42 Side Console

USER MANUAL

FOREWORD

Congratulations on choosing a Yamarin 42 Side Console! We are delighted to welcome you as a Yamarin owner.

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, for your own comfort and safety, please ensure that you obtain sufficient handling and operating experience before "assuming command" of the craft. Only then will you be ready to accept responsibility as the "captain" of your boat. Your dealer or national sailing association or yacht club will be happy to advise you of local boating schools or competent instructors.

Before setting out, please make sure that the design category of your boat can cope with the forecast wind and wave conditions, and that you and your crew are able to control your boat in those conditions.

This user manual is not a detailed maintenance or trouble shooting 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 cannot be held responsible for modifications he has not approved.

Operating a boat requires a licence or authorisation in some countries. Boating may also be subject to special regulations.

Always keep your boat in good condition, and take into account possible wear due to age and hard use or misuse. Any craft – no matter how strong it may be, can be severely damaged if not used properly. Using a boat inappropriately is not safe boating practice. Always adjust the speed and direction of the craft to sea conditions.

You should keep appropriate safety equipment on board according to the boat's type, weather conditions and other factors. Having safety equipment on board is mandatory in some countries. The boat's crew should be familiar with the use of all safety equipment, and with manoeuvring in emergencies (rescuing persons who have fallen overboard, towing etc.). Boating clubs regularly organise rescue training.

All persons on board should use an appropriate buoyancy aid (life jacket/personal flotation device). Please note that, in some countries, the use of a buoyancy aid compliant with national regulations is required under law at all times while on board.

We wish you many enjoyable times on board your Yamarin Side Console 42!

Konekesko Marine
PL 145
01301 VANTAA, FINLAND

Tel. +358 (0)10 5311
www.yamarin.com

Table of contents

BEFORE YOU SET OFF

Familiarise yourself with this user 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?
- **Loading**
  Do not overload the craft, and distribute loads appropriately. To avoid impairment of the craft's stability, do not place heavy items high up.
- **Passengers**
  Ensure that there are lifejackets for all people on board. Agree on crew tasks before setting off.
- **Fuel**
  Make sure that the boat has enough fuel, including a 20% reserve for heavy weather or other unforeseen eventualities.
- **Engine and equipment**
  Check the function and condition of steering, electronic equipment and the battery, and carry out the routine daily checks specified in the engine manual. Check the boat's seaworthiness: there are no fuel or water leaks, safety equipment must be available on board etc. Check that there is no more than a minimal amount of water in the bilge.
- **Ventilation**
  Ventilate the fuel compartment to minimise the risk of fire.
- **Fastening of equipment**
  Check that all onboard items are positioned so that they are held in place also during rough seas and high winds.
- **Nautical charts**
  If you are not navigating in completely familiar waters, check whether you have nautical charts on board that cover a large enough area!
- **Leaving the berth**
  Agree with the crew who will release each mooring line, etc. Be careful not to let mooring lines or other lines get tangled in the propeller during manoeuvring.
- **Obligatory equipment**
  What is considered obligatory equipment varies from country to country. Find out what is required for your boat.

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

1 General

The user manual will help you familiarise yourself with the properties and features, as well as the care and maintenance of your new boat. Separate manuals for installed equipment are attached and are referred to in many sections of the user 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 boat's hull at the stern, or on the transom, next to the rub rail. We recommend that you write down the CIN code in the declaration of conformity in this book. When contacting the boat maker or dealer, please provide the CIN code and the type of craft. This helps in delivering the correct spare parts.

Declaration of conformity

DECLARATION OF CONFORMITY
Recreational Craft Directives 94/25/EC and 2003/44/EC

Manufacturer: See CIN code and list of manufacturers

Module used (cross) **:**

A	**-**	**Aa**	**-**	**B+C**	**X**	**B+D**	**-**	**B+F**	**-**	**G**	**-**	**H**	**-**

THIS DECLARATION IS PREPARED BY

Prepared by: Konekesko Oy Marine

Address: Vanha Porvoontie 245

Postal code: 01380 **City:** Vantaa

Country: FIN SUOMI, FINLAND

NOTIFIED BODY

Name: VTT Expert Services Oy **Identification number:** no. 0537

Address: PL1000

Postal code: FIN 02044 VTT **Place:**

Country: FIN SUOMI, FINLAND

EC type examination certificate: **No. VTT-C-7788-10-vene-001-11**

DESCRIPTION OF THE RECREATIONAL CRAFT

Hull identification number (CIN):	[ ][ ] - [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]
Brand name of the craft:	**YAMARIN**
Model or number:	**42 Side Console**
Design category:	**D**
Type of craft*:	**03**
Type of hull*:	**01**
Deck*:	**03**
Construction material*:	**02**
Propulsion*:	**02**
Type of engine*:	**01**
Maximum recommended engine power (kW):	**19**
Length and beam of hull (m):	**4.25/1.68**
Draught (m):	

* Please refer to codes on next page

I declare under my own and sole responsibility that the recreational craft mentioned above complies with all applicable essential requirements in the way specified on the next page.

Peter Krusberg
Signatory authorised by Konekesko Oy Marine

Product Development Manager, Konekesko Oy

09 February 2012

Type of craft:	**Deck:**
01 sailboat	01 decked
02 inflatable	02 partly decked
03 other: motor boat	03 open:
Type of hull:	**Propulsion:**
01 monohull	01 sails
02 multihull	02 petrol engine
03 other:	03 diesel engine
	04 electrical motor
	05 oars
	06 other:
Construction material:	**Type of engine:**
01 aluminium, aluminium alloys	01 outboard
02 plastic, fibre reinforced plastic	02 inboard
03 steel, steel alloys	03 z or stern drive
04 wood	04 other:
05 other:	

ESSENTIAL SAFETY REQUIREMENTS (Appendix 1)	**ISO standards used**	**Other normative document used**
General requirements (2)		
Hull identification number – CIN (2.1)	ISO 100087:1996 / A1:2000	
Builder's plate (2.2)	RCD annex I, 2.2	RSG Guidelines
Protection from falling overboard... (2.3)	EN ISO 15085:2003	
Visibility from the main steering position (2.4)		RSG Guidelines NBS F10
User manual (2.5)	ISO 10240:2004	
Structure (3.1)	ISO 12215-5:2008, ISO 12215-6:2008	RSG Guidelines, NBS-VTT Extended rule
Stability and freeboard (3.2)	EN ISO 12217-3:2002 + A1:2009	RSG Guidelines NBS F3
Buoyancy and flotation (3.3)	EN ISO 12217-3:2002	RSG Guidelines NBS F12
Openings in hull, deck and superstructure (3.4)	EN ISO 9093-1:1997	
Water incursion (3.5)	EN ISO 15083:2003	RSG Guidelines
Maximum recommended load (3.6)	EN ISO 14946:2001 / AC 2005	RSG Guidelines NBS F3
Life raft stowage (3.7)		RSG Guidelines
Evacuation (3.8)	ISO 9094	RSG Guidelines
Anchoring, mooring and towing (3.9)	EN ISO 15084:2003	RSG Guidelines
Handling characteristics (4)	EN ISO 11592:2001, EN ISO 8665:2006	RSG Guidelines NBS F10
Installation requirements (5)		
Engines and engine spaces (5.1)	ISO 11105, ISO 9094	RSG Guidelines
Inboard engine (5.1.1)		
Ventilation (5.1.2)		
Exposed parts (5.1.3)		
Starting the outboard engine (5.1.4)		
Fuel system (5.2)	EN ISO 11105:1997	RSG Guidelines
General – fuel system (5.2.1)		
Fuel tanks (5.2.2)		
Electrical systems (5.3)	EN ISO 10133:2000, ISO 8846:1990	RSG Guidelines
Steering system (5.4)	EN ISO 28848 + A1:2000	
General – steering system (5.4.1)		
Emergency arrangements (5.4.2)		
Gas system (5.5)	ISO 10239	
Fire protection (5.6)	ISO 9094	
General – fire protection (5.6.1)		
Fire-fighting equipment (5.6.2)		
Navigation lights (5.7)		1972 COLREG
Discharge prevention (5.8)		RSG Guidelines

2 Definitions

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

DANGER!:	Denotes an extreme intrinsic hazard exists, which would result in a high probability of death or irreparable injury if proper precautions are not taken.
WARNING!:	Denotes a hazard exists, which can result in injury or death if proper precautions are not taken.
NOTE!:	Denotes a reminder of safety practices or directs attention to unsafe practices, which could result in personal injury or damage to the craft or components.

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 the equipment installed in it at the boat factory have a 2-year warranty, subject to the warranty conditions of Finnboat. The manufacturers of the devices are directly responsible for the warranties of the engine, instrumentation, and other comparable devices.

Please contact your dealer regarding warranty issues. When discussing the boat's warranties, you should mention the model of the boat and CIN code (hull identification number), located on the starboard side aft corner of the boat, below the rub rail.

4 Before use

4.1 Registration

Registration regulations vary from country to country. 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 of the boat

5.1 General

The user manual is not meant to be a complete service or repair manual, but to guide the user in using his/her boat in a proper way.

5.2 Basic data

Marketer: *Konekesko Oy Marine, PL 145, 01301 Vantaa, Finland, tel. +358 (0)10 5311*

Design categories: ***A, B, C and D***

The meaning of each design category is described 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 for corresponding seas (significant wave height does not exceed 4 metres, please refer to note 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*:* The boat is built for conditions where wind speeds can reach a maximum of 6 Beaufort (approx. 14 m/s), and for corresponding seas (significant wave height does not exceed 2 metres, please refer to note below). 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 specifications*
Please also refer to section 5.4 “Loading”.

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

Operating area: Please refer to the *design category*
Check your boat's design category in the *technical specification*

CE plate:
Supplementary information is provided in the appropriate sections of this manual. A part of this information is indicated on the CE plate affixed next to the aft bench.

Technical specifications

Model	YAMARIN 42 Side Console
Design category	D
Overall length	4.25 m
Greatest width	1.68 m
Weight without engine, fluids and equipment	240 kg
Maximum load/number of passengers	300 kg / 4 + fuel 25 kg + equipment 10 kg
Maximum load on CE plate	310 kg
Maximum engine power	14.7 kW/ 25 hp
Largest recommended engine weight	65 kg
Fuel tank capacity	25 litres
Construction material	Reinforced plastic
Colour codes:	
- Hull:	RAL 9003
- Deck	RAL 9003
Water line:	
- At stern	50 mm
- At bow	240 mm
Remote control cables	13 feet
Steering cables	14 feet

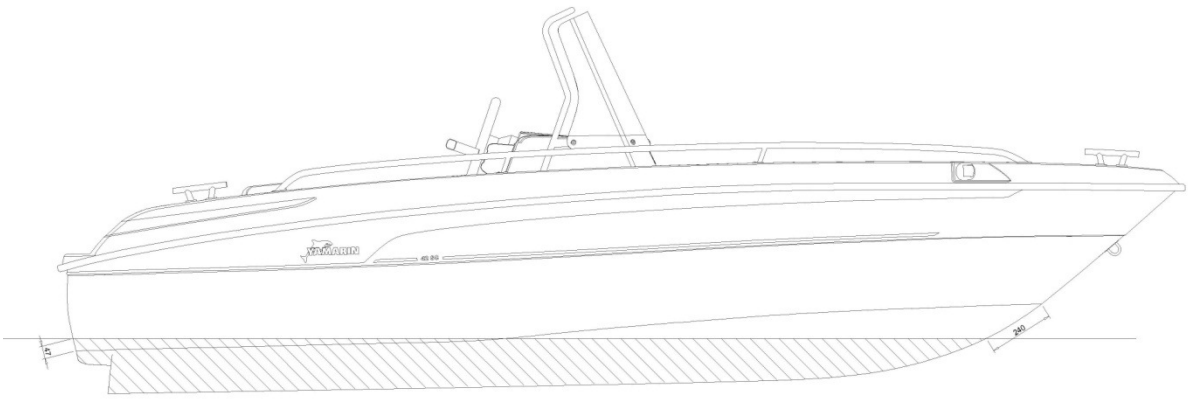


Figure. Water line.

5.3 Maximum recommended number of passengers

The maximum number of passengers for your boat is indicated in the *technical specification.* Please refer to the general lay-out diagrams.

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 “Loading”). Always remain seated on the boat. If the driver or passengers stand during driving, the boat's handling characteristics and stability change significantly. This may cause hazardous situations.

5.4 Loading

The maximum load for your boat model is indicated in the *technical specification*. This load includes the following weights:

a) the total weight of passengers (the default weight of an adult is assumed to be 75 kg and that of a child 37.5 kg);
b) basic equipment 10 kg;
c) fluid in portable tanks (water, fuel etc.);
d) personal equipment (e.g. recreational gear);
e) other loads

Model calculation:
The maximum recommended load for the *Yamarin 42 Side Console* = 310 kg + fuel 25 kg

There are 2 adults and 2 children, a 20 kg portable tank of water, 15 kg of fishing equipment and 10 kg of basic equipment on the boat.

2 x 75 kg + 2 x 37.5 kg + 20 kg + 15 kg + 10 kg = 270 kg

The boat's total load is 270 kg < maximum recommended load 310 kg, loading is OK

WARNING! Never exceed the maximum recommended load when loading the craft. Always load the craft carefully and distribute loads appropriately so that the design trim is maintained (a roughly even keel). Avoid placing heavy items high up.

5.5 Engine and propeller

The maximum recommended engine power and weight for your boat are indicated in the *technical specifications.*
Follow the engine manufacturer's instructions when choosing a propeller for your craft.

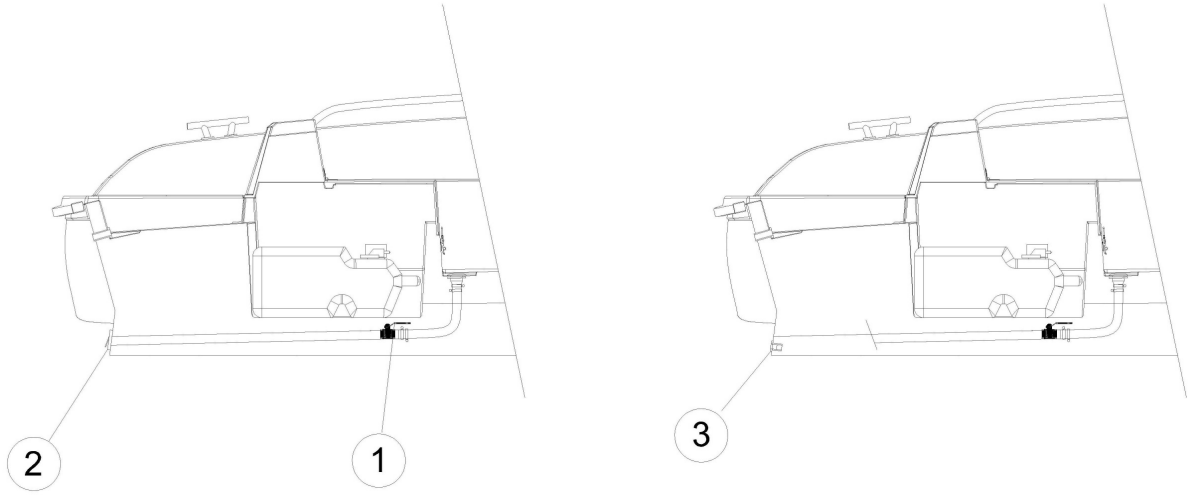
Yamaha F15 CEPL 9 ¼ x 9 J
Yamaha F20 BEPL 9 ¼ x 11 J
Yamaha F25 DETL 9 ⅞ x 11 ¼ F

5.6 Prevention of water incursion and stability

5.6.1 Openings in the hull and deck

The boat can be emptied on land by opening the plug at the bottom edge of the transom.

NOTE! Always remember to close the stern plug before launching the boat.
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 the water, provided that the bow is higher than the stern and the closing valve is open. Please refer to the figure below for the location of the valve.
This drain valve is meant to be shut at maximum load to prevent potential water incursion. Rainwater drains from the undecked part of the boat through the drainage hole; the valve is designed to be closed when the boat is heavily loaded, to prevent the incursion of water into the undecked part of the boat. Check regularly that rain water drains from the boat without impediment.
Keep a baler and/or hand pump on board when on the water.



1. Rainwater drainage valve
2. The shut-off flap
3. Drain plug

Figure. Locations of through fittings and drainage valves

WARNING!	Acquaint yourself thoroughly with the boat's drainage systems, so that you will be able to operate them correctly even in sudden emergencies.
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 like 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.

NOTE! There is always some amount of condensed water in the bilge. A small amount of water may also come through the hull bushings, 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.

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

5.6.2 Stability and buoyancy

Please note that stability is 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.

This YAMARIN boat is equipped with flotation materials, which allow the boat to float even when filled with water.

The boat will float at maximum load, even when filled with water.

5.7 Avoiding the risk of fire or explosion

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.

Remove the detachable tank from the boat for the duration of refuelling.

Do not stow any loose items, which might touch or damage the fuel system if they move, in the tank compartment Check annually that the fuel hoses are not worn at lead-ins. Brittle or otherwise damaged hoses and their pumps must be immediately replaced with a new, identical product.

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

5.8 Main switch

Operation of the main switch (located in the battery compartment):

- switch turned clockwise -> circuit switched on
- switch turned anticlockwise -> battery disconnected from circuit

Figure. Main switch

When you leave the boat, switch the battery off using the main switch.

NOTE! Never switch off the main switch while the engine is running! Doing so can damage the battery charger.

Electrical system:

1 Wire harness
2 Main switch
3 Automatic fuse for navigation light
4 Automatic fuse for 12V outlet
5 Navigation light switch
6 12 V outlet
7 Battery
8 Motor

In addition, the engine is an essential part of the boat's electrical system, which functions both as a power source and a consumer of power.

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 for the first few times.

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 boat is equipped with cable steering. The remote control combines the functions of throttle, forward and reverse gears, and the adjusting of the engine trim angle. (The Yamaha F15 does not include engine trim angle adjustment.)

5.9.2 Emergency switch

The emergency switch is a device, which attaches to the ignition panel at one end, and to, for instance, your life vest at the other. The emergency switch automatically switches off the engine when detached from the ignition panel. 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. 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.

The engine will not start if the emergency switch is not attached to the switch on the ignition panel.

DANGER! A rotating propeller presents a life-threatening danger to a swimmer or a person that 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 set out. 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 pier, 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 the engine trim angle

The following 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 in light seas, lift the bow until you feel the propeller starting to come out of the water. Then, lower the bow a little, until the going feels steady. You may consider using a log to help you find the optimal trim angle.
- In 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.

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

5.9.5 Starting the engine

1. Switch the power on using the main switch.
2. Lower the engine to the driving position.
3. Use the pump on the fuel hose to pump fuel from the tank until you feel the pump harden.
4. Check that the gear/throttle handle is in the neutral position, and that the emergency switch is attached to the ignition panel.
5. Start the engine by turning the ignition key clockwise.
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 in fine weather and calm seas, as long as you organise an adequate lookout, in compliance with the regulations of COLREG. To achieve the best possible visibility from the driver's seat, you should:

- ensure that passengers do not restrict your visibility
- not drive near planing speed for long periods, as the bow will come up and reduce visibility
- look over the windshield when visibility is poor
- remember to also keep a lookout behind you, particularly on shipping lanes
- use navigation lights in darkness

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. 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, least at speeds under 5 knots);
- visibility (islands, fog, rain, driving against the sun);
- knowledge of the route (time required for navigation);
- width of the route (other traffic, noise and bow wake near shore).

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.

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

- placing the load properly. The general rule is that you should place as little weight in the bow as possible; and

- adjusting the engine 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 can lead to large heeling angles and loss of control over the boat in rough seas.

5.9.7 Approaching the dock

Practise boat manoeuvring skills where there is ample space to learn how to approach a pier 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 pier.

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

Before docking, prepare the mooring lines at stern and bow. Approach the pier bow first at a narrow angle. Just before touching the pier, steer against it and shift into reverse. Apply throttle quickly and sharply. The boat will stop and turn parallel to the pier. 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 pier. The easiest way to depart is to first push the stern as far away from the pier as possible, and then slowly reverse away from the pier into open water.

The propeller is designed to have the best grip in forward gear. Therefore, propeller performance is weaker in reverse. Neither does the boat have a similar steering response in reverse as in forward gear.

WARNING! Your Yamarin boat is fast. It will not stop instantly from plane. Slow down in time before anchoring, beaching or docking. Learn to estimate the distance the boat needs to come to a halt. 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 pier, shore or another vessel! Practise beaching and docking under favourable conditions! Use moderate but firm engine power!

NOTE! When securing your boat, you must take into consideration possible changes in wind direction, a rise or lowering of the water level, any possible bow wakes, etc. You can get more information from your insurance company, for example.

5.9.8 Using the canopy (optional accessory)

The canopy is designed to withstand a maximum speed of 50 km/h at sea and in road transport. All press studs must be properly fastened when using the canopy.

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 fallen overboard.

It is always easiest to help a person climb on board from the water 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.

5.10.2 Securing loose equipment

Secure all heavy equipment, such as anchors, firmly in place before setting off.

5.10.3 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 garbage 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
- 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.

5.10.4 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 image of your boat model in the chapter on towing for anchoring bollards (cleats and trailer hook). To prevent abrasion, use fenders that are large enough.

The locations of anchoring bollards are also depicted in the image of your boat model. It is the responsibility of the owner/user to ensure that mooring, towing and anchor ropes, anchor chains, and anchors are suitable for the boat's intended purpose, and that the breaking strength of ropes and chains is no more than 80% of that of the corresponding anchoring bollards. However, you should take into account wear and the loss of strength caused by knots.

Anchoring bollard strength and anchor weight for your boat:

- Forward 8.3 kN
- Backward 5.8 kN
- Anchor 3-5 kg

When beaching in a natural harbour, make sure that the water is deep enough, using a plumb line, for example, and LOWER THE ANCHOR FAR ENOUGH FROM SHORE. A moderate 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 pier, shore or another vessel! Practise beaching in good weather conditions. Use moderate but firm engine power.

NOTE! When securing your boat, you must take into consideration possible changes in wind direction, a rise or lowering of the water level, any possible bow wakes, etc. You can get more information from your insurance company, for example.

5.10.5 Towing

When towing another boat, use a floating line that is strong enough for the task. Tow carefully at first, avoid jerks, and do not overload the engine. If you are towing a small dinghy, adjust the towing line length so that the dinghy will ride the boat's bow wake. In narrow channels or rough seas, however, keep the dinghy close to the transom to reduce weaving. Properly attach all equipment on the dinghy, in case it should capsize. Cover the dinghy in rough seas on open stretches of water to prevent it filling with water.

If you are towing, or if your boat has to be towed, attach the towline to the anchoring bollards described for your boat model.

WARNING! When towing, the towline is under high tension. If it should break, the end that has snapped off may lash back at fatal speed. Always use a thick enough rope and avoid the line of the towrope.

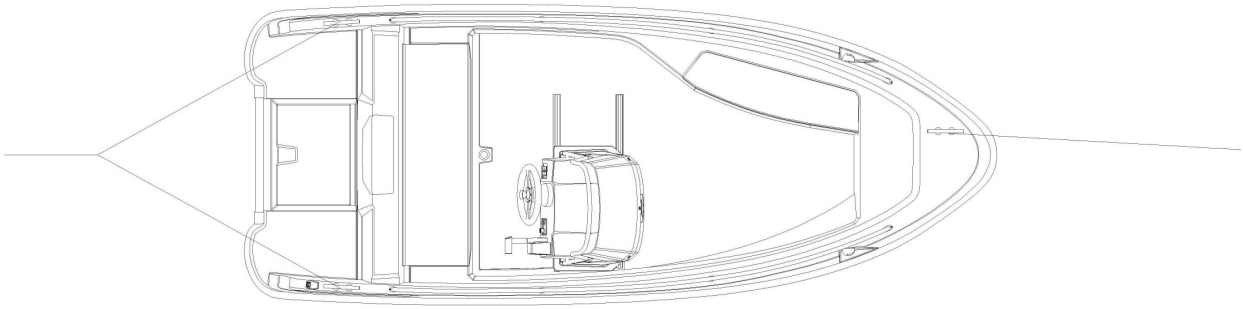


Figure. Location of anchoring bollards during towing, anchoring and mooring.

5.10.6 Trailer transport

You can transport your Yamarin boat on land conveniently on a trailer. However, make sure that the trailer has sufficient load-bearing capacity to accommodate the boat, its engine and equipment, etc. Also make sure that there are sufficient supports to reduce load points. A trailer's maximum total weight is indicated on your car's registration certificate.

The trailer's keel supports should carry most of the weight of the boat. Adjust the keel supports so that the boat cannot slide from side to side. An example of support placement is presented in the figure below.

Clean the supports of sand and dirt, so 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 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.

Tie the boat properly before beginning transport. Fastening belts located at the bow should be directed "down-front". You can prevent the stern of the boat from shifting by tightening a sling rope over the stern as depicted in the figure below. 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 only tighten them before the next transport.

NOTE! The trailer should be slightly front-weighted. 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 can result in 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!

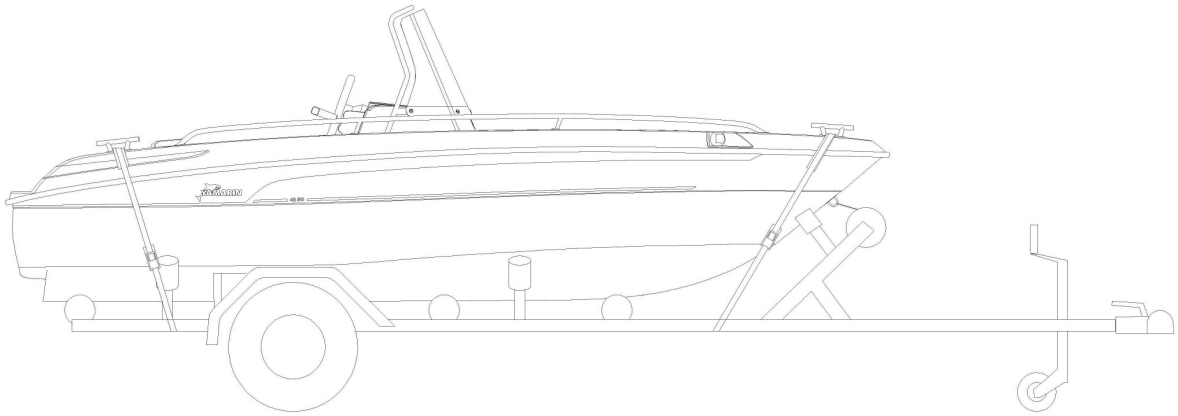


Figure. Attaching the boat to the trailer

5.10.7 Docking

The storage cradle should be sufficiently steady and suitable for the boat's dimensions. The cradle's keel supports should carry most of the weight of the boat. The side supports should have cut outs at the bottom steps to avoid load points on the steps. Storage cradle dimensions are shown in the figures below.

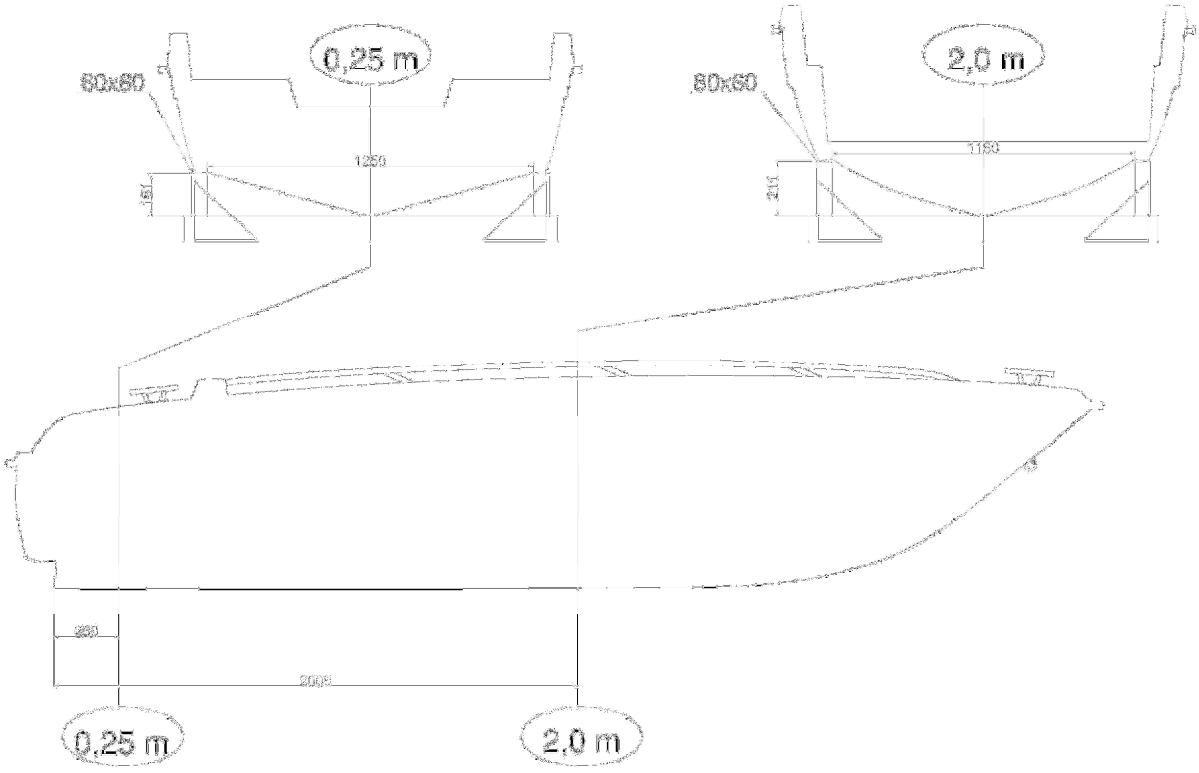


Figure. Storage cradle dimensions.

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! The boat must not be lifted by its cleats.

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, as well as the boat's resale value.

Familiarise yourself with the service procedures shown in the engine manual (see annex). Carry out the procedures carefully, or ensure they are performed by an accredited service company. Other areas in need of regular maintenance include:
– steering and control devices
– the canopy (optional accessory)
Make sure to perform their maintenance according to their separate instructions and manuals.

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

To keep the boat's seat cushions in good condition, they should be stored in a dry, well-ventilated space. Although the seat cushions are made of water-resistant material, water can get in through their seams. If the cushions remain damp for any length of time, they may get mouldy and be ruined. Therefore, always remove the cushions from the boat for the night, if you wish to keep them dry and in good condition. The warranty does not cover cushions spoilt by rain or damp.

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.

Useful tip: Mouldy spots on artificial leather boat seats will vanish if you wipe the seats with lemon juice concentrate with a dash of added salt. A fresh scent will linger on the seats.

6.3 Care instructions for the canopy

Store the canopy over winter in a dry and well-ventilated place. The press studs of the canopy should be sprayed with silicon spray every now and then; otherwise, they may become so tight that the canopy will tear when trying to open them. The warranty does not cover a torn canopy.

6.4 Care instructions for the windshield

The boat's windshield is made of acryl, and it may only be washed with water and soap. No solvents may be used for cleaning it.

6.5 Care instructions for the remote control

Normally, the remote control needs no other maintenance apart from greasing and calibration during winter servicing. If the remote control becomes stiff for any reason, it needs to be serviced immediately.

6.6 Care instructions for the steering system

1. Check the plastic surface of the steering cable. If it is damaged, the steering cable must be replaced.

2. Detach the steering cable from the engine's steering support tube by detaching the connecting rod between the engine and the steering cable, and unscrewing the steering cable nut. Draw the steering cable out of the engine's steering support tube. Clean the steering support tube and the steering cable rod. Grease both with waterproof grease. Install the steering cable back into the steering support tube, tighten the steering cable nut, and install the connecting rod. Tighten the steering cable screw carefully – a loose screw will increase slack in the steering.

3. Make sure that all parts of the steering system are appropriately fastened. Tighten the nuts and screws if necessary.

6.7 Care instructions for electrical components

The best way to protect electrical components, such as the main switch, couplings, etc. against oxidation is to spray them every now and then with a moisture repellent antioxidant.

6.8 Minor superficial repairs

You can repair minor damage to the boat's gelcoat surface 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 gelcoat with 1.5-2% hardener
5. fill the repair with more gelcoat than needed, so that its surface remains slightly proud of the surrounding area
6. carefully put tape over the repair
7. after the gelcoat 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 specification*.

NOTE! 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 before you make or commission new grounding systems, hatches, holes, etc. The flotation material on the boat must under no circumstances be removed.

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

If freezing temperatures are expected, empty the cooling water from the engine, following the engine manual's instructions.

Have your *Yamarin* boat lifted in good time before the water freezes. Your boat is not designed for being driven in ice, or for remaining in the water when it freezes.

You should usually carry out the following measures before lifting the boat:
– change the engine oil (check the engine's maintenance instructions from the engine manual)
– preliminary washing of the boat
– emptying the boat of bilge water and unnecessary items

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.

Electronic instruments are best protected against oxidation and theft by detaching them and removing them to a dry indoor environment for the winter. Detach the batteries and store them in a warm, dry place. Charge the batteries at least twice during the winter. Spray the couplings of the electrical system with an appropriate water repellent antioxidant.

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. Snow will not accumulate on top of the covering if the comb angle is sharp enough (at least 90°). Depending on the support structure's shape, appropriate dimensions for the covering are:

6 x 4 m

NOTE! The covering or its attaching ropes must not touch the boat's surface directly, because they will abrade the gelcoat as they flutter and move.

7.2 Measures before launching the boat

Repair possible damage to the gelcoat surface according to section 6.8.

In coastal 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, 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.

At lake areas, antifouling is not needed and its use is not recommended.

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

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 location of bushings is described in chapter 5. Bring the safety equipment on board before setting off.

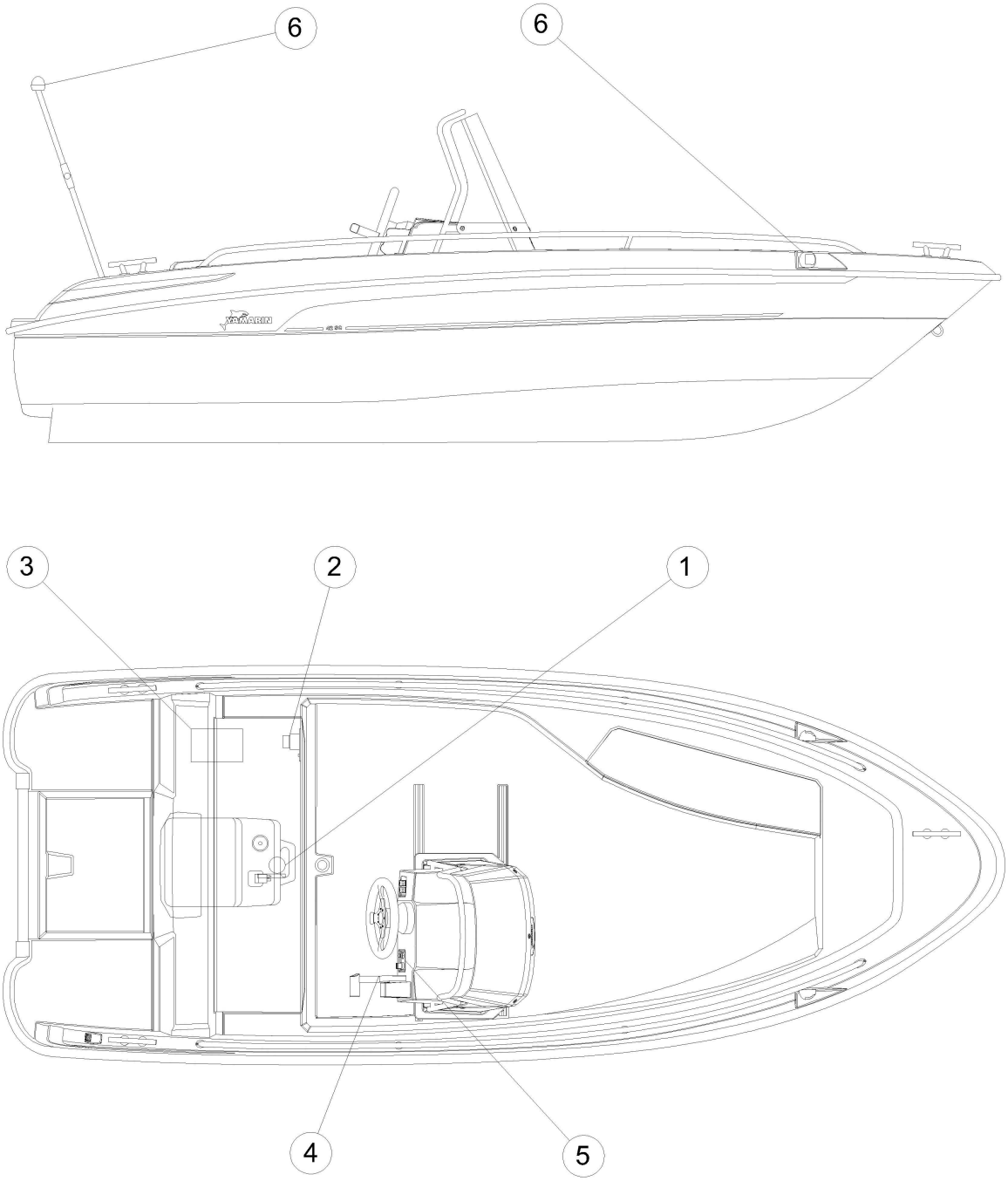
NOTE! Do not apply any paint to the zinc anodes, log sensor, or piston rods of hydraulic trim tabs. Do not apply paints containing copper on aluminium parts, and remember to follow the paint manufacturer's instructions.

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.

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

8 Lay-out

8.1 General lay-out



1. Rainwater drainage valve
2. Main switch and fuse panel
3. Battery
4. Control device
5. Switches
6. Navigation lights

Figure. General lay-out

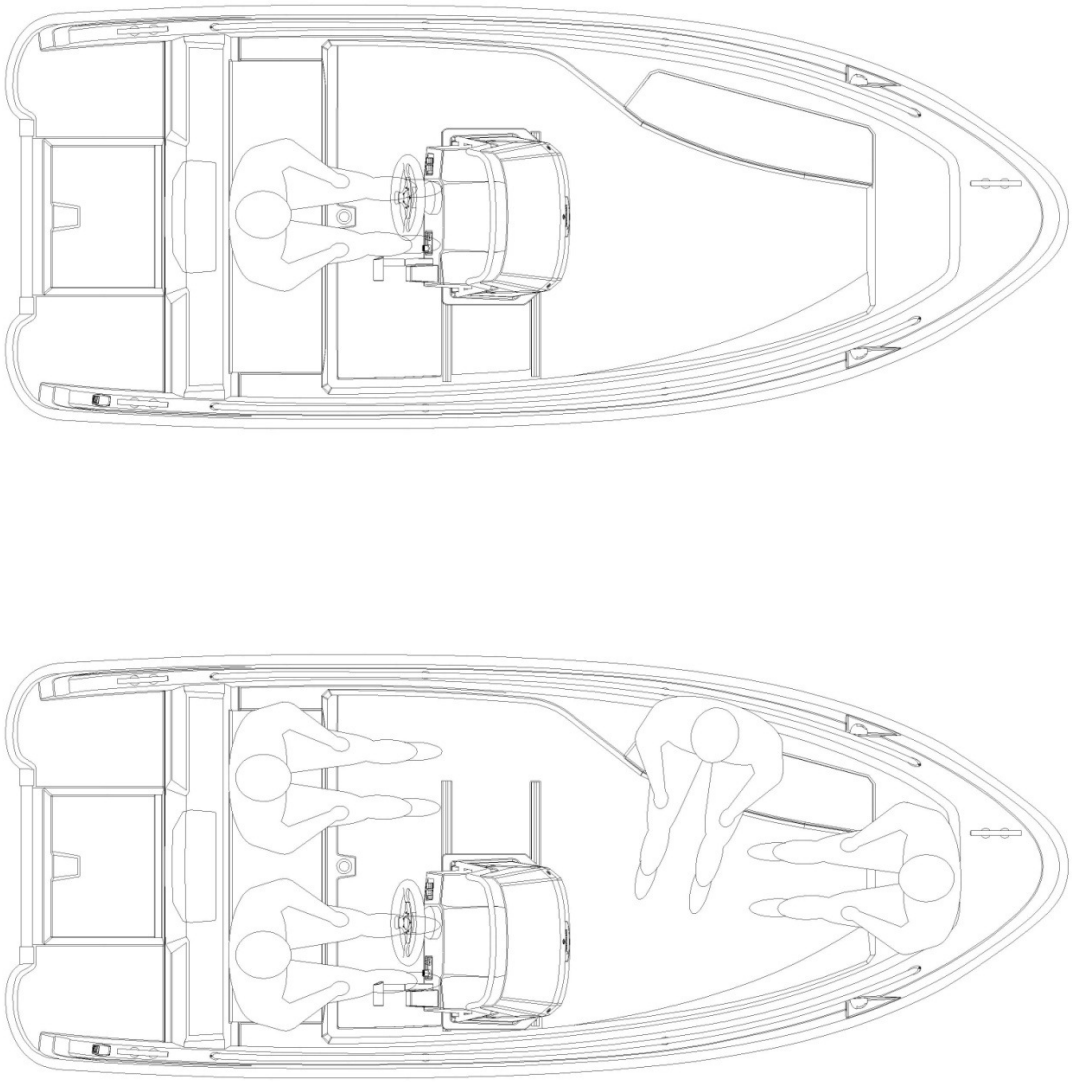


Figure. Seats and working decks for the maximum number of passengers

WARNING! Handle the boat’s hatches with care and watch your fingers and toes. **Be especially careful with the anchor box hatches, which are equipped with elastic straps.**

8.2 Fuel system

DETACHABLE TANKS

Smaller Yamarin boats use detachable fuel tanks. The detachable tank is normally delivered together with the outboard engine. Yamarin boats have spaces for two detachable tanks. Fuel hoses are usually attached to detachable tanks with quick release couplings, so detaching the tank and filling it at a service station while the boat remains in the water is quite convenient (please refer to the section "Refuelling").

Detachable tanks are also usually equipped with displays that indicate the amount of remaining fuel, and ventilation valves, which you should remember to open when the engine is being used, to

remove pressure from the tank and ease fuel intake.

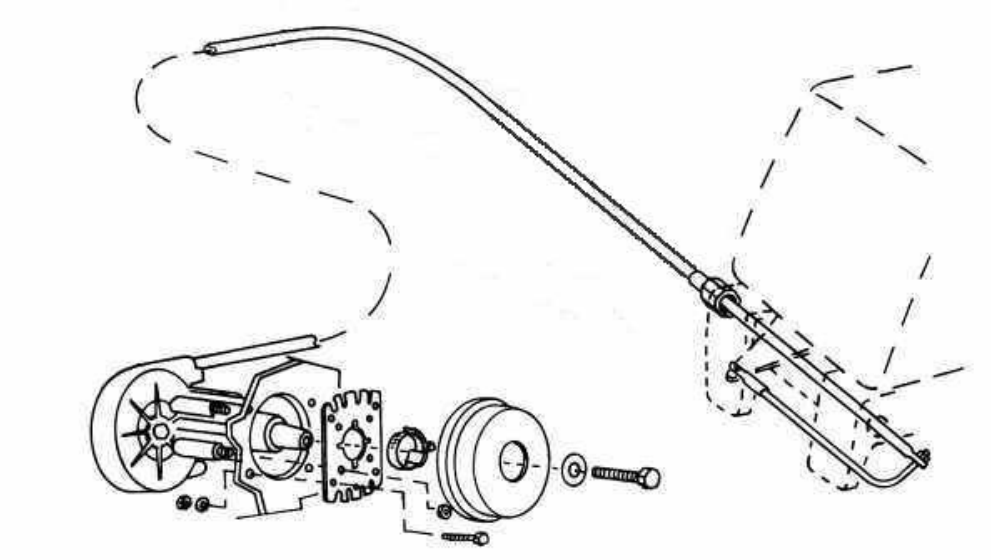
8.3 Steering system

A steering wheel is required on boats with an engine power of more than 15 kW (20 hp) /NBS/. All Yamarin boats in this size category are installed with a steering device and cables as standard equipment. The steering cables are suitable for engine manifold installation.

Please refer to the figure depicting the steering system.

WARNING! The wheel and steering system must comply with CE standards. You can be sure of this by using original Yamarin spare parts.

Figure. Steering system



8.4 Wiring diagram