Yamarin 79 Day Cruiser

Owner’s manual

FOREWORD

Congratulations on choosing a Yamarin 79 Day Cruiser!

This manual will familiarise you with the features of your new boat and help with its care and maintenance. It has been written to help you learn to handle your boat safely and avoid any problems. Make sure that you have received manuals for all equipment fitted on your boat. Supplement this manual with the specifications and manuals of equipment you purchase later for your boat. Space has been left for your own notes at the end of the manual. Please read this manual carefully and familiarise yourself with the craft before using it.

If this is your first craft, or you are changing to a type of craft you are not familiar with, please ensure that you obtain sufficient handling and operating experience before 'assuming command' of the craft. This is highly important for your own comfort and safety. Your dealer or national sailing association or yacht club will be happy to advise you of local boating schools or competent instructors.

This owner's manual is not a detailed maintenance or troubleshooting guide. In case of difficulty please contact the dealer. Always use qualified and competent people for the maintenance, repair and modification of the boat. Modifications that may affect the safety characteristics of the craft must be assessed, executed and documented by competent people. The manufacturer is not responsible for modifications they have not approved.

Always keep your boat in a good condition and be aware that the boat requires maintenance and servicing. Any craft, no matter how strong it may be, can be severely damaged if not used properly. Always adjust the speed and direction of the craft to prevailing weather conditions.

We wish You enjoyable and relaxing times on board your Yamarin boat!

Konekesko Oy
PL 145
01301 VANTAA, FINLAND

Tel. +358 10 5311
www.yamarin.com

Please keep this user manual in a secure place, and hand it over to the new owner if you sell the craft.

Table of contents

BEFORE YOU SET OFF

Familiarise yourself with this owner's manual.
Always check at least the following items before leaving:

- **Weather conditions and forecast**
  Take the wind, waves and visibility into account. Are the design category, size and equipment of your boat, as well as the skills of the skipper and crew, adequate for the waters you are headed for? Hull windows and hatches must be battened down during high wind and rough seas to prevent water incursion.
- **Loading and stability**
  Do not overload the craft, and distribute loads appropriately. Heavy items are to be placed in the storage compartments under the aft bench. Also note that the boat is less stable if people stand up when on board.
- **Passengers**
  Ensure that there are personal flotation devices or lifejackets for all people on board. Agree on crew tasks before setting off.
- **Fuel and fuel system**
  Make sure that the boat has enough fuel, including a 20% reserve for heavy weather or other unforeseen eventualities.
- **Engine and manoeuvring equipment**
  Check the function and condition of steering and remote control, and carry out routine checks according to the engine manual.
- **Seaworthiness**
  Check the boat's seaworthiness: no fuel or water leaks, safety equipment available on board, etc. Check that there is no water in the bilge.
- **Fastening of equipment**
  Check that all onboard items are positioned so that they will stay in place even in rough seas and high winds. Please note that the seat cushions may fly overboard if they are not fixed properly with press studs.
- **Nautical charts**
  Unless you are navigating in completely familiar waters, ensure you have nautical charts on board that cover a large enough area! If your boat is equipped with a chart plotter, learn to use it before setting off. Ensure that the plotter charts are of the latest edition.
- **Leaving the berth**
  Agree with the crew who will release each mooring line, etc. Be careful not to let mooring lines or the anchoring line become fouled in the propeller during manoeuvring.
- **Obligatory equipment**
  What is considered obligatory equipment varies between different countries. Find out what is required for your boat.

You will find additional instructions concerning the engine in the separate engine manual.

1 General

The owner's manual will help you familiarise yourself with the properties and features of your new boat and with its care and maintenance. Separate manuals for installed equipment are attached and are referred to in many sections of the owner's manual. You can supplement this user manual by adding the manuals of devices which are installed afterwards. Space has been left for your own notes at the end of the manual.

The craft has a running serial number, a CIN-code (Craft Identification Number). The CIN-code can be found on the starboard side of the transom just below the bathing platform. We recommend that you write down the CIN-code in the declaration of conformity on the following page. When contacting the dealer, please provide the CIN code and the type of craft. This helps in delivering the correct spare parts.

1.1 DECLARATION OF CONFORMITY

Declaration of Conformity of Recreational Craft with the Design, Construction and Noise Emission requirements of Directive 2013/53/EU.

Manufacturer/Marketer: Konekesko Oy Marine

Address: Vanha Porvoontie 245

Post Code: 01300 **Town:** Vantaa **Country:** Finland / FIN

Name of Notified Body for design and construction assessment: VTT Expert Services Oy

Address: PL1000

Post Code: 02044 VTT **Town:** Espoo **Country:** Finland / FIN **ID Number**: 0537

EC type-examination Certificate number: VTT-C-11757-10-vene-001-16

Module used for construction assessment: ☐ A ☐ Aa ☒ B+C ☐ B+D ☐ B+E ☐ B+F ☐ G ☐ H

Module used for noise emission assessment: ☐ A ☐ Aa ☐ G ☐ H

Other Community Directives applied:

DESCRIPTION OF CRAFT

Craft Identification Number (CIN): | | | | | | | | | | | | | |

Brand Name of the craft: **Yamarin**

Type or number: **79 Day Cruiser**

Type of craft:
- ☐ sailboat
- ☒ motorboat
- ☐ inflatable
- ☐ other (specify): _____

Type of hull:
- ☒ monohull
- ☐ multihull
- ☐ other (specify): _____

Construction material:
- ☐ aluminium, aluminium alloys
- ☒ plastic, reinforced plastic
- ☐ steel, steel alloys
- ☐ wood
- ☐ other (specify): _____

Maximum Design Category: A ☐ B ☐ C ☒ D ☐

Max. Engine power: 221 kW

Length of hull L_h: 8,08 m

Beam of hull B_h: 2,6 m

Draught T: approx. 0,5 m (engine up)

Type of main Propulsion:
- ☐ sail
- ☒ petrol engine
- ☐ diesel engine
- ☐ electric motor
- ☐ oars
- ☐ other (specify): _____

Type of engine:
- ☒ outboard
- ☐ inboard
- ☐ z or sterndrive without integral exhaust
- ☐ z or sterndrive with integral exhaust
- ☐ other (specify): _____

Deck:
- ☐ fully decked
- ☒ partly decked
- ☐ open
- ☐ other (specify):_____

This declaration of conformity is issued under the sole responsibility of the manufacturer. I declare on behalf of the craft manufacturer that the craft mentioned above complies with all applicable essential requirements in the way specified and is in conformity with the type for which above mentioned EC type examination certificate has been issued.

Name and function: Peter Krusberg, Product Development and Production Manager, Konekesko Oy Marine
(identification of the person empowered to sign on behalf of the Manufacturer or his authorized representative)

Signature: _____ **Place of issue:** Vantaa **Date (yr/month/day):** 2016/10/21

Essential requirements	Standards	Other normative Document/ method	Technical file	Pleace specify in more details (*Mandatory Standards)
General requirements (2)	☒			EN ISO 8666:2002 *
Craft Identification Number - CIN (2.1)	☒			EN ISO 10087:2006 *
Builder's Plate (2.2)	☐	☒	☐	RCD annex I, 2.2
Protection from falling overboard and means of reboarding (2.3)	☒	☐	☐	EN ISO 15085:2003/DAM 2.3.2
Visibility from the main steering position (2.4)	☒	☐	☐	EN ISO 11591:2011
Owner's manual (2.5)	☒	☐	☐	EN ISO 10240:2004
Integrity and structural requirements (3)				
Structure (3.1)	☐	☒	☐	RSG Guidelines, NBS-VTT Extended Rule
Stability and freeboard (3.2)	☒	☐	☐	EN ISO 12217-1:2015
Buoyancy and floatation (3.3)	☒	☐	☐	EN ISO 12217-1:2015
Openings in hull, deck and superstructure (3.4)	☒	☐	☐	EN ISO 9093-1:1997, EN ISO 12216:2002
Flooding (3.5)	☒	☐	☐	EN ISO 15083:2003, ISO 8849:2003
Manufacturer's maximum recommended load (3.6)	☒	☐	☐	EN ISO 14946:2001/AC 2005
Liferaft stowage (3.7)	☐	☒	☐	RSG Guidelines
Escape (3.8)	☒	☐	☐	EN ISO 9094:2015
Anchoring, mooring and towing (3.9)	☒	☐	☐	EN ISO 15084:2003
Handling characteristics (4)	☒	☐	☐	EN ISO 11592:2001, EN ISO 8665:2006
Engines and engine spaces (5.1)				
Inboard engine (5.1.1)	☐	☐	☐	
Ventilation (5.1.2)	☐	☐	☐	
Exposed parts (5.1.3)	☐	☐	☐	
Outboard engine starting (5.1.4)	☐	☐	☐	
Fuel system (5.2)				
General – fuel system (5.2.1)	☒	☐	☐	EN ISO 11105:1997
Fuel tanks (5.2.2)	☒	☐	☐	EN ISO 10088:2013
Electrical systems (5.4)	☒	☐	☐	EN ISO 10133:2012, EN ISO 8846:1993/A1:2000
Steering systems (5.4)				
General – steering system (5.4.1)	☒	☐	☐	EN ISO 10592:1995/A1:2000
Emergency arrangements (5.4.2)	☐	☐	☐	
Gas systems (5.5)	☐	☐	☐	
Fire protection (5.6)				
General – fire protection(5.6.1)	☒	☐	☐	EN ISO 9094-1:2015
Fire-fighting equipment (5.6.2)	☒	☐	☐	EN ISO 9094-1:2015
Navigation lights (5.7)	☐	☒	☐	1972 COLREG
Discharge prevention (5.8)	☐	☐	☐	
Annex I.B – Exhaust Emissions	**See the Declaration of Conformity of the engine manufacturer**			
Annex I.C – Noise Emissions[1]	☐	☐	☐	
Noise emission levels (I.C.1)	☐	☐	☐	
Owner's manual (I.C.2)	☐	☐	☐	

[1] Only to be completed for boats with inboard engines or sterndrive engines without integral exhaust.

2 Definitions

The warnings and cautions in this manual are defined as follows:

DANGER! Denotes an extreme intrinsic hazard that will result in a high probability of death or permanent injury if proper precautions are not taken.

WARNING! Denotes a hazard which can result in injury or death if proper precautions are not taken.

NOTE! Denotes a reminder of safe practices or directs attention to unsafe practices which could result in personal injury or damage to the craft or components or the environment.

SI system units are used in this manual. In some cases, other units have been added in brackets. An exception is wind speed, for which the Beaufort scale is used in the Recreational Craft Directive.

3 Warranty

The boat and its factory-installed equipment have a two-year warranty, starting on the first day of use. Please contact your dealer regarding any potential warranty issues. Please remember to provide the CIN code. If possible, please provide a digital photograph of the subject of your claim. This usually speeds up the claims process.

4 Before use

4.1 Registration

Registration regulations vary between different countries. Find out what is required in relation to your own boat.

4.2 Insurance

Boat insurance can compensate damage occurring on water or during transport and lifting. Check who has insurance liability each time when having the boat lifted. Insurance also has an indirect effect on safety at sea: In the event of a serious accident or damage, you must, above all, concentrate on saving people. Insurance companies will be able to give more information about different insurance alternatives. Check who has insurance liability each time when having the boat lifted or transported!

4.3 Training

No one is a born sailor. There is plenty of boating literature available. Navigation courses are arranged by local yacht clubs or national boating associations where you can gain basic skills.

However, please remember that you only become confident in boat handling, navigation, docking and anchoring after long practical experience.

5 Characteristics and use of your boat

5.1 General

The user manual is not meant to be a complete service or repair manual; it simply guides the user to use his/her boat in a proper way.

Pictures and drawings of this manual might include optional or country-specific features.

5.2 Basic data

Recreational crafts can be constructed according to 4 categories (A, B, C and D) under the Recreational Craft Directive 2013/53/EU. This boat has been constructed according to design category C. The meanings of the various design categories are explained below.

Category A: The boat is built for conditions where wind speed can exceed 8 Beaufort (approx. 21 m/s), and where the significant height of the waves (please refer to note below) can exceed 4 metres. In such circumstances the boats are largely self-sufficient. Category A does not include abnormal conditions such as hurricanes. Such conditions may be encountered on extended voyages, for example when crossing oceans, or in coastal areas where there is an open expanse of sea for several hundred nautical miles off the coast.

Category B*:* The boat is built for conditions where wind speeds can reach a maximum of 8 Beaufort (approx. 21 m/s), and where the corresponding significant height of the waves (please refer to note below) is 4 metres at most. 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*:* The boat is built for conditions where wind speeds can reach a maximum of 6 Beaufort (approx. 14 m/s), and where the corresponding significant height of the waves (please refer to note below) is 2 metres at most. Such conditions may be encountered on exposed inland waters, in estuaries, and in coastal waters in moderate weather conditions.

Category D*:* The boat is built for conditions where wind speeds can reach a maximum of 4 Beaufort (approx. 8 m/s), and for corresponding seas (significant wave height does not exceed 0.3 metres, and the height of the greatest waves does not exceed 0.5 metres). Such conditions may be encountered on protected inland waters, and in coastal areas during fine weather conditions.

***Note*:** Significant wave height is a term used in boat design. In practice, significant wave height means the average height of the highest third of all wave heights measured in the waters. If the significant wave height is 2.0 m, the mean height of all waves is roughly 1.2 m.

Maximum recommended load: See *technical specification.*
Please also refer to section 5.4 “Loading”.

Main dimensions and capacities: See *technical specification.*
Craft length, width, draught, total weight, etc., and tank capacities are shown in the technical specifications.

Builder’s plate: Part of the aforementioned information is given on the builder’s plate, which is affixed next to the remote control. Supplementary information is provided in the appropriate sections of this manual.

Technical specifications

Model	YAMARIN 79 DC	
Design category	C	
Overall length (swim ladder not included)	8.08 m	
Width	2.6 m	
Weight without engine, fluids and equipment	approx. 1,700 kg	
Weight on trailer with largest recommended engine	approx. 2,310 kg Includes the boat (approx. 1,700 kg), a Yamaha F300 engine (270 kg) and the estimated weight of fluids and equipment (340 kg). NOTE! This is not the maximum weight of fluids and equipment.	
Weight on trailer with the largest engine that complies with the standard	approx. 2,353 kg Includes the boat (approx. 1,700 kg) and a 300 hp engine (313 kg) and the estimated weight of fluids and equipment (340 kg). NOTE! This is not the maximum weight of fluids and equipment.	
Maximum weight of load / Maximum number of passengers	920 kg 8 persons	
Maximum load includes	600 kg / 8 persons (75 kg each) + personal equipment 50 kg + fuel 195 kg + fresh water 45 kg + waste water 30 kg = 920 kg	
Maximum load on builder's plate (CE sign)	650 kg Includes passengers 8 x 75 kg = 600 kg + personal equipment 50 kg = a total of 650 kg	
Weight at full load	approx. 3,003 kg Includes the boat 1,700 kg + batteries 20 kg + engine 313 kg + basic equipment 50 kg + personal equipment 50 kg + fuel 195 kg + water 45 kg + waste water 30 kg + passengers 600 kg	
Maximum engine power	221 kW / 300 hp	
Weight of largest recommended engine	313 kg	
Fuel tank capacity	261 litres	
Maximum draught at full load, engine up	approx. 0.5 m	
Maximum height from water line at light load	approx. 1.7 m	
Construction material	Reinforced plastic	
Colour codes: - Hull: - Deck	 Ashland 10015 Ashland 10015	 RAL 9016 RAL 9016
Hydraulic hoses	2 x 2.5 m 2 x 3.5 m	
Speed achieved at performance test	approx. 48 knots	

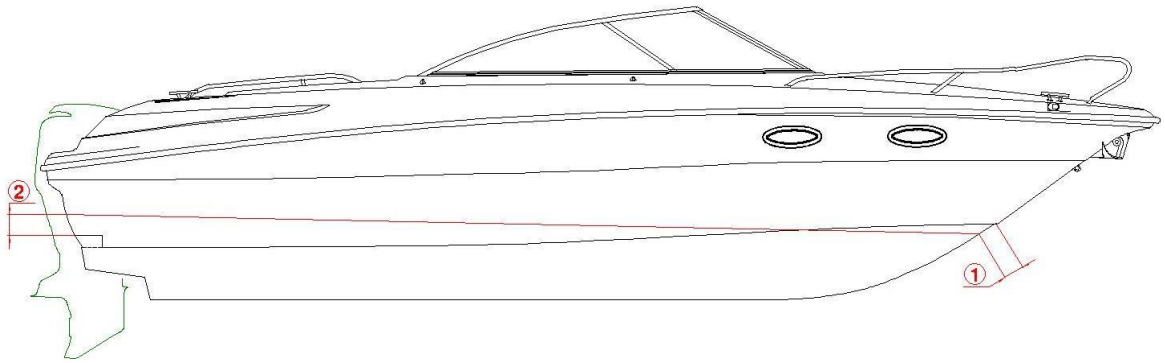


Image: Boat's water line

Water line:		
-	at stern	90 mm directly up from chine (2)
-	at bow	230 mm down from chine along the bow (1)

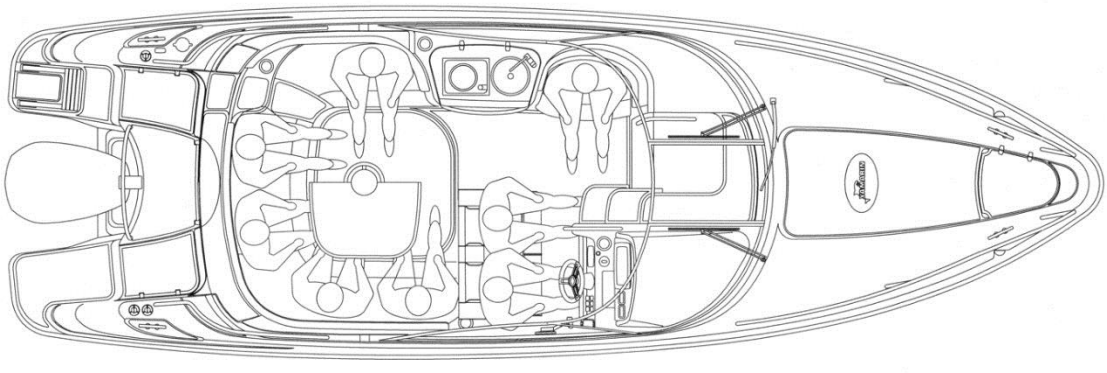
NOTE! The measurements indicate the upper limit of antifouling paint, not the boat's true water line.

5.3 Maximum recommended number of passengers:

The boat's maximum recommended number of passengers is eight persons.

WARNING! Do not exceed the maximum recommended number of passengers. Regardless of the number of passengers, the total weight of people and equipment must never exceed the maximum recommended load (please refer to Section 5.4, "Loading"). Always remain seated on the boat. All persons on board must remain seated while the boat is moving.

Seats on the boat:



5.4 Loading

The boat's maximum permitted load is 920 kg. This load includes the following weights:

a) The total weight of passengers 600 kg (the default weight of an adult is assumed to be 75 kg and that of a child 37.5 kg)
b) Liquids (fresh water, fuel, etc.) in fixed tanks 240 kg
c) Personal equipment (e.g. recreational and camping equipment) 50 kg
d) the weight of supplies and other stores 30 kg

NOTE! The maximum permitted load only includes the weights mentioned above.

WARNING! **Never exceed the maximum recommended load when loading the craft**. Always load the craft carefully and distribute loads appropriately so that the boat is on an even keel. Heavy equipment should usually be placed in the storage compartment under the aft seat. If the boat is carrying the maximum number of passengers, heavy items should be placed in the bow so that the boat will not be tail-heavy. Always avoid placing heavy items high up.

5.5 Engine and propeller

The maximum recommended engine power for the boat is 300 hp (221 kW). Do not use the boat with an engine that has an output higher than the kW limit given on the CE plate. Using a more powerful engine than specified on the CE plate will void the boat’s warranty. Follow the dealer’s instructions when choosing the propeller for your craft.

NOTE! Do not turn the engine when the engine well's hatch is resting on the hood. The warranty does not cover damage caused by the hatch to the hood.

5.6 Prevention of water incursion and stability

5.6.1 Hull and deck through fittings and closing valves

The boat has a rainwater draining system, which means that rainwater is drained from the undecked part of the boat when the boat is on the water. The system also functions when the boat is out of water, provided that the bow is higher than the stern and closing valve is open. The rainwater drainage closing valve is located under the middle hatch of the aft seat. This drain valve is meant to be shut only when at maximum load to prevent potential water incursion. **In other loading conditions the drain valve should remain open to let rainwater drain from the boat**.

The boat is equipped with two bilge pumps, at the locations indicated in the figure below. The electric bilge pump has a capacity of c. *65 l/min* and the manual pump's capacity is c. *0.5* l/pull.

The boat is equipped with high bilge water warning system. Warning system includes a float switch located in the bilge and a warning light located on the dashboard.

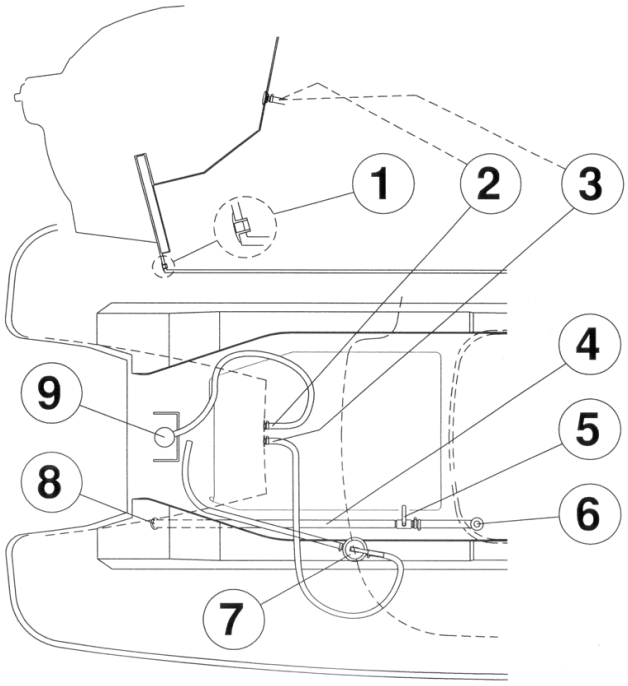


Image: Boat drainage system

1. Bilge compartment drainage plug
2. Automated bilge pump's drainage through fitting
3. Manual bilge pump's drainage through fitting
4. Open deck space drainage pipe
5. Rainwater drainage valve
6. Rainwater drainage through fitting
7. Manual bilge pump
8. Shut-off flap
9. Electric bilge pump and float switch

The owner of the boat is responsible for ensuring that there is at least one baler or bucket on the boat and that it has been secured.

WARNING! The bilge pump system is not intended to cope with a leak caused by running aground or other equivalent damage (hull damage).

WARNING! Always keep the drainpipe shut when its inboard end is constantly below the waterline due to loading. The shut-off flap on the transom only prevents water from entering the boat when reversing!

NOTE! Make sure that water can flow unobstructed through the drainpipe. Debris such as autumn leaves may obstruct the water flow, which can cause the boat to fill with water and sink. The bilge pump system does not work in conditions below 0°C.

PRECAUTION! Refer to the image above to locate the pumps. Regularly check to ensure that there is no debris at the end of the suction hoses for each of the pumps. You can access the electrical pump by doing the following: Screw off the bottom plate (plywood plate) under the aft seat. The bilge pump is located in a case and you can just lift it up as it is not fitted with screws. Clean out the bottom layer in the bilge pump by letting it down into its case. The end of the hand pump's suction hose is situated between the fuel tank and the transom, and can be reached by screwing off the bottom plate under the aft seat.

NOTE! There is always some condensed water in the bilge. A small amount of water may also come through the hull through fittings, especially as the boat ages. Always remember to check the bilge before you leave the boat at quay or buoy, and always before setting off. Have any leaks repaired at an authorised repair shop.

WARNING! The boat’s handling properties may become extremely dangerous if there is water in the bilge.

WARNING! The boat's hull windows must be kept closed when the boat is moving. Also close the windows when you leave the boat at pier or buoy. In rough weather, hatches, drawers and doors should be kept shut to minimise the risk of them filling with water.

5.6.2 Stability and buoyancy

Please note that stability will be reduced by any weight added high up on the boat. Any change in the distribution of weight on board may significantly affect the stability, trim and performance of your craft. Please remember that large breaking waves always present a serious danger to stability.

5.7 Preventing fires and explosion hazards

5.7.1 Refuelling

Shut off the engine and extinguish any cigarettes before starting to refuel. During refuelling, do not use switches or appliances that can cause a spark.

If the nozzle shuts off in the middle of refuelling, turn it roughly 90 degrees to prevent the fuel jet from hitting the chain's mounting screw.

When refuelling at a service station, do not use a plastic funnel, since it will prevent the tension between the refuelling nozzle and filling vent from being discharged.

Hint: If you are afraid of getting fuel on the teak deck during refuelling, wet the deck with water. You can also hold a rag in front of the fuel filler to prevent fuel from splashing on the deck.

Always keep a spare can of fuel on board. The anchor boxes at the stern are especially suitable for storing the spare canister. There is no risk of vaporised fuel coming into contact with battery compartments or the electrical system from either of these boxes.

Do not stow any loose items under the aft seat that could prevent fuel flow to the engine if they shift. This is particularly important for items that may press against hoses or the fuel filter. Check the fuel hoses annually for wear, especially at through fittings.

Please note that, depending on the trim of the boat or the boat's heeling angle, it might not be possible to use the full capacity of the tanks.

WARNING! Vaporised fuel is highly explosive. Observe these instructions and the utmost caution during refuelling. The smell of fuel always means that there is vaporised fuel on your boat.

5.7.2 Other fuel-operated systems (stove and heater)

The stove and paraffin heater (optional accessory) have their own user manuals and their operation is not described in detail in this manual. The fuel tanks for the stove and heater are located under the left aft bench. Only use good-quality paraffin as fuel. Turn off the stove and heater when refuelling the paraffin tank. When handling paraffin, do not use switches or appliances that can cause a spark. Always clean any spilled fuel immediately.

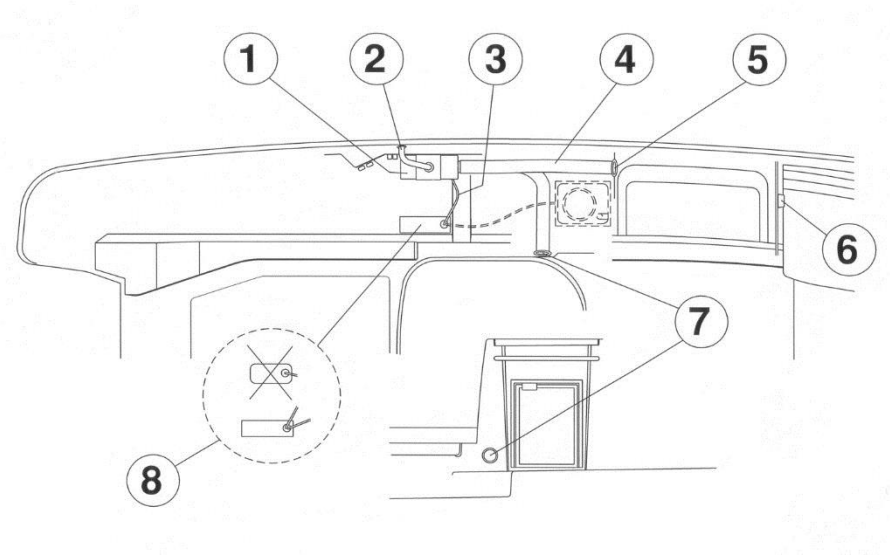


Image: Stove and heater (optional accessory)

1. Paraffin heater
2. Paraffin heater's air intake valve
3. Heater's paraffin feed hose
4. Hot air hose
5. Cabin exhaust grate
6. Heater switch, above the cupboard door
7. Exhaust grate
8. Paraffin tank (if the boat is equipped with a paraffin heater)

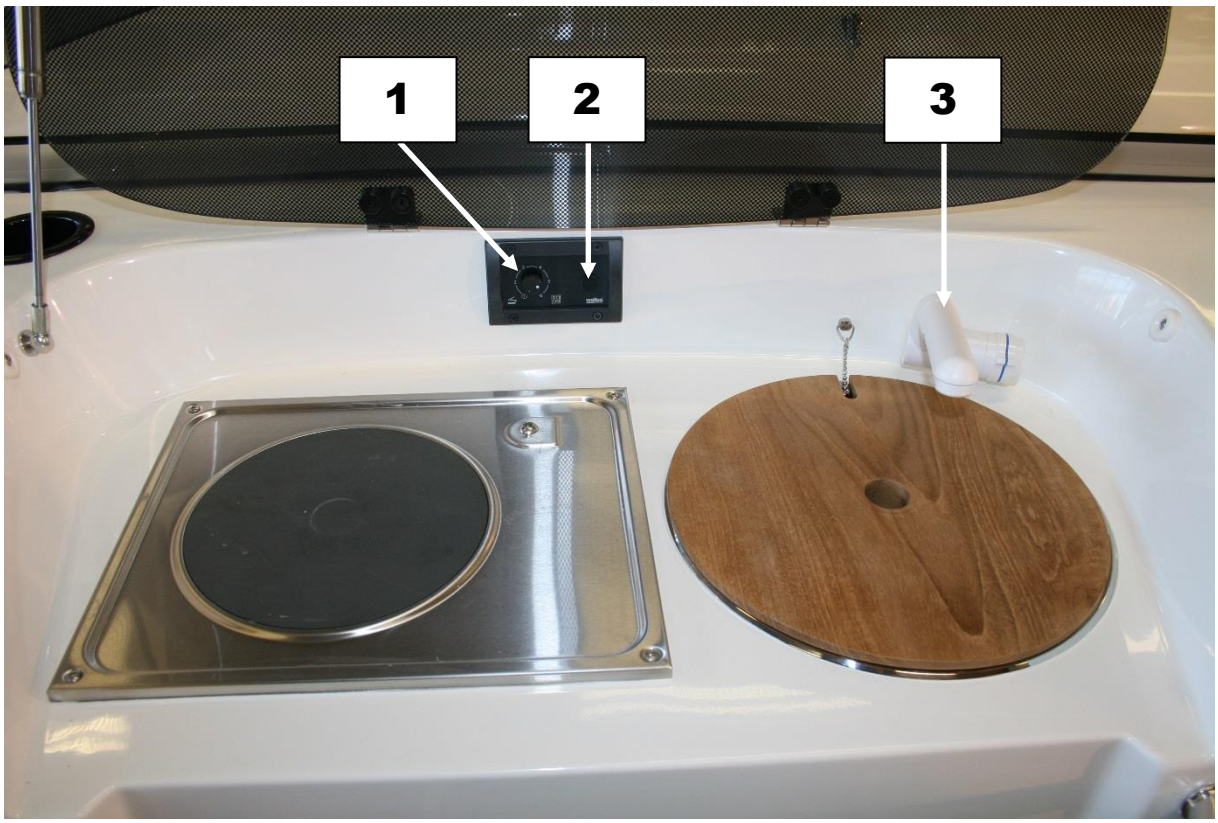


Image: Switches in the cuddy

1. Stove control
2. Stove power switch
3. Water tap

NOTE! The cuddy's cover is made of tempered glass. Tempered glass is durable and can withstand quite powerful impacts, but you should nevertheless keep in mind that the edge of the glass is vulnerable to knocks and impacts. Ensure that nothing in the sink or on the stove will obstruct the cuddy cover before lowering it. The cover must be kept closed and bolted when the boat is moving.

WARNING! For reasons of fire safety, the wooden cover of the cuddy's sink must always be kept closed when the sink is not being used. The concave mirrored surface can focus and magnify the sun's rays, which can ignite combustible materials such as dish rags in the sink. This risk of fire must be taken seriously. The cover of the cuddy alone does not provide sufficient protection from the sun.

NOTE! If the boat is equipped with a paraffin heater (optional accessory), do not close the exhaust grates when the heater is switched on. This will cause the heater to overheat and engage the overheat protector.

5.7.3 Fire protection

The boat is equipped with a portable 2 kg fire extinguisher class 8A 68 B, which is the minimum power requirement for extinguishers. For the extinguisher to remain reliable, it should be inspected annually by an authorised inspector. In the event that the fire extinguisher is replaced, the capacity of the new one must be at least equivalent to the old.

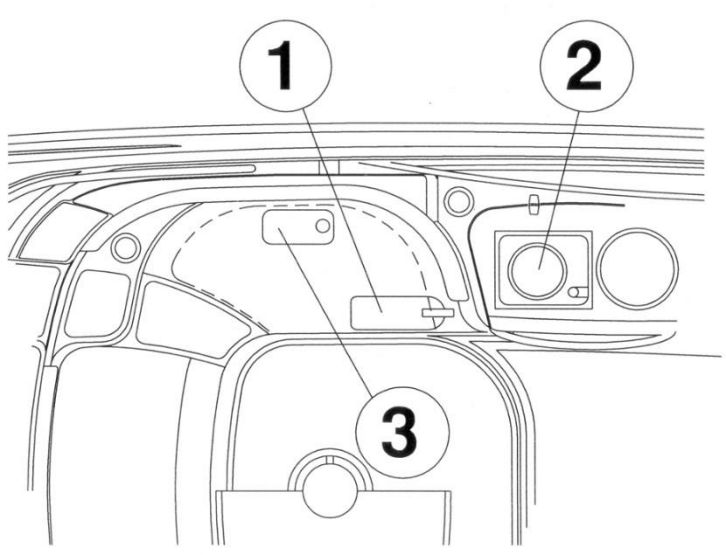


Image: Location of the fire extinguisher

1. Portable extinguisher
2. Stove
3. Paraffin tank

Ensure that fire-fighting equipment is readily accessible even when the boat is loaded. Inform members of the crew about the location and operation of fire-fighting equipment.

Remember:

- Never block passages to exits and hatches.
- Never hinder access to safety equipment, for instance the switches to the electric system.
- Never hinder access to fire extinguishers located in a box.
- Never leave the boat unsupervised while the cooker or heater is on.
- Never make alterations to any of the boat's systems (especially the electricity or the fuel systems) or allow an unqualified person to make alterations to any of the boat's systems.
- Never refill a fuel tank when the boat's engine is running or the cooker or heater is on.
- Never smoke while handling petrol or gas.

NOTE ! In a new boat the fire extinguisher might go out of date in a short period of time.

5.8 Main power switches and circuit breakers

Operation of the main power switches:

-clockwise position	->	circuit switched on
-counter-clockwise position	->	battery disconnected

Switch the power off from both main switches when leaving the boat, and always switch both switches on when using it.

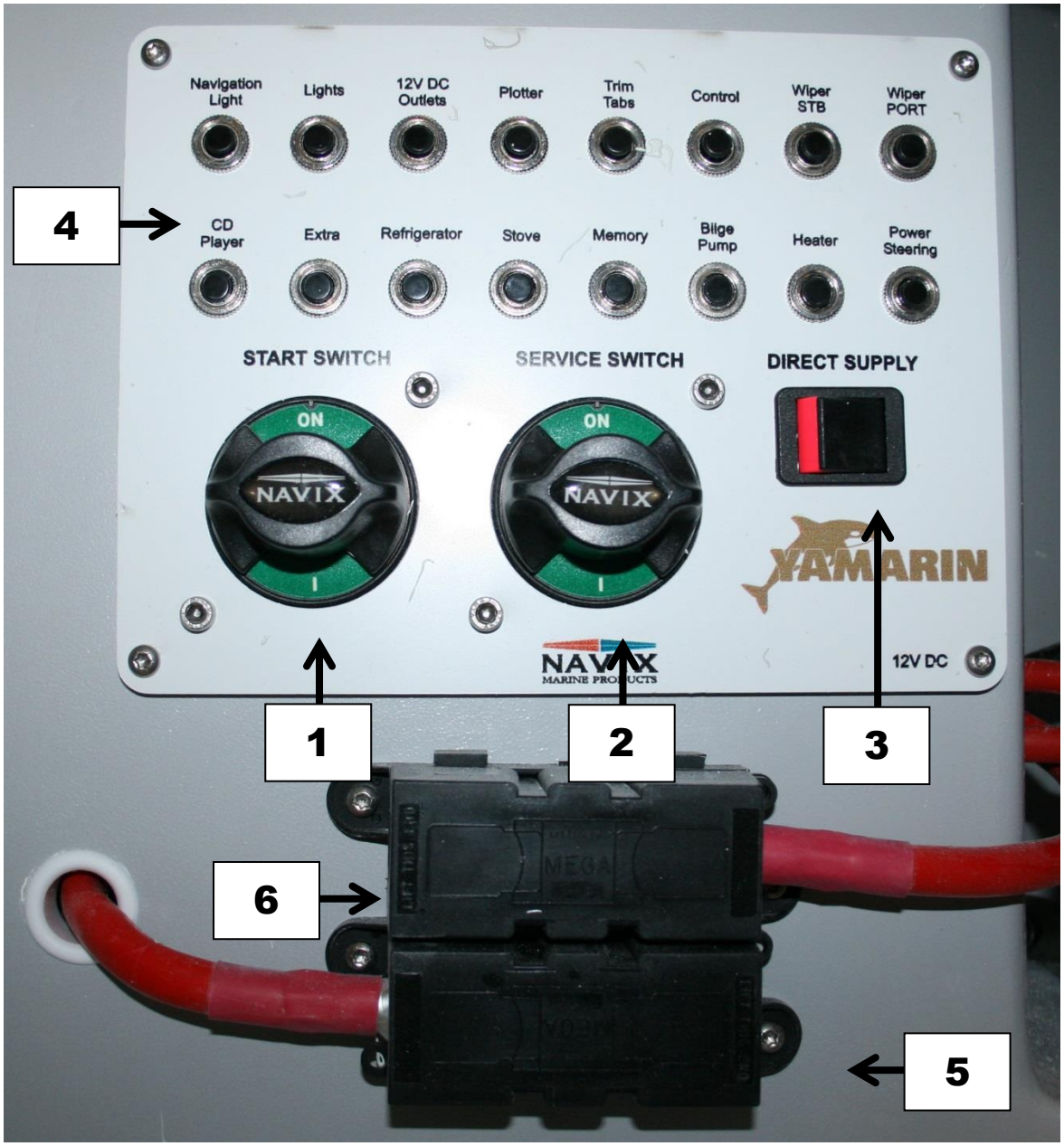


Image: Main power switch and fuses

1. Engine main switch
2. Supply current main switch
3. Direct supply*
4. Fuse panel
5. Bow propeller fuse
6. Stern anchor winch (optional accessory) fuse

**Engaged when the red indicator is visible.*

Electric circuit fuses are located next to the main power switch and steering console. Fuse sizes are also presented in the electrical diagram. Do not change the circuit breaker amperages or install any components that exceed the nominal amperage of the circuit in the electric system.

Remember to always use both main switches when switching the power off or on. Remember also to switch off the main power switch before making any electrical installations. Do not switch off the direct power supply (3. Direct Supply in the figure above) if you wish the electric bilge pump to keep operating while you are away. However, do not forget to switch off the refrigerator, stove, chart plotter, possible radio, etc., since these are all supplied by the direct supply.

NOTE! Remember also to switch off the main power switch before making any electrical installations.

NOTE! Never switch off the main switch while the engine is running! It can cause serious damage to the engine's electric system.

NOTE! Do not perform electric installations (such as changing lamps) when the power is on. Leave any larger installations to professionals.

5.9 Operation

If this is your first boat or a boat type new to you, take someone with experience of a similar boat with you the first few times you operate it.

5.9.1 Controls

You will quickly learn how to control your boat, but changing weather conditions, such as wind and waves, will always present new challenges for the driver. The remote control combines the functions of throttle, forward and reverse gears, and the adjusting of the engine trim angle. The boat is equipped with hydraulic steering.

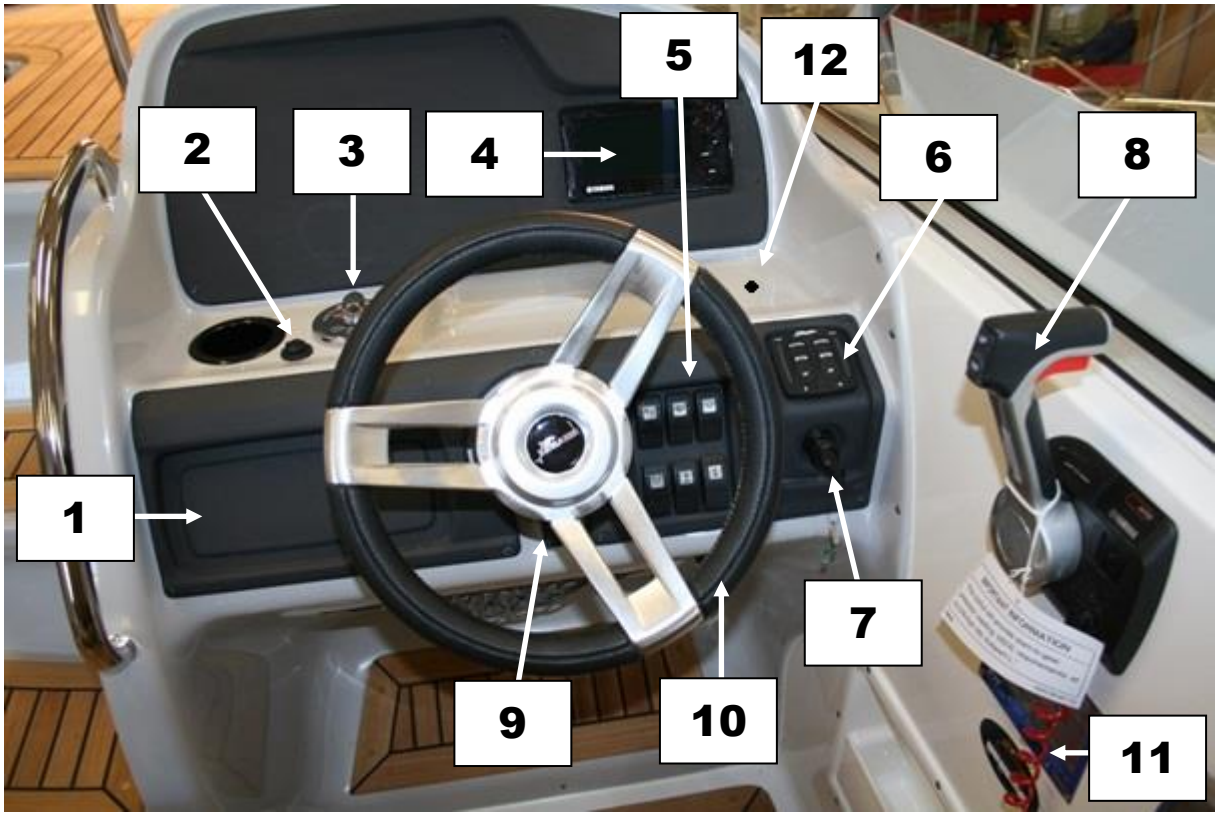


Image: Controls

1. Place for radio
2. Hydraulic steering oil refill
3. Bow propeller control unit
4. 5” LAN multi-purpose indicator
5. Switchboard
6. Trim switches
7. Ignition
8. Electronic remote control device
9. Tilt wheel angle adjustment
10. 12V power outlet (bottom of console)
11. Emergency switch
12. High bilge water warning light

5.9.2 Emergency switch

The emergency switch is a device with one end attached to the switch under the remote control and the other end for instance to your lifejacket. The emergency switch automatically switches off the engine when detached from the remote control. It is very important that the boat will come to a halt in the event that the driver, for whatever reason, loses his/her balance and is flung from the helm.

NOTE! Never take control of the boat without having attached the emergency switch to yourself. If you attach the emergency switch to your arm, do not steer the boat with that arm, because the chain may be tangled in the steering wheel during tight turns.

NOTE! The engine will not start if the emergency switch is not attached to the switch on the remote control.

DANGER! A rotating propeller presents a life-threatening danger to a swimmer or a person who has fallen overboard. Always use the emergency switch to turn off the engine when a swimmer or water skier is about to re-enter the boat from the water.

5.9.3 Gearshift and throttle

The engine is put into gear by pushing the button on the gear/throttle handle upwards with your fingers and by pushing or pulling the gear/throttle lever forward or backward, depending on the direction in which you are planning to go. When the engine is in gear, you can adjust the boat's speed using the same gear/throttle lever.

When the boat is travelling forward slowly, you can use the reverse gear for braking when approaching the dock, for instance. Shifting into reverse must not be done if the boat is travelling at higher speeds, because it will damage the engine.

5.9.4 Adjusting of trim angle

These are the main rules when adjusting the trim angle:

- When bringing the boat to plane, keep the 'bow down' position
- When the boat is planing and seas are calm, keep lifting the bow until you can feel that both the engine and the boat move very easily. In calm waters, the engine should normally be trimmed up at least 3 scale marks on the trim indicator on the revolution counter. If the engine is trimmed up too much, the speed of the boat will be reduced. If the boat is trimmed too low, the boat will run slowly and the engine will run heavily. To achieve good fuel economy, it is important to drive the boat with the right engine trim angle.
- In heavy head seas, lower the bow to allow it to slice through the waves better, thus providing a smoother ride.
- In following seas, raise the bow to avoid 'diving' into the waves.

WARNING! Do not drive the boat at high speeds with the engine trimmed up (bow up), as there is a risk of sudden heeling when the propeller hits the water again after a flight in heavy waves. Likewise, do not drive at high speed with the engine completely trimmed down (bow down) since this can cause the boat to pitch unexpectedly when the bow hits the water. The boat may become unstable when turning if the bow is too low.

The trim tabs can be used to adjust the boat's heel to make the boat run in an upright position in crosswinds or with an unbalanced load.
All planing boats lean into the wind, but the heel can be adjusted by lowering the windward trim tab. This makes the boat's sharp bow cut the waves, resulting in a much smoother ride. If you want to further reduce the waves' effect on the boat, you should trim the windward side up to lift it above the waves to an extent.

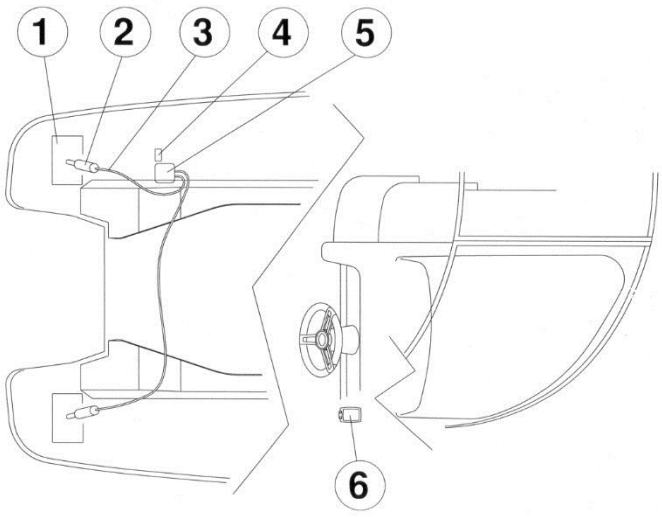


Image: Trim system

1. Trim tab
2. Trim cylinder
3. Trim hose
4. Trim control unit
5. Trim pump
6. Trim switches

WARNING! Adjust the trim tabs carefully at high speeds – adjusting them radically changes the way the boat handles. Do not drive with the bow too low, since the boat may turn unexpectedly.

WARNING! Waves reduce manoeuvrability and make the boat heel. Accordingly, reduce speed when encountering heavier seas.

5.9.5 Starting the engine

1. Switch the power on using the main power switch.
2. Lower the engine to the driving position by pressing the Power Trim button on the gear/throttle handle.
3. Check that the gear/throttle handle is in the neutral position and that the emergency switch is attached to the bottom of the remote control.
4. Switch on the current, using the start key, without starting the engine and wait a few seconds for the warning lights to light up.
5. Start the engine by turning the ignition key clockwise until the engine starts. If everything is in order, the engine should start within 1-2 seconds. If the engine does not start, you should not try to start it for more than 10 seconds at a time.
6. After the engine has started, let it idle for a few minutes before setting off. (Please refer to the engine manual!)

For more detailed information, please refer to the engine manual.

5.9.6 Driving

It is easy to drive when the weather is fine and the sea is calm. However, always remember to keep an adequate lookout. In order to maintain the best possible visibility from the driver's position, you should do this:

- Ensure that passengers do not restrict your visibility.
- Do not drive near planing speed for long periods, as the bow up comes up and reduces visibility.
- When visibility is poor, look over the windshield.
- remember to also keep a lookout behind you, particularly on shipping lanes

Use navigation lights in darkness.

Always adjust your speed to prevailing conditions and the environment. Take into account the following:

- waves (also consult the passengers on what is a comfortable speed);
- your own bow wake (greatest at planing speed, smallest at speeds under 5 knots);
- visibility (islands, fog, rain, driving against the sun);
- familiarity with the route (time required for navigation);
- width of the route (other traffic, noise and bow wake near shore).
- Make sure to always maintain a sufficient distance to avoid collision. The distance must be sufficient to stop the boat or to take evasive action.

When running at low speed, a planing boat's directional stability is poorer than at higher speeds. So be careful in narrow passages and, particularly, when meeting other boats.

You must learn the rules of traffic on sea lanes and follow the international regulations on how to avoid collisions at sea, COLREG. Navigate with care and use new or updated nautical charts.

The running position of the boat greatly affects its handling characteristics and fuel consumption and visibility from the driver's position. You can affect the running position by:

- placing the load properly – the general rule being that you should place as little weight in the bow as possible; and
- adjusting the trim angle.

The combination of the right running position with the right speed also makes driving in rough seas safer and more comfortable.

WARNING! A high speed and sudden manoeuvring in rough seas can lead to loss of control over the boat and large heeling angles.

NOTE! The boat is not designed to jump waves.
The warranty does not cover damage caused by flight. It is possible to check whether the engine has been airborne from the engine history on the repair shop's computer.

5.9.7 Approaching and leaving the dock

Practise boat manoeuvring skills where there is ample space to learn how to approach a dock before entering a crowded marina.

A very gentle application of throttle does not generate sufficient steering power. Sharp but short throttle applications enable efficient steering movements when approaching the dock.

Ensure that everyone on board who does not have to stand up is seated when you are approaching the dock. Sudden steering movements may cause the boat to heel and injure somebody.

Before docking, prepare the mooring lines at stern and bow. Approach the dock bow first at an acute angle. Just before touching the dock, steer into it and shift into reverse. Apply throttle quickly and sharply. The boat will stop and turn parallel to the dock. If possible, make the approach into the wind or current, whichever is the strongest. This makes departing easier, as the wind or current will push the bow out from the dock. The easiest way to depart is to first push the stern as far away from the dock as possible, and then slowly reverse away from the dock into open water.

The propeller is designed to have the best grip in forward gear. Therefore, propeller performance is weaker in reverse. The steering response is also not as good in reverse as in forward gear.

WARNING! The boat is fast. If you are planing, it takes time to come to a stop. Slow down in time before anchoring, beaching or docking. Learn to estimate the distance the boat needs to stop. Remember that steering control is poor if there is no traction.

WARNING! Do not try to stop the boat with your hands, and do not put your arm or foot between the boat and the dock, the shore or another vessel! Practise beaching and docking under favourable conditions! Use moderate but firm engine power!

NOTE! When securing your boat, take into consideration the possibility of changes in wind direction, rising or sinking of the water level, bow wakes, etc. You can get more information from your insurance company, for example.

5.9.8 Using the canopy

The canopy is designed to withstand a maximum speed of 30 knots at sea, and 50 km/h in road transport. All press studs must be properly fastened when using the canopy. The canopy's design allows raising just the front part. We recommend that you remove the sides and back of the canopy to make it fit into the canopy box more easily. Then, fold the upper parts of the sides entirely on top of the roof, so that no fabric remains where the corners of the canopy supports are. Finally, roll up the roof part along with the sides folded on top of it, and lower the canopy into the canopy box.

NOTE! The boat should not be driven in rain with the canopy down. The equipment in the open deck space is not water-tight and must be protected from the rain.

NOTE! The windshield and canopy do not necessarily form a watertight seal.
Water may enter the boat between the canopy and windshield when the canopy is up.

5.9.9 Windshield door

The windshield door must always be kept shut and locked while driving.
The door has not been designed to be used as a railing when getting in or out of the boat.

WARNING! The door must be kept closed in rough seas or strong or gusty winds, since it may slam shut. The door is heavy and may cause injury if it strikes someone when slamming shut.

WARNING! Large waves or gusts of wind may slam the door shut also when the boat is stationary. It is thus recommended to always keep the door closed when the passage through the bow deck is not being used.

5.9.10 Stairs, sharp windshield corner and cabin door

Great care must be taken when using the stairs, particularly when the cabin door is open.

NOTE! Bolt the cabin door when moving around the boat, since it may slam shut.

WARNING! Take care not to strike your knee on the sharp upper corner of the right-hand windshield when mounting the stairs. When descending, the same corner may hit your shin.

The bow anchor box hatch is equipped with a rubber band that holds the hatch closed while driving.

WARNING! It is not recommended that children do not use the hatch, as their fingers or toes could get caught in it.

5.9.11 Cabin lights

The figure below presents the cabin light switch, which is located above the corner cupboard in the cabin.

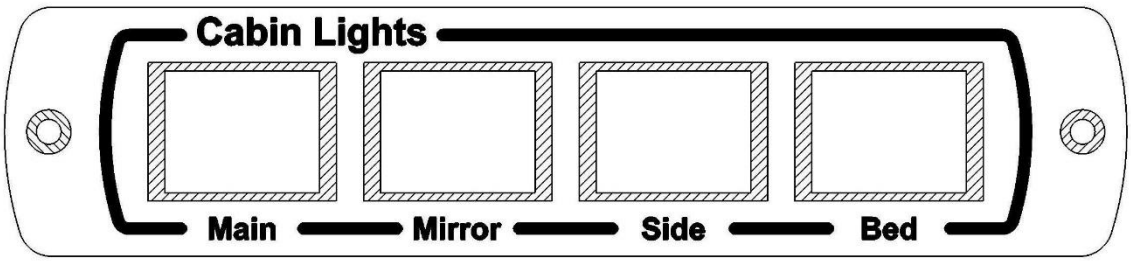


Image: Cabin light switch

Main = Overhead lights
Mirror = Mirror light
Side = Side lights
Bed = Quarter berth lights

5.10 Proper use – other recommendations and guidelines

5.10.1 Man overboard

It is always a serious situation when someone falls overboard. Rescue procedures should be practised in advance during good weather, because it is too late for practice when someone has actually fallen into the water.

The boat is equipped with the fixed swim ladder that can be lowered down from the water. The swim ladder extends to the full length by lowering the ladder and releasing the ribbon.

It is always easiest to help a person climb back on board at the stern of the boat. A rope loop attached to the boat helps lifting. The boat's swim ladder extends 30 cm into the water. If a child has fallen overboard, an adult carrying an extra life-saving device or a fender must always jump in after the child; however, someone must always remain on board the boat.

It is very important to maintain visual and verbal contact with a person that has fallen overboard.

DANGER! A rotating propeller presents a life-threatening danger to a swimmer or a person who has fallen overboard. Always use the emergency switch to turn off the engine when a swimmer or water skier is about to re-enter the boat from the water.

5.10.2 Securing loose equipment

Stow all heavy equipment, such as anchors, and secure them firmly before setting off.

5.10.3 Bow cabin sliding door

NOTE! We recommend keeping the cabin's sliding door closed while driving. If you nevertheless wish to keep the door open while driving slowly, it must be locked in the open position with its bolt to prevent it from sliding shut and trapping someone.

5.10.4 Respect for the environment

Conservation of the environment is a matter of honour for every boater. Therefore, you should avoid:

- fuel and oil leaks;
- emptying rubbish and waste into the water or on the shore;
- letting detergents or solvents get into the water;
- loud noise both on the water and at the marina; and
- producing an unnecessarily high bow wake, especially in narrow passages and shallow waters.

Service the engine well and run it at the most economical speed, which will also keep exhaust emissions low.

Please also consider other local environmental legislation and regulations.

Please make sure to familiarise yourself with the International Convention for the Prevention of Pollution From Ships (MARPOL) and respect it to the greatest possible extent.

5.10.5 Toilet and septic tank use

The toilet is flushed with sea water. The flushing waste is conveyed into the septic tank. The flushing water shut-off valve is located on the right side of the toilet seat, behind the inspection hatch. The valve can be kept open during normal use. We recommend closing the valve in rough seas to avoid siphonage.

The septic tank (= toilet waste water tank) has a capacity of 28 l and is located under the right-hand (SB) bench in the open deck space. The vacuum drain's deck vent is compliant with standard ISO 8099 and is located next to the aft bollard, on the right-hand side of the boat.

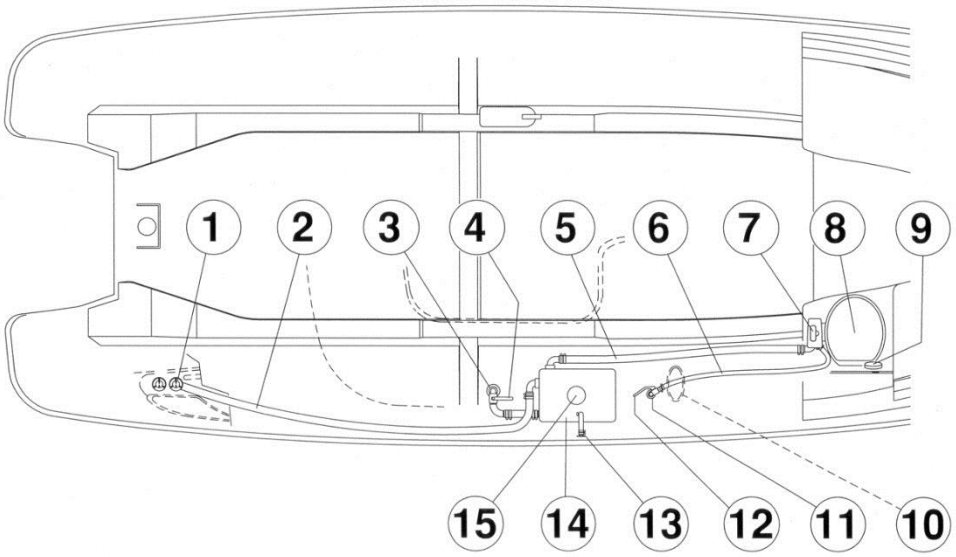


Image: Septic system

1. Septic tank vacuum drain vent
2. Septic tank vacuum drain hose
3. Septic tank drainage through fitting
4. Septic tank sea drainage valve
5. Sanitary hose from toilet to septic tank
6. Toilet flushing water intake hose
7. Toilet flushing pump
8. Toilet
9. Septic tank surface level indicator
10. Maintenance hatch
11. Toilet flushing water intake through fitting
12. Toilet flushing water intake valve (in the cabin, behind the maintenance hatch)
13. Septic tank vent
14. Septic tank
15. Septic tank sensor

Drain the septic tank when leaving port by using the port's drainage equipment.

The septic tank's sea drainage valve is located immediately next to the tank. In normal conditions, the sea drainage valve must be kept closed. Please find out which regulations are in force where you are using the boat in relation to the discharge of grey water. The sea drainage valve can be sealed.

The septic tank and its hoses, etc. can be cleaned with mild alkaline detergent. Glycol can be used as an anti-freeze agent. The system must nevertheless be kept as empty as possible while the boat is stored in freezing conditions.

5.10.6 Anchoring and mooring the boat

Always moor your boat carefully, even in sheltered places, because conditions can change rapidly. Mooring lines should be equipped with absorbers to dampen any jolts. Please refer to the section on towing for the location of bollards. To prevent abrasion, use fenders that are large enough.

The forward maximum load of the bow bollards is at least 23 kN, or c. 2,300 kg. The backward maximum load of the stern bollards is at least 16.0 kN, or c. 1,600 kg.

The minimum anchor weight for the boat is 10 kg. Drop anchor far enough from shore. A reasonable grip is attained if the anchor line length is 4–5 times the water depth.

WARNING! Do not try to stop the boat with your hands, and do not put your arm or foot between the boat and the dock, the shore or another vessel!

NOTE! When securing your boat, take into consideration the possibility of changes in wind direction, rising or sinking of the water level, bow wakes, etc. You can get more information from your insurance company, for example.

5.10.7 Towing

When towing another boat, use a floating line that is strong enough for the task. Begin towing slowly, avoid jerks, and do not overload the engine.

The owner of the boat should consider the measures necessary for securing the boat's towrope.

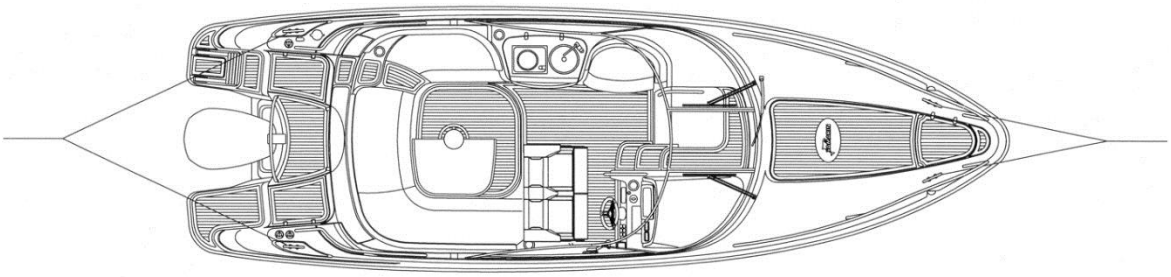
If you are towing, or if your boat has to be towed, attach the towline to the bow or stern bollards as per the following image.

WARNING! When towing, the towline is under high tension. If it should break, the end that snaps off may lash back fast enough to cause serious injury or death. Always use a thick enough line and keep to one side of the towline.

NOTE! When towing another boat or being towed, always drive at low speed. If the boat has a displacement hull, never exceed hull speed while towing.

NOTE! The towline should always be fastened so that it can be unfastened under load.

Attaching the towline to the bollards:



5.10.8 Trailer transport

Weight data for trailer transport may be found in the technical specifications. The trailer's keel supports should carry most of the weight of the boat. Adjust the side supports so that the boat will not rock sideways. For more information, please turn to your dealer.

Clean the supports of sand and dirt so that they will not scratch the bottom of the boat. Double-check that the trailer is securely coupled to the trailer tow hitch!

The place for lifting the boat out of the water should be sheltered, and the ramp should extend deep enough into the water. Reverse the trailer
so deep into the water that the rearmost keel support is just above the water. Drive the boat carefully towards the rearmost keel support and fasten the winch cable to the trailer hook. Reel the boat up onto the trailer, taking care that the boat remains straight on the trailer's centre line. Remember to trim up the engine before reeling the boat onto the trailer so that it will not hit the bottom.

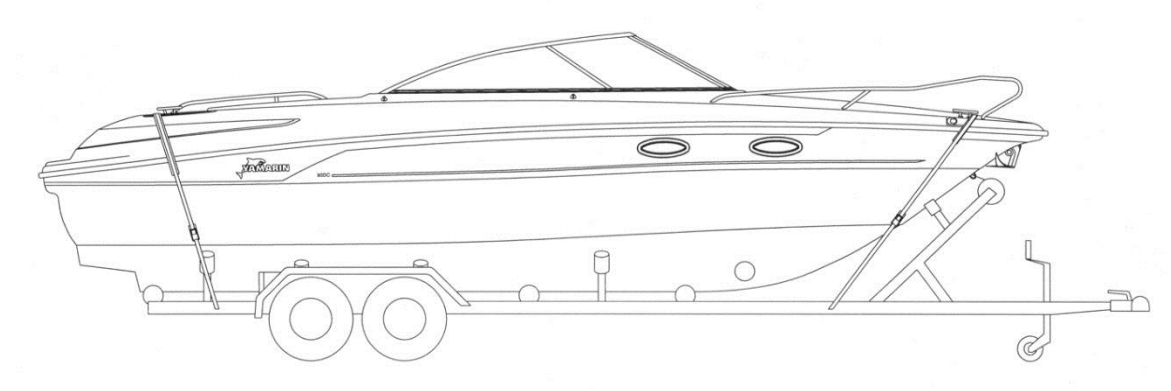


Image: Securing the boat to the trailer

Tie the boat properly before beginning transport. The sling ropes at the bow should be directed down and back, and the sling ropes at stern should be directed down and front. Do not leave any loose equipment or extra load on the boat when it is being transported. Remove the seat cushions and close all hatches properly.

The engine should be in the driving position during transport. However, ensure that there remains adequate clearance. If the clearance is not sufficient in this position, you can transport the engine raised. In this case, the engine must be supported with a suitable support to protect the transom.

If the boat is kept on the trailer between transports, you must loosen the sling ropes for the duration and tighten them before the next transport.

NOTE! The trailer should be slightly front-weighted. Appropriate nose weight is 4 % of the total mass of the trailer, but not less than 25 kg. Nose weight must not exceed the maximum vertical load on tow ball. Maximum load is defined by car manufacturer of the towing vehicle. Make sure that the boat is fastened tight enough to the trailer and that the weight of the boat is divided equally between side supports. If the boat swings against a side support during transport, it may sustain hull damage.

When letting the boat down from the trailer, remember to fasten the bow rope to the boat beforehand so that you can release the cable from the trailer hook as soon as the boat is in the water. Be careful with the winch handle!

5.10.9 Docking

The storage cradle should be sufficiently steady and suitable for this particular boat and engine combination. A sturdy plank (2x4"), should be placed between the "V" trestles to support the keel and to bear most of the weight of the boat. The boat must not rest on the side supports. The side supports should not be placed touching the bottom chine, and point loads should be avoided. The supporting structures should be strong, particularly near the transom, to support the added weight of the engine. Storage cradle dimensions are shown in the picture below.

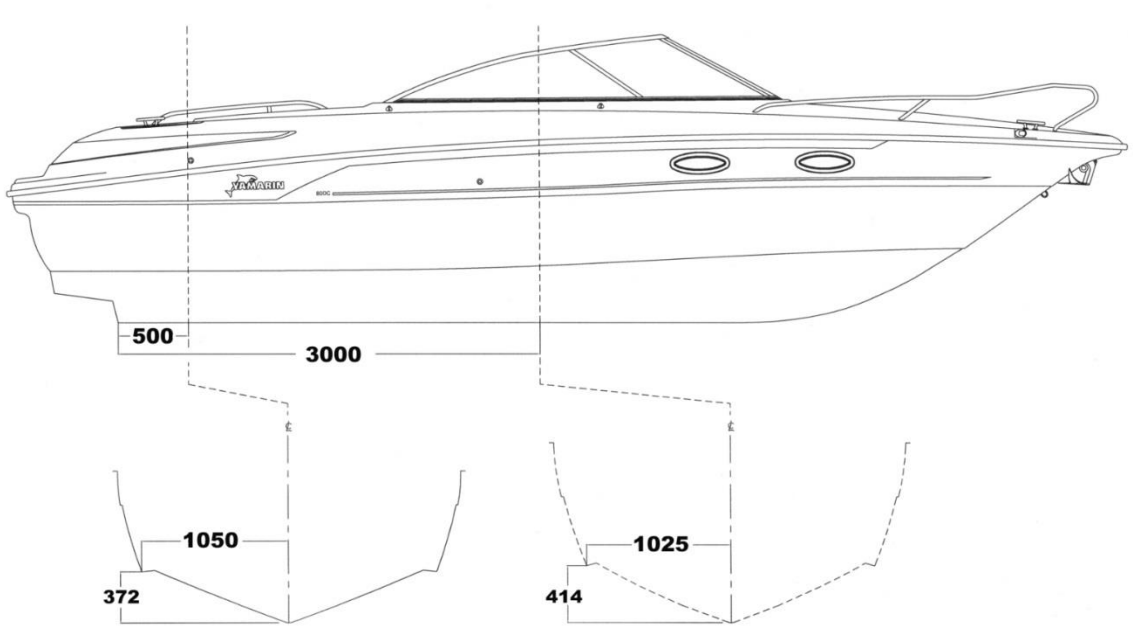


Image: Storage cradle dimensions

Only use reputable lifting companies or boat yards with sufficient lifting capacity. In addition to the boat's tare weight (please refer to the technical specification), also take into consideration accessories and other possible loads in the boat.

When the boat is being lifted, the lines must be placed under the boat and the boat must remain horizontal during lifting.

NOTE! Do not lift the boat by its bollards.

DANGER! Never stand under a boat that is suspended from a crane.

6 Servicing and maintenance

Keep your boat and its equipment clean and tidy. This increases comfort and safety on board, and also the boat's resale value.

Familiarise yourself with the service procedures shown in the engine manual (see annex). Have your engine serviced according to the instructions in the manual.

6.1 Washing and waxing the boat

Normally it is sufficient to just wash and wax the deck and sides. Special boat cleaning agents are most suitable for the purpose. Do not use strong solvents; they can cause glossy reinforced plastic surfaces to fade. Mildly abrasive polishes can be used to remove chafes and embedded dirt from the deck. Fibre glass surfaces can be washed with a pressure washer.

Useful tip: When the boat has been washed with tap water, a thin chalk-like layer of lime and minerals will remain on the boat's surface after it has dried. The problem can be eliminated by adding a few drops of pine oil soap into a bucket of rinsing water, which will soften it.

Useful tip: Water and lime stains on stainless steel rails and handles disappear when you apply some Lemon Pled furniture spray. Your railings will shine like the day they came off the assembly line.

Useful tip: If the boat's ropes smell bad after the season, immerse them for a couple of hours in a bucket of water with a bottle of apple vinegar and a splash of fabric conditioner added. Allow the lines to dry properly, and they will be as good as new.

6.2 Care instructions for seat cushions

Always use the canopy or harbour cover when it is raining to protect the seat cushions. Although the seat cushions are made of water-resistant material, water can get in through their seams. It is advisable to protect the cushions by spraying them with Sunbrella spray. If the cushions remain damp for any length of time, they may get mouldy and be ruined. If the mattresses get wet, the fabric can be removed by unzipping the mattress and dried in the sun, at room temperature or in a sauna (50°C). The warranty does not cover cushions spoilt by rain or damp.

NOTE! To keep the boat's seat cushions in good condition over the winter, they should be stored in a dry, well-ventilated space.

NOTE! Wet cushions should not be placed in storage, because they gather mould easily.

The press studs of the seat cushions should be sprayed with silicon spray every now and then, otherwise they may become so tight that the fabric will tear when trying to open them. The warranty does not cover ripped seat cushions. Use very little silicon spray at a time in order not to stain the cushions.

6.3 Care instructions for the canopy

Store the canopy over winter in a dry and well-ventilated place. The warranty does not cover torn or mouldy canopies.

6.4 Care instructions for the windshield

The boat’s windshield is made of tempered glass and can be cleaned with ordinary glass cleaners.

Useful tip: When wiping the boat’s windshield dry after cleaning, avoid using circular motions. This can leave circular smudges on the windshield that become visible in sunlight, impeding visibility. Wipe off any streaks with dry newspaper or cotton cloth using first horizontal, then vertical motions. Repeat this a few times and you'll bring the windshield to a brilliant shine.

6.5 Care instructions for the stainless steel components

To keep the boat’s stainless steel parts, such as rails, handles and bollards, shining as good as new, you should keep the parts clean and waxed. The edges of the mounting flanges of the rails should also be cleaned. Any dirt that remains under the edge of the flange will begin to look like rust. In regular use (i.e. no damage), the parts should be cleaned and waxed at least twice every summer. Rail maintenance should also be performed when the boat is put into winter storage.

6.6 Electronic remote control device maintenance instructions

If there is a problem in the functioning of the electronic remote control device, it must be serviced at an authorised Yamaha workshop.

6.7 Care instructions for the steering system

The hydraulic steering does not require maintenance under normal circumstances. If the steering starts to feel loose, there is a leak somewhere in the system. Leaks must be repaired immediately!

WARNING! A hydraulic steering system that has a leak or trapped air in the hoses is extremely dangerous.

6.8 Care instructions for electrical components

Electrical components like main switches, other switches and couplings do not normally need to be serviced if the boat is stored in a dry and well-ventilated place for the winter. If, however, you wish to protect electrical components against oxidation, the best way to do it is by spraying them every now and then with a moisture repellent antioxidant.

6.9 Minor superficial repairs

You can repair minor surface damage to the boat's hull or deck yourself. However, achieving a neat, unnoticeable repair requires a considerable amount of skill:

1. Protect the area around the damage with tape.
2. Bevel the edges of the damaged area and clean with acetone.
3. If the damage is deeper than 2 mm, it is advisable to smooth it with an appropriate polyfiller before painting.
4. Mix topcoat with 1.5-2% hardener.
5. Fill the repair with more topcoat than needed, so that its surface remains slightly proud of the surrounding area.
6. Carefully put tape over the repair.
7. After the topcoat has hardened, remove the tape and sand the repair using 600 and 1200 paper applying water.
8. buff using abrasive paste and wax

The colours used on this boat are specified in the *technical specifications*. One point to consider is that a paint called gelcoat has been used in manufacturing the boat, but the surface is always repaired with a paint called topcoat. Gelcoat paint does not harden without a mould surface, whereas paraffin has been added to topcoat to allow it to harden.

NOTE! Some post-delivery installations and alteration work may cause damage to the structure of the boat or impair safety if not performed correctly. Please contact the dealer if you are planning any modifications.

7 Winter storage

Preparing your boat for winter storage is an annual routine. Have your boat lifted in good time before the water freezes. Your boat is not designed for use in ice and it is not meant to be used in temperatures below zero (for example, the rain water draining system will freeze up). It is advisable to perform all maintenance, repair and inspection procedures in connection with placing the boat in winter storage.

Familiarise yourself with the service procedures shown in the engine manual. We recommend that you leave them to an authorised service agent. Do not forget to service the remote control and steering system. Make sure to perform their maintenance according to their separate instructions and manuals.

7.1 Measures before winter storage

Wash the bottom of the boat immediately after the boat has been lifted. Algae and slime will come off easier if they are not left to dry. Empty the engine of its cooling water according to the manual.
Give the engine and other equipment their winter servicing, following their separate manuals. If your boat is stored outside or in a humid place over the winter, empty it of textiles and other equipment that may corrode or become mouldy in damp conditions. Wash the ropes in fresh water. Replace any worn ropes. Leave bushing valves open. Remove the drain plug for the winter.

Check the condition of the hull and rub down any scrapes
to let possible moisture inside the laminate dry. Repair any damage in the spring before launching the boat.

Always cover your boat so that snow cannot gather inside. Always make sure, however, that it is adequately ventilated. A winter storage cover is available as an optional accessory for your boat.

7.2 Measures before launching the boat

Repair any damage to the gelcoat surface according to section 6.10.

In sea areas, antifouling paint should be used to prevent the hull from becoming covered with vegetation. Fouling of the bottom and especially the propeller increases fuel consumption remarkably. However, if the boat is anchored at the inlet of a stream or in a land-locked lake, or if it is lifted out of the water at least once every two weeks, it is normally not necessary to use antifouling paint. Carefully follow the paint manufacturer’s instructions when applying the paint. When sanding old antifouling paint, remember that the dust is toxic.

Antifouling paint is not necessary in fresh water (lake areas). We nevertheless recommend using an epoxy primer if the boat will be in the water for several months each year. Fresh water, and warm fresh water in particular, is more readily absorbed by the laminate than sea water.

NOTE! Do not paint over the zinc anodes or the piston rods of hydraulic trim tabs. Do not apply paints containing copper on aluminium parts, and remember to follow the paint manufacturer's instructions.

Useful tip: Do not throw away a used paint brush. A dried and hardened paint brush that has been used for antifouling paint
can be reused if you first soak it for a couple of hours in a mix of 2 litres of hot water, 100 ml of vinegar, and 50 ml of baking powder.

Perform the necessary service procedures required for the engine according to the engine manual. Check the functioning of electric equipment and remove any oxidation from fuse connectors etc.

Remember that petrol goes stale over time, and you must always start the engine with fresh petrol in the spring.

When the boat has been launched you should open all hull bushings and check to ensure that there are no
leaking hoses or connectors. The locations of bushings (through fittings) are shown in section 5. Bring your safety equipment
back on board before setting out.

8 Lay-out

8.1 General lay-out

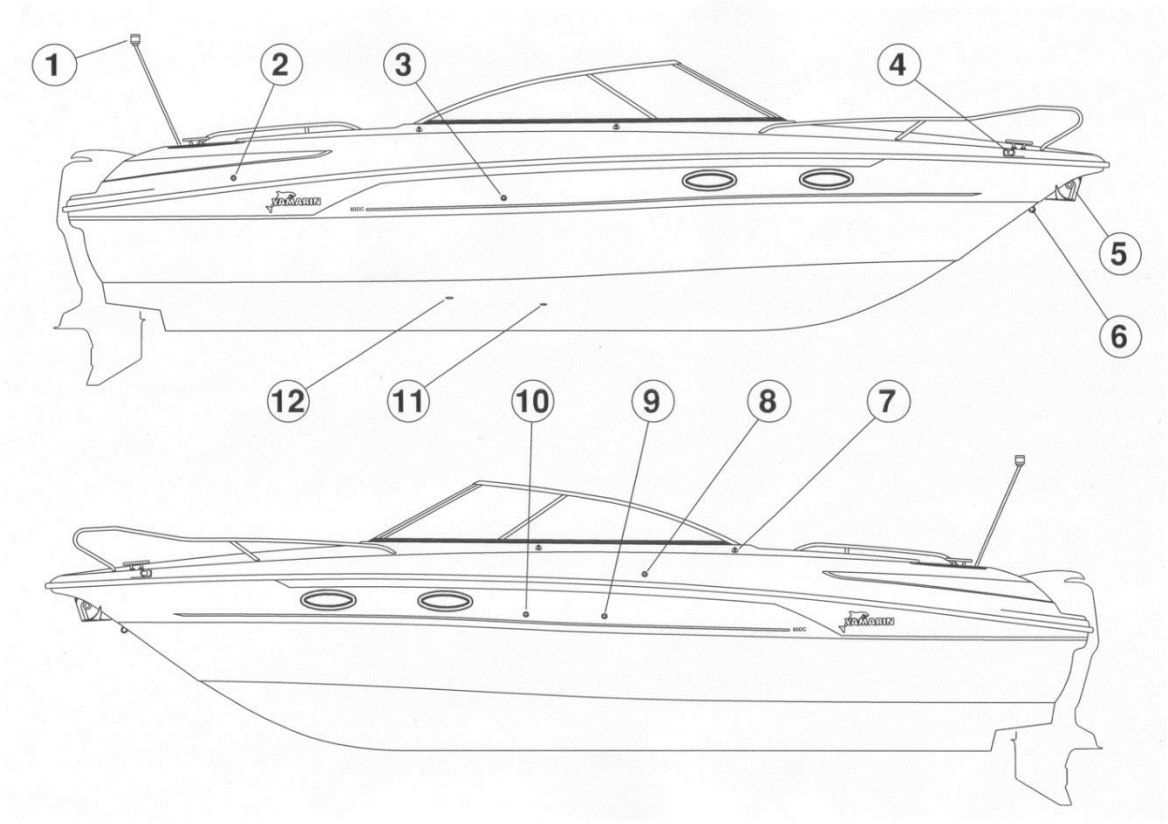


Image: General lay-out from the side

1. Light mast
2. Fuel tank vent
3. Septic tank vent
4. Navigation light
5. Bow anchor location
6. Trailer hook
7. Fender mounting
8. Water tank vent
9. Stove exhaust through fitting
10. Washbasin drainage through fitting
11. Toilet flushing water intake through fitting
12. Septic tank sea drainage through fitting

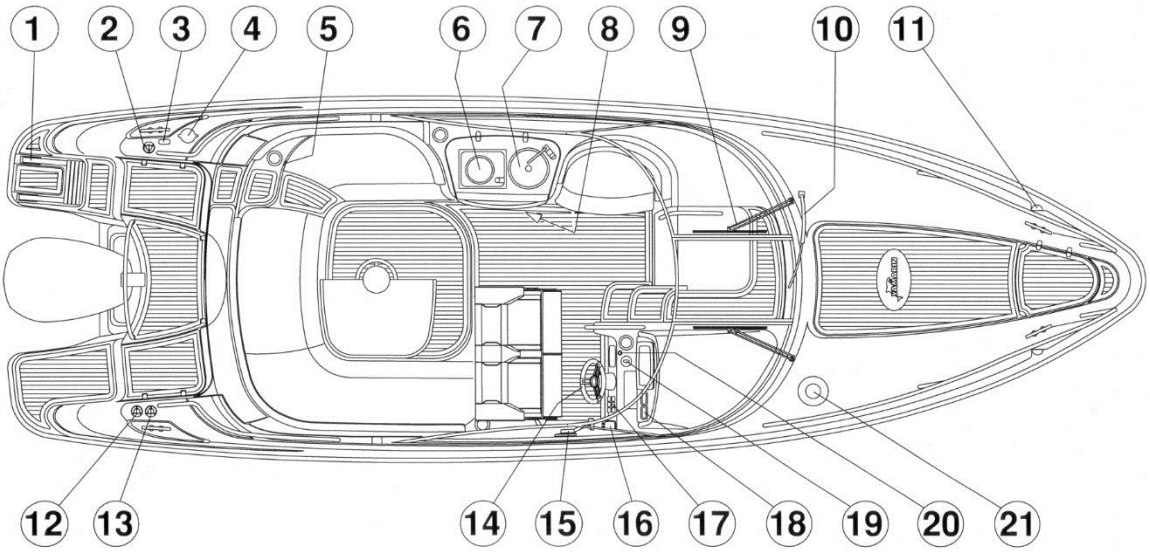


Image: General lay-out from above

1. Telescopic swim ladder
2. Water tank refill vent
3. Light mast pedestal
4. Swimming platform shower (optional accessory)
5. Mug holder
6. Stove
7. Kitchen sink
8. Refrigerator
9. Windshield wiper
10. Windshield door pump
11. Navigation light
12. Fuel refill
13. Septic tank vacuum drainage vent
14. Steering wheel
15. Electronic remote control device
16. Trim switches
17. Switchboard
18. 5” LAN multi-purpose indicator
19. Bow propeller control unit
20. Hydraulic steering oil refill
21. Solar panel valve

WARNING! Handle the boat’s hatches with care and watch your fingers and toes. **Please pay particular attention to the bow anchor box hatch, which is equipped with an elastic band.**

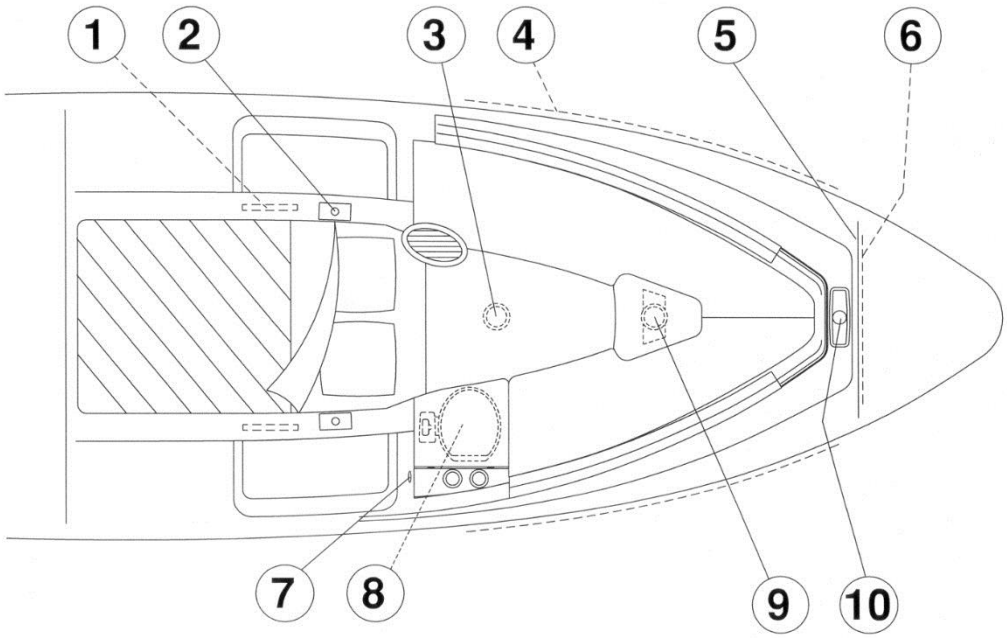


Image: Cabin lay-out

1. Cabin light x 2 pcs
2. Cabin handrail x 4 pcs
3. Overhead light
4. Cabin side light
5. Mirror
6. Mirror background light
7. 12 V power outlet
8. WC
9. Bow propeller
10. Storage case / bottle holder

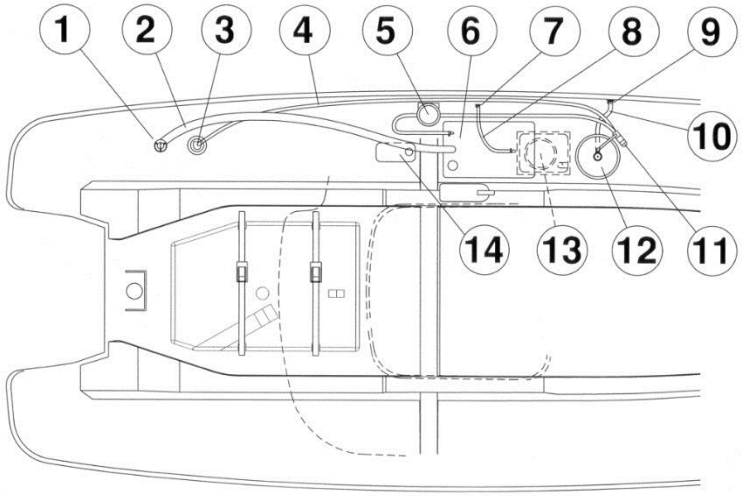


Image: Fresh water system and stove

1. Water tank refill vent
2. Water tank refill hose
3. Swimming platform shower (optional accessory)
4. Water hose from pump to shower (optional accessory)
5. Pressurised water pump (optional accessory)
6. Water tank
7. Stove exhaust through fitting
8. Stove exhaust gas hose
9. Washbasin drainage through fitting
10. Washbasin drainage hose
11. Water tap
12. Washbasin
13. Stove
14. Stove tank

8.2 Fuel system

The boat has a built-in fuel tank. A fuel filter is installed in the fuel line, also functioning as a water separator. The filter must be changed at least once a year. When a new or removed filter has been mounted, the fuel line must be filled with a ball pump before starting the engine.

NOTE! The condition of the fuel hoses must be inspected annually, and every effort should be made to prevent damage to them. Damaged fuel hoses must be replaced. If you replace fuel hoses, make sure the new hoses have an ISO 7840 label.

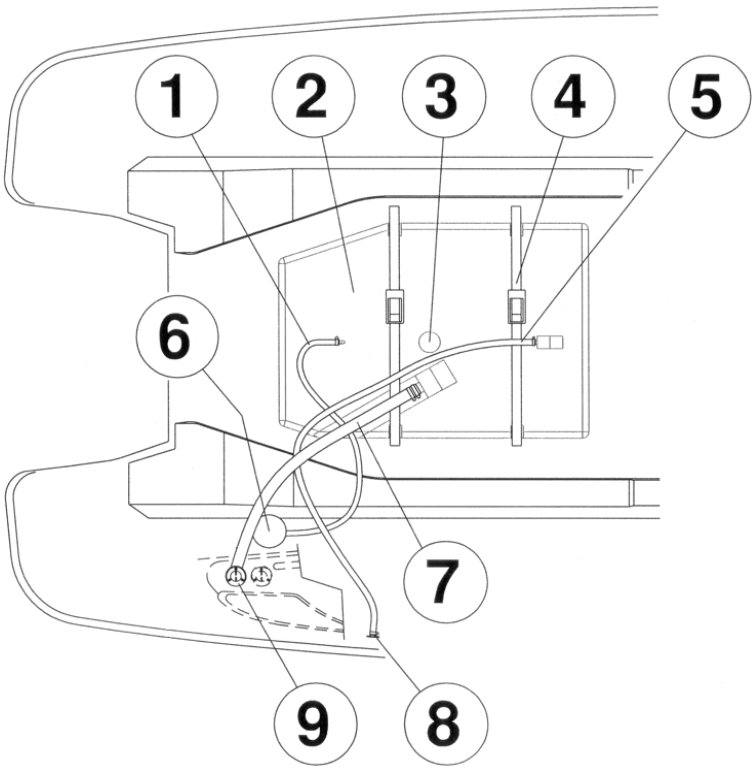


Image: Fuel system

1. Fuel feed hose
2. Fuel tank
3. Fuel tank sensor
4. Fuel tank mounting strap
5. Fuel tank breather hose
6. Fuel filter
7. Fuel tank filling hose
8. Fuel tank vent
9. Fuel refill

The location of the fuel tank refill vent is marked on the deck by the  symbol.

8.3 Steering system

The boat is equipped with hydraulic steering. With hydraulic steering, the steering wheel's position changes constantly, which is why the boat is equipped with a symmetrical steering wheel. The lengths of the hydraulic hoses are:

- 2 x 2.5 m
- 2 x 3.5 m

The hydraulic steering does not require maintenance under normal circumstances. If the steering starts to feel loose, there is a leak somewhere in the system. Leaks must be repaired immediately!

NOTE! If you replace any component in the steering system, please note that all components must conform to the ISO 10592 standard and carry the CE mark.

WARNING! A hydraulic steering system that has a leak or trapped air in the hoses is extremely dangerous.

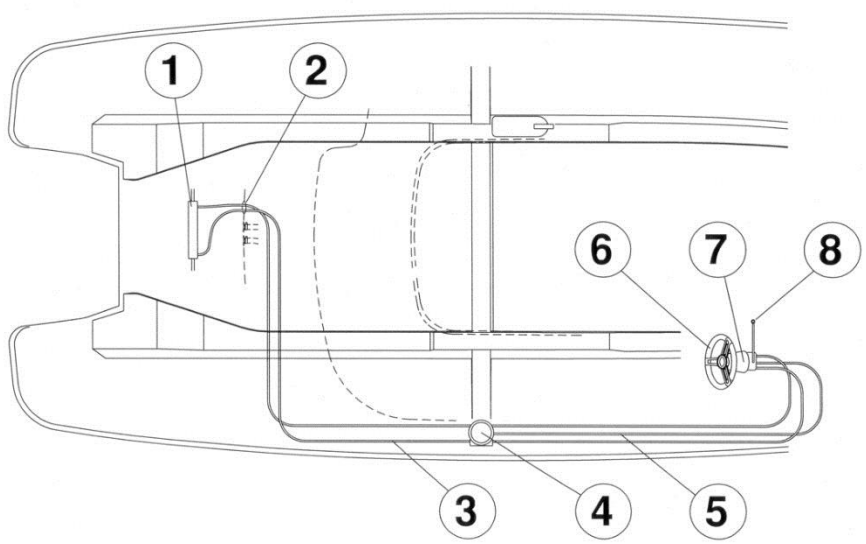


Image: Steering system

1. Hydraulic steering cylinder
2. Hydraulic hose through fitting
3. Hydraulic hose
4. Power steering (optional accessory)
5. Oil overflow pipe
6. Steering wheel
7. Tilt steering pump
8. Hydraulic steering oil refill

8.4 Electrical system

The electrical system contains the following main components:

1. Starter battery (not standard equipment)
2. Wire harness
3. 2 pcs main switches
4. Battery compartment fuse panel
5. 6 pcs switches with automatic fuses
6. 2 pcs 12 V power outlets
7. Navigation lights
8. Deck lights
9. Windshield wiper (right and left sides)
10. Fresh water pump
11. Cabin lights + switches
12. Refrigerator
13. Stove
14. Trims

In addition, the engine is an essential part of the boat’s electrical system; it both generates and consumes power.

If you connect or disconnect the battery, take care not to touch both battery terminals with a metal object at the same time.

Only recharge the batteries with the boat's battery charger or one with equivalent power. Charging the battery with excessive current creates an explosion risk.

Do not alter the onboard electric system or relevant drawings; alterations and maintenance work have to be carried out by a professional.

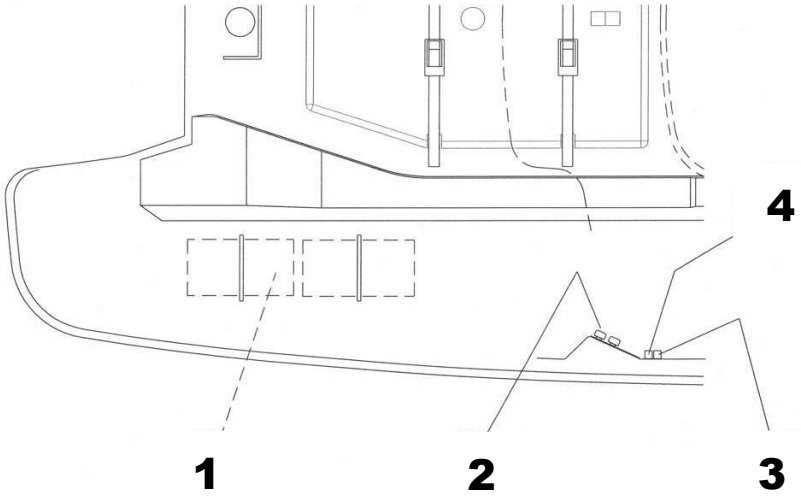
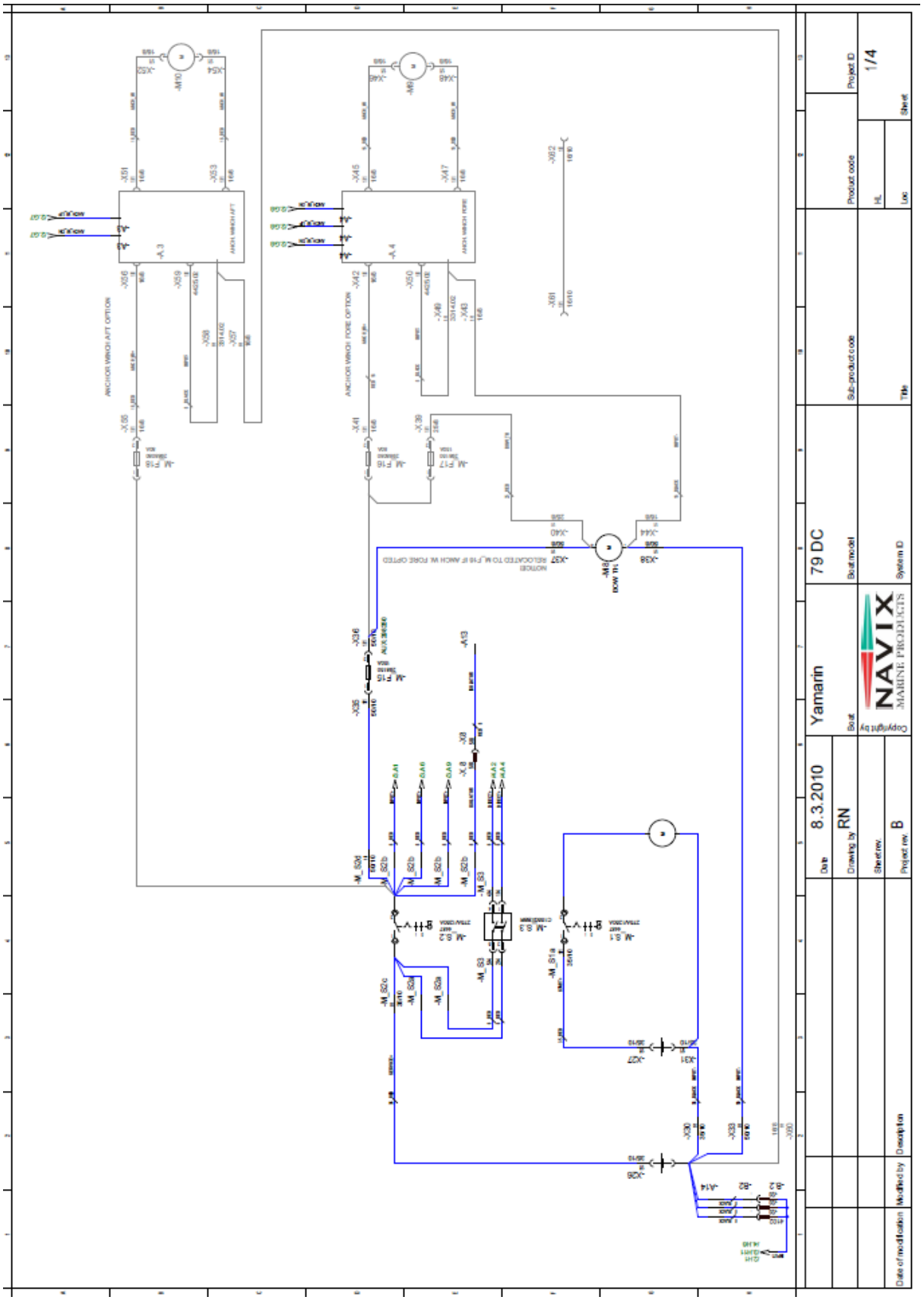
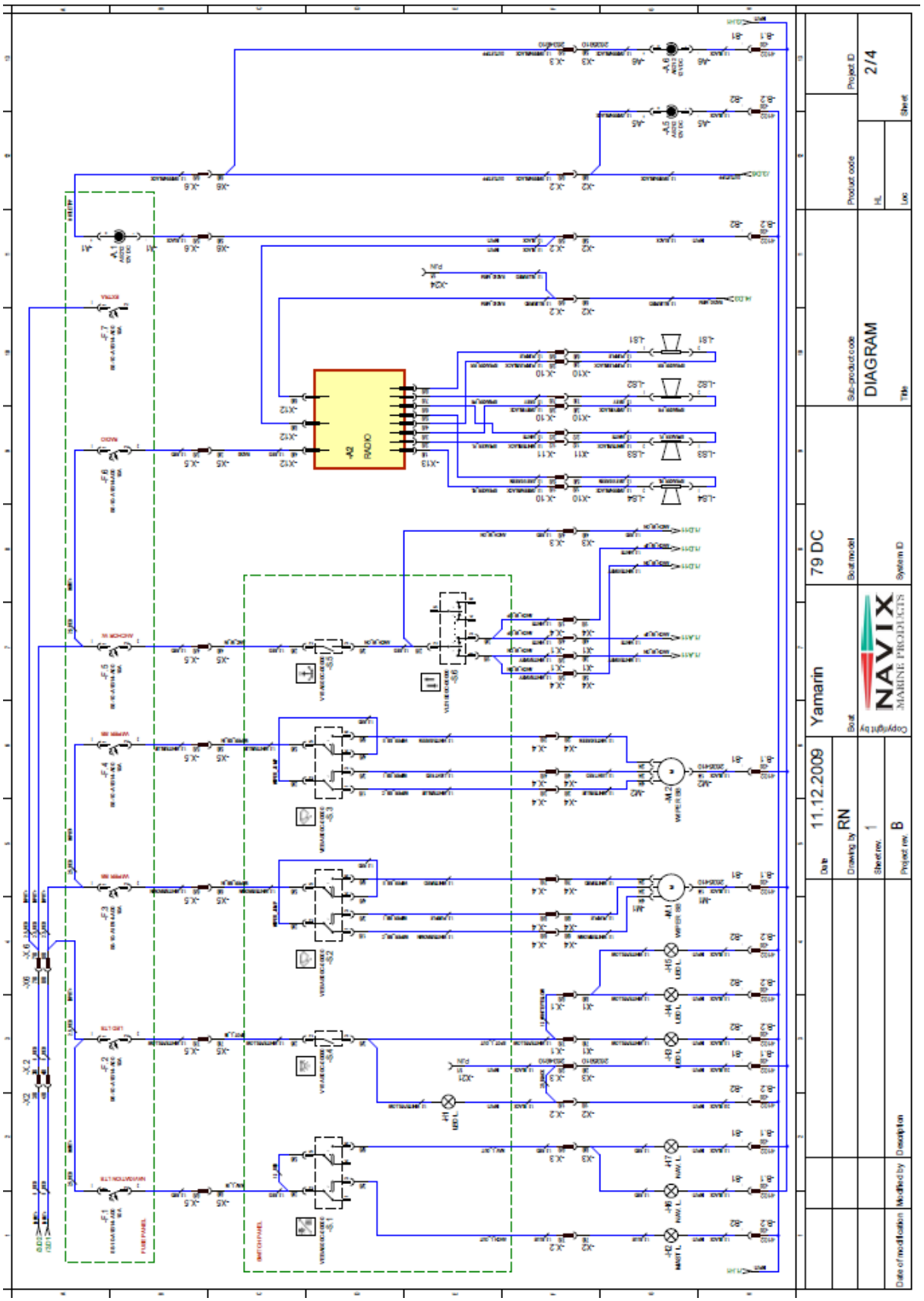


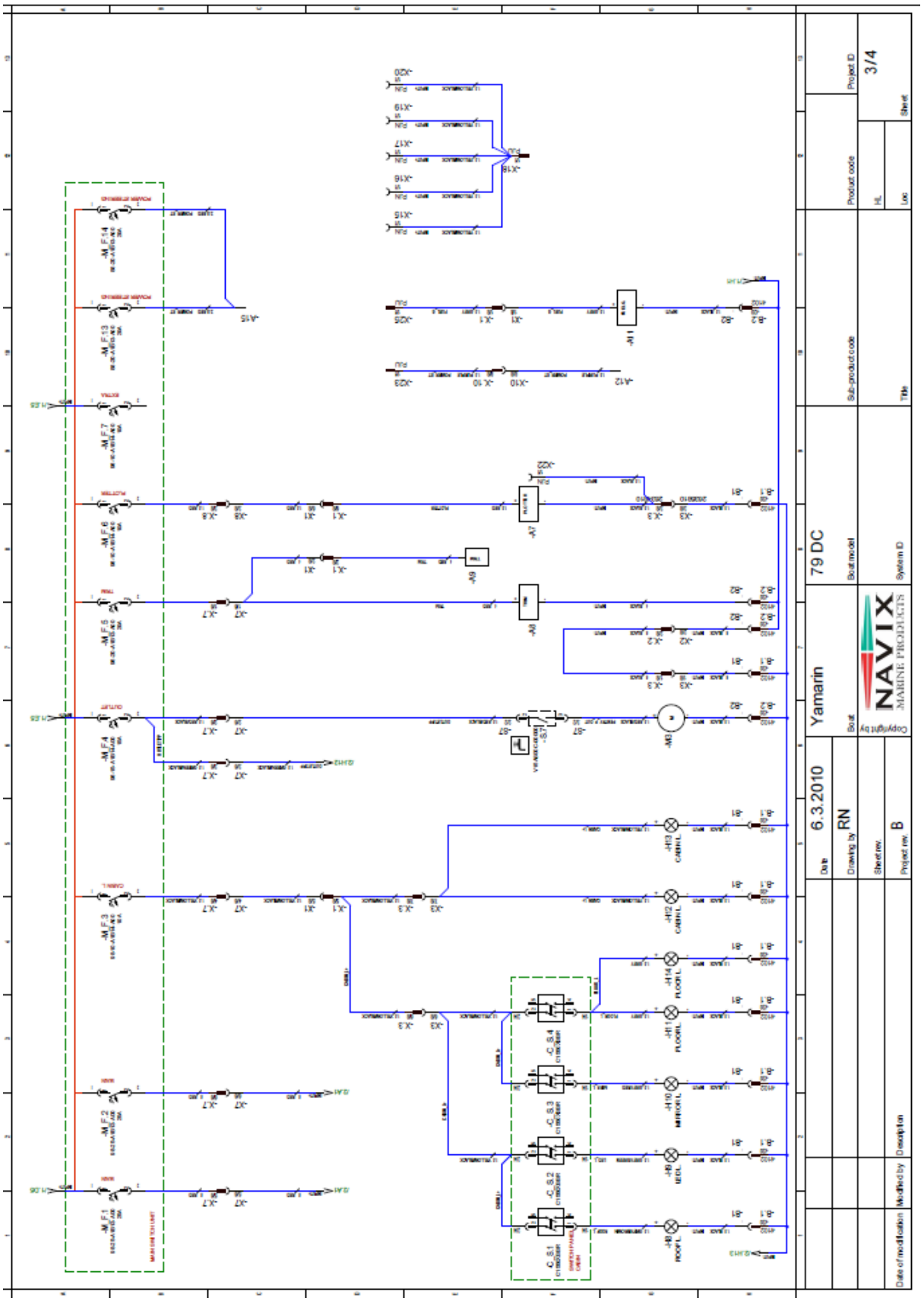
Image: Electrical system

1. Battery
2. Main switch
3. Bow propeller fuse
4. Stern anchor winch fuse

8.5 Wiring diagram




A2
RADIO
79 DC
Yamarin
11.12.2009
RN
DIAGRAM
2/4
NAVIX
MARINE PRODUCTS


79 DC
Yamarin
6.3.2010
RN
B
3/4
NAVIX
MARINE PRODUCTS

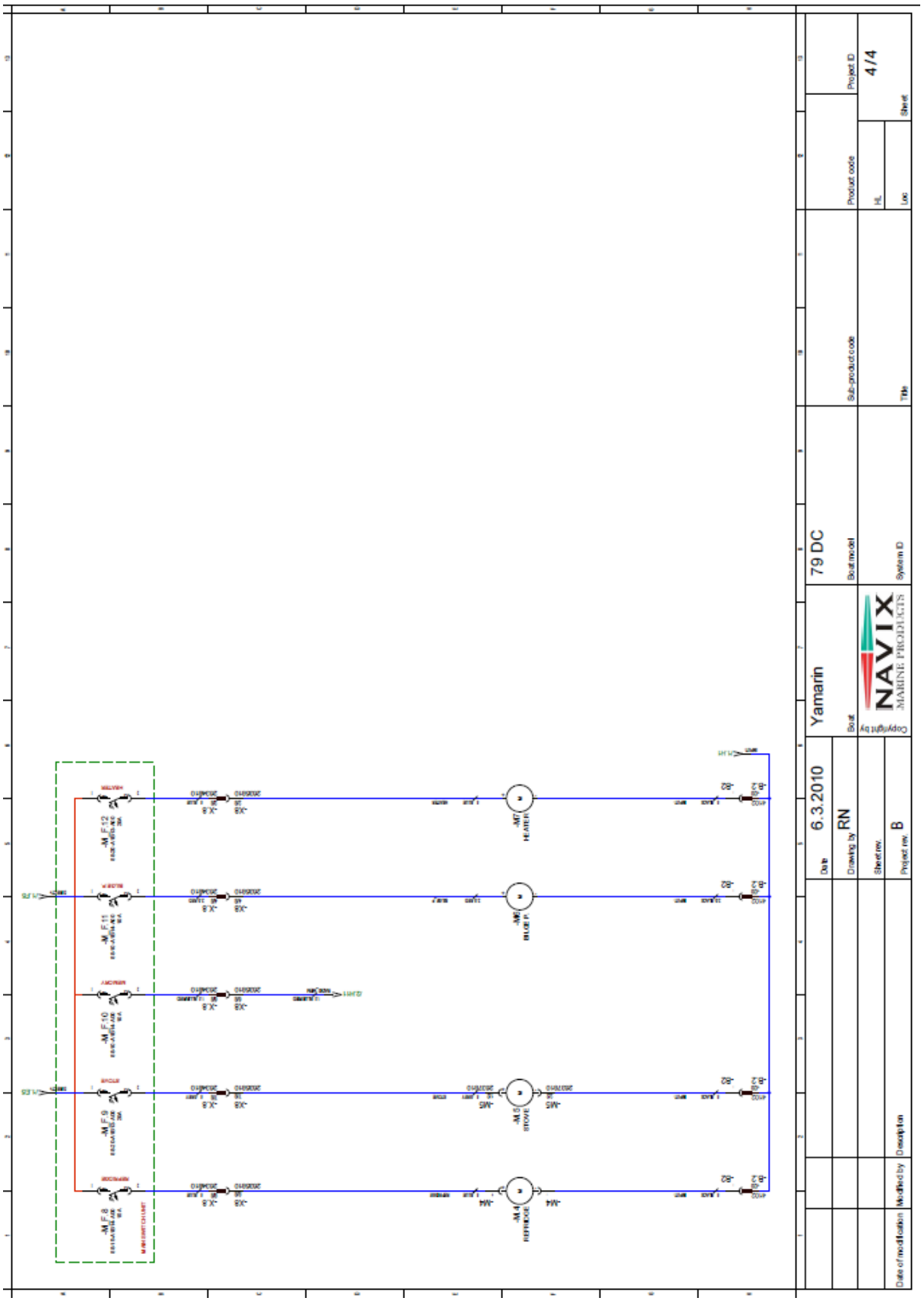
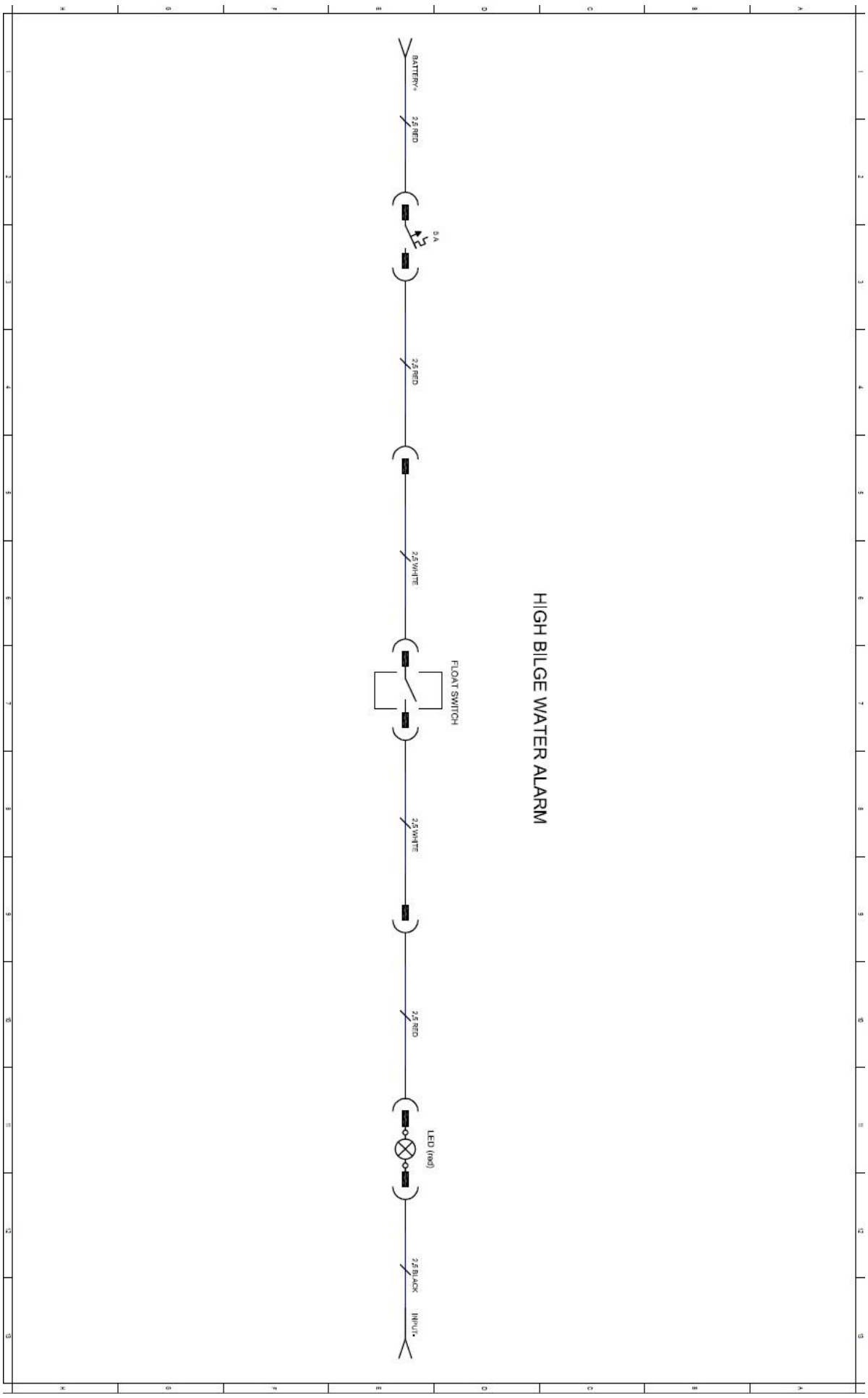


Image: Wiring diagram


HIGH BILGE WATER ALARM
BATTERY+
2.5 RED
5A
2.5 RED
2.5 WHITE
FLOAT SWITCH
2.5 WHITE
2.5 RED
LED (red)
2.5 BLACK
INPUT+