



Yamarin 68 Cabin

OWNER'S MANUAL

FOREWORD

Congratulations on choosing a Yamarin 68 Cabin! We are delighted to welcome you as a Yamarin owner.

The intention of this manual is to help you to operate your craft safely, with maximum enjoyment. The manual contains details of the craft, the equipment supplied or fitted, its systems and information on its operation, care and maintenance. Please read it carefully, and familiarise yourself with the craft before using it.

Naturally, the owner's manual is not a course on boating safety or seamanship. 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 handling and operating experience before "assuming command" of the craft. Your dealer or national sailing association or yacht club will be pleased to advise you of local boating schools, or competent instructors.

This owner's 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 shall be assessed, executed and documented by competent people. The manufacturer is not responsible for modifications he has 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 sea conditions.

All persons should wear a suitable buoyancy aid (Life jacket/Personal Flotation Device) when on deck.

We wish you many enjoyable times on-board your Yamarin 68 Cabin!

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PLEASE KEEP THIS MANUAL IN A SECURE PLACE, AND HAND IT OVER TO THE NEW OWNER IF YOU SELL THE CRAFT.

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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 water area you are aiming for? During use, hull windows and other hatches must be battened down to prevent water incursion
- **Loading and stability**
Do not overload the craft and distribute loads appropriately. To avoid impairment of the craft's stability, do not place heavy items high up. Please consider that the stability of the boat is reduced if people stand up when on-board during use.
- **Passengers**
Ensure that there is Personal Flotation Device or Lifejackets for all people on-board.
Agree crew tasks before setting off.
- **Fuel and fuel system**
Make sure that the boat has enough fuel. Keep in mind that rough conditions at sea impact on fuel consumption and that it can increase by more than 30% when compared to calm conditions. As a rule of thumb you should aim for there being at least 20% left in the tank when arriving at your destination. Regularly check the fuel filter to ensure that there is no water in the moisture trap located under the fuel filter itself. The fuel filter should be changed 1-2 times per year depending on engine hours and quality of fuel.
- **Engine and manoeuvring equipment**
Check the function and condition of steering, batteries and remote control and carry out routine checks according to the engine manual
- **Boat's seaworthiness**
Check the boat's seaworthiness: no fuel or water leaks are permitted, safety equipment must be available on-board etc. Check that there is no water in the bilge!
- **Fastening of equipment**
Check that all equipment and heavy items are positioned so that they are held in place during travel at sea and high winds. Please note that the seat cushions may fly over board if they are not fixed properly with press studs.
- **Nautical charts**
If you are not navigating in familiar waters, ensure you have nautical charts on-board that cover a large enough area. If your boat is equipped with a chart plotter, familiarise yourself with 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 to tangle 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 a separate manual.

Own notes

1 General

The owner's manual will help you to become familiarised with the properties and features of your new boat, as well as 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, of course, complement this owner's manual by adding the manuals of devices which are installed afterwards. There is also space for your own notes at the end of this manual.

The craft has a running serial number, CIN-code (Craft Identification Number). The CIN-code can be found on the starboard side of the transom just below the rub rail. We recommend that you write down the CIN-code in the declaration of conformity in this book. 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
Recreational Craft Directive 94/25/EC and 2003/44/EC**

Manufacturer: Seliö Boats

Module used: B, EC type examination

THIS DECLARATION IS PREPARED BY

Prepared by: Konekesko Oy Marine

Address: Vanha Porvoontie 245

Postal code: 01300

City: Vantaa

Country (code): FIN

(printed): Finland

NOTIFIED BODY

Name: VTT

Identification number: 0537

Address: P.O. Box 1000

Postal code: 02044 VTT

City: Espoo

Country (code): FIN

(printed) Finland

EC type-examination certificate

VTT-C-2128-10-vene-001-07

DESCRIPTION OF THE CRAFT

Hull identification number (CIN):

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Brand name of the craft:

Yamarin

Type or number:

68 Cabin

Design category:

C

Type of craft *:

03

Type of hull *:

01

Deck *:

01

Construction material *:

02

Propulsion *:

02

Type of engine *:

01

Maximum recommended engine power (kW):

148.0

Length and beam of hull (m):

6.80/2.55

Draught (m):

approx. 0.45

* Please refer to codes on next page

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

Peter Krusberg
Product Manager, Yamarin
27th of June 2008

Type of craft:	Deck:
01 sailboat	01 decked
02 inflatable	02 partly decked
03 other: motorboat	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	ISO-standards used	Other normative document used
General requirements (2)		
Basic information	EN ISO 8666:2002	
Hull Identification Number – CIN (2.1)	ISO 10087:1996 / A1:2000	
Builder's Plate (2.2)		RCD annex I, 2.2
Protection from falling overboard... (2.3)	EN ISO 15085:2003	
Visibility from the main steering position (2.4)		RSG Guidelines, EN ISO 11591, NBS F10
Owner's manual (2.5)	EN ISO 10240:2004	
Structure (3.1)		RSG Guidelines, NBS-VTT Extended rule
Stability and freeboard (3.2)	EN ISO 12217:2002	
Buoyancy and floatation (3.3)	EN ISO 12217:2002	
Openings in hull, deck and superstructure (3.4)	ISO 9093-1:1994	
Water incursion (3.5)	EN ISO 15083:2003, ISO 8849:1990	
Manufacturer's maximum recommended load (3.6)	EN ISO 12217:2002, EN ISO 14946:2001	
Life raft stowage (3.7)		RSG Guidelines
Evacuation (3.8)	EN ISO 9094-1:2003	
Anchoring, mooring and towing (3.9)	EN ISO 15084:2003	
Handling characteristics (4)	EN ISO 11592:2001	
Installation requirements (5)		
Engines and engine spaces (5.1)		
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 10088:2001, EN ISO 11105:1997	
General – fuel system (5.2.1)		
Fuel tanks (5.2.2)		
Electrical systems (5.3)	EN ISO 10133:2000, ISO 8846:1990	
Steering system (5.4)	EN ISO 10592:1994/A1:2000	
General – steering system (5.4.1)		
Emergency arrangements (5.4.2)		
Gas system (5.5)		
Fire protection (5.6)	EN ISO 9094-1:2003	
General – fire protection (5.6.1)		
Fire-fighting equipment (5.6.2)		
Navigation lights (5.7)		1972 COLREG
Discharge prevention (5.8)	EN ISO 8099:2000	

2 Definitions

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

- DANGER!** Denotes an extreme intrinsic hazard exists which would result in 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.

The units used in this manual are in accordance with the SI-system. In some cases other units have been added in brackets. An exception is the wind speed, where the Beaufort scale is used in the recreational craft directive.

3 Warranty

The boat and the equipment installed at the boat factory are guaranteed for one year, starting from the first day of use. Please contact your dealer in relation to 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 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 insurance liability separately when lifting the boat. 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.

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 owner's manual is not meant to be a complete service or repair manual, but to guide the user to know the characteristics of the boat and to use his/her boat in a proper way.

5.2 Basic data

Recreational crafts can be constructed according to 4 categories (A, B, C and D) according to the recreational craft directive 94/25/EC. Yamarin 68 C is constructed according to category C. Below you will find information on what each category means:

Category A: The boat is built for conditions where the wind can exceed 8 Beaufort (approx. 21 m/s) and where the significant height of the waves (please refer to note below) can exceed 4m. 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 across 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 the wind reaches a maximum of 8 Beaufort (approx. 21 m/s) and where the significant height of the waves (please refer to note below) does not exceed 4m. 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 the wind reaches a maximum of 6 Beaufort (approx. 14 m/s) and where the significant height of the waves does not exceed 2 m (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 the wind reaches a maximum of 4 Beaufort (approx. 8 m/s) and where the significant height of the waves (please refer to note below) does not exceed 0.3 m and the height of the greatest waves is no more than 0.5 m. Such conditions may be encountered on protected waters on lakes and in coastal areas during fine weather conditions.

Note: The significant wave height is the mean height of the highest one third of the waves, which approximately corresponds to the wave height estimated by an experienced observer. In the event that 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”.

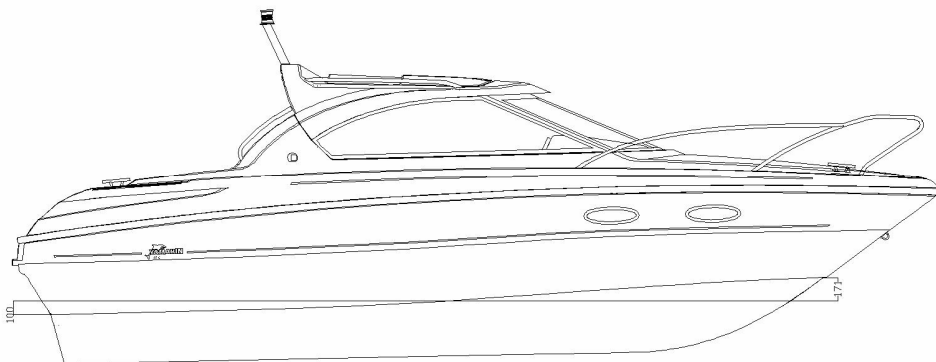
Main dimensions and capacities: *See technical specifications*

Craft length, breadth, draft, total weight etc. as well as tank capacities are shown in technical specifications.

Builder’s plate: Part of the previously mentioned information is given on the builder’s plate, which is affixed next *to the driver’s seat*. A full explanation of this information is given in the relevant sections of this manual.

Technical specifications

Model	Yamarin 68 Cabin	
Design category	C	
Overall length (swim ladder not included)	6.80 m	
Width	2.55 m	
Weight without engine, fluids and equipment	approx. 1,400 kg	
Weight on trailer with biggest recommended engine	Approx. 1 850kg. Includes the boat (approx. 1 400kg) and Yamaha F200 hp-engine (300kg) and estimated weight of fluids and equipments (150kg). NB! This is not the maximum weight of fluids and equipments	
Weight on trailer with smallest recommended engine	Approx. 1 750kg. Includes the boat (approx. 1 400 kg) and Yamaha F115 hp-engine (200 kg) and estimated weight of fluids and equipments (150 kg). NB! This is not the maximum weight of fluids and equipments.	
Maximum number of passengers	8 persons	
Maximum weight of load	905 kg	
Max load includes	8 Persons = 600 kg + Personal equipment 80 kg + Fuel 100 kg + Fresh Water 45 kg + Waste 30 kg + Basic equipment 20 kg + possible life raft 30 kg	
Maximum load on builder's plate (CE-sign)	730 kg	
Maximum engine power	148.0 kW/ 200 hp	
Weight of maximum recommended engine	272 kg	
Fuel tank capacity	140 litres	
Fresh Water tank capacity	45 litres	
Waste tank capacity	28 litres	
Construction material	Glassfibre reinforced polyesterresin	
Colour codes		
Hull	Ashland 10015	RAL 9016
Deck	Ashland 10015	RAL 9016
Blue stripe	Ashland 39500	RAL 5011
Remote control cables	4.50 m	
Hydraulic hoses	5.50 m	



68 C water line

At stern: From chine 100 mm up

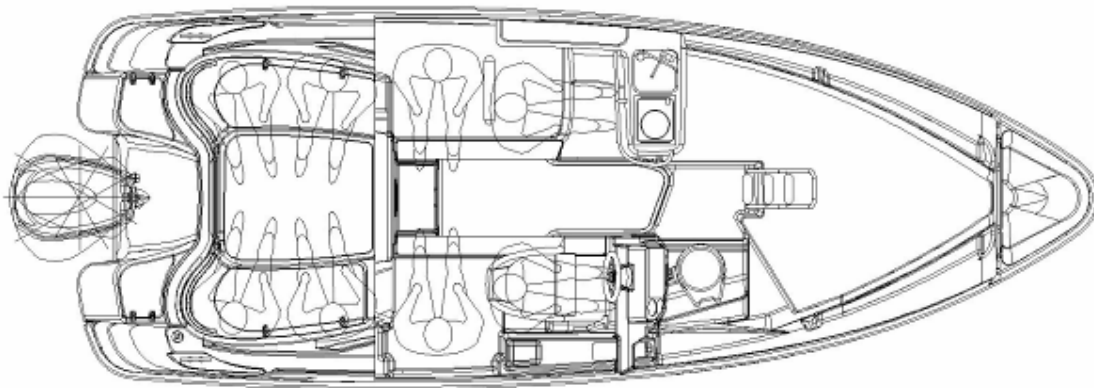
At bow: From chine 170 mm down

5.3 Maximum recommended number of passengers

The maximum recommended number of passengers on board Yamarin 68 C is 8.

WARNING!

Do not exceed the maximum recommended number of passengers. Regardless of the number of passengers the total weight of persons and equipment must never exceed the maximum recommended load (please refer to section 5.4 “Loading”). During the voyage all passengers must remain seated on the seats (please refer to the image here below).



Seats of Yamarin 68 C

5.4 Loading

The maximum permitted load for the Yamarin 68 C is 905 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) basic equipment 20kg
- c) consumable liquids (fresh water, fuel etc.) in fixed tanks 145 kg
- d) personal equipment (e.g. hobby equipment and overnight equipment) 80 kg.
- e) the weight of supplies and other stores 30 kg
- f) possible life raft 30 kg

WARNING!

When loading the craft, never exceed the maximum recommended load. Always load the craft carefully and distribute loads appropriately (roughly an even keel). Heavy equipment should usually be placed in the storage compartment under the aft seat. If the maximum number of passengers are on-board you should place the heavy equipment in the cabin to ensure that the craft does not become tail-heavy. Always avoid placing heavy weights high up.

5.5 Engine and propeller

The maximum recommended engine power for the Yamarin 68 C is 200 hp (148 kW). Follow the dealer's instructions when choosing the propeller for your craft. Do not use the boat with more power than 200 hp. There is no warranty if overpowered.

5.6 Prevention of water incursion and stability

5.6.1 Hull and deck thru fittings and closing valves

The Yamarin 68 C 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. The closing valve is located behind the hatch on aft deck. This drain valve is meant to be shut at maximum load to prevent potential water incursion. In other loading conditions the drain valve should remain open.

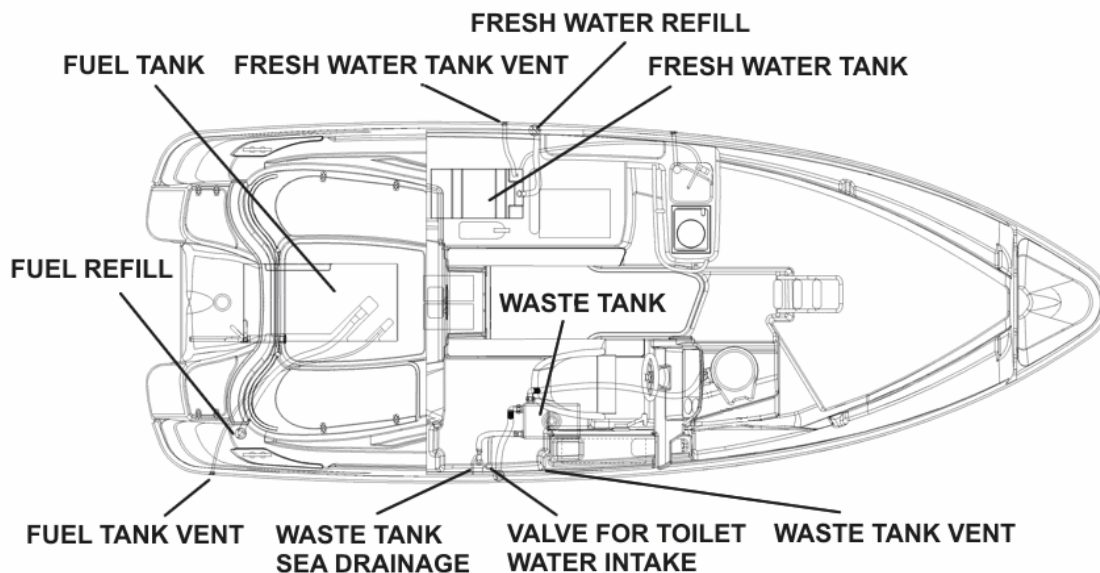
The boat has two bilge pumps, a hand pump and an electric pump. The electric bilge pump has a capacity of approx. 65 l/min and the hand pump has a capacity of 0.5 l/pull.

- Refer to the next image 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 when you open the inspection hatch on the aft deck. 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 handpump's suction hose is situated between the fuel tank and the transom, and can be reached when you open the inspection hatch on aft deck.

WARNING!

The bilge pump system is not intended to cope with a leakage caused by running aground or other equivalent damage.



Locations of hull and deck thru fittings and closing valves for the Yamarin 68 C

WARNING! Always keep the drainpipe shut when its inboard end is constantly below the waterline due to the load. 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. For instance, 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. As the boat ages, there is a risk that a small amount of water may come through the hull bushings. Always remember to check the bilge, via the inspection hatch under the aft seat, 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. Any change in the distribution of the weight onboard may significantly affect the stability, trim and performance of your craft. However, please remember that large breaking waves always present a serious danger to stability.

The boat does not float if filled with water. In accordance with the Recreational Craft Directive decked boats do not need to float if filled with water.

5.7 Avoiding the risk of fire or danger of 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.

When filling the fuel tank, do not use a plastic funnel, as this prevents discharge of the static electricity between the fuel nozzle and the filling fitting.

If it is difficult to refuel the fuel tank as the petrol jet hits the chain attachment please turn the pistol for instance 90 degrees. To avoid squirt when refuelling the fuel tank you can use a rag on top of the deck fitting.

Useful tips: As your boat has a teak deck and you are concerned about fuel spillage when refuelling, we recommend that you wet the teak surface with water before refuelling. Once the wood is saturated with water it won't absorb any petrol.

Always keep a spare can of fuel onboard. A suitable place for stowing the spare can, especially considering fire safety, is either of the anchor boxes in the stern. There is no risk of gasified fuel coming into contact with battery compartments or the electrical system from either of these boxes.

Do not stow any loose items under aft seat that, if moved, could prevent fuel from going to the engine. This is particularly important for items that may move against hoses running to or from the fuel filter. Check annually that the fuel hoses are not worn at lead-ins.

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! Petrol vapours are explosive. Extreme caution must be exercised and these instructions must be followed when refuelling. The smell of petrol always means that there are petrol vapours in the boat.

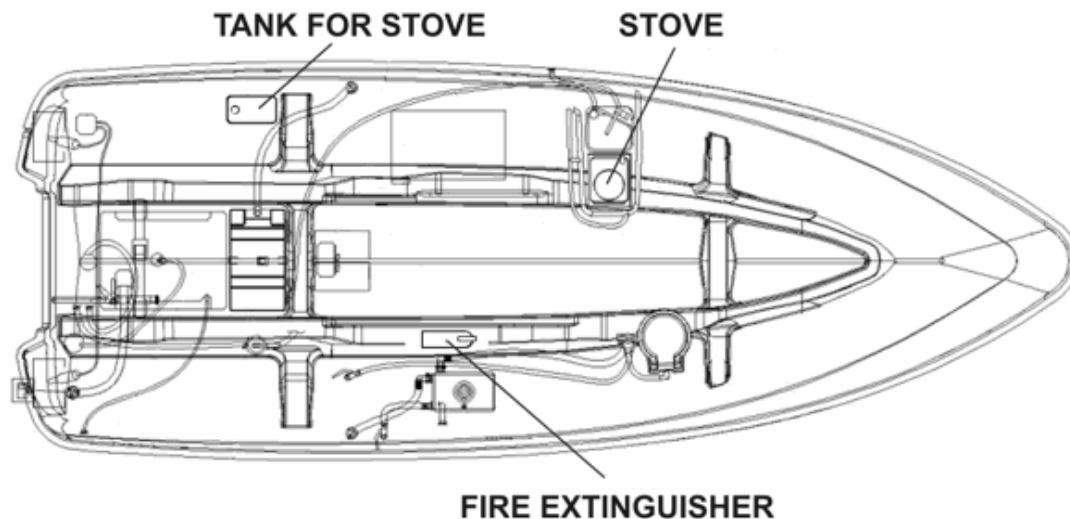
5.7.2 Other fuel burning systems (stove and heater)

The boat is equipped with a stove which have a separate user manual. The fuel tank for the stove is located under the starboard side aft deck seat. Use only good quality paraffin as fuel. Before you start to refill or replace the petrol tank you should turn off the stove and the cabin heater. When handling paraffin, do not use appliances or equipment that could cause sparks. Wipe up any spilled paraffin immediately.

If the boat is equipped with a Wallas 1800 heater it has to be connected to the direct supply switch in the main switch panel. The direct supply shall never be switched off before the red combustion pilot lamp goes out (= aftercooling). If the boat is also equipped with a heater.it is necessary to ensure that its instruction manual are stored on-board.

5.7.3 Fire protection

The boat is equipped with a portable 2 kg fire extinguisher class 8A89B. Please look at the image below for its location. The portable fire extinguisher must be serviced annually by an authorised inspector. In the event that the fire extinguisher is replaced the capacity of the new one should be the equivalent of the old one. You will see where the fire extinguisher is located on the image below.



The location of the portable fire extinguisher on-board the Yamarin 68 C.

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.

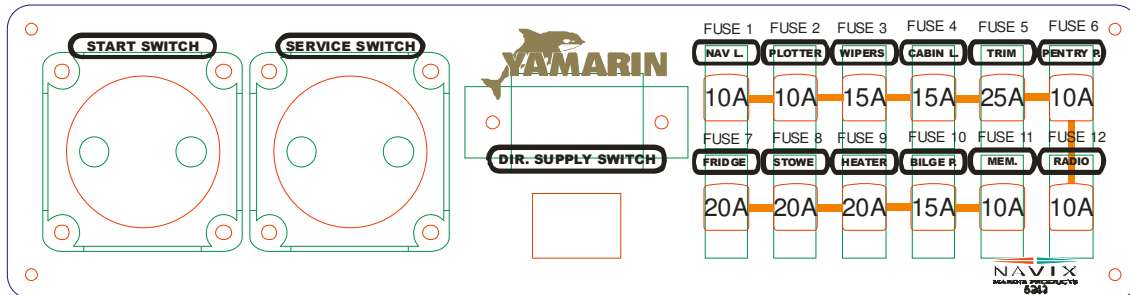
Remember:

- Never block passages to exits and hatches
- Never hinder access to safety equipment, for instance the fuel vents, the gas vents or the switches to the electric system.
- Never hinder access to fire extinguishers located in a cabinet
- Never leave the boat unsupervised when the stove or the cabin heater is being used
- Never make changes to any of the boat's systems (especially the electricity or the fuel systems) or allow an unqualified person to make changes to any of the boat's systems
- Never fill a fuel container when the appliance in question is being used or when the stove or cabin heater is being used
- Never smoke when handling petrol or gas.

5.8 Main switches and fuses

Main switches operation:

- Switch clockwise -> battery connected
- Switch counter clockwise -> battery disconnected



Always keep both start and service switches connected when using the boat or any device in the boat.

WARNING! Do not keep service battery switch off and start battery switch connected + ignition lock switched on as this may damage the electrical system in the boat!

Following fuses are connected to the direct supply switch: Fridge, stove, memory for radio and Yamaha-gauges, bilge pump and heater. Please note that the automatic bilge pump will

not be working when direct supply switch is off. Also the memory current to radio, chartplotter and gauges is out of order if direct supply switch is off.

When you leave the boat, switch off both start and service battery using the main switches but not the direct supply switch. Always check that stove, (heater) and fridge are switched off.

NOTE! Never switch off the main switch when the engine is running! This could cause serious damage to the engine's electrical system. Some of the fuses for the circuits are located beside the main switch and some next to the helm station. The fuse sizes are shown in the schematics for the electrics. Do not change the amp rating of the fuses and do not install any components that could cause the rated current amperage of the circuit to be exceeded.

MAIN SWITCH START BATTERY

MAIN SWITCH SERVICE BATTERY

NAV. L = Navigation light

WIPER = Windscreen wiper (SB)

CAB. L. = Cabin light

OUTLET = 12 V- outlet

PENTRY PUMP = Fresh water pump (pump inside tank)

TRIM = Electro-hydraulic pump for trim tabs

PLOTTER = Chart plotter

FRIDGE

STOVE

MEM. = Memory current to instrument panel

BILGE P. = Electric bilge pump

DIR. SUPPLY = Direct supply for fridge, stove, memory for radio and Yamaha-gauges, bilge pump and heater.

5.9 Operation

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

5.9.1 Controls

You will quickly learn how to control your Yamarin 68 C, but constantly changing weather conditions, like 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 has a hydraulic steering system.

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 to, for instance, your life vest. The emergency switch automatically switches off the engine when detached from the remote control. It is very important that the boat comes 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 it to your arm, do not steer the boat with that hand, because the lanyard may twist around the steering wheel.

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

WARNING! A rotating propeller presents a life-threatening danger to a swimmer or a person that has fallen overboard. Use an emergency switch to turn off the engine always 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 which direction you are planning to set out. When the engine is in gear, you adjust the boat speed with the same gear/throttle lever.

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

5.9.4 Adjusting of 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, and in the event that the sea is still, the bow is lifted until you can feel that both the engine and the boat move very easily. In calm water, the engine should normally be trimmed up at least 3 scale marks on the trim indicator on the rev counter. If engine is trimmed up too much, the speed of the boat is reduced. If the boat is trimmed too low, both boat and engine run heavily. To achieve good fuel economy it is important to drive the boat with the right engine trim angle.
- In a heavy sea lower the bow to allow it to slice through the waves better, thus providing a smoother ride.
- In following waves, 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 it hits the water

It is possible, **using the boat's trim**, to correct the sideways heeling to ensure that the boat is moving completely upright both when there is a side wind as well as when the boat is unevenly loaded. It is true to say that all planing boats lie against the wind. However, when the boat is equipped with trim tabs, its direction can be straightened by putting down the windward trim tab. This enables the boat to run much more smoothly through the waves. If you want to reduce the impact of waves even further, you can trim up windward, which causes the waves to go more under the bottom of the boat.

WARNING! Adjust the trim tabs with care when at high speed – it dramatically changes the behaviour of the boat. Do not run the boat with the bow too much down, as the boat can pitch unexpectedly.

WARNING! Waves reduce manoeuvrability and make the boat heel. Take this into account by reducing the speed when encountering heavier seas.

5.9.5 Starting the engine

1. Switch on the engine using the main switch.
2. Lower the engine to the driving position by pressing the Power Trim button on the gear/throttle handle.
3. Use the hand pump bulb on the fuel hose to pump fuel from the tank until the bulb becomes hard. There is a little arrow on the bulb which should point upward when you are pumping.
4. 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.
5. Switch on the current, using the start key, without starting the engine and wait a few seconds until the warning lights light up.
6. Start the engine by turning the ignition key clockwise, until it starts. If everything is correct the engine should start within 1-2 seconds. If the engine does not start you should not “crank” the starter engine for more than 10 seconds at any one time.
7. 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. Do not, however, forget the importance of keeping an adequate lookout. In order for the visibility from the driver's seat to be as good as possible you should:

- 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 in shipping lanes and heavily trafficked routes.

Use proper navigation lights after dark.

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

- waves (also consult the passengers about 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)
- familiarity with the route (sufficient time for navigation)
- the width of the route (other traffic, noise and wash on shore)

When running at low speed, a planing boat's directional stability is poorer than at higher speed.

So be careful in narrow passages and when meeting other boats. It is therefore important that you 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 driving characteristics and fuel consumption. The boat's best operational position may be achieved by:

- placing the load properly
- adjusting the engine's trim angle.

The combination of the right operational position with the right speed also makes driving in open waters more comfortable and safer.

WARNING! High speed and quick manoeuvring, in a rough sea, can lead to large heeling angles and loss of control over the boat.

NOTE! The boat is not designed to be driven through conditions that cause it to jump waves.

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 throttle application does not generate sufficient steering power. Sharp but short throttle applications enable efficient steering movements.

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 sway and someone to get injured.

Before docking, prepare the ropes at stern and bow. Approach the dock bow first at a narrow angle. Just before touching the dock, steer against the dock 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 from the dock easier as the wind or current pushes the bow out from the dock. If there is no wind or current the easiest way to depart is by pushing the stern as far away from the dock as possible, and then slowly reversing away from the dock into open water.

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

WARNING! Yamarin 68 Cabin is a fast boat. It does not stop instantly when at planing speed. Slow down in plenty of time before anchoring, beaching or docking. Learn to estimate the distance the boat needs before it stops. 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 you secure the boat you must take into consideration changes in wind direction, that the water level might rise or sink, any backwash that might occur, etc. You can get more information from insurance companies, etc.

5.9.8 Using the canopy (Additional equipment)

The canopy is designed to take 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.

5.9.9 Front door and steps

The front door is not designed to be used as a rail when you are coming on board or leaving the boat. You are advised to use only the handrail if you require support. Pay attention when using the stairs as there is an obvious risk of falling.

WARNING! Keep the door closed in the event of heavy sea, strong wind or gusts as there is a risk that the door could be thrown shut by itself. Because the door is relatively heavy this action could cause injury to passengers if it is thrown shut.

WARNING! When the boat is at a standstill the door can be closed by gusts or if big waves hit the boat. You are therefore advised that you keep the door closed when no one is on the foredeck.

WARNING! Make sure that the steps are locked before using them.

5.9.10 Cabin sliding door

Pay attention when using the cabin's sliding door as there is a risk that the door could be thrown shut by itself in the event of heavy sea.

NOTE! If you keep the sliding door open when driving, it must always be locked with the strap.

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 when the weather is good, because when someone has fallen overboard, there is no time for practising.

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 with a life-saving device or a fender must always jump in after the child, however, someone must always remain onboard the boat.

It is very important to maintain visual and verbal contact in the event that a person falls overboard.

DANGER! A rotating propeller presents a life-threatening danger to a swimmer or a person that has fallen overboard. Use an 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

Secure all loose equipment before setting off.

5.10.3 Respect for the environment

Our seas, lakes and archipelago are unique and their conservation is a matter of honour for each boater. Therefore you should avoid:

- fuel and oil leakages
- 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 unnecessarily high wash 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 regulations on the prevention of pollution at sea (MARPOL) and respect these to the greatest possible extent.

5.10.4 Toilet

The toilet uses seawater to flush. When flushing the toilet all the waste goes into the waste water tank. The water inlet valve is located behind the round inspection hatch which is located in the stowage space underneath the driver's seat. In normal use the valve can be left open. In heavy sea we recommend that you close the vent to avoid water overflow.

5.10.5 Use of waste tank

The capacity of the waste water tank is 28 litres and it is located under the starboard locker inside cabin. The pump-out deck fitting complies with the ISO 8099 standard and the fitting is located on the side deck at starboard side.

The discharge shutoff seacock to the waste water tank is located next to it. The valve should normally **always remain closed and it should only be opened when emptying the tank into the sea**. Please find out which regulations are in force where you are using the boat in relation to the discharge of grey water.

Mildly alkaline general detergents can be used for cleaning the waste water tank and its hoses. Glycol can be used as an anti-freeze agent. However, the system must be as empty as possible for storage in temperatures below zero.

Always keep the thru hull fitting valve to the waste water tank closed. Only open it if you need to empty the tank into the sea where you are allowed to do so.

5.10.6 Anchoring and mooring

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. To prevent abrasion, use fenders that are large enough. The location of the bollards is illustrated on the image in the section on towing.

The tare of the mooring, towing and anchoring lines should be maximum 80 % of the tare of the bollard in question. The tare rating of the bollard is illustrated below. It is the owner's/operator's responsibility to ensure that mooring lines, towing lines, anchor chains, anchor lines and anchors are adequate for the vessel's intended use, i.e. the lines or chains do not exceed 80 % of the tare rating/breaking strength of the respective strong point.

The tare rating/breaking strength of the anchoring bollards and the minimum anchor weight for the boats is:

- Aft	20,9 kN
- Stern	14,6 kN
- Anchor	7,5 kg (stocked or drag anchor)

When you land to a natural harbour, ensure sufficient water depth. Let the anchor go at sufficient distance from the shore. An appropriate grip is achieved if the length of the anchor line is 4-5 times the water depth.

WARNING!

Do not try to stop the boat by hand and do not put your hand or foot between your boat and the dock, beach, or another boat. Practice mooring in good conditions, use moderate yet firm engine power.

NOTE!

When mooring your boat, take wind veering, raise or fall of water level, wake of other boats etc. into account. More guidance can be provided by insurance companies, for instance.

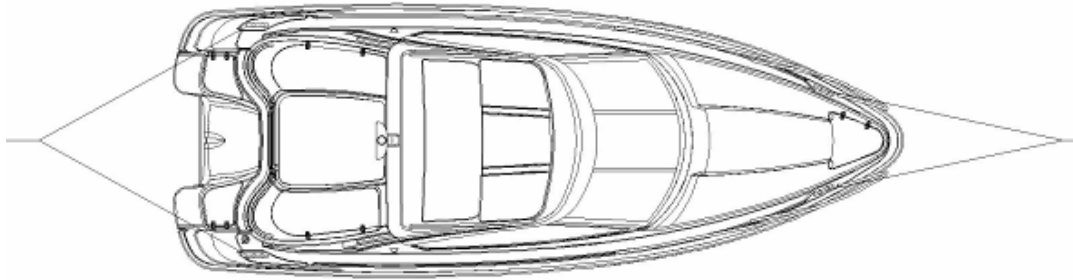
5.10.7 Towing

If you tow another boat, use adequately strong, floating line. Begin the towing carefully, avoid jerks, and do not overload the engine. If you tow a small dinghy, adjust the towing line so that the dinghy rides “downhill” on the wave. In narrow channels and large waves pull the dinghy near the transom to reduce yawing. Carefully secure all equipment in the dinghy in the event that it might capsize. When crossing open waters, cover the dinghy to prevent ingress of spray water.

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

WARNING!

When towing the towline is under high tension. If it breaks, the speed of the end that has snapped off may rebound and cause serious injury or death. Always use a thick enough rope and do not get in the way of the rope extension.



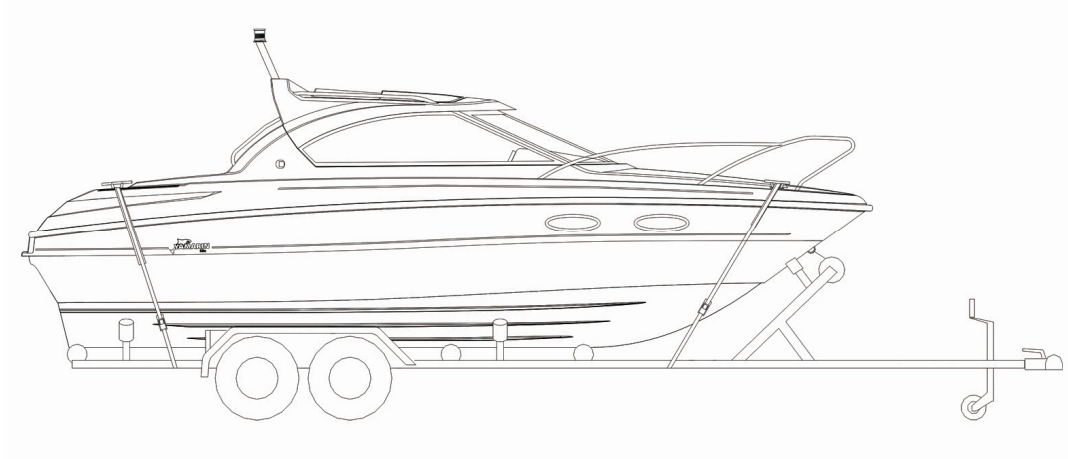
The location of the anchor bollards during towing, anchoring, and mooring.

5.10.8 Trailer transport

Weights on trailer can be found from Technical specifications. The keel support of trailer should carry the most of the weight of the boat. Adjust the side supports so that boat can not slide from side to side. For more information, please turn to your dealer.

Before you take boat on trailer clean the supports from sand and dirt, so they wont scratch the bottom of the boat. Check once again that trailer is mounted to trailer hitch.

The place where the boat will be taken on the trailer should be safe from the wind and waves and ramp should continue deep enough into water. Reverse trailer so deep that the rearmost keel support is just above the water level. Drive the boat carefully towards the rearmost keel support and fasten winch cable to trailer hook. Reel up the boat on trailer in a way that boat wont slide from side to side. Remember to trim up motor before reeling the boat on to trailer. Otherwise it can hit the bottom.



Tie the boat properly before starting the transport. Fastening belts located at the bow should be directed "down-back" and fastening belts located at rear should be directed "down-front". Do not leave any loose equipment or extra load to boat when it's transported. Take seat cushion away and close the hatches properly.

When transporting the boat the motor should be on its driving position. Make sure that there is the needed road clearance.

The fastening belts must be loosened up if the boat is kept on trailer between transportations and tightened up before next transportation.

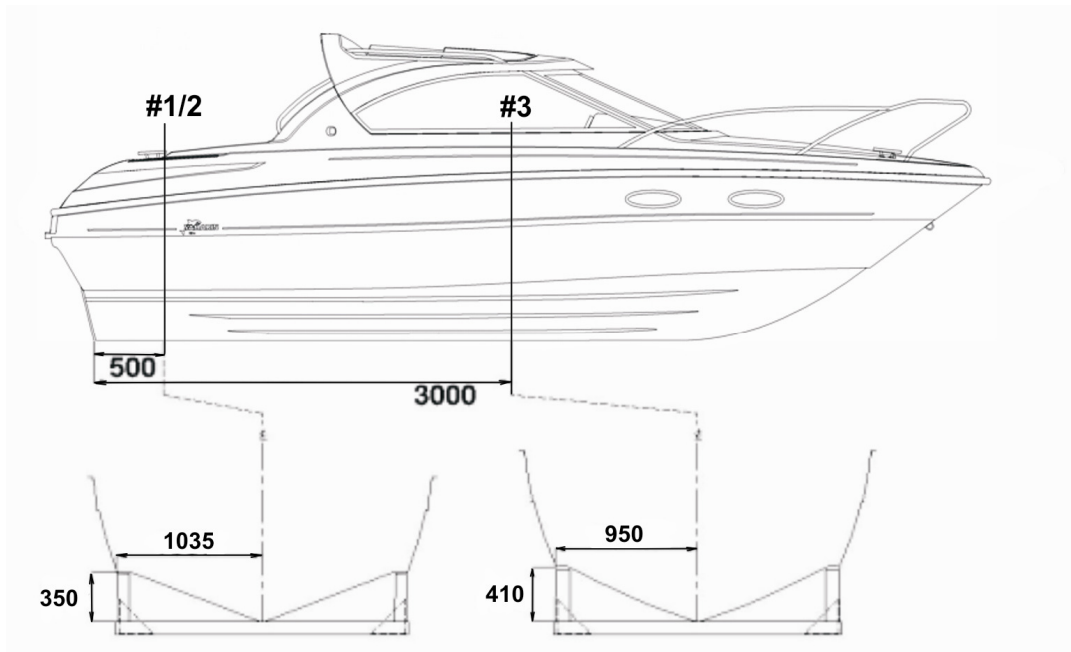
NOTE!

The trailer should be a little front-weighted. Make sure that the boat is fasten tight enough to trailer and the weight of the boat is divided equally on the both side supports. If the boat swings against the side support it can damage the hull.

When letting down the boat from trailer, remember to fasten the bow rope to the boat in order to release cable from the trailer hook when boat is on the water. Look out the winch handle!

5.10.9 Docking

The storage cradle should be sufficiently steady and suitable for the boat's dimensions and so that it supports the whole of the keel. The side supports must therefore not support the boat. The side supports should have cut outs at the beading around the ladder to avoid load points on the beading. The supporting structures at the transom should be strong enough to also support the weight of the engine. Below you can see the dimensions of the cradles. Between them there must be a sturdy plank that provides support under the keel of the boat.



Yamarin 68 C storage cradle dimensions.

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

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

NOTE! The boat cannot be lifted by the bollards.

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

6 Servicing and maintenance

Familiarise yourself with the service procedures shown in the engine manual (see attachment). Carry out the service carefully, or ensure it is performed by an accredited service company

6.1 Washing and cleaning the boat

Normally it is sufficient just to wash and wax the deck and sides. A special boat cleaning agent is most suitable for the purpose. Mildly abrasive polishes can be used to remove chafings and embedded dirt. Fibreglass surfaces can be washed with a pressure washer.

Useful tips: When the boat has been washed using 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 tips: Water and lime stains on stainless steel rails and handles disappear when you apply some Lemon Pledge furniture spray. The rails start shining just as nice as they did when the boat left the shipyard.

Useful tips: If the boat's ropes smell bad after winter storage, immerse them for a couple of hours into a bucket of water and add a bottle of apple vinegar and a splash of fabric conditioner for clothes. Allow the lines to dry properly.

6.2 Care instructions for seat cushions

In order to ensure that the boat's seat cushions remain in good condition they must be stored in a dry and well-ventilated space. Although they are made of water resistant material, their seams can let water in. If the cushions remain damp for any length of time, they may grow mouldy and become damaged. So always take the cushions inside for the night, if you want them to stay dry and in good condition. The front seats will remain dry if you always remember to use the protective bags on them. The warranty does not cover cushions spoilt by rain or dampness.

The press studs of the seat cushions should be sprayed with a silicon spray every now and then, otherwise they may become so tight that the fabric is torn when trying to open them. The warranty does not cover ripped seat cushions.

6.3 Care instruction for the canopy

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

6.4 Care instructions for windshield

The boat's windshield is made of tempered glass and it can be washed with ordinary glass cleaners.

Useful tips: 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 first using horizontal motions and then vertical motions. Repeat this a few times and you'll bring the windshield to a brilliant shine.

6.5 Care instruction for remote control

Normally the remote control needs no other maintenance than greasing and adjustment during the winter service. If, for any reason, it becomes stiff to operate, it needs to be serviced immediately.

6.6 Care instructions for the steering system

Normally the hydraulic steering system does not need to be serviced. If the steering becomes "loose", there is a leak in the system. The leak must be repaired immediately!

WARNING! A hydraulic system with a leak, or one with trapped air is extremely dangerous.

6.7 Care instructions for electrical components

The best way to protect electrical components, like the main switch, navigation light switch, connectors etc., against oxidation is to spraying them every now and then with a moisture repellent antioxidant.

6.8 Minor superficial repairs

Minor damages to the boat's gelcoat surface can be repaired by yourself. However, a neat, unnoticeable repair requires a considerable amount of skill:

1. Tape off the area around the damage. This is to ensure that the area around the damage isn't accidentally damaged.
2. Bevel the edges sloping into the damaged area and clean with acetone.
3. In the event that the damage is deeper than 2 mm it can be advisable to fill it with an appropriate polyfiller.
4. Mix topcoat with 1.5-2% hardener and fill the repair with more topcoat than needed, so that its surface remains slightly proud of the surrounding area.
5. Carefully put a tape over the topcoat (masking tape or brown parcel tape).
6. After the topcoat has hardened, remove the tape and sand it using 600- and 1200-paper applying water.
7. Buff using abrasive paste.

The colours used on this boat are specified in the section on Technical Specifications.

NOTE! Certain post delivery installations may cause damage to the structure of the boat or impair safety if not performed correctly. Please contact the dealer before any questionable works are carried out on the boat.

7 Winter storage

Preparing boats for winter storage is an annual autumnal 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 below zero temperatures (for example, the rain water draining system will freeze). It is advisable to perform all maintenance repair and inspection procedures when lifting the craft.

Please familiarise yourself with the servicing instructions provided 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 separate instructions and manuals.

7.1 Measures before winter storage

Take your boat out of the water in good time before the ice forms. Your boat is not dimensioned to allow sailing or storage in icy conditions. 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. Give the engine, and other accessories – following separate manuals, their winter service. If your boat is stored outside or in a humid place during the winter, remove the textiles and other equipment that may corrode or become mouldy in damp conditions.

Useful tips: If the boat's ropes smell bad after winter storage, immerse them into a bucket of water and add a bottle of apple vinegar with a splash of fabric conditioner for clothes. Allow the lines to dry properly.

Replace worn ropes. Leave bushing valves open for the winter.

The electrical instruments are best protected against oxidation and theft by storing them indoors in a dry place during the winter. Remove batteries and store them in a warm, dry place. Charge them at least twice during the winter. Spray the electrical connectors with a suitable moisture repellent antioxidant.

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

Always cover your boat so that snow cannot gather inside. Always make sure, however, that there is adequate ventilation. As an optional extra there is a winter storage protector for your Yamarin 68 Cabin.

7.2 Measures before launching

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

In coastal areas an antifouling paint should be used to prevent the hull from becoming covered. Fouling of the bottom and especially the propeller increases the fuel consumption remarkably. However, if the boat is anchored at the inlet of a stream, on a land locked lake, or if it is lifted out of the water at least once a week, it is normally not necessary to use an antifouling paint. Carefully follow the paint manufacturer's instructions when applying the antifouling paint. If you are sanding old antifouling paint, remember that the dust is toxic.

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 tips: 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.

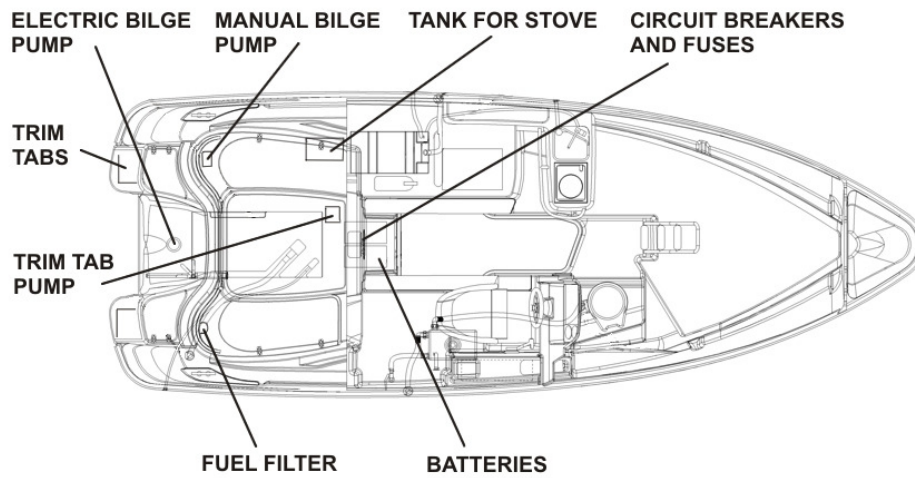
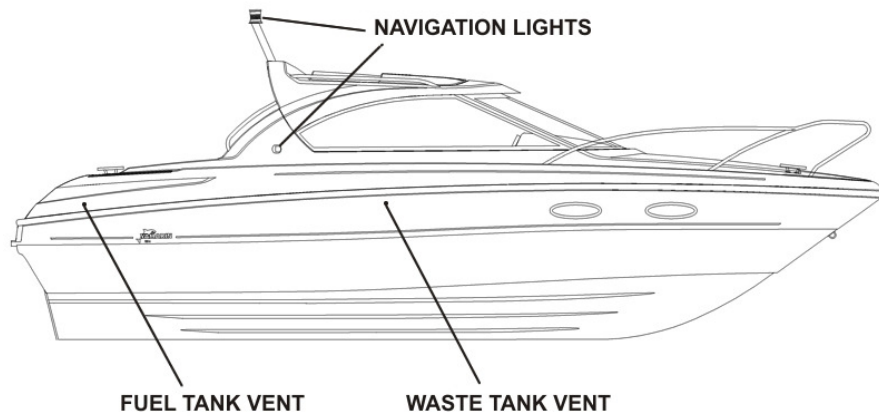
Perform the necessary service procedures according to the engine manual. Check the function of electric equipment and remove possible oxidation from fuse connectors etc.

Remember that eventually, petrol turns stale in time, and that you should always use fresh fuel when starting the engine for the first time after winter storage.

When the boat has been launched you should open all hull bushings and check to ensure that there are no leaking hoses or connectors. Bring the safety equipment on-board before setting off.

8 Lay-out

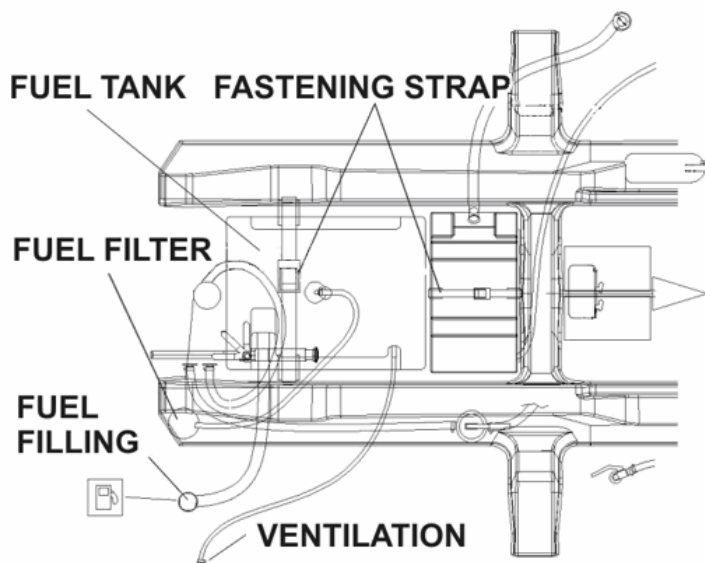
8.1 General lay-out



WARNING! Treat the boat's hatches with care and watch your fingers and toes. **Be especially careful with the forward anchor box hatch which is equipped with an elastic strap.**

8.2 Fuel system

The boat is equipped with a built-in-fuel tank. A fuel filter, which also has a transparent water separator, is situated under the aft seat. 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.



8.3 Steering system

The boat is equipped with a hydraulic steering system as standard. Thanks to this the steering is very light and comfortable.

NOTE! If you want to replace a component in the steering system, please note that all components must be in conformity with the ISO 10592 standard and carry the CE mark.

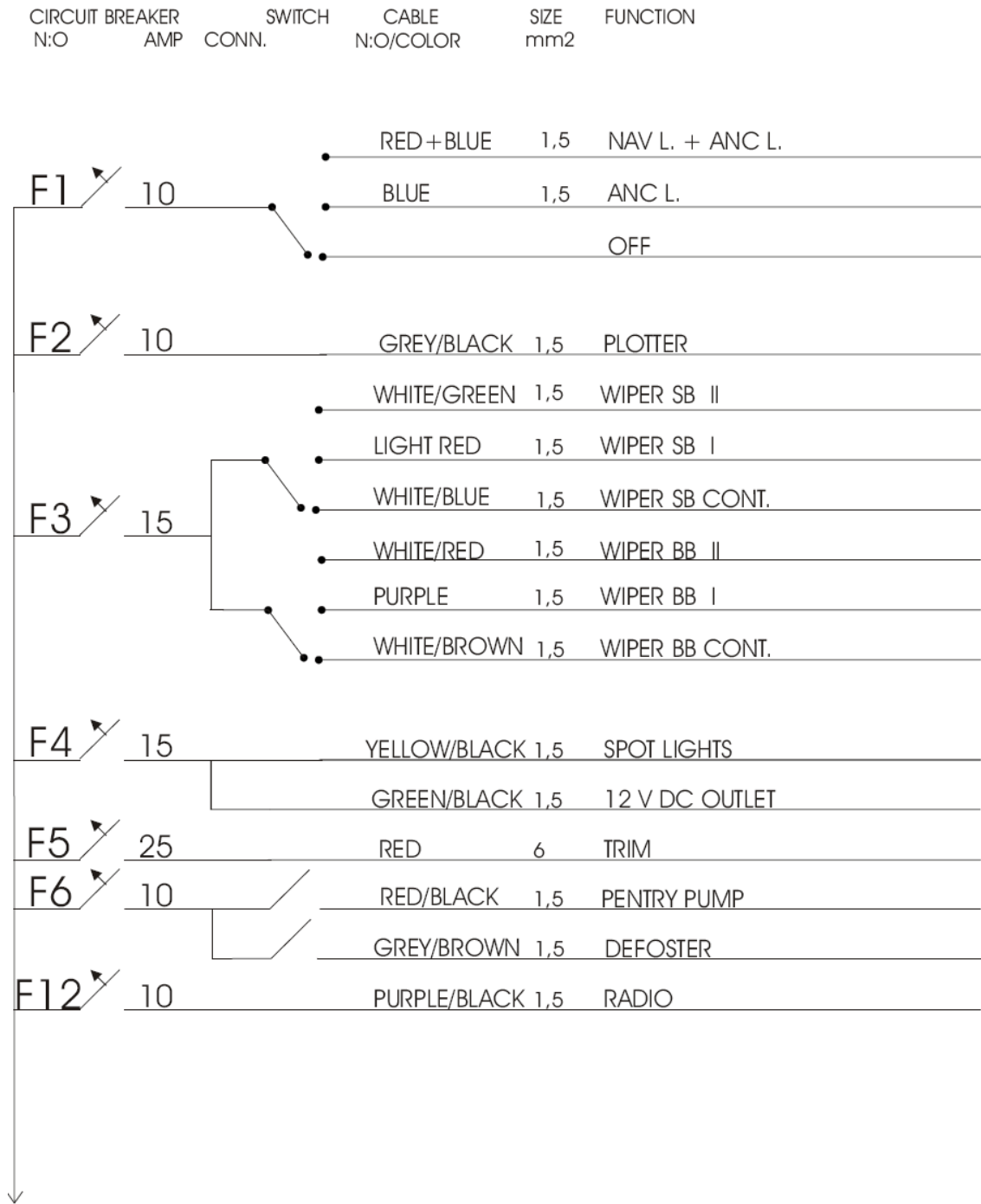
8.4 Electrical system

The electrical system installed as standard equipment in the Yamarin 68 Cabin includes the following main components:

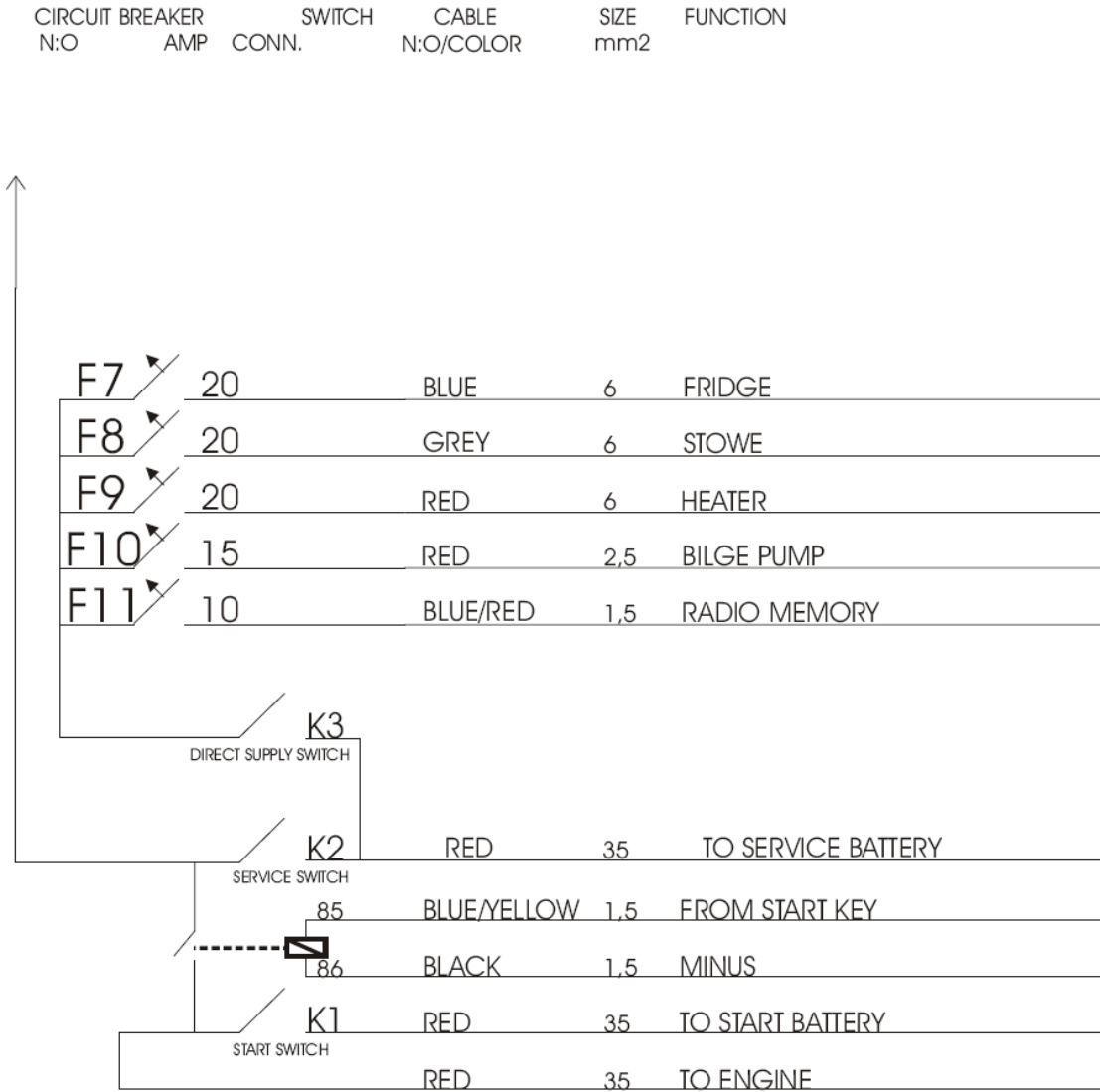
1. START BATTERY
2. SERVICE BATTERY
3. WIRE HARNESS
4. MAIN SWITCH FOR START BATTERY
5. MAIN SWITCH FOR SERVICE BATTERY
6. BATTERY COMPARTMENT FUSE PANEL (= MAIN SWITCH PANEL)
7. 12-V POWER OUTLET
8. NAVIGATION LIGHTS
9. WINDSHIELD WIPER (STARBOARD)
10. CABIN LIGHT
11. FRIDGE
12. TRIM TABS
13. FRESH WATER PUMP (INSIDE FRESH WATER TANK)
14. ELECTRIC BILGE PUMP

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

8.5 Wiring diagram



MODIFICATION DESCRIPTION:	Revision	A1	Date	YAMARIN 68C DIAGRAM	N:O 5347DRA
	Drawn by	JL	1.10.07		
	Modified by	MH	8.5.08		
	PAGE:	1/2			
			NAVIX MARINE PRODUCTS		



MODIFICATION DESCRIPTION:	Revision	A1	Date	YAMARIN 68C DIAGRAM 
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PAGE: 2/2			N:O 5347DRA	