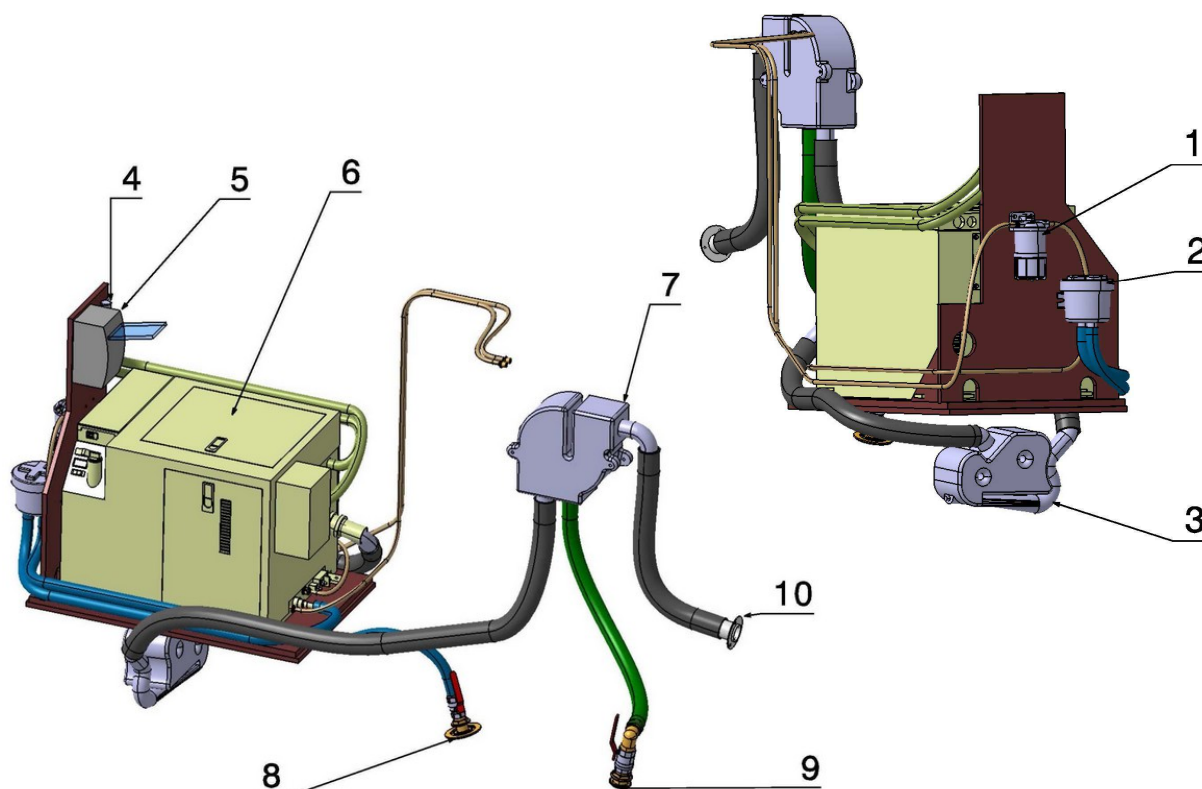
Starting up

- Fill the generator with water to prevent the seawater pump from running dry (refer to the supplier's recommendations).
- Open the raw water intake valves and evacuation valves.
- Open the fuel supply valve.
- Turn the generator's battery switch to the ON position.
- Switch the generator's circuit-breaker to the ON position.
- Turn on the generator using the remote control (located near the main switch panel) or on the generator itself.
- Make sure that no AC equipment is running. Toggle the shore power/ generator switch.

In the event of the generator catching fire

- Do not open the generator.
- Cut the power supply (electrical and fuel) to the boat's engines, to the generator and to the ventilators.
- Use the extinguisher access port on the generator to discharge the contents of the portable extinguisher.

Diagram of layout



1. Fuel filter
2. Seawater filter
3. Water trap
4. Anti-siphon valve
5. Differential circuit breaker

6. Generator
7. Water/gas separator
8. Seawater inlet
9. Seawater drainage
10. Outlet

Steering system

10.1 General points

- The steering system is an important safety feature. For this reason, an annual inspection of the whole system must be carried out by a professional engineer.
- Owners are expected to operate the boat in a reasonable manner, with the direction of the helm (in degrees/seconds) set according to the actual speed of the boat.

Bow thruster (tunnel)

Your boat is fitted with a bow thruster and/or a stern thruster to assist with manoeuvrability.

Deck fittings

11.1 Tender lift

- The platform (tender lift) facilitates launching and recovery of the tender and also serves as a swim platform. Any other use is dangerous and must be strictly avoided.
- The platform runs on the DC power supply.
- A breaker protects the electrical circuit.

Platform




- Climbing onto the platform while it is in operation must be strictly avoided.
- Make sure the lifting/lowering system is unobstructed before operating.
- The hydraulic lifting platform can be used for transportation purposes and for launching and hauling of boats or heavy floating bodies only, within its capacity limits. Any other use is dangerous and must be strictly avoided.
- Maximum load permitted on the platform: 350kg (Load must be uniformly distributed).
- Do not use the platform when under way.
- Make sure that you always sail with the platform in the raised position.
- Do not use the platform in rough seas.
- The boat's engines must be shut down while the platform is operated.



- When you leave the boat, be sure to leave the platform in the raised position.
- Check the platform anodes regularly (see Chapter: ANODES).
- The raised position is the platform's "off" position.
- Use the platform/leave the boat ONLY if the lock is engaged (platform in 'up' position).
- During platform opening or closure:
 - Beware of the system's movements to avoid injuries;
 - Never leave children unattended when they are using the system.

11.2 Anchoring, mooring, towing

11.2.1 Anchor points



Anchoring points showing visible signs of deterioration must be replaced.

Responsibility

- It is the responsibility of the owner/user of the boat to ensure that the berthing lines, towing cables, chains and mooring lines and the anchors are adequate for the intended use of the boat, i.e. that the lines or chains do not exceed 80 % of the breaking strength of the corresponding anchor point.
- It the boat is being towed, it is essential that the PODs are in line with the boat (see Chapter: EMERGENCY SYSTEMS IN CASE OF STEERING GEAR FAILURE).

	Aft mooring	Forward mooring	Mooring & Towing
Reference (Diagram on next page)	1	2	3
Anchor Point Breaking Strength	38,7kN	55,4kN	55,4kN
Mooring Line/Chain Breaking Strength	30,9kN	44,4kN	44,4kN

Fairlead

- The purpose of a fairlead is to guide a mooring rope on the boat deck.
- Pass the warps through the fairleads provided.

Fenders

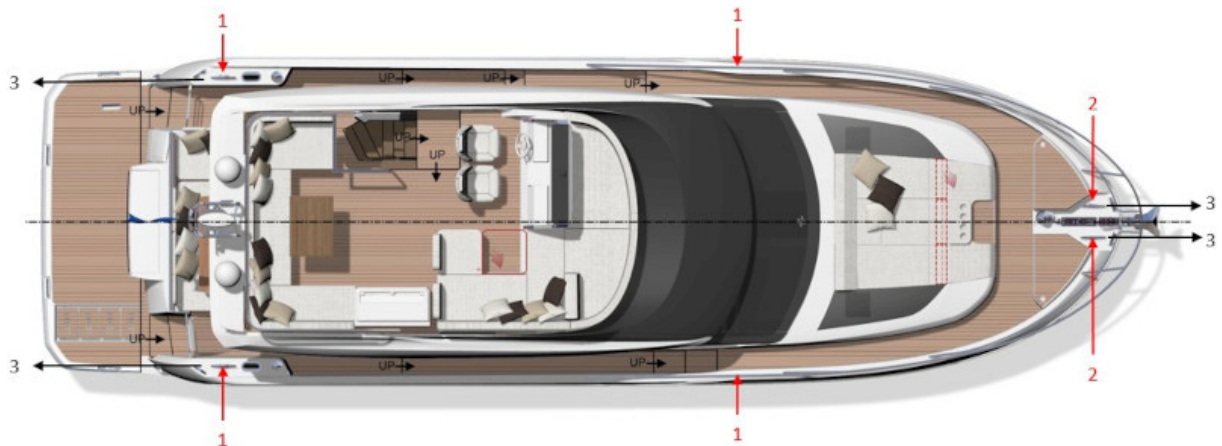
- Be sure to protect the transom platform with a fender to avoid friction with the pontoon.
- Use a sufficient number of fenders (boat fenders) to protect the boat from any risk of rubbing against the pontoon/quay.

11.2.2 Towing



- Generally the breaking strength of lines/chains must not exceed 80% of the breaking strength of the anchor points.
 - Always tow or be towed at low speed. Never exceed the maximum speed of a displacement hull during a tow.
 - Be particularly vigilant when the end of a towing cable is being thrown or received (the end may become caught in the propeller).
 - A towing cable must always be secured in such a way that it can be released under load.
 - Do not try to stop the boat by using a boathook or your foot, hand or any other part of your body.
- **Responsibility:** It is important that the owner thinks through the actions required when securing a towing cable onboard.
 - If the boat is being towed, it is essential that the PODs are in line with the boat.
 - In the event of steering gear damage, an emergency kit is supplied by the manufacturer to align the PODs with the boat's axis (see Chapter: EMERGENCY SYSTEMS IN CASE OF STEERING GEAR FAILURE).

Location of attachment points



1. Aft and middle mooring cleat
2. Forward mooring cleat
3. Anchoring and towing cleats

11.3 Electric windlass



- Windlass operations are dangerous:
 - Always keep the anchor chain or rope free and unfouled;
 - Carry out manoeuvres carefully and always wear shoes;
 - Avoid wearing baggy clothing and jewellery that could get caught in the engine when it is running. Tie up long hair..
- Refer to the manufacturer's instructions for use and maintenance.

The windlass is designed for anchoring purposes: Any other use is dangerous and must be strictly avoided.

Operation



The handle serves only to release the chain sprocket in order to lower the anchor manually should the electric windlass break down. The handle cannot be used to raise the anchor manually.

Maintenance

- Once a year, dismantle, carefully wash and grease all the moving parts of the windlass.
- Regularly grease the supply terminals of the electric motor of the windlass and of the relay control box.

Emergency anchoring procedure

Advice / Recommendation

- Before anchoring check the depth of water, the power of the current and the nature of the sea bed.
- Check the swing radius once the boat is at anchor.
- After each trip rinse the windlass and anchor chain or rope with fresh water.

In the event of an electrical fault, it is possible to lower the anchor manually: Put the handle in the space provided to release the chain sprocket. Let the chain run out using the handle to control the speed as it runs.

11.4 Tender

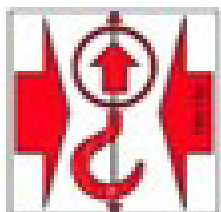


The portable fuel tank for the tender must be stored in the tender garage.

Handling and transport

12.1 Position of straps

The position of the lifting slings is shown in the pictogram below:



12.2 Lifting

- **Before applying antifouling NEVER:**
 - Do any sandblasting;
 - Use any other solvents than ethylic alcohol;
 - Use pressure washer detergents;
 - Use scrapers;
 - Use grinding tools.
- Before the first application of antifouling to the hull, you should lightly sand the hull using wet and dry sandpaper of 400 µm or more.
- The lower hull of your boat should be covered with an anti-fouling paint to prevent the adhesion of marine growth.
- The water quality where your boat is kept, along with the frequency of lifting, will determine the choice of antifouling.
- All bronze or steel surfaces, including the propellers, should be protected by a suitable antifoul paint.
- During lift-out, check the anodes, cutlass bearing and the propeller (see corresponding chapters).
- Antifouling can deteriorate when the boat is ashore or dried out: Please observe the out-of-water time limit set by the supplier.
- If cleaning off existing antifouling requires high pressure washing:
 - Ensure the water temperature does not exceed 15 degrees;
 - The water pressure must not exceed 150 bar (2175 PSI);
 - The distance between the hose nozzle and the hull must not be less than 10 centimetres.

12.3 Launching and retrieving



Do not stand onboard or beneath the boat during the handling operations.



- When placing the slings make sure that the positioning marks are still visible.
- Immerse the sling fully under the engine mounting.

The first time you use your boat a high level of skill and attention will be required. The proper functioning of all equipment will depend on the initial set-up being carried out correctly. For this reason the first launch must be carried out under your dealer's supervision.

Before launching

- Replace the speedometer in its housing.
- Check the cleanliness of the seawater filters.
- Check the anodes (see Chapter: ELECTRICAL SYSTEM).
- Check the propeller (see Chapter: STEERING SYSTEM).
- Prepare enough fenders and lines.
- Check the engine's seawater intake valve and the fuel feed valve (see Chapter: ENGINE).

12.4 Winterisation

Advice / Recommendation

- Engine winterisation requires a professional engineer: please consult your dealer.
- This is not an exhaustive list of recommendations: Your dealer will give you the advice you need and will carry out technical maintenance of your boat.

Environment


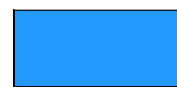




Waste management


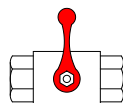
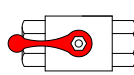


- Make sure you know the local environmental regulations and follow the codes of best practice.
 - Do not pump out the toilets or the contents of the black water tank near the coast or in areas where this is forbidden. Use the pump-out facilities available in ports or marinas to empty the contents of the black water tank before leaving port.
 - Make sure you know the international regulations to prevent pollution in the marine environment (MARPOL Convention) and follow these as much as possible.
-
- Throw all packaging in the recycling containers provided.
 - Once a piece of equipment has stopped working completely, find out about the relevant recycling regulations from your nearest recycling centre or from your dealer.
 - Make sure you follow the relevant local laws when scrapping.
 - Some onboard equipment can have a toxic effect on the environment and on human health due to the specific substances they contain: Do not throw any equipment in household waste containers and absolutely never dispose of equipment in the sea.
 - Dead batteries are toxic to health and to the environment. Batteries must not be put in with household waste and must be recycled separately. Contact the harbour master or a specialist company about recycling them.

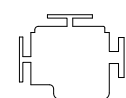

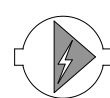
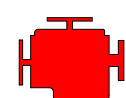

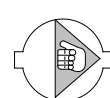



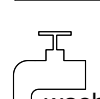

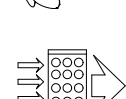
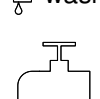

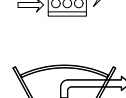

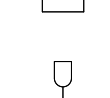

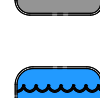
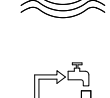
Appendix








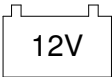




Label key

					
Engine group	Plumbing group	Colour - WC group	General electrical equipment	Comfort group	Drainage group

	Valve location label		Closed valve		Open valve
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Meaning of the symbols

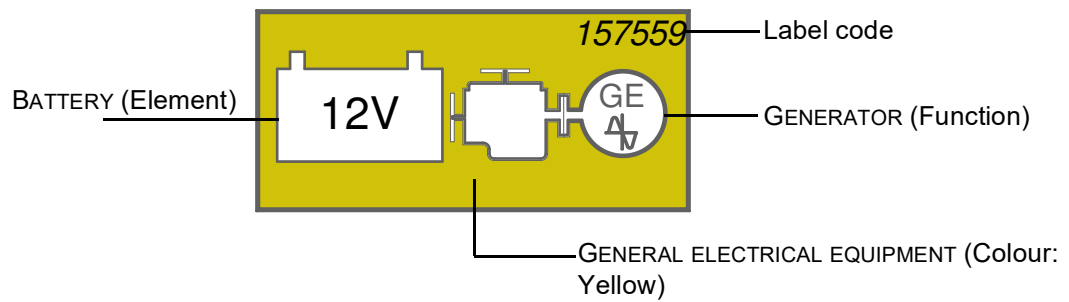
	Motor		Shower		Electronic pump
	Port engine		Washbasin		Manual pump
	Starboard engine		Ice maker		WC Toilet
	Propeller shaft		Deck wash		Washer
	Filter		Sea water tap		Dryer
	Hull drainage		Waste water tank		Dishwasher
	Sea water intake		Fresh water tank		Watermaker

	Shore power socket		Fuel tank		Fuel filter
	Service		Holding tank		Inverter
	Generator		Battery stock		Heating
	Breaker		Thruster		Air conditioning

Each label is defined by:

- a functional group (specific colour)

example:



ENGLISH

CE 236718 RCD-2
Index A


PRESTIGE®