OCEANIS 50 NEW

Owner's Manual

BENETEAU

Code: 135020
Index E

Welcome aboard

Madam, Sir,

You have just taken delivery of your new BENETEAU boat and we thank you for the confidence you have shown us in ordering a vessel of our brand. The whole BENETEAU team welcomes you aboard.
A BENETEAU is made to last, in order to bring you all the pleasure you expect from a vessel over a period of many years. Each boat is subject to the utmost attention to detail from the design stage right through to launching.
This manual is meant to help you to enjoy your boat comfortably and safely. It includes the boat specifications, the equipment provided or installed, the systems and tips on her operation and maintenance. Some of the equipment described in this manual may be optional.

Your BENETEAU dealer will be able to help and advise you in the use and maintenance of your boat.

Read this user's guide/owner's manual carefully and get to know your boat before using it.
The better you know your vessel the more pleasure you will get from being at the helm.

The sea is a source for learning. Caution based on a knowledge of one's own limits and those of the boat is the pre-requisite for an accomplished sailor.
Even when your boat has been adapted for them, the sea and wind conditions corresponding to the design categories A, B, C and D may vary, ranging from severe conditions to strong storms subject to the risks of exceptional waves and gusts of wind, this meaning they are dangerous conditions in which only an experienced, fit and well trained crew manoeuvring a well maintained boat can sail in a satisfactory manner.
This user's guide/owner's manual is not a course in safety at sea or about sailing sense. If this is your first boat or if you change to a new type of boat which you are not used to, get some training in boat control and sailing to ensure your safety and comfort. Your dealer, your international sailing association or your yacht club will be very happy to recommend local sailing schools or professional instructors.
Make sure the sea and wind conditions will correspond to the category of your boat and you and your crew are able to handle the boat in these conditions.
Always listen to the weather forecast before you put out to sea.

Keep this user's guide/owner's manual in a safe place and hand it over to the new owner if you sell your boat.
You are advised to keep all the instructions and manuals provided by the boat equipment manufacturers (accessories...) in the same place as this manual

Introduction

The users of the boat are informed of the following:

- This user guide/owner's manual is not a maintenance or repair guide. In case of difficulty do not hesitate to call on the services of your concessionaire BENETEAU.
- Any alterations which may affect the safety specifications of the boat must be assessed, carried out and recorded by persons qualified to do so. Any change in the distribution of the vessel's mass (adding a radar, altering the mast, changing an engine, etc) may affect the stability, trim and performance of your boat.

The BENETEAU shipyards may not be held responsible for any alterations which they have not approved.

- The complete crew must be equipped appropriately.
- In numerous countries, a licence, an authorization or a training course is requested. Make sure you have this legal authorization before you use your boat.
- Adapt the use of your boat to her condition that wears out with time and use.
- Any boat, however solid she may be, may be severely damaged if badly used. This is not compatible with safe navigation. Always adapt the speed and direction of your boat to the conditions of the sea.
- The boat shall not be loaded more with than the maximum load recommended by the builder, in particular the total weight of the food supplies, of the different equipment that are not supplied by the builder and of the persons on board.
- The weight of the boat shall be properly distributed.
- The stability is reduced when you add weight in the upper parts.
- In case of heavy weather, the hatches, lockers and doors shall be closed in order to minimize the risk of water coming in.
- Breaking waves are a serious threat to stability.
- The water in the bilge shall be kept at its minimum.
- The stability may be reduced when you tow a boat or when you lift heavy weights with the davits or the boom.
- If your boat is equipped with a liferaft, carefully read the instructions. The boat must have on board all the proper safety equipment (lifejackets, buoys, harness, flares, liferafts, etc.) depending on the type of vessel, its certification, the country, the weather conditions encountered, etc.
- The crew must be familiar with the use of all the safety equipment and the emergency safety procedures (MOB, towing etc.). Sailing schools organise regular training sessions.
- Anyone on the deck shall wear a life jacket or a buoyancy aid.

The safety regulations as defined by the sailing code and enforced by the ''COLREG'' should be observed.

Introduction

Name plate:

Some of the data is shown on the manufacturer's plate fixed to the boat. The explanation of the data is given in the appropriate chapters of this manual.

Identification of vessel:

The vessel's identification is found on the builder's certificate delivered with the boat and is engraved on the starboard aft side.

So as to be able to continuously improve their product the BENETEAU shipyards reserve the right to make any alterations in design, layout or equipment which they judge necessary.

That is the reason why the specifications and information given are not contractual, they may be modified without prior notice or up dates.

This owner's manual is designed in accordance with the ISO 10240 standard requirements, it has a general purpose and it may sometimes list some equipment or accessories or deal with some points or questions that are not relevant to your own boat.

The different warnings used throughout this guide are broken down as follows.

DANGER

Indicates the existence of a serious inherent danger with a high risk of death or serious injury if the appropriate precautions are not taken

WARNING

Indicates the existence of a danger which could lead to injury or death if the appropriate precautions are not taken

PRECAUTION

Indicates a reminder of safety practice or draws attention to dangerous practices which could cause injury to persons or damage to the vessel or to its components

ADVICE - RECOMMENDATION

Indicates a recommendation or advice for carrying out manoeuvres appropriate for the planned manoeuvres

HISTORY OF UPDATES

- Index A.....10/2009
- Index B.....03/2010
- Index C 09/2010
- Index D 12/2010
- Index E.....08/2012

Contents

1

General specifications

- Technical specifications
- Certification
- Design category
- Your boat

TECHNICAL SPECIFICATIONS OCEANIS 50 NEW

L.O.A ..... 15,10 m
Hull length ..... 14,75 m
L.W.L. ..... 13,33 m
Overall width ..... 4,49 m
Beam ..... 4,49 m
Waterline beam ..... 3,61 m
Air draught - Empty vessel ..... 19,75 m

Deep draught keel version

Draught - min ..... 2,10 m
Ballast weight ..... 3 750 kg
Light displacement ..... 12 453 kg
Displacement with maximum load (Category A & B)..... 16 198 kg
Displacement with maximum load (Category C & D) ..... 16 318 kg

Shallow draught keel version

Draught - min ..... 1,80 m
Ballast weight ..... 4 300 kg
Light displacement ..... 13 003 kg
Displacement with maximum load (Category A & B)..... 16 748 kg
Displacement with maximum load (Category C & D) ..... 16 868 kg
Charge maxim registered (Category A & B)..... 3 745 kg
Charge maxim registered (Category C & D) ..... 3 865 kg

Including the mass of the persons who are authorized on board (75 kg/ 165 lbs per adult), the supplies, the liquids that can be used (fresh water and fuel) in fixed completely full tanks, the additional loads, the optional equipments, the liferaft and the scope for load.

Recommended maximum power..... 81 kW
Maximum motorisation mass..... 245 kg
Total mass of liquids (all tanks full) ..... 903 kg
Freshwater capacity ..... 330 l + 238 l
Sewage water capacity - Aft washroom ..... 73 l
Sewage water capacity - Fore washroom (optional) ..... 73 l
Fuel oil tank capacity..... 237 l
Refrigeration unit capacity..... 130 l + 100 l
Battery capacity - Service..... 2 x 140 Ah
Spare batteries - Service..... 2 x 140 A
Battery capacity - Engine ..... 110 Ah
Battery capacity - Bow thruster ..... 2 x 50 Ah
Battery capacity - Generator ..... 110 Ah
Cabins 2/3
Berth..... 4/6
Build material: ..... Laminated polyester
Architect ..... BERRET - RACOUPEAU
Interior design..... NAUTA Design

Note: The capacities indicated are maximum (including options).

CERTIFICATION

CE Category	Persons Maximum
A	8 persons
B	9 persons
C	14 persons
D	14 persons

DEFINITION OF DESIGN CATEGORIES

Design category	Wind force (Beaufort scale)	Significant height of waves to be considered (in metres H 1/3)
Vessel designed for navigation:		
A - "At high sea"	Over 8	Over 4
B - "In open sea"	Up to and including 8	Up to and including 4
C - "Near to the coast"	Up to and including 6	Up to and including 2
D - "In sheltered waters"	Up to and including 4	Up to and including 0,3

The OCEANIS 50 NEW model conforms to the directive 2003/44/CE

SAILS - MAST WITH IN-MAST FURLING

Furling mainsail ..... 45,00 m^2
Genoa ..... 66,70 m^2
Symmetric spi ..... 151,00 m^2

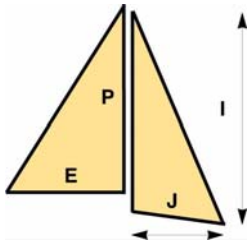
SAILS - CLASSICAL MAST

Classical mainsail ..... 57,20 m^2
Genoa ..... 66,70 m^2
Symmetric spi ..... 151,00 m^2

ALL VERSIONS

I ..... 18,25 m
J ..... 5,62 m
P ..... 17,00 m
E ..... 5,71 m

The sails are the main propulsion means of the OCEANIS 50 NEW.



Category A: At high sea

This craft is designed to operate in winds that may exceed wind force 8 (Beaufort scale) and in significant wave heights of 4 m and above.
This craft is largely self-sufficient. Abnormal conditions such as hurricanes are excluded.
Such conditions may be encountered on extended voyages, for example across oceans, or inshore when unsheltered from the wind and waves for several hundred nautical miles.

Category B: In open sea

This craft is designed to operate in winds up to Beaufort force 8 and the associated wave heights (significant wave height up to 4 m, see Note 1 below).
Such conditions may be encountered on offshore voyages of sufficient length, or on coastal waters when unsheltered from the wind and waves for several dozens of nautical miles.
These conditions may also be experienced on inland seas of sufficient size for the wave height to be generated.

Category C: Near to the coast

This craft is designed to operate in winds up to Beaufort force 6 and the associated wave heights (significant wave height up to 2 m, see Note 1 below). You may meet with such conditions in exposed inland waters, in estuaries and in coastal waters with moderate weather conditions.

Category D: In sheltered waters

This craft is designed to operate in winds up to Beaufort force 4 and the associated wave heights (occasional maximum waves of 0,5 m height). Such conditions may be encountered in sheltered inland waters, and in coastal waters in fine weather.

NOTE:

- The significant wave height is the mean height of the highest one-third of the waves, which approximately corresponds to the wave height estimated by an experienced observer. Some waves will be double this height.

- The creation of different design categories results from the need to distinguish between different levels of risk according to the construction of the boats.
The parameters for the characteristics are established to define the conditions of navigation which each category may encounter; they serve purely to evaluate the boat designs and are not to be used to limit the geographical areas in which these boats may operate..

- One boat may be classed in several design categories at the same time, each with their different maximum capabilities.

Your boat

Name of the owner: .....

Address: .....

.....

Telephone:.....

email: .....

Telephone N° / Address to be contacted in case of emergency

Name of the boat: .....

Delivery date: .....

Registration number:.....

Serial number (C.I.N): .....

Entrance door key n°: .....

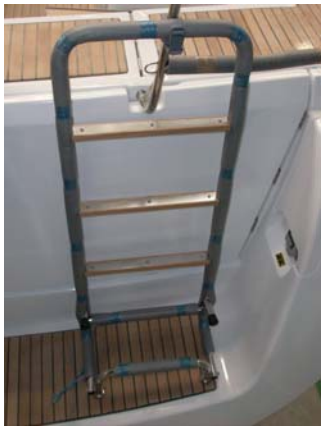
Engine type		
Serial number		
Engine key number		

Safety

- Safety Equipment
- General information
- Gas system
- Recommendations for gas
- Fight against fire
- Bilge pump system
- Emergency tiller

REF	Designation
1	Position of swimming ladder (means of coming back onboard)
2	Location of liferaft locker

Fastener - Swimming ladder



Swimming ladder (means of coming back onboard)

Storage locker for liferaft (not supplied)

GENERAL INFORMATION

DANGERS

The major hazards concern:

- The gas system.
- The electrical system.
- Manoeuvring the vessel and the sails.
- The motorisation.

Please refer to the relevant paragraphs.

DANGER

- Fuel leaks or vapour represent a danger of fire and explosion.
- Leave the engine compartment ventilated for a long time before starting the engine.
- There may be danger of fire or explosion if direct current systems are incorrectly used.
- Some boats are equipped with a retractable ladder or removable. Make sure the ladder is in place and deployed as soon as you are on board.
- Reduce speed in waves.

WARNING

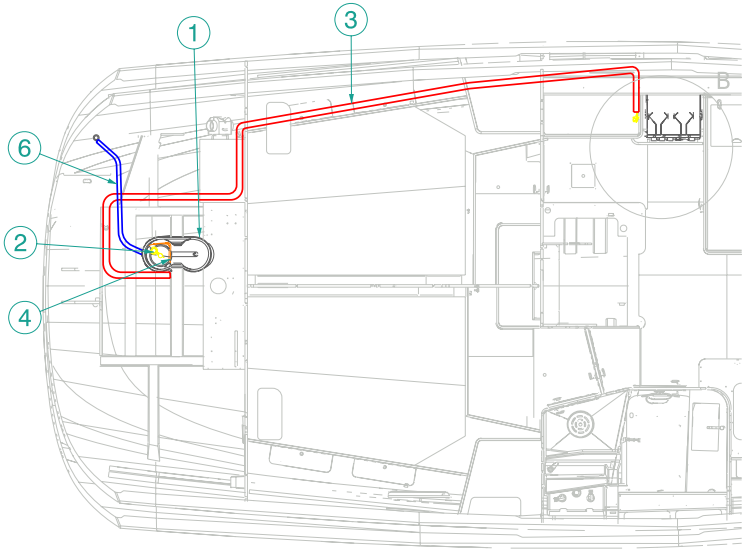
- Before you sail, list the compulsory safety equipment.
- Don't exceed the number of persons indicated in the chapter 'Specifications'.
- The total weight of the persons and equipment must never exceed the maximum load recommended by the manufacturer.
- Use the seats provided.

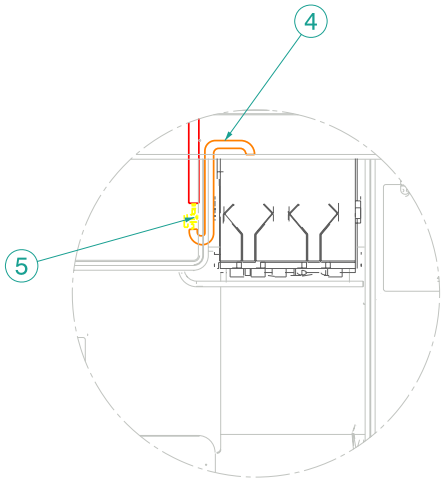
ADVICE - RECOMMENDATION

- When sailing, never padlock or lock the liferaft locker.
- Before putting to sea, carefully read the launching instructions shown on the liferaft.
- Close the deck hatches and portholes before each trip (including the companionway hatch in heavy weather).
- Don't store anything below the floorboards.
- Ensure that movable items are firmly secured when the boat is under way.

GAS SYSTEM

LOCATION





REF	Designation
1	Gas cylinder locker
2	Regulator valve
3	Supply - Gas
4	Connector - gas copper
5	Supply valve - Gas
6	Drain

Supply valve Gas

Valve
6 - Open position
7 - Closed position

Gas cylinder locker

RECOMMENDATIONS FOR GAS

Type of cylinder: butane, service pressure 10 kg/cm^2 or according to current standards of your country).

Close the valves on the system and on the cylinder when the appliances are not used. Close the valves before you change cylinders and immediately in case of emergency.

Never leave unattended an appliance that is working. Don't install or store flammable materials above or over the stove (curtains, papers, napkins etc.).

Make sure that the valves of the appliances are closed before you open the cylinder or hose valve.

In case you smell gas or find that the burners have gone out (although appliance models cut off automatically if the flames go out), turn off the valves of the appliances. Do ventilate the boat in order to get rid of any residual gas. Find the cause of the problem.

Regularly test the gas system in order to detect any gas leak.

Check all the connections using water and soap or detergent, closing the valves of the appliances and opening the valve on the cylinder.

If you detect a leak, close the valve of the cylinder and repair before you use it again.

The appliances use the oxygen of the cabin and release combustible gases. Ventilate your boat when using appliances.

Don't obstruct the air vents and at least leave the door open. Don't use the oven or stove as back up heaters.

Lock the stove oven when being not used in order to avoid damaging the tubes when sailing.

Never obstruct the fast access to the components of the gas system. Keep the taps of the empty cylinders turned off and the cylinders disconnected.

Keep the protection, lids, covers and taps in their places.

Don't use the gas cylinder storage place to store other equipment. Only use the proper locker to store the gas cylinders.

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

WARNING

- Don't use a solution containing ammonia.
- Don't use a flame to detect leaks.
- Don't smoke, don't use a naked flame when you change the gas cylinder.

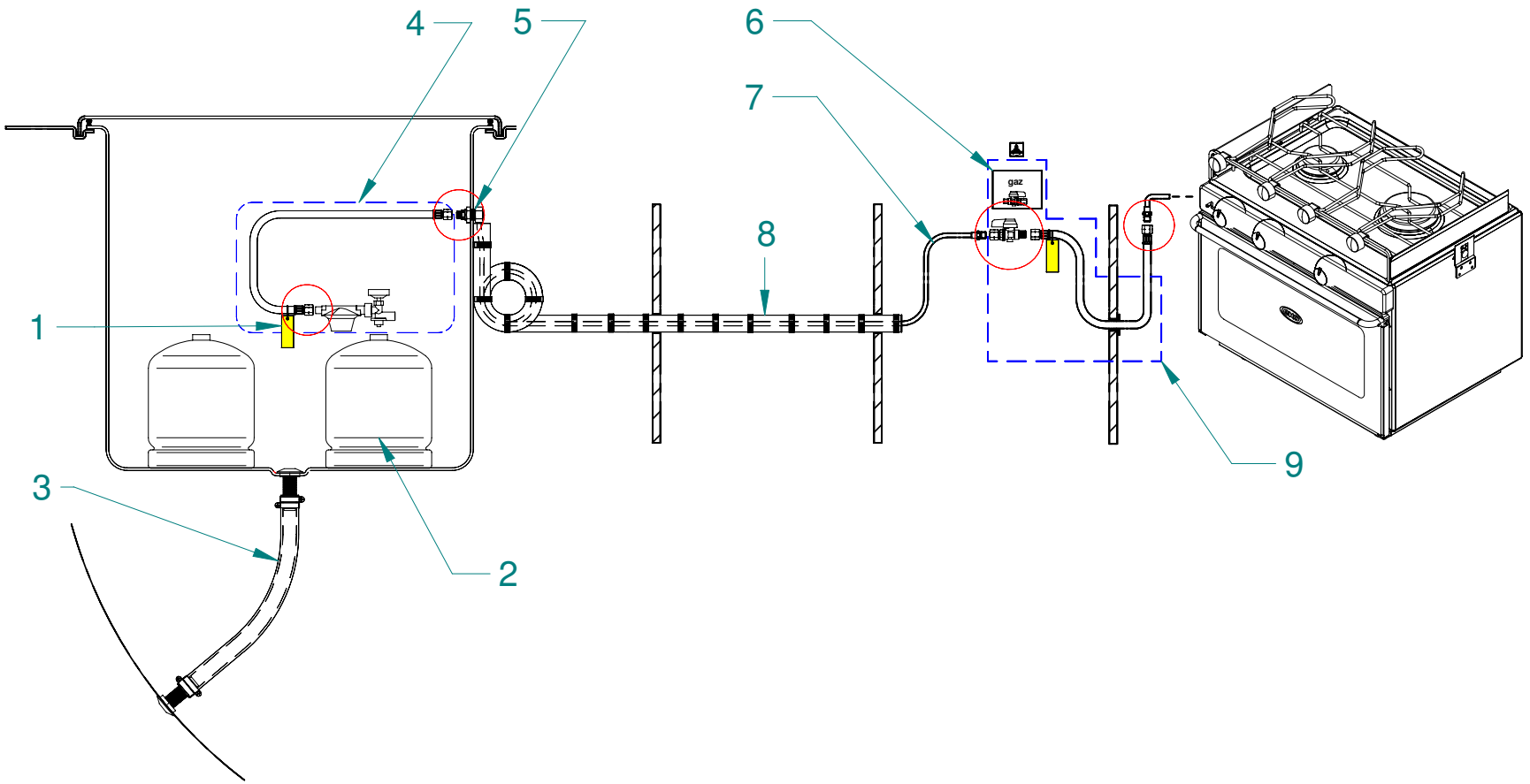
WARNING

- Do not use a solution containing ammonia to detect leaks.
- Don't use a flame to detect leaks.
- Don't smoke, don't use a naked flame when you change the gas cylinder.

ADVICE - RECOMMENDATION

- Shut off the gas supply at the bottle as well as the cooker tap.
- When changing the cylinder, refit the cap in place on the regulator threaded section (to avoid corrosion).
- For winter storage instructions and precautions, refer to Chapter 12.

SCHEMA GAS - VERSION EUROPE



REF	Designation
1	Regulator valve
2	Gas cylinder
3	Drain
4	Connection kit gas bottle
5	Rubber washers
6	Pictogram
7	Connection kit gas copper
8	PVC girdled sleeve
9	Gas appliance connection kit

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

Pay particular attention to keep in good condition the screw thread of the cylinder on which the regulator is. Check the condition of the regulator every year and change it if necessary. Use regulators identical to the ones that are fitted.

Have the repairs carried out by someone skilled.

POSITION OF GAS BOTTLE

The locker for storing gas bottles can be reached through the cockpit. The locker can accommodate 2 gas bottles. The locker is equipped with bottle fastening straps.

FIGHT AGAINST FIRE.

It is the owner's or the skipper's responsibility:

- To have the extinguishers checked in pursuance of the instructions given.
- Use extinguisher replacements with equivalent features (same capacity and fire resistance) if the ones in place are out of date or have been used.
- To tell the crew:
  - where the extinguishers are and how they work,
  - where the release aperture is situated in the engine compartment,
  - where the emergency exits are.
- Make sure the extinguishers can be reached easily when people are on board.
- Make sure that the ventilation openings in the engine (and generator, if installed) compartment are well cleared.

Keep the bilge clean. Regularly check that there is no fuel or gas vapour.

For protection of the deck, the vessel owner/user should provide at least one fire bucket complete with rope in an immediately accessible position.

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 machinery and they do not obstruct access to and from the compartment.

Always fasten the curtains open when the gas cooker is working.

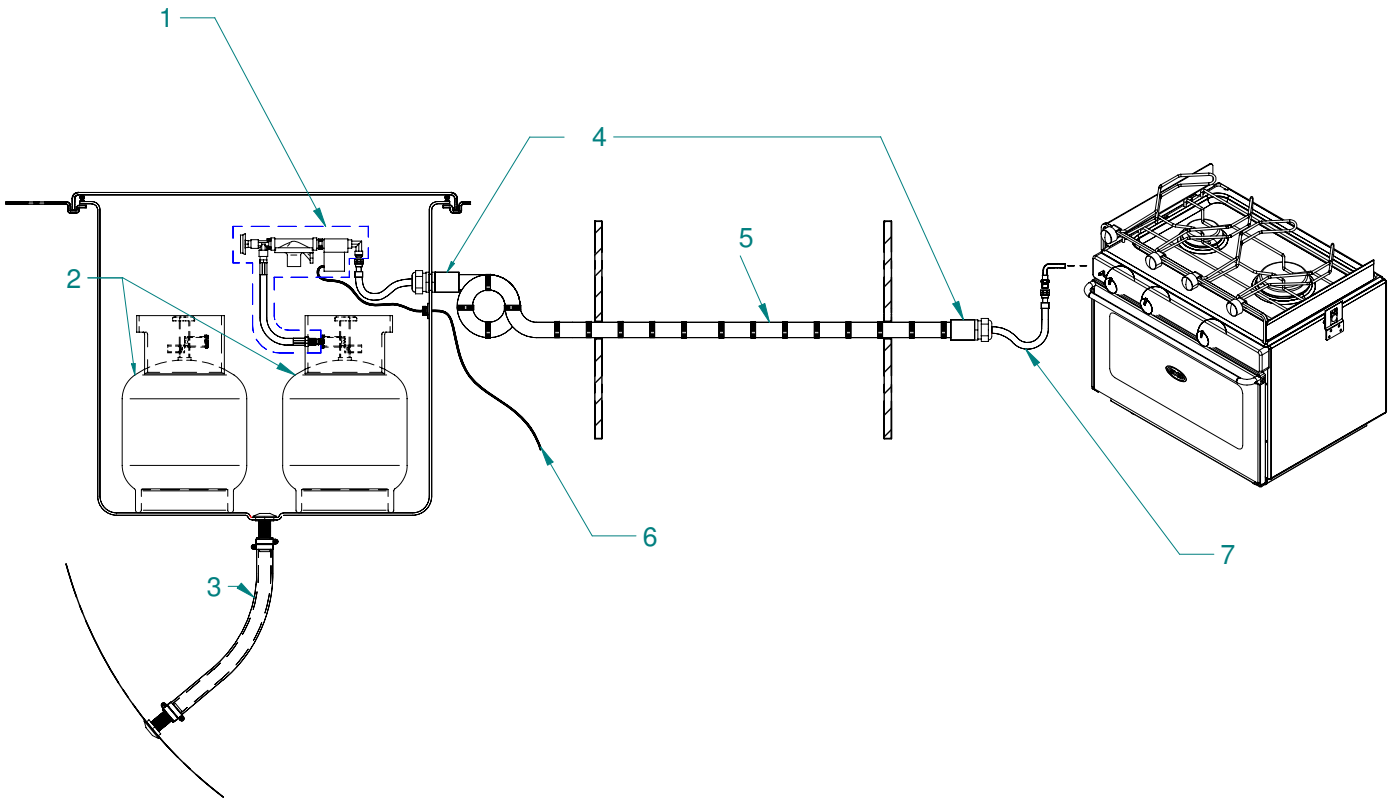
Exits other than the doors and hatches of the main companionway, equipped with permanently fitted ladders, are identified with a symbol.

WARNING

-Keep an extinguisher handy in case the fire should start again.

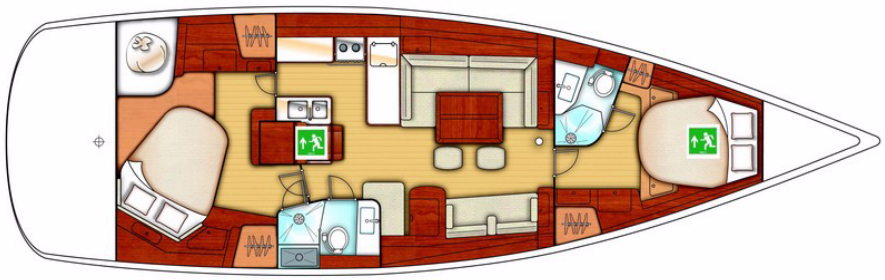
-Fire fighting equipment (portable extinguishers, fire blankets and buckets) must be permanently and immediately accessible.

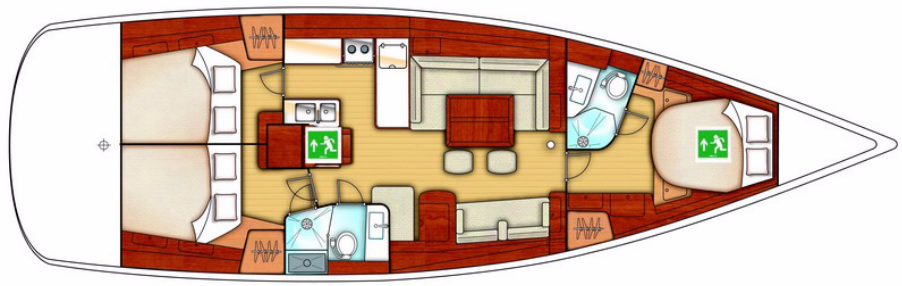
SCHEMA GAS - VERSION US



REF	Designation
1	Regulator valve 12V
2	Gas cylinder
3	Drain
4	Stuffing box
5	PVC girdled sleeve
6	Electromagnetic valve for gas 12V
7	Pipe Propane Plastic

EMERGENCY EVACUATION AND LOCATION OF EXTINGUISHERS





Emergency exits in case of fire

- Deck hatch of the fore cabin
- Companionway

Position of portable extinguishers (not supplied)

- Cockpit locker
- Hanging locker - Forward cabin
- Hanging locker - Port aft cabin
- Port saloon

Note: Same position for the other layouts.

EXTINGUISHERS

The extinguishers are part of the compulsory equipment.

An extinguisher or a fire blanket shall be set less than 2 m from any flame appliance.

Extinguishers must be placed less than 5 m from any berth.

It is compulsory for an extinguisher to be placed less than 2 m away from the extinguisher aperture of the engine compartment.

An extinguisher shall be less than 1 m from the steering station.

The extinguishers must be in position (see "Extinguisher positions" diagram).

Extinguisher, per unit, minimum capacity 5A/34B.

For the OCEANIS 50 NEW: 20A/136B(equivalent 4 extinguishers of this minimum capacity).

DANGER

- There may be danger of fire or explosion if direct or alternating current systems are incorrectly used (Refer to chapter Electricity).

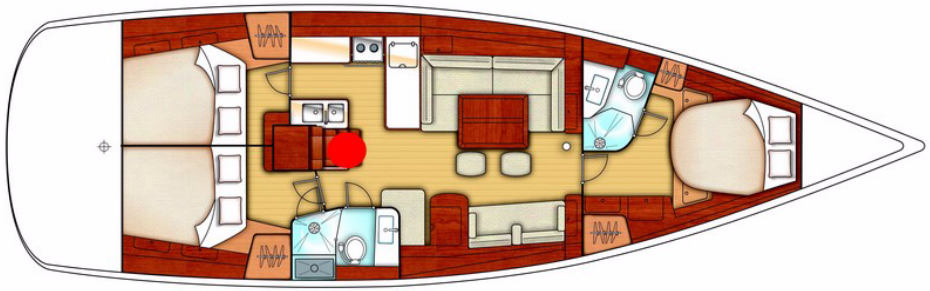
WARNING

- Do not obstruct the ways to the emergency exits.
- Do not obstruct the safety controls (fuel oil valves, gas valves, power switches).
- Do not block the extinguishers placed on shelves.
- Do not leave the vessel unattended when a cooker or heater is in use.
- Do not use gas lamps in the vessel.
- Do not alter the vessel systems (electrical, gas or fuel).
- Do not fill up a tank or change a gas cylinder when an engine is running or a cooker or heater is on.
- Do not smoke while handling fuels or gas.

WARNING

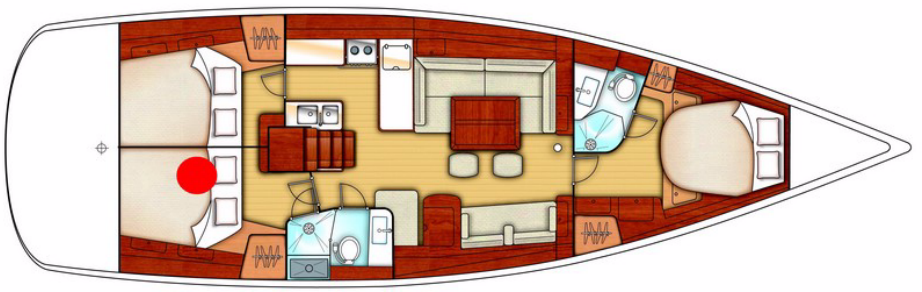
- The **CO^2** extinguishers shall be used only to fight **electrical fires**.
- Clear the area immediately after use in order to avoid suffocation.
- Air before entering.

POSITION OF FUEL VALVE AND ENGINE COMPARTMENT EXTINGUISHER APERTURE



Extinguisher hole located under the companionway step

A pictogram helps to locate it easily



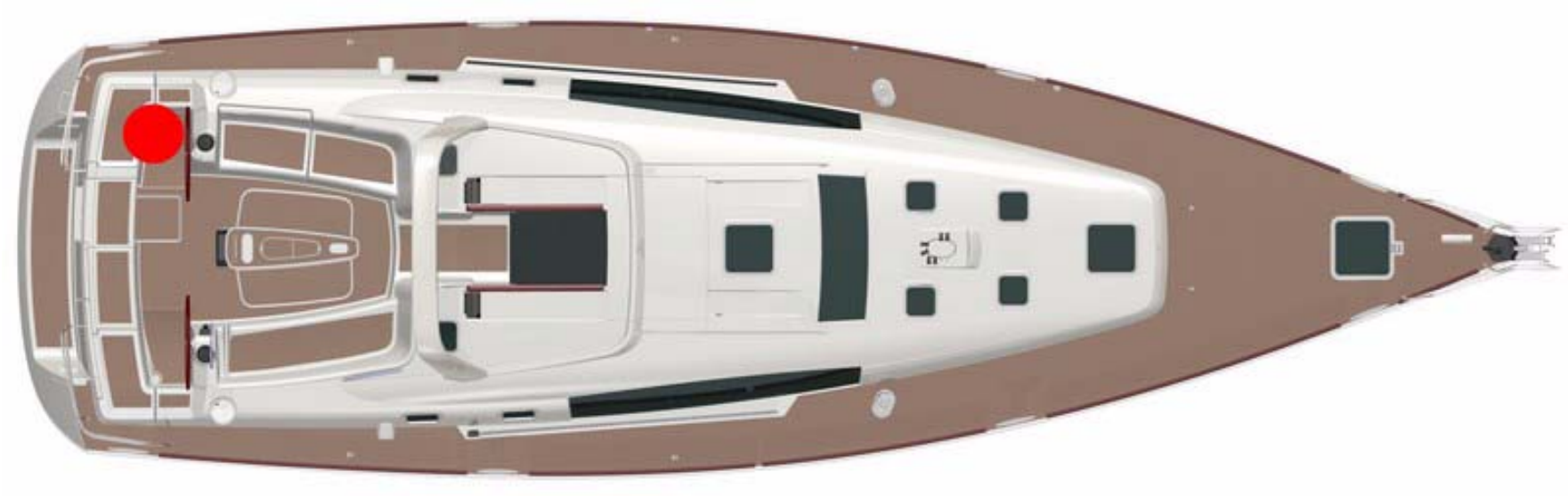
Supply valve Fuel

The engine compartment has a port that makes it possible to inject the extinguishing product inside without opening the usual access hatches.

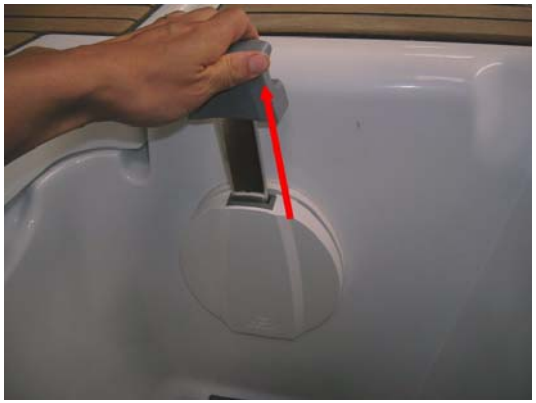
INSTRUCTIONS TO FOLLOW IN CASE OF A FIRE IN THE ENGINE COMPARTMENT BILGE:

- Stop the engine.
- Switch off power and stop fuel supply.
- Block off the air supply from the air inlets and outlets of the engine.
- Inject the extinguishing product through the aperture.
- Wait.
- Open the access hatches and repair.

USE OF THE MANUAL BILGE PUMP



Location



Operation
Capacity: 40,5 litre / minute

BILGE PUMP SYSTEM

PROCEDURE TO BE FOLLOWED

- Switch on power to the electric bilge pumps.
- If necessary activate the manual pump.
- Identify the source of the leak by tasting the water and decide on the relevant action to be taken:
  - freshwater = watertank leak.
  - seawater = breach of hull.

ELECTRIC BILGE PUMP

The first electric bilge pump is located in the sump well.

The second electric bilge pump is located on the plumbing board under the port saloon seating.

Operation relay 12V 25A - Chart table unit.

Capacity: 70,8 litre / minute

Capacity: 15 litre / minute

Operation:
The electric bilge pumps are connected to the 12V service circuit. To enable operation the 12V circuit must be activated by turning on the battery switches.

You can energize the electric bilge pump from the electrical panel.

On the electrical panel - three possible positions : OFF / Automatic / Mechanically operated.

In the automatic position each pump is set off automatically by a trip switch located in the sump area or in the bottom of the hull.

MANUAL BILGE PUMP

The manual bilge pump is located in the cockpit behind the rudder wheel to port.

The control arm of the pump shall be kept accessible whatever the circumstances.

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.

-Do not let the pumps run while dry, this may cause them damage.

-The water in the bilge shall be kept at its minimum.

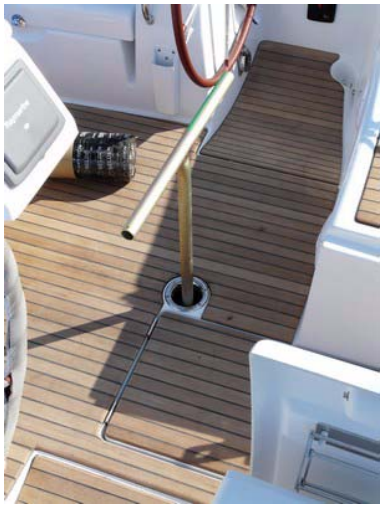
-Check the functioning of each bilge pump regularly.

SAFETY PRECAUTIONS

-Clean off debris which could block the pump intake points or strainers. If the watertight partitions which seal off the fore and aft points are fitted with valves they must be closed at all times and only opened to drain water into the main bilge.

USE STEERS FRANK OF HELP

Sector access port



Tiller in position

EMERGENCY TILLER

The emergency tiller is in an aft locker and shall be easy to get to.

To operate the tiller:

- Use a winch handle and unscrew the tiller cover situated at the back of the cockpit.
- Insert the tiller into the rudder stock and make sure it is fully secure in the square.
- If the automatic pilot is connected and is working after the tiller damage, use it.
- Disconnect all apparatus linked to the rudder stock to use the emergency tiller.

Tiller position:
Port cockpit locker

ADVICE - RECOMMENDATION

- The emergency tiller is designed only to be able to continue underway at a reduced speed in case of steering gear failure.

Hull

- Maintenance of the Hull
- Lifting

LIFTING

Wetted area : 48 m²

Maintenance of the Hull

The materials and equipments of your boat have been selected because of their high quality and performance and ease of maintenance. However you shall carry out a minimum maintenance in order to protect your boat from outside attacks (salt, sun, electrolysis ...).

Preferably wash your boat on shore.

Use as few cleaning agents as possible.

Don't use solvents or aggressive detergent agents. Don't discharge cleaning agents into the water.

Lifting

The lower hull of your boat should be covered with an anti-fouling paint which will prevent the adhesion of marine growth.

The nature of the water in which the boat sails will determine the choice of the anti-fouling paint as well as the frequency of hull stripping and painting. Do not hesitate to take advice from your specialists.

Refer to chapter 11 for launching instructions.

Before applying anti-fouling paint never:

- Do any sandblasting.
- Use any other solvents than ethylic alcohol.
- Use detergents under pressure.
- Use scrapers.
- Do any sanding other than a light rubbing down by hand with a grade 400 wet abrasive paper (to roughen up the hull before the first coat).

If cleaning of the anti-fouling paint has to be done with a high pressure hose:

- The water temperature must not exceed 15 °C.
- The water pressure must not exceed 150 bars.
- The distance between the hose nozzle and the hull must not be less than 10 centimetres.

Follow the supplier's instructions very closely when applying the anti-fouling paint.

All these hull maintenance operations can be carried out by your dealer.

Precaution

-Consult the harbourmaster's office to find out the conditions of water use and the maintenance area for cleaning your vessel.

-It is necessary to seek the advice of your concessionnaire with regard to gel-coat repairs.

Precaution

-When applying the anti-fouling paint do not paint over the electronic instrument sensors nor the anodes.

Advice - Recommendation

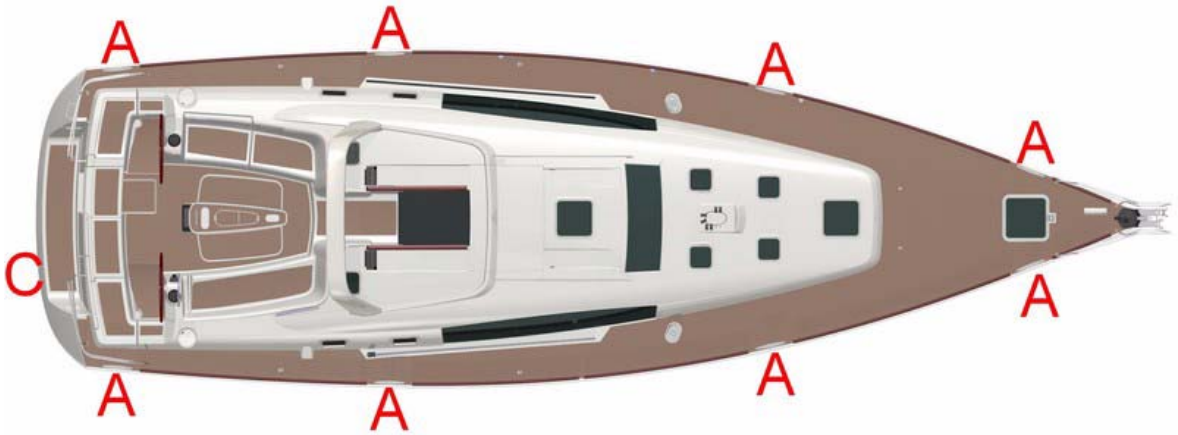
-When in dry dock check the anode on the propeller shaft line.

-See "Motorisation" chapter.

4

Deck

- Navigation - Deck Layout
- Stability
- Prevention of man overboard
- Mooring lines



A. Mooring cleats
Jack-lines to be fixed to the mooring cleats

B. Towing:

- at the bow, to be towed
- at the stern, to tow

C. Swimming ladder (means of coming back onboard)

D. Mount Outboard (not supplied)

E. Lifebuoy support bracket (not supplied)

WARNING

-The maximum weight of the outboard engine (not supplied) on the pushpits should not exceed 20 kg.

STABILITY

Breaking waves represent a serious danger for stability and for taking in water. Close the companionway doors and hatches in heavy seas.

During sailing keep all the portholes, windows and doors closed.

- The stability is reduced when you add weight in the upper parts.
- Stability may be reduced when towing a boat or when heavy weights are lifted with the davits.

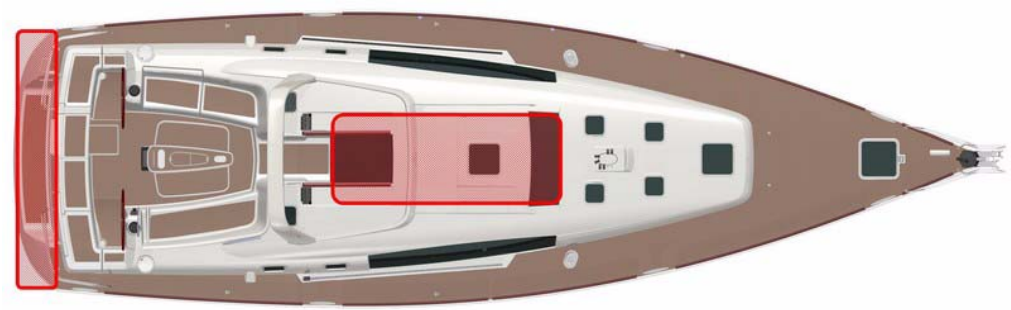
PREVENTION OF MAN OVERBOARD

Regularly check the guard-rails:

- With metal guard-rails, watch for corrosion particularly at connecting points.
- With synthetic guard-rails, change them as soon as they show signs of wear due to chafing or UV.

Areas forbidden when sailing:

- Aft quarterdeck.
- Roof.



MOORING LINES

A sufficient number of mooring lines suitably sized and suitable for the environment shall be on board for mooring your boat.

- Always manoeuvre your boat using the engine.
- Make allowance for the current and wind when you handle your boat.
- Protect your boat to the highest degree with suitably sized fenders.
- Always keep the mooring ropes unfouled and stored away.
- Handle your boat at a reduced speed.

AFTER MOORING

- Protect the mooring lines against chafing with plastic sleeves.
- Make allowance for the variations in tides if need be.

DANGER

-Wear your life jacket.

-In heavy weather, wear your safety harness and fasten yourself to the boat.

-When at sea close the guardrail side-opening or openings.

-Do not try to stop the boat using a boat hook or your foot, your hand or any other part of the body.

WARNING

-The sudden closing of a locker due to a gust of wind or movement of the boat could result in injury.

ADVICE - RECOMMENDATION

-Close the deck hatches and portholes before each trip (including the companionway hatch in heavy weather).

Steering system

5

- Steering Gear

STEERING GEAR

CABLE ADJUSTMENT - STEERING SYSTEM

The steering gear is assembled and pre-adjusted at the factory, however, only actual use at sea will enable the steering cable to find its definitive postion around the wheel drum.

For this reason, it is necessary to re-adjust the gear after the first few sea outings.

The adjustment is made on the nut and bolt system integral with the steering cable at the join with the profile. To check the adjustment exert a perpendicular force on the cable between the wheel drum and the return sheaves located on the hull.

MAINTENANCE

- Regularly check:
  - The tension in the steering cables.
  - The tightness of the steering system components.
- Don't tighten the steering cables excessively.
- Lubricate all the elements.

Maintain the nylon, ertalon or teflon bushes with only a suitable lubricant.

Note: Do not hesitate to consult your dealer about system maintenance.

Access to steering gear: Cockpit locker - Port side

WARNING

-The steering system is a feature of sailing safety and for this reason must be verified at least once a year.

-THE STEERING CABLE MUST BE CHANGED EVERY 10 YEARS.

WARNING

-Refer to chapter 2 "Safety"for use of the emergency tiller.

ADVICE - RECOMMENDATION

-The emergency tiller is designed only to be able to continue underway at a reduced speed in case of steering gear failure.

Water and sewage water

- Water system - Distribution

6

WATER SYSTEM - DISTRIBUTION

USE OF THE WASHBASINS AND SHOWERS

- Close the valves and turn off the taps after use.

SEA WATER FOOT PUMP / FRESH WATER

The footpump makes either seawater or freshwater available at the sink.

Manipulate the valve (choice of water) and push down on the pump pedal.

Seawater inlet - Under galley floor

House water inlet: Plumbing board

Control: Foot pump

WARNING

-Turn off the shore freshwater supply valve before leaving the vessel.

PRECAUTION

-Never operate the water system equipment when the valve is closed or the tank is empty (the electrical equipment may be damaged).

-Check the water filter for condition (refer to manufacturer's instructions).

-Close the taps of empty tanks.

WARNING

-.Bleed the cockpit shower circuits and the deck washing pump to prevent freezing.

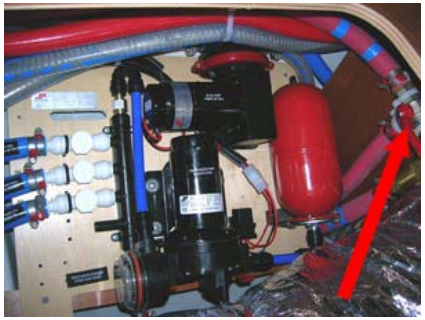
COCKPIT SHOWER SPRAY

Location

SHORE FRESHWATER SUPPLY

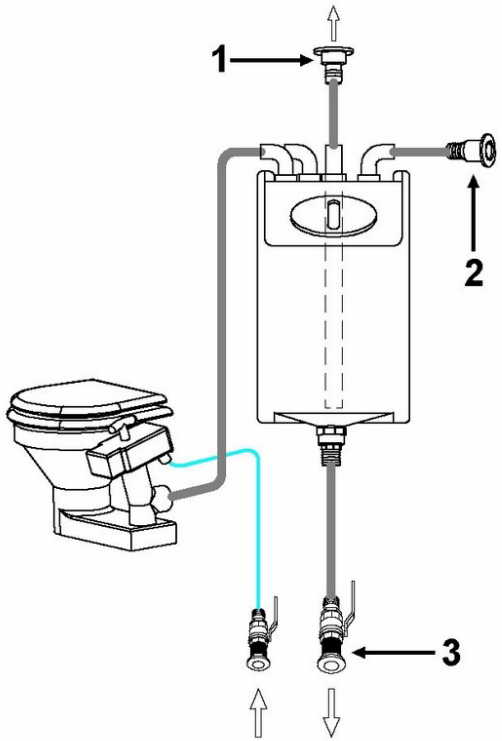
Location

Selection valve -
Shore fresh water / On board water circuit
Location: Seating - Port saloon



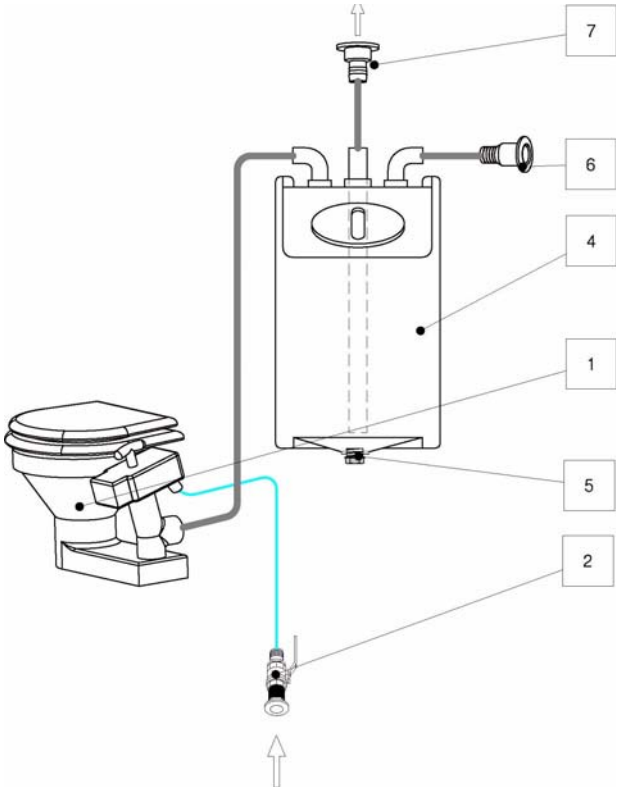
Black water circuit - Schematic diagram

Deck or sea evacuation



1. Deck filler - Suction and Rinsing
2. Tank vent hole
3. Thru-hull seacock

Deck only evacuation



1. WC
2. Seawater inlet
4. Sewage tank
5. Closing cap
6. Vent hole
7. Deck filler: Intake / Rinsing off

USE OF MARINE WCS FITTED WITH BLACK WATER TANK

Open the water intake valve (valve handle parallel to the pipe).

In the case of a direct discharge into the sea: Open the draining valve.

In case you store the waste waters in the tank: Make sure the draining valve is closed (valve handle perpendicular to the pipe).

To drain the bowl, set the control lever of the pump slantwise (FLUSH) then operate the pump.

To dry the bowl, set the lever vertical (DRY) then operate the pump.

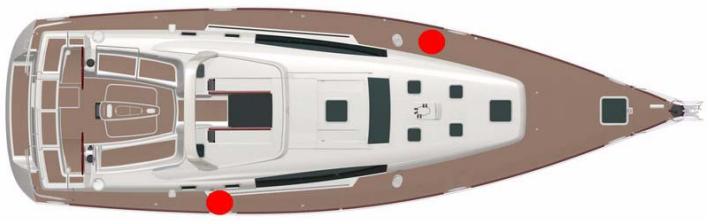
In order to avoid clogging the heads:

- Only use absorbent paper inreasonable quantities.
- Schedule a regular rinsing through of the system with fresh water.
- Always retain a little water in the bottom of the bowl to avoid smells

To empty the tank:

- In an authorized area, open the draining valve.
- In a marina equipped with a system to suck the waste waters, put the sucking hose into the tank through the deck filler. Start the pump of the sucking system. The filler caps are opened and closed with an appropriate key. When the tank is empty, check the cap seal for condition then close the filler.

Drainage - Deck



Aft washroom: 73 l
Fore washroom: 73 l

WARNING

-The tanks' nominal capacity cannot be fully used due to the load and the need to maintain the correct trim. A 20% reserve should be kept.

WARNING

-Ask for information about the laws in force in your country or your marina about discharging your waste waters into the sea.

PRECAUTION

-Close the valves after each use and above all when the boat is unattended.

PRECAUTION

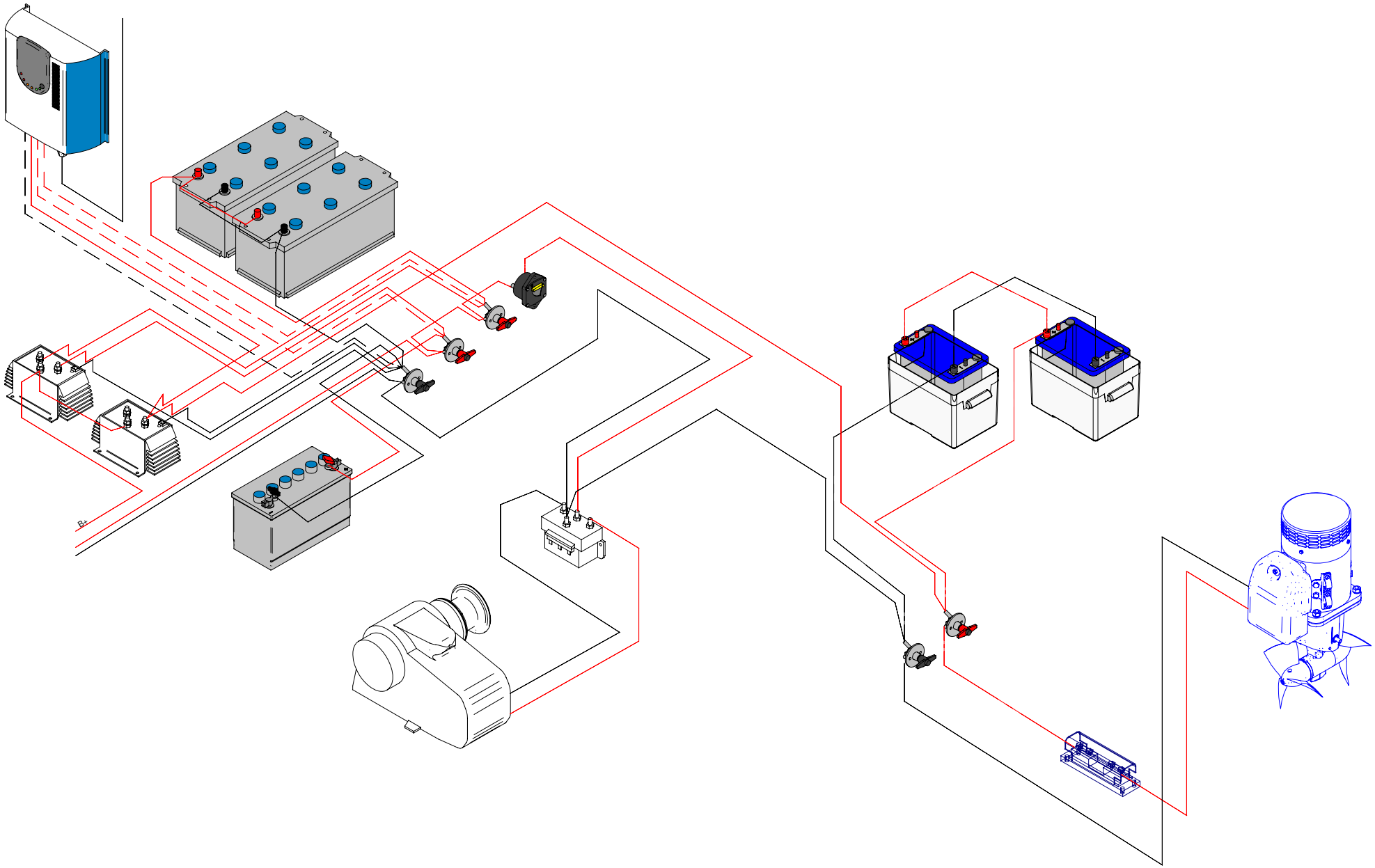
-Regular check the tank level. High pressure due to too high a level may cause leaks or more unpleasant troubles.

Electrical equipment

- General information
- 12 V DC system
- 110-220 V AC system

7

Schematic diagram



GENERAL INFORMATION

ELECTRICAL PANEL

The electrical switchboard does not require any routine maintenance. In case an electric appliance is not energized, check:

- The main power supply (batteries, battery switches).
- The switches and circuit breakers on the line.
- the relevant electrical unit.

ELECTRICAL CIRCUIT, 12 V

GENERAL RECOMMENDATIONS

- Never work on a live electric fitting.
- The batteries must be strongly fastened.
- Do not block the battery ventilation ducts, some of them may give off hydrogen which represents a danger of explosion.
- The batteries must be handled with care. In the case of contact with electrolyte thoroughly rinse off the affected part of the body and consult a doctor.
- To avoid short-circuiting between the battery poles do not store conducting objects near to the batteries (metal tools, etc...).
- Turn off the electrical circuit with the battery switches when installing batteries or during their connection/ disconnection.
- Never modify the specifications of power overload protection devices.
- Never modify an installation. Use the services of a qualified marine electricity technician.
- Never install or replace the electric appliances (or any electric equipement) by components exceeding the capacity (amperage) of the circuit (Watt for bulbs).
- Do not leave the vessel unattended when the electrical system is switched on .
- Certain lights represent a significant heat source, be careful of surrounding objects.

Note that the 12 V circuit wires are red for positive and black for negative.

DANGER

-There may be danger of fire or explosion if direct current systems are incorrectly used.

WARNING

-Handle the batteries with care (Please refer to the manufacturer's instructions.

-In case of electrolyte splashing, thoroughly rinse the part of the body that has been in conctact with it. Obtain medical advice.

ADVICE - RECOMMENDATION

-Keep the batteries clean and dry in order to avoid premature wear.

-Periodically check the electrolyte level. Add distilled water when needed.

-Tighten and maintain the terminal connectors by greasing them regularly.

-Disconnect the batteries during winter storage or long periods of inactivity.

SHORE POWER SOCKET

		
Differential switch 40A - Chart table unit	**Shore power socket 220V - 30A (Ref 1)**	**Bipolar circuit breaker 32A Cockpit locker - Starboard (Ref 2)**

ELECTRICAL CIRCUIT, 110-220 V

GENERAL RECOMMENDATIONS

Certain vessels are equipped (as either standard or optional features depending on the model)with a 110 V or 230 V circuit.

The following measures are recommended in order to avoid the danger of electrical shock and fire:

- Never work on a live electric fitting.
- Plug in the boat/shore supply cable in the boat before you plug it into the shore supply socket.
- Never let the end of the boat/shore supply cable hang in the water.
- Turn off the shore supply with the onboard cut-off switch before connecting or disconnecting the vessel/ shore supply line.
- Disconnect the ship/shore power cable at the shore socket first.
- Check the polarity indicator for the shore connections (110V AC version).
- If the reverse polarity indicator is activated immediately disconnect the cable. Rectify the polarity fault before using the vessel's electrical installation.
- Close the shore supply input cover firmly after use.
- Do not modify the vessel/shore supply line connections; only use compatible connections.
- Do not alter the vessel's electrical system. The installation, modifications and maintenance must be carried out by a qualified marine electricity technician. Check the system at least twice a year.
- Disconnect the vessel supply when the system is not being used. This is to prevent the danger of fire.
- Use double insulated or earthed appliances.

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

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.
-There may be danger of electrocution if alternating current systems are incorrectly used.

PRECAUTION

-Never modify an electric fitting and relevant diagrams yourself.
-Call in a technician skilled in marine electricity to carry out any electric modification.
-Never change the breaking capacity (amperage) of the overcurrent safety devices.
-Never install or replace the electric appliances (or any electric equipement) by components exceeding the capacity (amperage) of the circuit (Watt for bulbs).

ADVICE - RECOMMENDATION

-In order to reduce the risks of electic shock and fire:
-Before you plug in or unplug the boat/ shore supply cable, switch off the shut off device connected to the shore supply.
-Plug in the boat/shore supply cable in the boat before you plug it into the shore supply socket.
-Unplug the boat/shore supply cable on shore first. Close the shore socket cover.
-Do not modify the connections of the boat/ shore supply cable

Engine

- General information
- Engine fitting

8

GENERAL INFORMATION

TYPE OF MOTORISATION

Your vessel is fitted with an in-board diesel engine.

Transmission type is Sail Drive.

PRECAUTIONS OF USE, OPERATING ADVICE

General point

- In this vessel, do not install an engine with a greater power and weight than that recommended, this will create a danger for its stability.
- Fuel which is stored elsewhere than in the fuel-tanks (portable tanks, jerrycans, etc...) must be kept in a ventilated space.
- Make sure that the engine compartment is clean and dry.
- Avoid contact between inflammable substances and the hot parts of the engine.
- Locate the extinguisher hole which allows access to the engine compartment if a fire should break out. (Refer to chapter 2).

Filling

Fill the fuel tank using the filler. In order to protect the deck from possible fuel splash, wet the area around the filler with sea water before you remove the filler cap. In case of splashing rinse the deck thoroughly (deck filler closed).

The fuel level is transmitted from the dipstick to the guage located on the house electrical panel.

Diesel oil tanks capacity: 237 litre.

DANGER

-Stop the engine and refrain from smoking during fuel tank filling.

-Make sure that the ventilation openings in the engine (and generator, if installed) compartment are well cleared.

ADVICE - RECOMMENDATION

-Carefully read the engine instructions given with your boat.

PRECAUTION

-Never run the engine when the boat is hauled out.

PRECAUTION

-Stop the engine before you open the companionway hatch and side hatches.

-In case of an intervention when the engine is running:

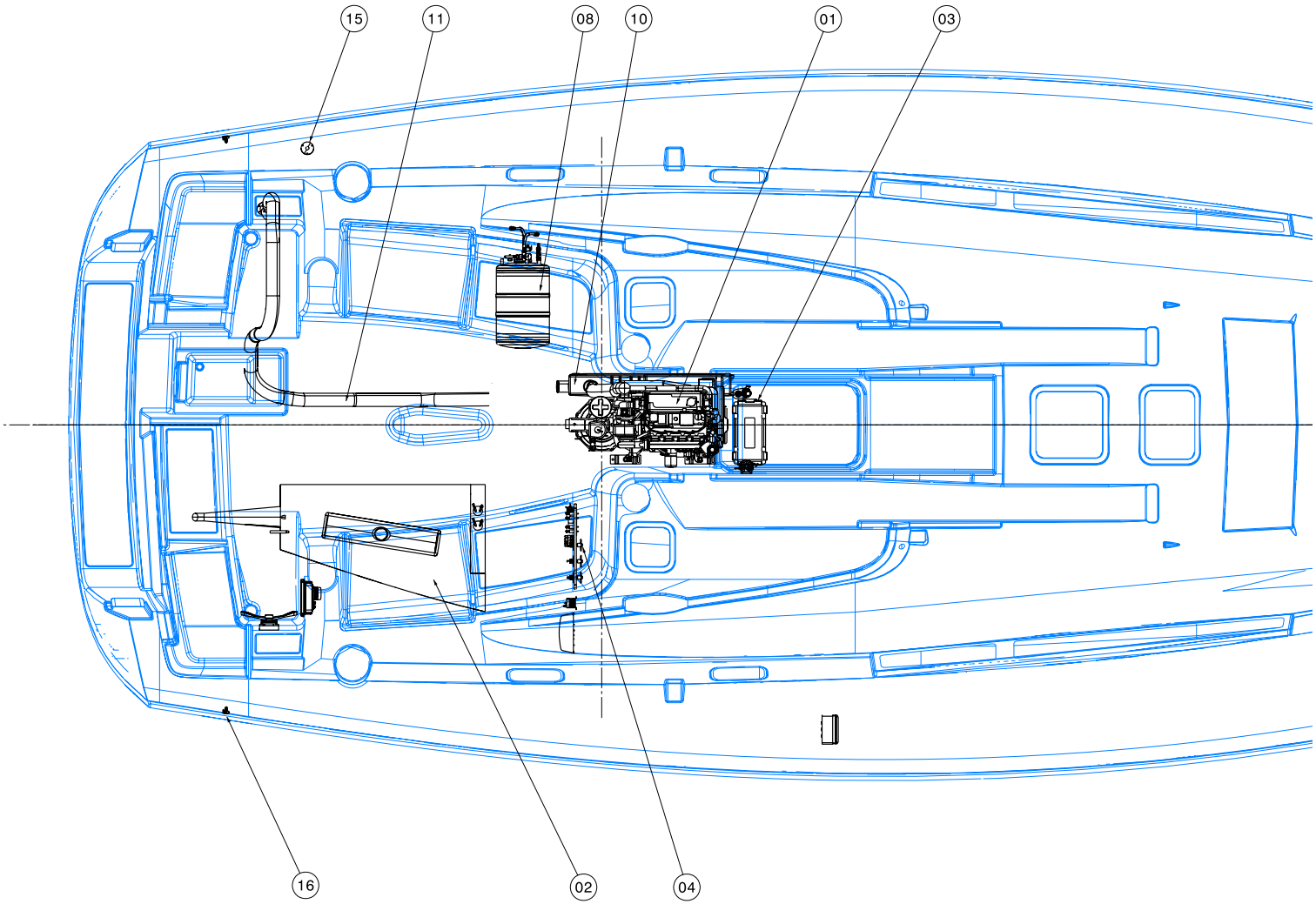
-Stay away from belts and hot or mobile parts.

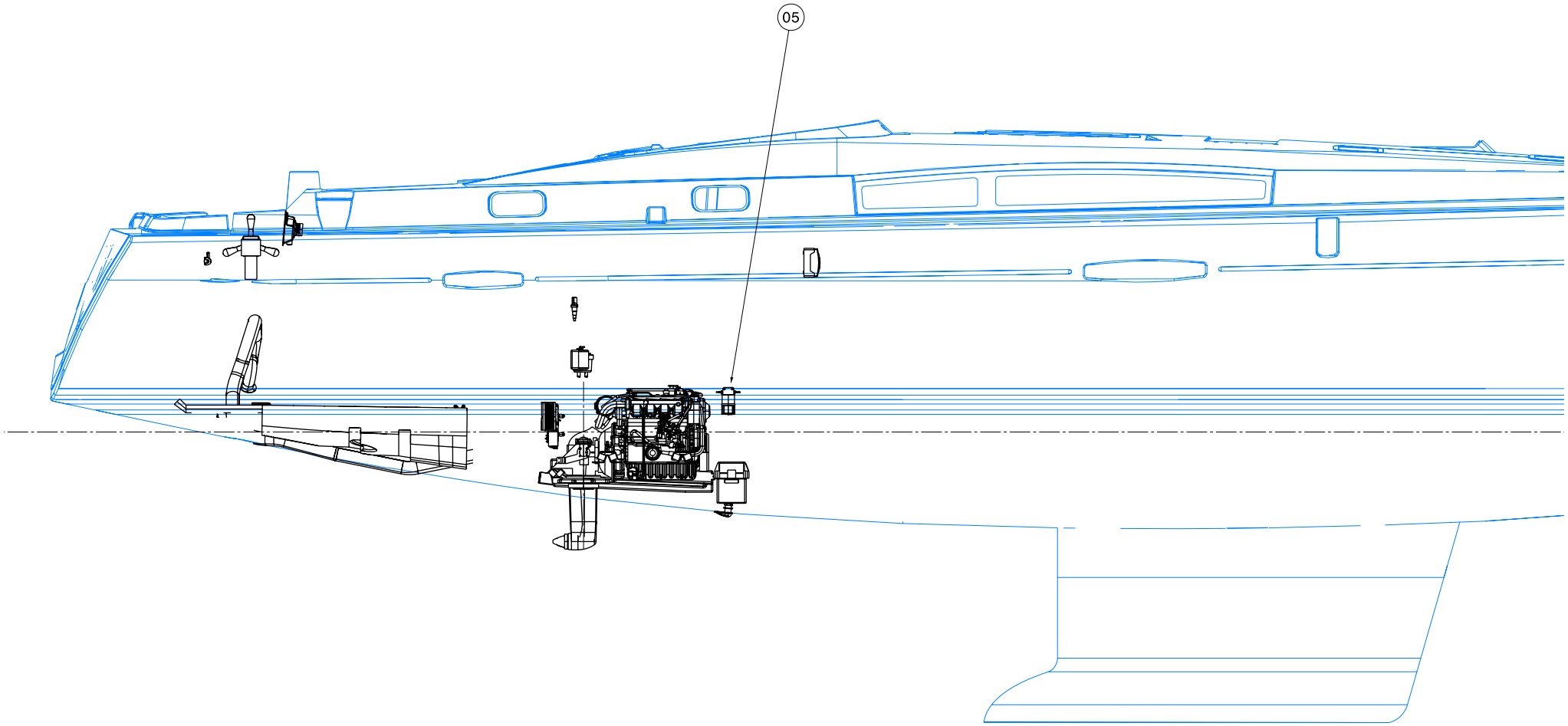
-Be careful with full clothes, long hair, rings etc. (you may be caught).

-Wear appropriate clothes (gloves, caps etc.).

ENGINE FITTING

DIAGRAM - LOCATION

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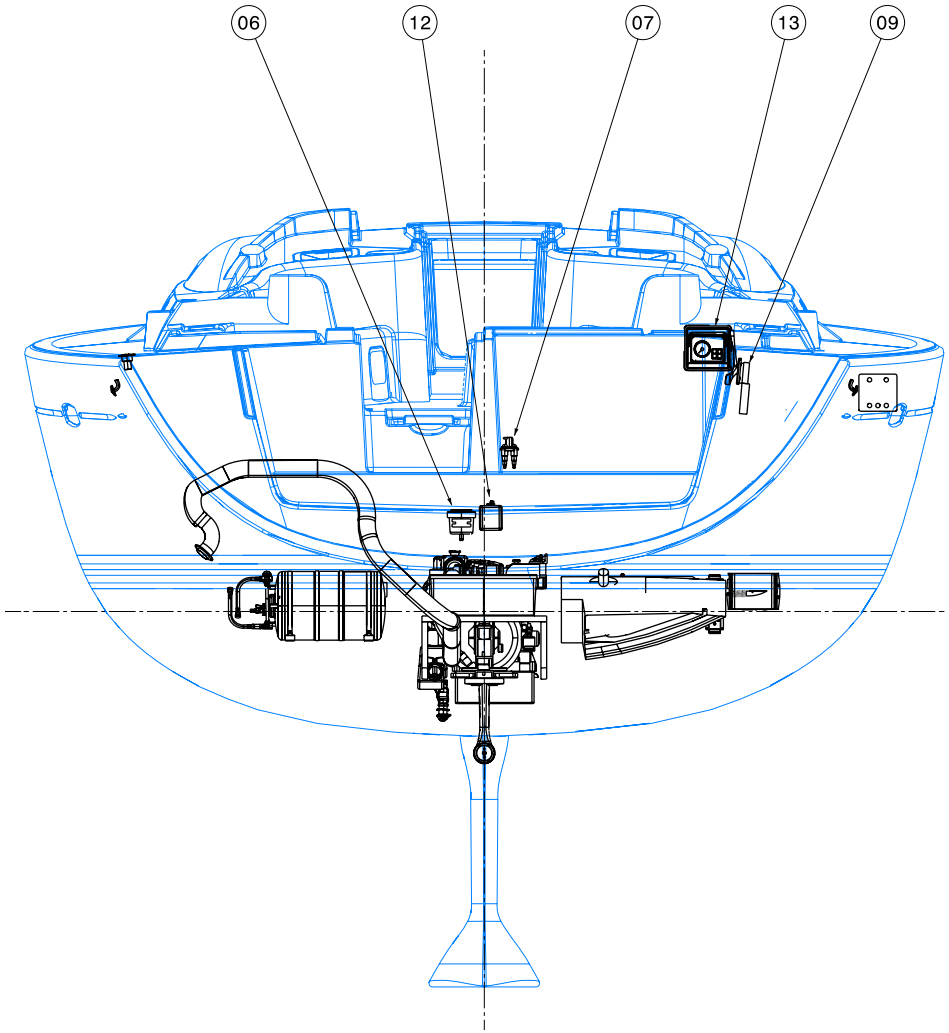


REF	Designation
1	Sail-drive engine
2	Fuel tank
3	Engine battery
4	Battery isolation switch set
5	diesel filter
6	Sea water filter
7	Anti-siphon valve
8	Water heater
9	Engine control lever
10	Water trap
11	Outlet
12	Accumulator tank
13	Engine panel
15	Fuel filler
16	Fan

The instrument panel has all the testing functions of the engine and it does not require any special precaution (refer to engine leaflet).

Check the clutch and accelerator cables (lubricate the end fittings and forks).

VISIBILITY FROM THE STEERING STATION

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

Make sure there is no other boat on your way.

The visibility from the steering station may be obstructed in the following conditions:

- Speed.
- Position of the upper and side awnings.
- Boat heeling over, the sails reduce visibility under wind.
- Load and load distribution.
- Sea conditions, rain, spray, fog or darkness.
- Lights on inside the boat.
- Persons and removable equipment in the helmsman's field of visibility.

ADVICE - RECOMMENDATION

-When the engine is running, avoid making noise and chops near the other users.

-Respect speed limits.

-If this boat is equipped with a fixed blade propeller, when sailing at speeds over 8 knots it is essential to leave the reverse gear control in neutral.

-To start the engine again, reduce the speed of the boat when sailing (in order to be able to disengage the clutch before starting it again).

PRECAUTION

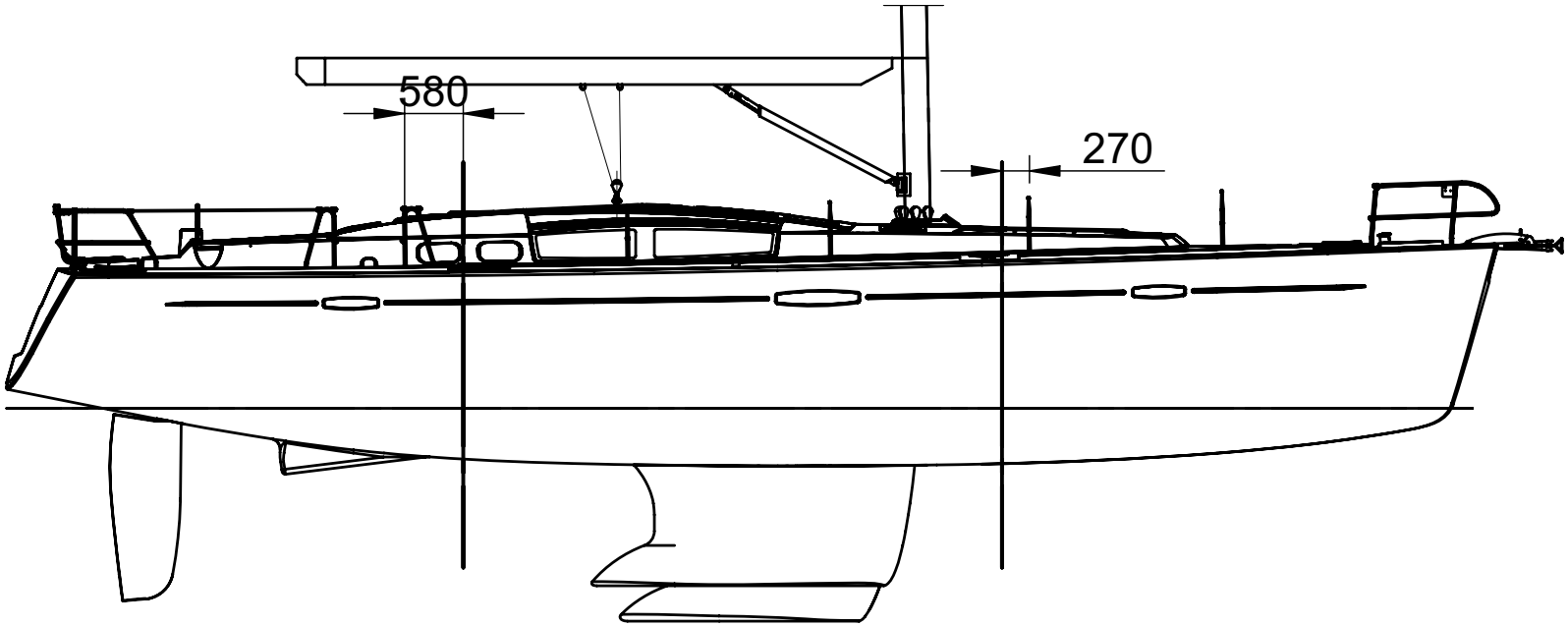
-Do not change the propeller without specialist's advice.

Launching

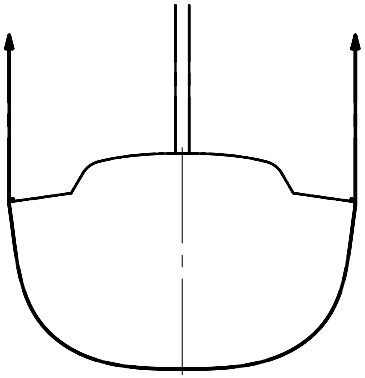
- Launching recommendations
- Stepping the mast

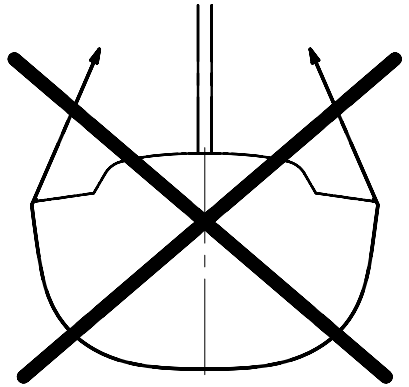
9

POSITION OF HOISTING CRADLE AND STRAPS



Note: Measurements are expressed in mm.





Personal notes

Dealer stamp