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Owner's manual

Seahawk Cabin | Condor Cabin

OWNER'S MANUAL

SILVER SEAHAWK CABIN

Fenix Marin Oy
Mahliankatu 5
37600 Valkeakoski
Finland

FOREWORD

Dear owner of a Finnish Silver boat! We thank you for choosing the Silver Seahawk Cabin and wish you many happy moments on the water.

The purpose of this manual is to help you use your boat safely and comfortably. It contains details of the boat and the equipment and systems fitted or to be fitted to it, as well as information on the use and care of the boat. We encourage you to read this manual carefully and familiarise yourself with your boat before using it.

The Owner's Handbook is, of course, not a course in seamanship or boating safety. If this is your first boat, or you have changed to a type of boat with which you are not yet familiar, for your own comfort and safety, please ensure that you gain experience in handling and operation before you take over command of the boat. Your boat dealer, boat clubs or national powerboat or sailing associations will be happy to provide information on local boating schools or recommend qualified instructors.

Ensure that the expected wind and wave conditions are appropriate for your design class and that you and your crew can handle your boat in these conditions. Wind and wave conditions corresponding to design categories A, B, and C range from gale force to high winds with the risk of abnormal waves and gusts. Although your boat is designed for them, they can be hazardous conditions that can only be satisfactorily operated by a capable, fit and trained crew using a well-maintained boat.

This Owner's Manual is not a detailed maintenance or troubleshooting guide. In case of problems, please contact the boat manufacturer or the manufacturer's representative. Always use qualified and trained persons for maintenance, repairs and modifications. Modifications that may affect the safety characteristics of the boat should be evaluated, implemented and documented by qualified persons. The boat manufacturer cannot be held responsible for modifications not approved by it.

Some countries require a driving licence or authorisation to drive a boat and may also have special rules.

Always keep your boat in good condition and take into account wear and tear from ageing and hard use or abuse. Any boat - regardless of its strength - can be significantly damaged if not used properly. This is not consistent with safe boating. Always adjust the speed and direction of the boat to wave conditions.

If your boat is equipped with a life raft, read the instructions carefully. The boat should be equipped with the appropriate safety equipment (life jackets, safety harnesses, etc.) depending on the type of boat, weather conditions, etc., which are compulsory in some countries. The crew should be familiar with the use of all safety equipment and emergency manoeuvring (rescue of a person who has fallen into the water, towing, etc.). Sailing schools and clubs regularly organise rescue drills.

All persons on board should wear a suitable buoyancy aid (lifejacket/boating vest) while on deck.

Please note that in some countries the law requires you to wear a floatation suit in accordance with national regulations at all times while on board.

KEEP THIS MANUAL IN A SAFE PLACE AND GIVE IT TO THE NEXT OWNER IF YOU SELL YOUR BOAT.

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BEFORE SETTING OFF:

Familiarise yourself with this Owner´s manual. Always check the following before setting off:

- **Weather conditions and forecast**
  Take into consideration the wind, waves and visibility. Are the design class, size and equipment of your boat, and the skills of the skipper and crew, adequate for the area of water you are about to enter? In strong winds and high waves, hatches should be closed to prevent splash water from entering the boat.

- **Load**
  Don't overload the boat, distribute the load correctly. Do not place heavy objects too high, so that the stability of the boat is not impaired.

- **Travellers**
  Please make sure that everyone involved has a lifejacket. Agree on the size of each the necessary tasks for each person during the trip before departure**.**

- **Fuel**
  Check that you have enough fuel; also have a reserve in case of bad weather, etc.

- **Engine and equipment**
  Check the operation and condition of the steering, electrical equipment and battery, and carry out daily checks as described in the engine manual. Check the seaworthiness of the boat in other respects: no fuel or water leaks, safety equipment on board, etc. Check that the amount of bilge water is kept to a minimum. For further instructions on the engine, refer to its own separate manual.

- **Ventilation**
  Allow the engine compartment fan to run for at least 4 minutes before starting the machine. Start the engine according to the manufacturer's instructions. Ensure that the fuel compartments are ventilated to avoid fire risk.

- **Fastening of goods**
  Make sure that all your belongings are positioned so that they stay in place even in rough seas and strong winds.

- **Nautical chart**
  Unless you are taking a completely familiar route, make sure you have nautical charts covering the entire area.

- **Departure manoeuvres**
  Agree with the crew who will untie which mooring line, etc. Check that no mooring lines or other ropes get caught in the propeller during manoeuvering. Check the operation of the bow thruster.

1. General information

The Owner's Manual will help you understand the features, care and maintenance of your new boat. The Owner's Manual is not intended to be a complete maintenance or repair manual, but to guide you in understanding the features of your new boat and how to use it properly.

It is the responsibility of the owner and skipper to ensure that the boat is used for its intended purpose.

The individual manuals for the equipment installed on the boat are attached and referred to in several places. You may, of course, supplement this manual with manuals for equipment purchased at a later date. A space for your own notes is provided at the end of the manual.

Before use

1.1. Registration

In Finland, according to the Water Traffic Act, any watercraft equipped with an engine or sails with a hull length of at least 5.5 metres and any watercraft equipped with an engine producing at least 15 kW, i.e. more than 20 horsepower, must be registered. You can get more detailed instructions on registration from the Finnish Transport and Communications Agency Traficom. The operator of a registered boat must be at least 15 years old.

1.2. Insurance

Boat insurance can cover damage occurring on the water or during transport and docking. Make sure you have separate insurance cover when you lift the boat. Insurance also has an indirect impact on safety on the water: in the event of a serious incident, you can focus on saving people first and foremost. For more information on the different insurance options, contact your insurance company.

1.3. Training

No one is born an expert, and boating is no exception. There are plenty of books about boating, and navigation courses are offered by the Finnish Navigation Association (Suomen Navigaatioliitto, tel. +358 50 5508827, https://suomennavigaatioliitto.com/) and adult education centres.

Information about boating courses is available from the Finnish Sailing and Boating Association (SPV – Suomen Purjehdus ja Veneily ry, tel. +358 40 834 3407, https://spv.fi/). These courses provide a good foundation for your skills, but confidence in boat handling, navigation, mooring and anchoring is achieved only through extended practice. Information about local boating clubs and their activities is also available from SPV.

2. Definitions

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

IMMEDIATE DANGER!	Indicates a serious hazard that will result in death or serious injury if proper precautions are not taken.
DANGER!	Indicates a potential hazard that could result in death or serious injury if proper precautions are not taken.
WARNING!	Indicates a potential hazard that could result in injury if proper precautions are not taken.
NOTE!	Indicates important information related to the risk of damage to the boat, its parts or other property, but not to personal danger.

The units used in this manual are in accordance with the International System of Units (SI). In some cases, other units have been added in brackets. An exception to this is wind speed, for which the Beaufort scale is used as in the EU directive on recreational craft and personal watercraft.

3. Basic boat information

For a more detailed technical specification of the boat, see Appendix 1 at the end of this Owner's Manual.

The basic specifications of the **Silver Seahawk Cabin** are as follows:

Manufacturer/manufacturer's representative:
Fenix Marin Oy, Mahliankatu 5, 37600 Valkeakoski, Finland

Type: **Silver Seahawk Cabin**

Design category: **C**
Design category means the following:

> ***Category A*:** The boat is designed for use in conditions with wind force less than 10 bft (approx. 25 m/s) and significant wave height corresponding to this. The conditions described can typically be encountered over long distances, such as ocean crossings, or along the coast when the distance exposed to wind and waves is several hundred nautical miles. Depending on atmospheric conditions, gusts can reach up to about 32 m/s.
>
> ***Category B:*** The boat is designed for use in conditions with wind force up to 8 bft (approx. 21 m/s) and wave height (significant wave height up to 4 m, see ***note*** below). Such conditions can typically be encountered on sufficiently long offshore

voyages, or in coastal waters where the distance exposed to wind and waves is several tens of nautical miles. The conditions described can also be encountered in lakes large enough for the wave height in question to develop. Depending on atmospheric conditions, gusts can reach up to about 27 m/s.

Category C*:* The boat is designed for use in conditions with a steady wind force of up to 6 bft (approx. 14 m/s) and a wave height of up to 6 bft (approx. 14 m/s) (significant wave height up to 2 m, see ***note*** below). Such conditions can typically be encountered in open lakes, estuaries, and coastal waters under reasonable weather conditions. Depending on atmospheric conditions, gusts can reach up to about 18 m/s.

Category D: The boat is designed for use in conditions with wind force up to 4 bft (approx. 8 m/s) and wave height (significant wave height up to 0.3 m, occasional maximum wave height 0.5 m). Such conditions can typically be encountered in sheltered inland waters, and in coastal waters in good weather. Depending on atmospheric conditions, gusts can reach up to about 12 m/s.

NOTE**:** The significant wave height is the average height of the highest third of all wave heights measured in the waters, which roughly corresponds to the wave height estimated by an experienced observer. Some individual waves may be approximately double this height.

Maximum recommended load: *845* kg, 680 kg on the manufacturer's plate.
See also section 5 "Loading".

Main dimensions and capacities:
More detailed information on the boat, such as length, width, draught, light weight, total weight, etc., and tank capacities are given in the technical specification in Appendix 1.

Manufacturer's plate:
The manufacturer's plate (***Figure 1)*** which is mounted in the boat next to the steering position contains some of the information specified above. Further explanations are given in the relevant sections of this manual.

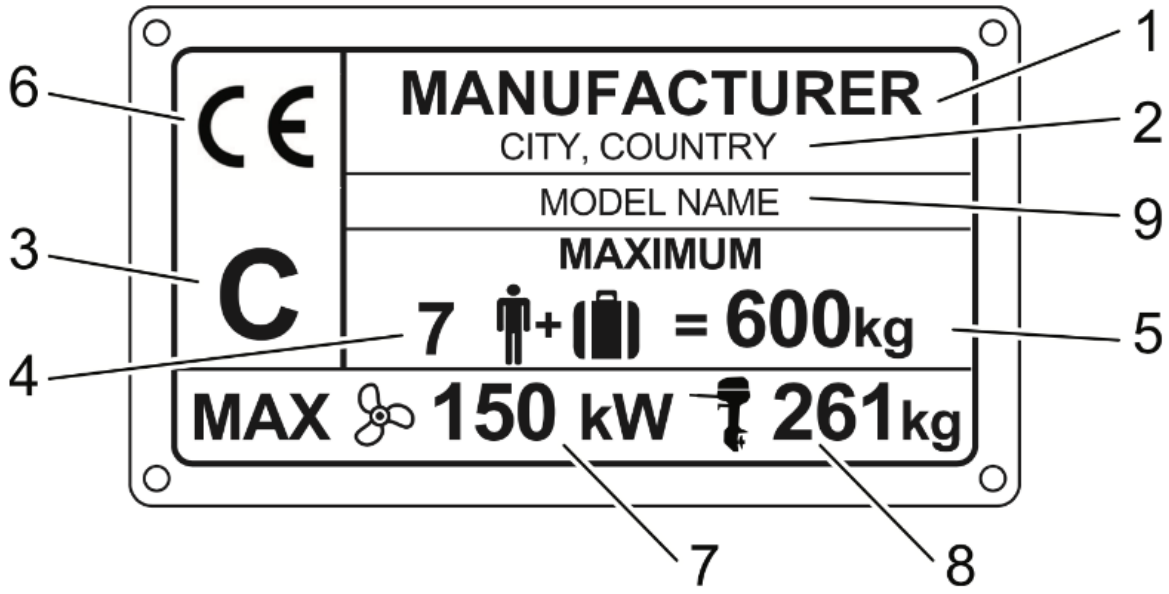


Figure 1. Information presented on the manufacturer's plate:
1. name of the manufacturer, 2. contact details of the manufacturer/manufacturer's representative and, if applicable, the identification number of the notified body, 3. boat design category, 4. maximum number of persons, 5. maximum recommended load (kg), 6. CE marking, 7. maximum power of the outboard engine(s) [kW], 8. maximum weight of the outboard engine(s) [kg], 9. boat model name

4. Maximum number of persons

The maximum recommended number of persons on the boat is 8. Their seats are located in the positions shown in Figure 2.

WARNING! **Do not exceed the maximum recommended number of persons.**

Regardless of the number of persons on board, the total weight of persons and equipment must never exceed the maximum recommended load (see section 5 "Loading"). Always use the seats or seating space provided.

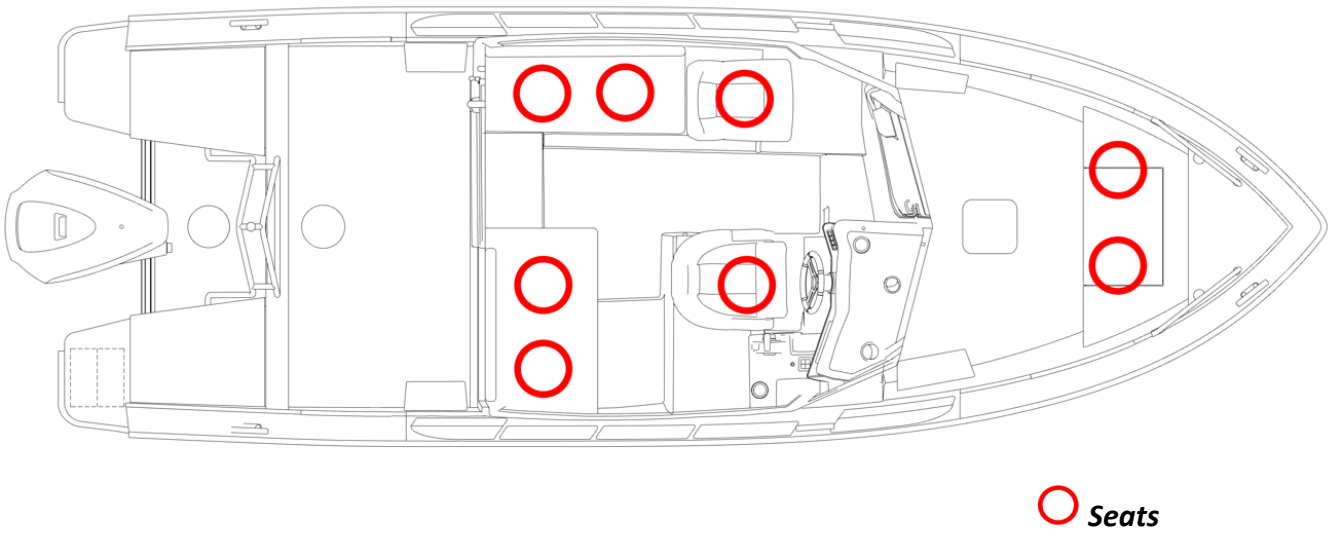


Figure 2. *Seats according to the maximum number of persons*

5. Loading

The maximum permissible load of your Silver Seahawk Cabin as **indicated on the manufacturer's plate** is *680* kg. This includes the following weights:

a) the total weight of the persons onboard amounting to *600* kg (the default mass of an adult is 75 kg and of an child 37,5 kg)

b) personal equipment, other movable equipment, provisions and other stores, cargo (e.g. hobby equipment), life raft and liquids in portable containers (water, fuel, etc.) amounting to *80* kg

NOTE! Liquids in fixed tanks are not included in the load on the manufacturer's plate.

The Silver Seahawk Cabin has a maximum recommended load weight including equipment of *845* kg.

The maximum recommended load includes only the above weight components. The weight of an empty boat and the weight of a light boat are given in Appendix 1.

WARNING: **When loading the boat, never exceed the maximum recommended load**.

Always load the boat carefully and distribute the load properly so that the boat´s design trim angle is maintained (approximately level). Avoid placing heavy weights high up.

NOTE! Ignoring the restrictions may result in the boat capsizing!

6. Engine and propeller

The Silver Seahawk Cabin has a maximum recommended engine power of *148* kW. The maximum recommended engine weight is *296* kg.

Follow the engine manufacturer's instructions when choosing a propeller.

Before setting off, check that you have enough fuel and carry out the daily operations described in the separate engine manual. Perform or have performed maintenance and other servicing in accordance with the engine manual.

The boat can be equipped with a bow thruster with *the operating switch* placed next to the remote control. Familiarise yourself with their use in accordance with the manufacturer's separate appendix/manual. Use the bow thruster only for short periods at a time.

A remote-control device equipped with an immobiliser when the gear is engaged must be used with the engine.

When starting the engine manually, follow the instructions in the engine manual.

7. Prevention of water incursion and stability

7.1. General

The water ingress prevention and stability of the boat are based on the loading conditions shown in Appendix 1.

7.2. Openings in hull and deck

The location of drainage valves and through-hull fittings is presented in Figure 3. It is recommended that drainage valves be kept shut (except to drain rainwater from cockpits) whenever the boat is not in use.

There are four through-hull fittings for draining rainwater from the cockpit. The drainage valves for these should be kept shut during maximum loading to prevent water incursion. In other loading conditions, keep these drainage valves open.

NOTE! The tightness of the maintenance hatch of the engine well must be checked regularly. A leaking engine well service hatch can expose the boat to the risk of sinking.

NOTE! All doors and hatches must be kept closed while the boat is in use.

The locations of drainage valves and through-hull fittings are shown in Figure 3.

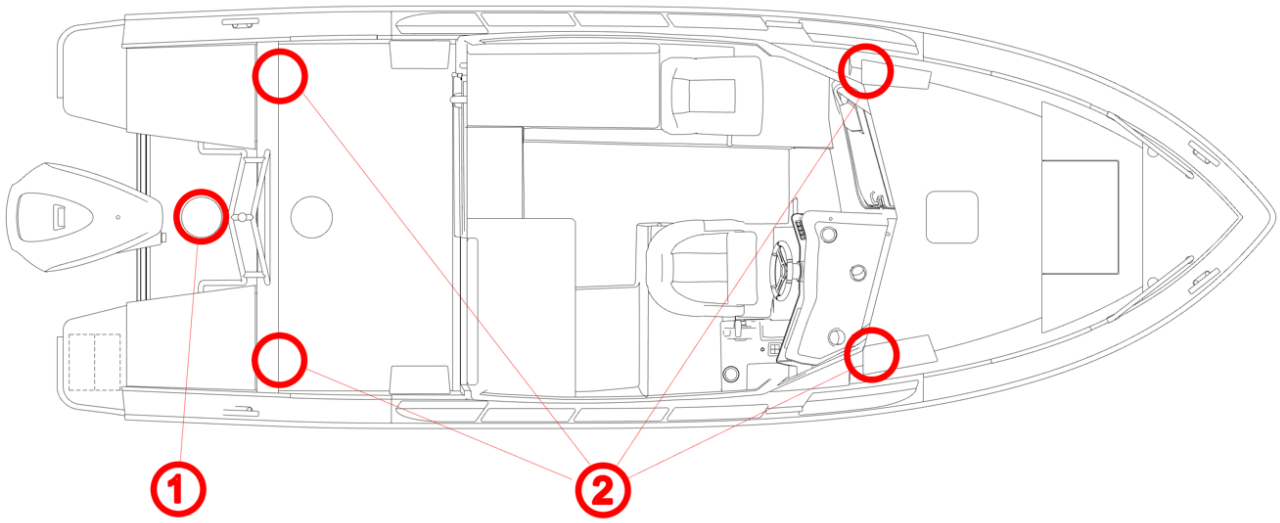


Figure 3. *Figure 3. Location of drainage valves, through-hull fittings and bilge pumps*

1. Bilge pump
2. Through-hulls

7.3. Bilge pumps and drainage

The Seahawk CABIN has an automatic bilge pump installed in the location shown in Figure 3. The electric bilge pump has a capacity of approximately 40 l/min. Service instructions for bilge pumps are given in a separate appendix.

The automatic bilge pump is always in standby mode when the battery is connected, regardless of the position of the main power switch. The pump can also be operated from the control switch. The bilge pump operating switch is equipped with an indicator light to indicate the operation of the bilge pump. The light will always come on when the pump is running. If the light does not come on, check the fuse of the bilge pump and otherwise ensure that the pump works.

Check the bilge pump regularly and make sure the battery has enough power, especially if the boat is not in the water for long periods of time.

The electric bilge pump is started from the switch panel shown in chapter 9 "Electrical system".

The owner is responsible for ensuring that at least one device for emptying the boat is kept onboard, and it must be secured to the boat. Note that the bilge pump system is not designed to cope with a leak caused by running aground or other hull damage.

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

NOTE! Check the functionality of all bilge pumps at regular intervals. Clean the suction inlets of the pumps from debris.

7.4. Stability and buoyancy

The Silver Seahawk CABIN has been designed for good stability *by placing heavy weights down low and keeping the open space and other deck troughs relatively small.* Remember, however, that large breaking waves are always a serious threat to stability.

Note also that the stability of your boat is reduced by adding weight up high. Any change in the distribution of weight onboard (such as adding a fishing tower, radar, in-mast furling system, changing the engine, etc.) may significantly affect the stability, trim and performance of your boat. Contact the boat manufacturer if you are planning such changes.

Bilge water should be kept to a minimum. In rough weather, hatches, lockers and doorways should be closed to minimise the risk of taking on water.

Consider that stability may be reduced when towing or lifting heavy weights using a davit or boom

7.5. Groundings

If you drive onto a ground, check immediately whether the damage has caused a leak. Check especially the area around the keel, the through-hull fittings, the transom, the area around the rudder and the propeller.

If you notice a significant leak, call for help. Try to plug the leak if possible. If there is no leakage in the structure, proceed carefully to the nearest port and inspect or check for structural damage of the boat.

Contact your insurance company and have the damage repaired as soon as possible.

8. Preventing the risk of fire or explosion

8.1. General

Follow the general precaution when handling flammable substances and open flames.

8.2. Engines

Before refuelling, switch off the engine and, of course, the cigarettes. Do not use switches or devices that can cause sparks.

The fuel filler () is located on the starboard side of the boat's dock deck.

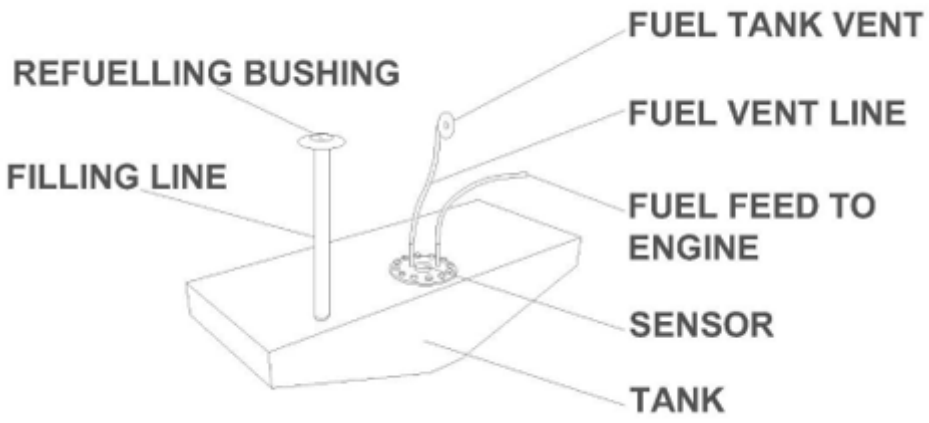
When refuelling at a service station, do not use a plastic funnel, which prevents the discharge of static voltage between the filling nozzle and the fuel inlet bushing. After refuelling (see tank

capacity in Appendix 1), check that there is no fuel spillage into the bilge or engine compartment and clean up the spillage immediately.

Do not keep spare fuel cans in unventilated areas or loose, or any equipment containing petrol in areas not intended for that purpose.

Recommendations for storing spare fuel: keep spare fuel in containers made of corrosion-resistant material and keep the amount of fuel to a minimum. Spare fuel should be stored outside the living quarters in a place where the temperature should not exceed 60 °C.

8.3. Fuel system



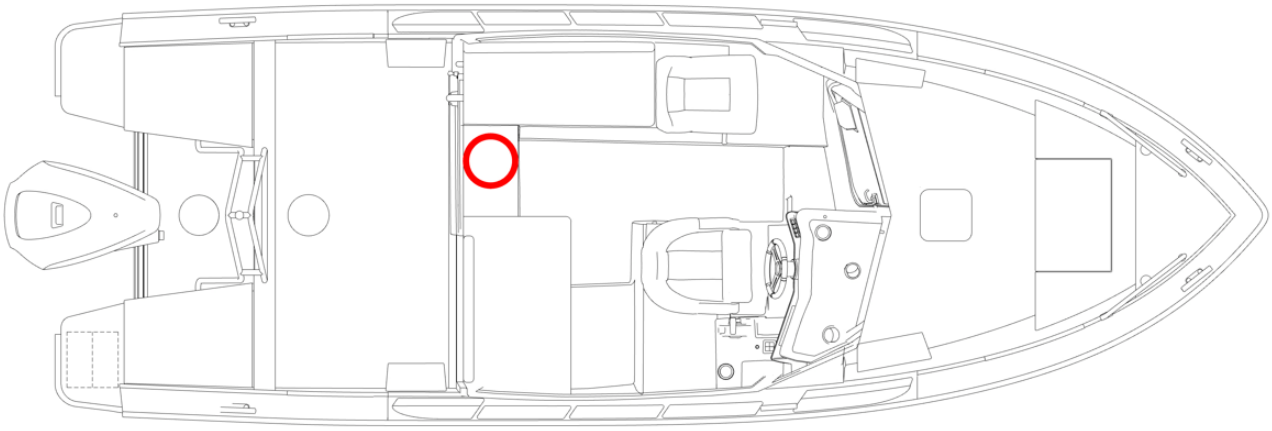
The boat is equipped with a fixed fuel tank. The fuel tank vent is located in the middle of the swim platform, in front of the engine well. The fuel tank cap is marked FUEL, which means 98E or 95E petrol. A fuel filter is installed in the fuel line, which also acts as a water separator. The filter should be changed at least once a year. Once a new filter or an out-of-place filter has been installed, the fuel line must be pumped full with a ball pump before starting the engine.

NOTE! The condition of the fuel line must be checked at regular intervals and efforts must be made to prevent damage to them. hoses must be replaced with new ones if cracked or other damage is detected.
If you replace the fuel lines, make sure they have the ISO 7840 marking.

NOTE! We recommend always using 98E fuel for better fuel economy, shelf life, lower alcohol content (water accumulation in the tank, dissolution of dirt) and density of energy.

8.4. Fire protection

When using your Seahawk CABIN, it must be equipped with the portable fire extinguishers (2 KG 13A 70B PD2G) shown in Figure 4.



Hand-held fire extinguisher

Figure 4. *Location of the fire extinguisher*

Portable fire extinguishers should be serviced annually. Fire extinguishers more than ten years old will not be accepted without a new pressure vessel test. If portable extinguishers are replaced, e.g. because they have exceeded their service life, have been tripped or are in another condition, the capacity of the new one must be at least equivalent to the old.

9. Electrical system

The electrical diagram of the boat is attached separately. The location and function of the main power switch are:

- On the right of the vertical wall of the rear seat
  - "OFF" position: Both batteries disconnected from all circuits
  - position "1": Battery 1 as service battery, charger charges 1 battery.
- If Dual battery switch in use, in addition
  - position "2": Battery 2 as service battery, charger charges 2 battery
  - position "1+2": Both batteries as service batteries, the charger charges both batteries.

The instruments and electrical equipment switches are arranged as shown in Figure 5.

Circuit fuses are located next to the corresponding switches, and the fuse sizes are also shown in Figure 5. The Silver Seahawk CABIN has resettable fuses, which can be reset in the event of an overload by pushing the toggle switch back up.

Do not change the amperage ratings of fuses or install components in the electrical system that exceed the rated amperage of the circuit.

Figure 5. *Location of switchboard and fuses*

When leaving the boat for a longer period, turn off the main switch. Also switch off the power if you are doing any electrical installations.

When removing or attaching batteries, be careful not to touch both battery terminals or the metal boat hull with a metal object at the same time.

Charge batteries only with a battery charger installed on the boat or of equivalent capacity. Charging at too high a current may cause an explosion. Ensure that the battery box has unobstructed ventilation.

NOTE! Never disconnect the main switch when the engine is running.

NOTE! Do not use the hull of a metal boat as a conductor.

Do not modify the boat's electrical system or related drawings; modifications and maintenance should be performed by a competent marine electrical technician.

10. Steering features

Familiarise yourself with the boat's features, starting at a low speed. Practise harbour manoeuvres in a place where there is suitable space. Learn how to use the bow thruster in different wind conditions.

10.1. Driving at high speeds

The maximum engine power of the boat is *148* kW. **Do not operate the boat if it has more engine power than the power indicated on the manufacturer's plate.**

The basic trim angle adjustments are as follows:

- To plane the boat, the trim should be adjusted all the way down (negative setting: “bow down”).
- When the boat is planing in low waves, the trim should be raised until the boat starts to porpoise or the propeller loses grip. When this happens, lower the bow slightly until the ride is stable. The log (speed indicator) can be used to optimise the trim angle.
- When the boat is riding into waves, the bow should be lowered until the ride becomes smooth. When driving with a tailwind, the bow should be raised slightly to avoid diving into the waves.
- Refer to the separate owner’s manual for the engine for further instructions.

The outboard motor is normally intended to be mounted on the transom at the first or second (1-2 mounting height) height level.

WARNING! Be careful when adjusting the trim angle at high speed – it may radically affect the boat´s behaviour. Do not drive with the boat with the bow too low, the boat may turn unexpectedly.

Do not drive the boat at high speed with the engine at a negative angle (bow down). The boat may roll sideways and there may be instability during turns.

You can adjust the running attitude of the boat using **trim tabs**. The basic directions are as follows:

- Set to “bow down” position at semiplaning speeds.
- When the boat is planing in low waves, raise the bow slowly and monitor the log to see how long the speed is increasing.
- When the boat is riding into waves, the bow should be lowered until the ride becomes smooth. When driving with a tailwind, the bow should be raised slightly to avoid diving into the waves.
- In sidewinds, adjust the trim tabs until the boat is exactly upright.

WARNING! Be careful when adjusting the trim angle at high speed – it may radically affect the boat´s behaviour. Do not drive with the boat with the bow too low, the boat may turn unexpectedly.

WARNING! Waves reduce the manoeuvrability of the boat and cause the boat to swing from side to side. Reduce speed as the wave height increases.

WARNING! Avoid sudden steering movements at high speeds. They may cause passengers to stagger

Learn the seafaring rules and the COLREG provisions (International Regulations for Preventing Collisions at Sea). Navigate carefully and use new or updated nautical charts.

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

- Wave height (also ask passengers for their opinion on a comfortable speed)
- Your own waves (largest when lifting the boat to planning, smallest at displacement speed, i.e. less than 6 knots). Observe the prohibitions on causing waves. Reduce speed and waves as a courtesy and for your own and others' safety.
- Visibility (islands, fog, rain, contra-sun)
- Familiarity of your route (time needed for navigation)
- Narrow routes (other boaters, noise and waves on beaches)
- Space required to stop or avoid obstacles

10.2. Starting the engine

Before starting the engine, make sure that the gear is in neutral, as indicated by the warning plate (Figure 7) in front of the steering position. Otherwise, a sudden, abrupt start can be dangerous for the occupants of the boat.

A remote-control device must be used with the engine installed on the boat to prevent the engine from starting with the gear engaged.

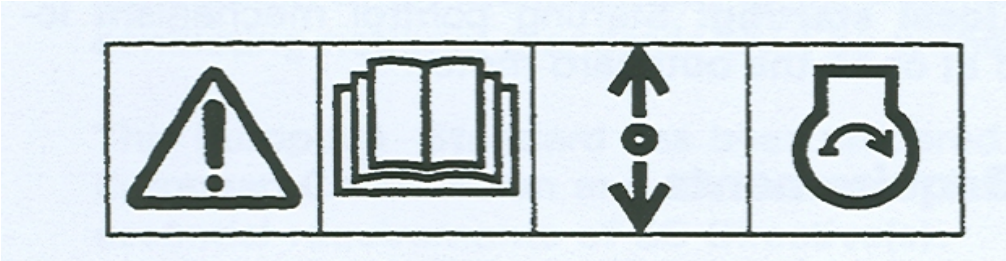


Figure 7*.* *Warning sign for starting the engine only at idle*

Attach the emergency stop cord to your hand or foot as soon as you have untied the lanyards. Refer to the engine manual for more detailed instructions. It is very important, especially when sailing alone, to stop the boat if you fall into the water or wobble in the boat. Remember, however, to remove the rope from your hand before the docking manoeuvre.

DANGER! The rotating propeller is life-threatening to a person who falls into the water or a swimmer. Use the emergency stop switch and turn off the engine when the swimmer or water skier gets on the boat.

10.3. Visibility from the driving position

It is easy to operate a boat in fair weather when the sea is calm but always remember to keep a lookout in accordance with the International Regulations for Preventing Collisions at Sea (COLREG). Always make sure that visibility from the steering position is as good as possible and that you can navigate even when visibility is temporarily limited. This is especially important at high speeds.

- Position your passengers, cargo, equipment, etc. so as not to reduce your field of vision.
- Don't drive at a constant planing speed at which the rise of the front end impairs visibility.
- Adjust the position of the boat using the trim levels and the power-trim angle so that the bow rise does not obstruct visibility.
- In poor visibility (rain, darkness, fog, surf or splashes), look over the windscreen.
- Use windscreen wipers if necessary.
- Especially on shipping lanes, remember to also look behind you.

In darkness and when visibility is limited (e.g. fog), use appropriate navigation lights.

11. Proper use - other recommendations and advice

11.1. Preventing falling overboard and getting back in the boat

In calm weather, the easiest way for a person who has fallen into the water, to get back on board is to use the ladders located at the transom/swimming platform. The ladder can be pulled down from the water. In rough weather, it is usually better to lift a person, who has fallen into the water, back into the boat from the lee side of the boat.

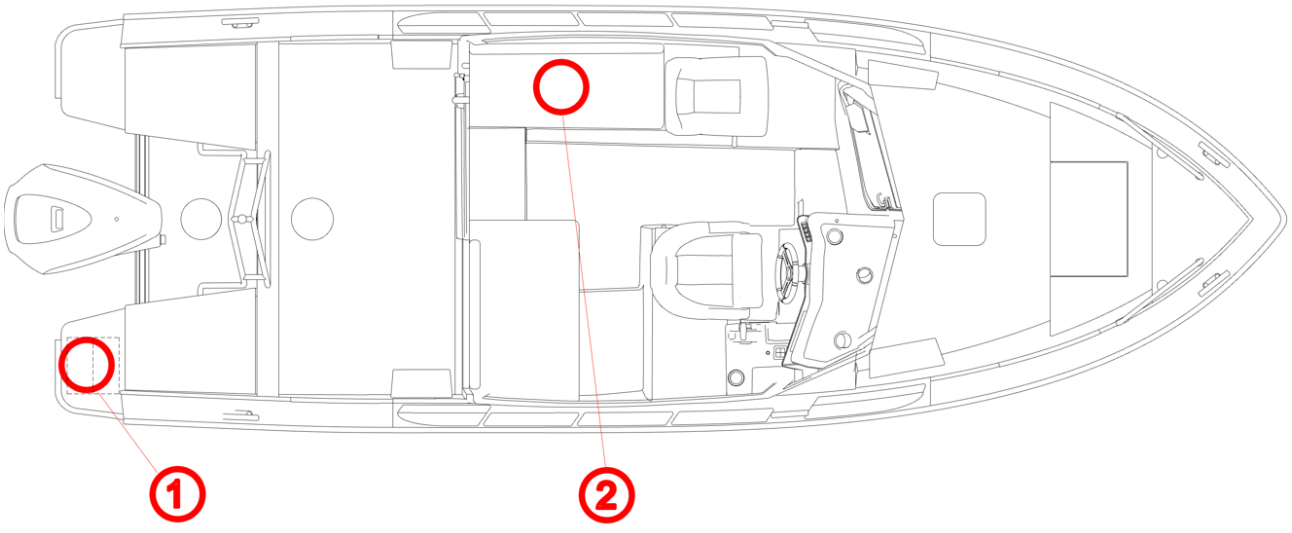


Figure 8. *Location of the swimming ladder and the life raft*

1. Swimming ladder
2. Life raft

11.2. Lifeboat storage

There is a place for the lift raft in the storage space in front of the control panel as shown in Figure 8. The maximum weight of the life raft is 28 kg.

11.3. Danger from moving parts

The moving parts of the engine are protected by various guards (see separate manual for the engine) and a wire-net is attached to the propeller shaft to prevent accidental contact. If you remove these guards, e.g. during maintenance, always replace them carefully before leaving.

11.4. Securing loose equipment

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

11.5. Taking the environment into account

Finland's archipelago and lakes are unique and preserving their nature is a matter of honour for boaters. Therefore, you should avoid:

- Fuel or oil spills, or the discharging toilet waste into the water
- Dumping rubbish or waste into the water or leaving them on the beach
- Discharge of detergents or solvents into water
- Loud noise both on the water and in ports
- Wake formation, especially in narrow and shallow waters.

In the Baltic Sea area, toilet wastewater must not be discharged into the sea near the coast. So use suction discharge stations to empty the wastewater tank.

In the Baltic Sea, it is not allowed to discharge toilet waste close to the shore. Use pump-out stations for emptying the septic tank.
Make sure you comply also with other local environmental laws and guidelines. Familiarise yourself with the International Convention for the Prevention of Pollution from Ships (MARPOL) and respect it to the greatest possible extent. Ensure the condition of the exhaust system and do not make any changes to it that could increase noise levels in the environment.

11.6. Anchoring, mooring and towing

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 strong points for mooring are shown in Figure 9.

The breaking strength of lines for mooring, towing and anchoring must not exceed 80% of the breaking strength of the respective strong point. The breaking strengths of strong points are shown in Figure 9.

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 boat's intended use, i.e. the lines or chains do not exceed 80% of the breaking strength of the respective strong point. The owner should also consider the measures necessary for securing the boat's towing line.

In normal conditions, the following diameters of lines and anchor weights are recommended for your boat:

		ø diameter (mm.)	**length (m.)**	**weight (kg)**
Mooring lines:		12	6–10	---
Anchor line:		12	30	---
Main anchor:		---	---	5,5
Light anchor:	(Bruce, Danforth, CQR, etc.	---	---	
		ø diameter (mm.)	**length (m.)**	**weight (kg)**
Stock or drag:		---	---	
Anchor line:				---

When docking in a natural harbour, make sure that the water depth is sufficient with a plomb line, and SETTLE THE ANCHOR WIDELY AWAY FROM THE SHORE. A reasonable grip is achieved when the rope is 4-5 times the water depth.

WARNING! Do not try to stop the boat by hand or put your hand or foot between the boat and the dock, the shore or other boat. Practice landing in good conditions, use engine power in a controlled but determined way.

NOTE! When mooring your boat, please take into consideration the possibility of change in wind direction and water level, stern waves, etc. You can get more information from your insurance company, for example.

NOTE! Strength of anchorage and towing points is 20kN (approx. 2000 kp)

When towing another boat, use a floating line that is strong enough for the task. Begin towing slowly, avoid jerks, and do not overload the engine. If you are towing 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 decrease yawing. Secure carefully all equipment in the dinghy if capsizing is possible. When crossing
open waters, cover the dinghy to prevent the ingression of spray water.

If you are towing or if your boat must be towed, attach the towing line to the strong points as shown in Figure 9. The stability of the boat decreases if the boom of the mast is used for towing or lifting heavy weights.

WARNING! Always use low speed when towing another boat or being towed. If the boat has a displacement hull, never exceed the hull speed while towing.

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

NOTE! The towing rope must be removable when loaded.

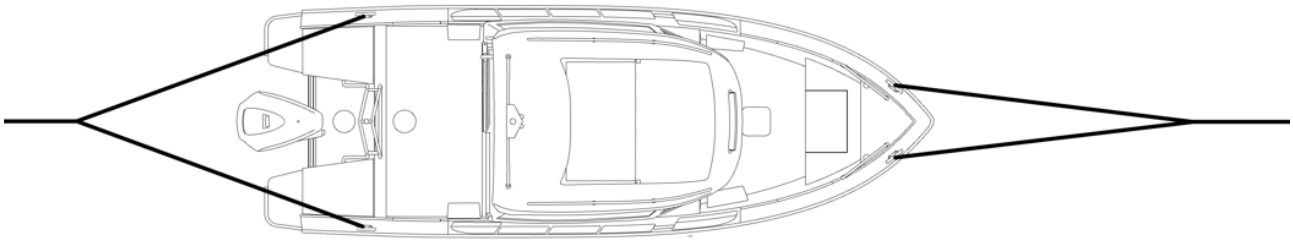


Figure 9. The breaking strengths of strong points

The boats´s strong points should be replaced when they show signs of wear, visible cracks or permanent deformation. Please note that black materials are less susceptible to UV radiation than light-coloured materials.

11.7. Trailer transport

The Silver Seahawk CABIN has a calculated weight of 1850 kg when transported on a trailer. When lifting the Silver Seahawk CABIN onto a trailer, please ensure that the trailer is suitable for your boat; there are sufficient supports to reduce point loads, sufficient load capacity for the boat, its engine and equipment, etc. Your vehicle registration will show you the maximum permissible gross weight of the trailer.

Remove excess items and bilge water from the boat before loading it onto the trailer. Adjust the trailer's side supports so that the keel supports carry most of the boat's weight. Tie the boat firmly to the trailer before the actual transport. Check the owner’s manual of the engine for trailering instructions.

NOTE! The trailer must be slightly front-weighted. Ensure that the boat is fastened firmly enough to the trailer and that the weight of the boat is divided equally between side supports. If the boat swings against a side support during transport, it may sustain hull damage.

11.8. Making the bed in a Silver Cabin boat

Instructions how to make the bed in a Silver Cabin boat

1. Place the oval tube in the brackets on the SB side, parallel with the boat.
2. Insert two pieces of horizontal tubes, as shown in Figure 10.
3. Open the back step cover and turn the mattress side supports upright, 90 degrees.

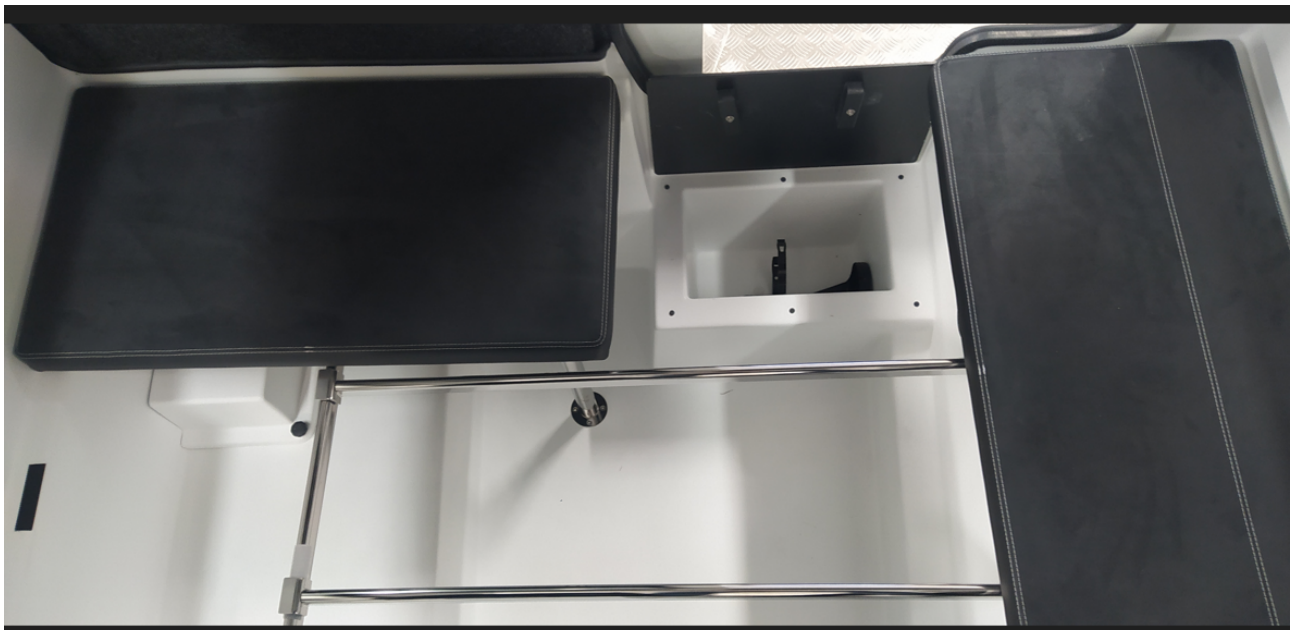


Figure 10.

4. Remove the PB side, SB side and the rear seat´s back cushion from their fasteners. The mattresses are released by lifting them straight upwards.
5. Place the mattresses as shown in picture 11.

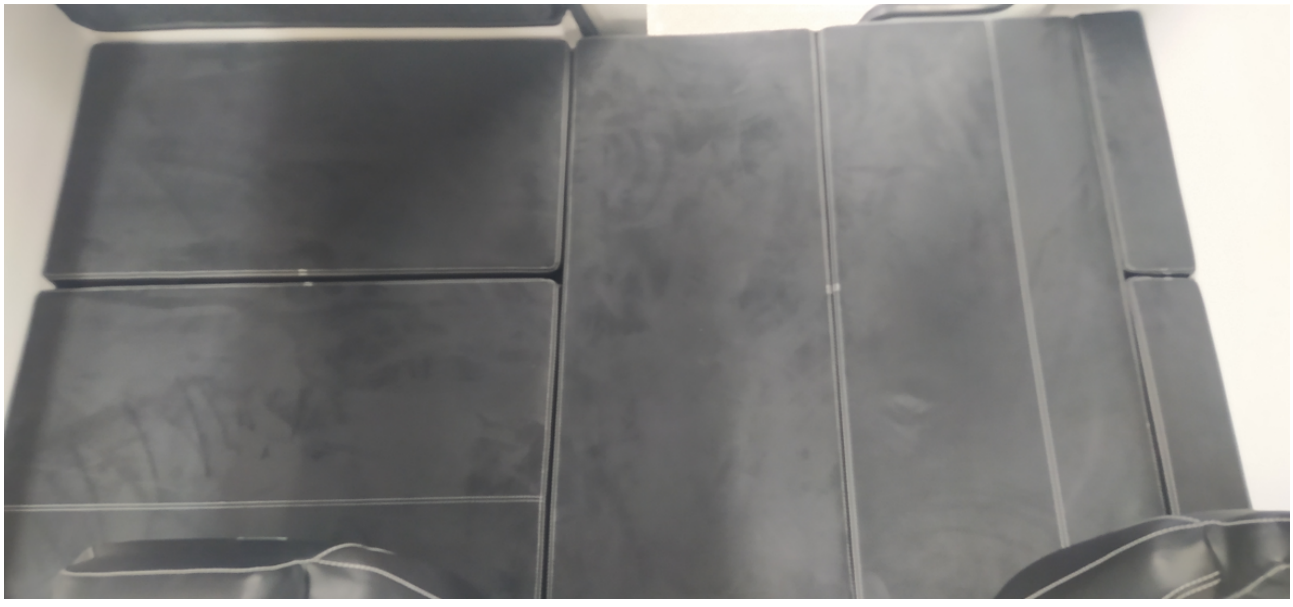


Figure 11.

12. Warranty

The boat and the equipment installed on it by the manufacturer have a 5-year warranty in accordance with the attached warranty conditions. Warranties for the following equipment are the direct responsibility of the manufacturers of the equipment concerned:

- *engine and transmission*
- *trim tabs*
- *bow thruster*
- *cushions*
- *canopies and covers*
- *compass*
- *instrument cluster*
- *navigation equipment*
- *Adjustable seat legs*

The warranty books and contact details for the suppliers of this equipment are attached separately. For other warranty issues, please contact the factory.

13. Maintenance and winter storage

Familiarize yourself with the maintenance procedures described in the separate owner's manual for the engine. Do these carefully yourself or let an authorised service agent do them. Other items requiring regular maintenance include:

- steering system and controls
- trim tabs
- bilge pump
- fire extinguisher

Service these in accordance with the separate instructions or manuals.

14. Repairs

In the event of engine or other equipment failure, please contact in the first, the relevant equipment suppliers.

Small dents in the surface layer (gelcoat) of the hull or deck can be repaired by yourself. However, a neat and flawless result requires skill and large amount of work:

- Protect the area to be repaired with tape.
- Bevel the edges of the dent and degrease with acetone.
- Mix 1.5-2% hardener with the gelcoat.

- Apply the gelcoat to the area to be repaired so that the surface is slightly higher than the surrounding surface.
- Carefully place the tape over the repair.
- Once the gelcoat has hardened, remove the tape and sand the patch down to the surrounding surface if necessary.
- Polish the fixed area with cutting paste.

The colour shades used on the boat are shown in Appendix 1. For more detailed instructions for repairs can requested from the boat manufacturer or supplier of the gelcoat.

Larger damages should be repaired by the manufacturer or boatyards:

NOTE! Some retrofitting and modifications, if done incorrectly, may cause damage to the structure or endanger safety. Contact the manufacturer or authorized boatyards before installing new groundings and hatches, for example. Do not install any attachments that can puncture the air floats.

NOTE! When maintaining electrical equipment, disconnect the batteries. If you have to replace electrical appliances, ensure that they are compatible with the voltage of the boat's electrical system.

14.1. Pre-winter winterisation measures

Lift your Silver Seahawk Cabin out of the water in good time before ice formation. Your boat is not designed for use or storage in ice.

Before lifting out of the water, it is normally recommended to carry out the following measures:

- Change the engine oil
- Wash the boat
- Empty the bilge water and any items from the boat. However, leave safety equipment, such as fire extinguishers, in the boat.

14.2. Washing and cleaning

Keep your boat clean and tidy. It increases comfort and safety, as well as the resale value of the boat.

Normally it is sufficient to 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. Waxes containing silicon are not recommended, as they decrease the adhesion of paint and resin, making repairs of possible damages more difficult.

After lifting the boat out of the water, wash the bottom immediately. It is easier to remove algae and slime before they dry out.

14.3. Winter storage and -maintenance

Perform the necessary service procedures following the owner's manuals of the engine and other equipment. If your boat is stored outside or in humid spaces, empty textiles and other equipment that may mould or corrode in a humid environment. Ropes should be washed with fresh water and worn ones renewed.

Electrical instruments are best protected against corrosion and theft by removing them and storing them in dry indoor spaces for wintertime. Remove also the batteries, take them to a warm and dry place, and charge at least two times during the winter. Spray the connectors of the electrical system with a moisture repellent antioxidant.

Check the condition of the hull and remove the caps from air tanks to drain any condensed water.

Cover your boat so that no snow can accumulate inside. However, take care of adequate ventilation. Normally, snow does not build up on the cover if the angle of the ridge is up to 90°. Suitable dimensions for the cover are 8 × 6 m.

NOTE! The cover or its fastening lines should not come into direct contact with the surfaces of the boat, as they may cause abrasion on the gelcoat surface when moving and flapping.

14.4. Measures before launching

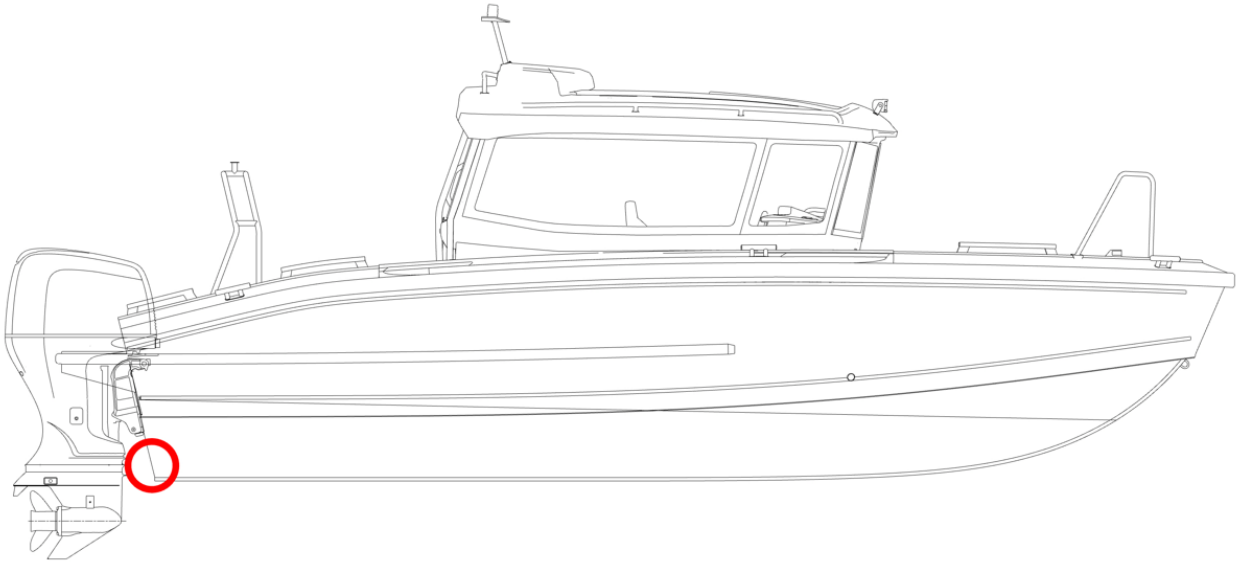
Repair or patch any dents in the gelcoat in accordance with section 14 "Repairs".

In sea areas, antifouling paint should be used to prevent the hull from becoming covered with vegetation. Fouling of the bottom and especially of the propeller increases fuel consumption considerably. However, if the boat is kept at the inlet of a stream, or in the Bothnian Sea, or is lifted out of the water at least every 2 weeks, or the bottom is washed in some other way, antifouling is not usually necessary. When painting, carefully follow the instructions of the paint manufacturer. If you are sanding with old anti-fouling paint, remember that the resulting sanding dust or sludge is toxic.

In the lake area, no biocide is required and we do not recommend the use of it.

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

To prevent galvanic corrosion, zinc anodes have been installed on your Silver Seahawk CABIN. The anodes should be replaced at the latest when more than half of the material has been eroded. The location of the anodes is shown in Figure 10.



Anodes

Figure 10. *Locations of anodes*

Perform the necessary service procedures required for the engine according to the separate owner's manual for the engine. Check the functioning of electrical equipment and remove any oxidation from fuse connectors, for example.

After launching the boat, open all seacocks and check that there is no leakage in hoses or connections. The location of through-hull fittings is shown in Chapter 7 "Prevention of water incursion and stability". Remember to load all safety equipment onboard before setting off.

15. Appendices

APPENDICES	
APPENDIX 1	TECHNICAL SPECIFICATIONS AND TANK CAPACITIES
DECLARATION OF CONFORMITY	***MODEL:***
OTHER APPENDICES:	**MANUFACTURER marks** (X) if included
TANK DIAGRAM	X
ELECTRICAL DIAGRAM	X
WARRANTY TERMS	X
OWNER´S MANUAL FOR ENGINE	
MAINTENANCE MANUAL FOR BILGE PUMP	X

APPENDIX 1

TECHNICAL SPECIFICATIONS AND TANK CAPACITIES

The boat has a craft identification number, WIN code. The WIN code is marked on the hull at the starboard side of the stern / on the outside of the transom next to the line strip. You should write the WIN code in the table below.

When contacting the manufacturer or dealer, please give the WIN code and the type of boat. This will help to deliver the correct spare parts. If you need gelcoat for a repair, please quote the colour code when ordering.

Type marking:	Silver Seahawk Cabin
Designer:	
WIN code:	FI-SLVSH
Engine serial number:	
Colour codes	
- frame:	000
- cover:	000
Body material:	Aluminium

		NUMBER/ MOUNT	SECTION
Main dimensions:	Overall length Lmax	6,98	m
(according to ISO 8666)	Hull length Lh	6,63	m
	Maximum width Bmax	2,45	m
	Hull width Bh	2,10	m
	Depth with full load of *xxx* kg		m
	Maximum height from water surface (light load)		m
	Weight without load, liquids and equipment*, but including weight of the maximum recommended outboard engine(s)*	1850	kg
	Total weight with full load		kg
	Weight during the performance test		kg
Load-bearing capacity:	Maximum number of persons	8	persons
(according to the manufacturer's plate, ISO 14946)	**The maximum recommended load, which includes:**	845	kg
	Total weight of persons		kg
	- basic equipment		kg
	- liquids in portable containers:		
	- water		kg
	- fuel		kg

		NUMBER/ MOUNT	SECTION
	Consumable liquids in fixed containers:		
	- water		kg
	- fuel (petrol/diesel)		kg
	- provisions and other stores		kg
	- life raft		kg
	- cargo		kg
	Total weight of all liquids in solid tanks (tanks full)		kg
Tank capacities:	Fuel tank(s)	220	l
	Fresh water tank(s)		l
	Septic tank		l
	LPG cylinders		kg
Propulsion type (primary)	Engine/sail/oars etc.		
Sail area and rig type			
Maximum recommended machine power:		147,1	kW (hv)
Standard propeller:		A19HR	(” x ”)
Top speed:	(load during performance test: x persons & full fuel tanks)		Knots
Electrical system:	Voltage	12	V equals.
	Battery capacity		x × Ah
	Shore power connection		x V, x-phase. x-x Hz

Due to manufacturing technology, small differences in main dimensions and capacities may occur.

The fuel tank filler is located on the port side deck of the boat.

THE BOAT OWNER'S OWN NOTES:

OWNER'S MANUAL

SILVER CONDOR CABIN

Fenix Marin Oy
Mahliankatu 5
37600 Valkeakoski
Finland

FOREWORD

Dear owner of a Finnish Silver boat! We thank you for choosing the Silver Condor and wish you many happy moments on the water.

The purpose of this manual is to help you use your boat safely and comfortably. It contains details of the boat and the equipment and systems fitted or to be fitted to it, as well as information on the use and care of the boat. We encourage you to read this manual carefully and familiarise yourself with your boat before using it.

The Owner's Handbook is, of course, not a course in seamanship or boating safety. If this is your first boat, or you have changed to a type of boat with which you are not yet familiar, for your own comfort and safety, please ensure that you gain experience in handling and operation before you take over command of the boat. Your boat dealer, boat clubs or national powerboat or sailing associations will be happy to provide information on local boating schools or recommend qualified instructors.

Ensure that the expected wind and wave conditions are appropriate for your design class and that you and your crew can handle your boat in these conditions. Wind and wave conditions corresponding to design categories A, B, and C range from gale force to high winds with the risk of abnormal waves and gusts. Although your boat is designed for them, they can be hazardous conditions that can only be satisfactorily operated by a capable, fit and trained crew using a well-maintained boat.

This Owner's Manual is not a detailed maintenance or troubleshooting guide. In case of problems, please contact the boat manufacturer or the manufacturer's representative. Always use qualified and trained persons for maintenance, repairs and modifications. Modifications that may affect the safety characteristics of the boat should be evaluated, implemented and documented by qualified persons. The boat manufacturer cannot be held responsible for modifications not approved by it.

Some countries require a driving licence or authorisation to drive a boat and may also have special rules.

Always keep your boat in good condition and take into account wear and tear from ageing and hard use or abuse. Any boat – regardless of its strength – can be significantly damaged if not used properly. This is not consistent with safe boating. Always adjust the speed and direction of the boat to wave conditions.

If your boat is equipped with a life raft, read the instructions carefully. The boat should be equipped with the appropriate safety equipment (life jackets, safety harnesses, etc.) depending on the type of boat, weather conditions, etc., which are compulsory in some countries. The crew should be familiar with the use of all safety equipment and emergency manoeuvring (rescue of a person who has fallen into the water, towing, etc.). Sailing schools and clubs regularly organise rescue drills.

All persons on board should wear a suitable buoyancy aid (lifejacket/boating vest) while on deck.

Please note that in some countries the law requires you to wear a floatation suit in accordance with national regulations at all times while on board.

KEEP THIS MANUAL IN A SAFE PLACE AND GIVE IT TO THE NEXT OWNER IF YOU SELL YOUR BOAT.

Table of contents

BEFORE YOU TAKE TO THE WATER:

Please consult this Owner's Manual. *Always* check at least the following *before setting out on the water:*

- **Weather conditions and forecast**

  Take into account wind, swell and visibility. Are the design class, size and equipment of your boat, and the skills of the skipper and crew, adequate for the area of water you are about to enter? In strong winds and high waves, hatches should be closed to prevent splash water from entering the boat.

- **Load**

  Don't overload the boat, distribute the load correctly. Do not place heavy objects too high, so that the stability of the boat is not impaired.

- **Travellers**

  Please make sure that everyone involved has a lifejacket. Agree on the size of each the necessary tasks for each person during the trip before departure**.**

- **Fuel**

  Check that you have enough fuel; also have a reserve in case of bad weather, etc. in case of bad weather.

- **Engine and equipment**

  Check the operation and condition of the steering, electrical equipment and battery, and carry out daily checks as described in the engine manual. Check the seaworthiness of the boat in other respects: no fuel or water leaks, safety equipment on board, etc. Check that the amount of bilge water is kept to a minimum. For further instructions on the engine, refer to its own separate manual.

- **Ventilation**

  Allow the engine compartment fan to run for at least 4 minutes before starting the machine. Start the engine according to the manufacturer's instructions in accordance with the manufacturer's instructions. Ensure that the fuel compartments are ventilated to avoid fire risk to reduce the risk of fire.

- **Fastening of goods**

  Make sure that all your belongings are positioned so that they stay in place even in rough seas and strong winds.

- **Nautical chart**

  Unless you are taking a completely familiar route, do you have enough nautical charts?

- **Departure manoeuvres**

  Agree with the crew who will untie which rope, etc. Check that no mooring or other ropes get caught in the propeller during departure or arrival. Check the operation of the bow thruster.

1. General information

The Owner's Handbook will help you understand the features, care and maintenance of your new boat. The Owner's Manual is not intended to be a complete maintenance or repair manual, but to guide you in understanding the features of your new boat and how to use it properly.

It is the responsibility of the owner and skipper to ensure that the boat is used for its intended purpose.

The individual manuals for the equipment installed on the boat are attached and referred to in several places. You may, of course, supplement this manual with manuals for equipment purchased at a later date. A space for your own notes is provided at the end of the manual.

Before deployment

Registration

According to the Water Transport Decree, sailing or motor boats with a hull length of 5.5 metres or more, and all watercraft with an engine power of 15 kilowatts or more, i.e. more than 20 horsepower, must be entered in the register of boats in Finland. For more detailed registration instructions, please contact the Finnish Transport and Communications Agency Traficom. In Finland, the driver of a boat to be registered must be at least 15 years old.

Insurance

Boat insurance can cover damage occurring on the water or during transport and docking. Make sure you have separate insurance cover when you lift the boat. Insurance also has an indirect impact on safety on the water: in the event of a serious incident, you can focus on saving people first and foremost. For more information on the different insurance options, contact your insurance company.

Education

No one is a blacksmith by birth, and being on the water is no exception. There is plenty of literature on boating, and navigation courses are organised by the Finnish Navigation Association https://suomennavigaatioliitto.com/ and by adult education centres.

Information on boating schools is available from the Finnish Sailing and Boating Association https://spv.fi/. These will give you a good basis for your skills, but confidence in handling, navigating, mooring and anchoring your boat will only be achieved after a long period of practical training. You can also find out about local boat clubs and their activities from the SPV.

2. Definitions

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

UNLIMITED DANGER!	Indicates a serious hazard which can result in death or serious injury. serious injury unless appropriate precautions are taken.

WARNING! Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

WARNING*!* Indicates a potentially hazardous situation which, if not avoided, could result in injury.

NOTE! Indicates important information relating to the risk of damage to the boat, its parts or other property, but not to personal injury.

The units used in this manual are those of the SI system. In some cases, other units have been added in brackets. An exception to this is wind speed, which is given in the Recreational Craft Directive in bophores.

3. Basic boat information

For a more detailed technical specification of the boat, see Appendix 1 at the end of this Owner's Manual.

The basic specifications of the **Silver Condor** are as follows:

Manufacturer/manufacturer's representative:
Fenix Marin Oy, Mahliankatu 5, 37600 Valkeakoski, Finland

Type: **Silver Condor**

Design class: **C**
Design category means the following:

> ***Design Category A*****:** The boat is designed for use in conditions with wind force less than 10 bft (approx. 25 m/s) and significant wave height corresponding to this. The conditions described can typically be encountered over long distances, such as ocean crossings, or along the coast when the distance exposed to wind and waves is several hundred nautical miles. Depending on atmospheric conditions, gusts can reach up to about 32 m/s.
>
> ***Design class B:*** The boat is designed for use in conditions with wind force up to 8 bft (approx. 21 m/s) and wave height (significant wave height up to 4 m, see ***note*** below). Such conditions can typically be encountered on sufficiently long offshore voyages, or in coastal waters where the distance exposed to wind and waves is several tens of nautical miles. The conditions described can also be encountered in lakes large enough for the wave height in question to develop. Depending on atmospheric conditions, gusts can reach up to about 27 m/s.
>
> ***Design class C****:* The boat is designed for use in conditions with a steady wind force of up to 6 bft (approx. 14 m/s) and a wave height of up to 6 bft (approx. 14 m/s)

(significant wave height up to 2 m, see ***note*** below). Such conditions can typically be encountered in open lakes, estuaries, and coastal waters under reasonable weather conditions. Depending on atmospheric conditions, gusts can reach up to about 18 m/s.

Design class D: The boat is designed for use in conditions with wind force up to 4 bft (approx. 8 m/s) and wave height (significant wave height up to 0.3 m, occasional maximum wave height 0.5 m). Such conditions can typically be encountered in sheltered inland waters, and in coastal waters in good weather. Depending on atmospheric conditions, gusts can reach up to about 12 m/s.

Note**: The** significant wave height is the average height of the highest third of the wave, which is approximately the height estimated by an experienced observer. Some individual waves may be about twice this height.

Maximum recommended load: 1410 kg, 1170 kg on the manufacturer's plate.
See also section 5 "Loading".

Main dimensions and capacities:
More detailed information on the boat , such as length, width, draught, light weight, total weight, etc., and tank capacities are given in the technical specification in Annex 1.

Manufacturer's plate:
The manufacturer's plate (***Figure 1)*** attached to the boat *next to the steering position* provides some of this information. Further explanations are given in the relevant sections of this manual.

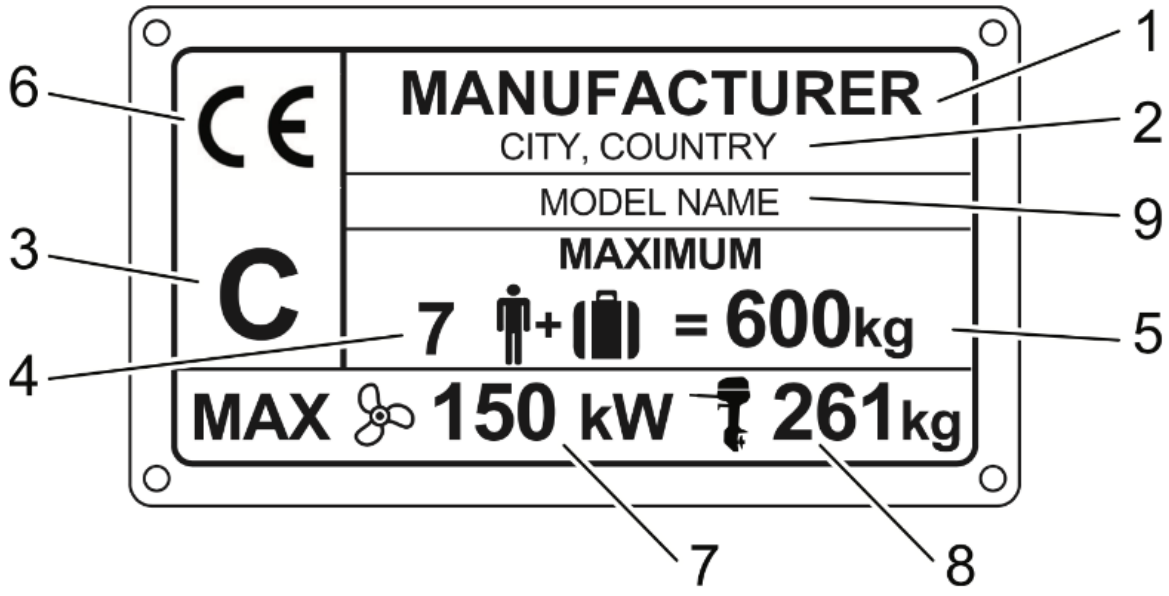


Figure 1. Information on the manufacturer's plate: 1. name of the manufacturer, 2. contact details of the manufacturer/manufacturer's representative *and, if applicable, the*

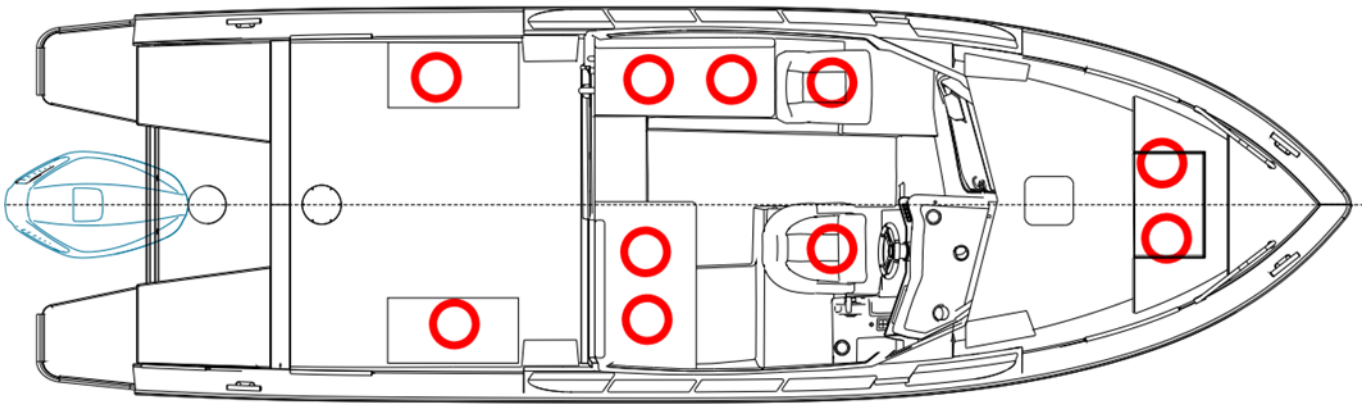
identification number of the notified body, 3. boat design category, 4. maximum number of persons, 5. maximum recommended load (kg), 6. CE marking, 7. *maximum power of the outboard engine(s) [kW]*, 8. *maximum weight of the outboard engine(s) [kg]*, 9. boat model designation

4. Maximum recommended number of persons

The maximum recommended number of persons on the boat is 10. Their seats are located in the positions shown in Figure 2.

WARNING! **Do not exceed the maximum recommended number of persons.**

Regardless of the number of persons on board, the total weight of persons and equipment must never exceed the maximum recommended load (see section 5 "Load"). Always use the seats or seats available on the boat.



Seats

Figure 2. *Seats according to the maximum number of persons*

5. Load

The Silver Condor Cabin has a maximum recommended load **on the manufacturer's plate of** 1170 kg. This includes the following weights:

a) the total weight of the persons on board 750 kg (one adult assumed weight 75 kg, child 37,5 kg)

b) personal equipment, other movable equipment, provisions and other stores, cargo (e.g. hobby equipment), life raft and liquids in portable containers (water, fuel, etc.) weighing *80* kg

NOTE! Liquids in fixed tanks are not included in the load on the manufacturer's plate.

The Silver Condor Cabin has a maximum recommended load weight including equipment of 1170 kg.

The maximum recommended load includes only the above weight components. The weight of an empty boat and the weight of a light boat are given in Annex 1.

WARNING: **When loading the boat, never exceed the maximum recommended load**.

Always load the boat carefully and distribute the load properly so that the design trim is maintained (approximately level). Avoid placing heavy weights high up.

NOTE! Failure to observe these restrictions may result in the boat capsizing!

6. Engine and propeller

The Silver Condor Cabin has a maximum recommended engine power of 258 kW. The maximum recommended engine weight is 375 kg.

Follow the engine manufacturer's instructions when choosing a propeller.

Before setting off, check that you have enough fuel and carry out the daily operations described in the separate engine manual. Perform or have performed maintenance and other servicing in accordance with the engine manual.

The boat can be equipped with a bow thruster with *the operating switch* placed next to the remote control. Familiarise yourself with their use in accordance with the manufacturer's separate appendix/manual. Use the bow thruster only for short periods at a time.

A remote control device equipped with an anti-start device when the gear is engaged must be used with the engine.

When starting the engine manually, follow the instructions in the engine manual.

7. Prevention and severity of water ingress

The water ingress prevention and stability of the boat are based on the loading conditions shown in Annex 1.

Holes in the body and deck

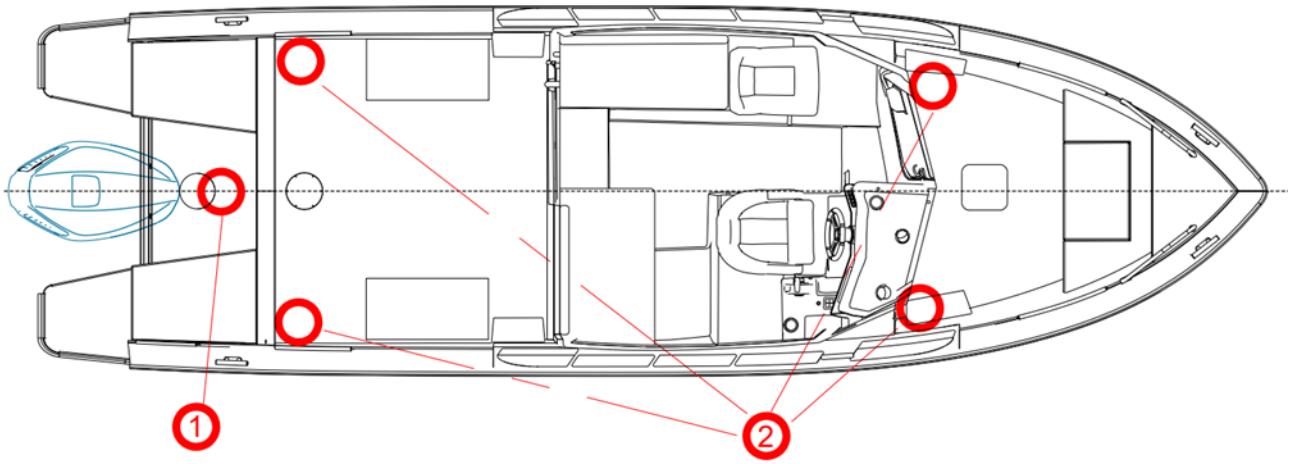
The locations of the vents and their shut-off valves are shown in Figure 3. We recommend closing the vents (except for the vents in the open compartment or rainwater-filled seat pan) when the boat is left alone.

The rainwater drainage openings have four drainage outlets. These are intended to be closed with the highest load to prevent water ingress. Keep the drainage openings open in other situations.

NOTE! The tightness of the engine manhole service hatch must be checked regularly. A leaking engine well service hatch can expose the boat to the risk of sinking.

NOTE! All doors and hatches must be kept closed while the boat is in motion.

The locations of the penetrations and stopcocks are shown in Figure 3 below.



1. Bilge pump 2. Draining the open space

Figure 3. *Locations of penetrations, stopcocks and bilge pumps*

Bilge pumps and drainage

The Condor Cabin has an automatic bilge pump installed in the location shown in Figure 3. The electric bilge pump has a capacity of approximately 40 l/min. Service instructions for bilge pumps are given in a separate appendix.

The automatic bilge pump is always in standby mode when the battery is connected, regardless of the position of the main power switch. The pump can also be operated from the control switch. The bilge pump operating switch is equipped with an indicator light to indicate the operation of the bilge pump. The light will always come on when the pump is running. If the light does not come on, check the fuse of the bilge pump and otherwise ensure that the pump works. Also check the bilge pump regularly and make sure the battery has enough power, especially if the boat is not in the water for long periods of time.

The electric bilge pump is started from the switch panel shown in chapter 9 "Electrical system".

It is the responsibility of the boat owner to ensure that the boat has at least one piece of equipment suitable for emptying, attached to the boat. Please note that bilge pumps are not designed to have sufficient capacity to combat a spill, e.g. in the event of a capsize.

WARNING! The bilge pump system is not designed to control leakage caused by derailment or other damage.

NOTE! Check the functionality of all bilge pumps at regular intervals. Clean the suction inlets of the pumps from debris.

Stability and buoyancy

The Silver Condor has been designed for good stability *by placing heavy weights down low and keeping the open space and other deck troughs relatively small.* Remember, however, that large breaking waves are always a serious threat to stability.

Please note that the stability of your boat will be reduced by any weight added at high altitude. Any change in mass placement *(e.g. adding a fishing tower, radar or furling mast, changing engines, etc.)* can significantly affect the stability, trim and performance of your boat. Please contact the boat manufacturer if you are considering such changes.

The amount of water in the bilge should be kept to a minimum. In severe weather, hatches, compartments and doors should be kept closed to minimise the risk of water ingress.

Please note that stability may be reduced when towing or lifting heavy objects with the help of a pallet or boom.

Going for a ride

If you drive onto a reef, check immediately whether the damage has caused a leak. In particular, check the area around the keel, the grommets, the transom, the rudder and the propeller.

If you notice a significant leak, call for help. Try to plug the leak if possible. If there is no leakage in the structure, proceed carefully to the nearest port and inspect or check for damage to the structure of the boat.

Contact your insurance company and have the damage repaired as soon as possible.

8. Preventing the risk of fire or explosion

Exercise general caution when handling flammable substances and open fires.

Engines

Before refuelling, switch off the engine and, of course, the cigarettes. Do not use switches or devices that can cause sparks.

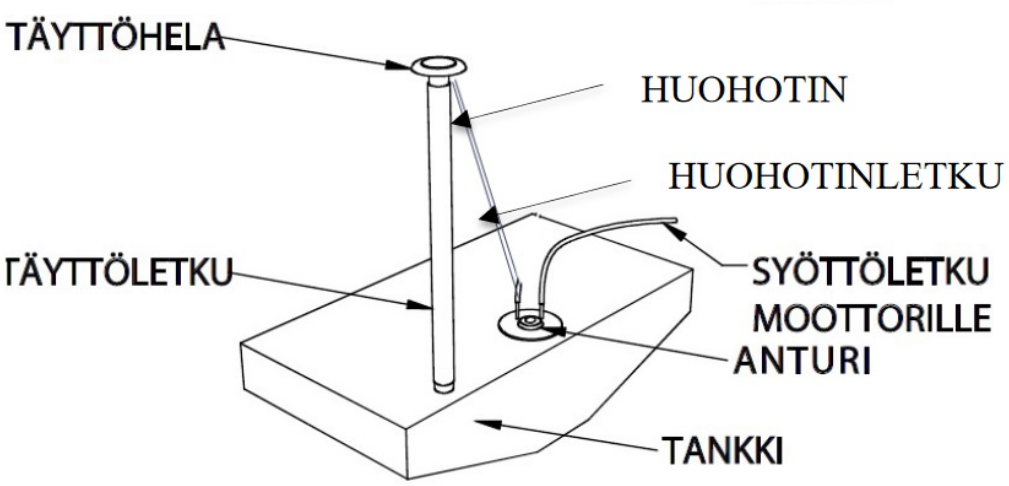
The fuel filler ( ) is located on the starboard side of the boat's dock deck.

When refuelling at a service station, do not use a plastic funnel, which prevents the discharge of static voltage between the filling nozzle and the filling coil. After filling the tank (see tank capacity in Appendix 1), check that there is no fuel spillage into the bilge or engine compartment and clean up the spillage immediately.

Do not keep spare fuel cans in unventilated areas or loose, or any equipment containing petrol in areas not intended for that purpose.

Recommendations for storing spare fuel: keep spare fuel in containers made of corrosion-resistant material, and keep the amount of fuel to a minimum. Spare fuel should be stored outside the living quarters in a place where the temperature should not exceed 60 °C.

Fuel system



The boat is equipped with a fixed fuel tank. The fuel tank filler is located in the middle of the swim platform, in front of the engine well. The fuel tank cap is marked FUEL, which means 98E or 95E petrol. A fuel filter is fitted in the fuel line, which also acts as a water separator. The filter should be changed at least once a year. Once a new filter or an out-of-place filter has been installed, the fuel line must be pumped full with a ball pump before starting the engine.

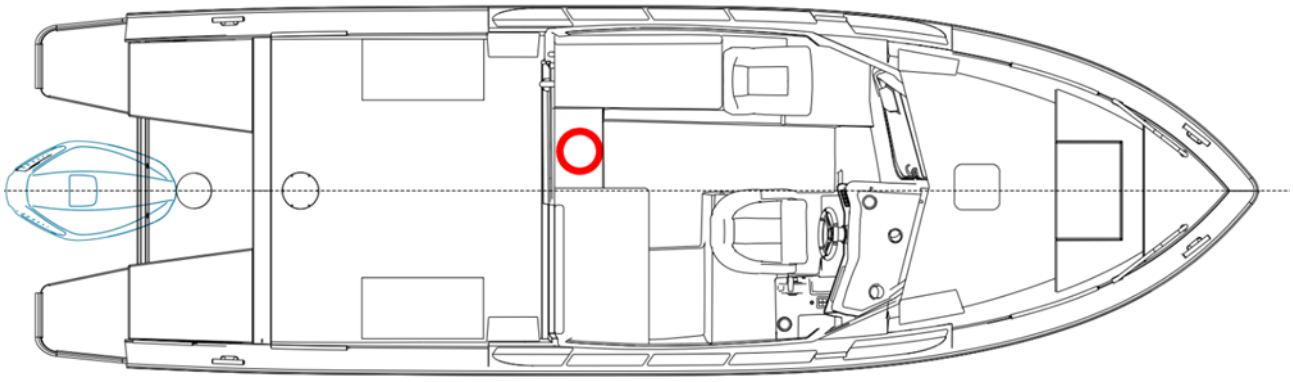
NOTE! The condition of the fuel lines must be checked at regular intervals and efforts must be made to prevent damage to them. Faulty the fuel hoses must be replaced. If you replace the fuel lines then make sure that they have the ISO 7840 marking.

NOTE! We always recommend to use 98E fuel for better fuel economy. shelf life, lower alcohol content (water

accumulation in the tank, dissolution of dirt) and better energy because of the density.

Fire prevention

When used, the Condor Cabin must be equipped with the hand-held powder extinguishers (2 KG 13A 70B PD2G) shown in Figure 3.



Hand-held fire extinguisher

Figure 4. *Location of the hand-held fire extinguisher*

Hand-held fire extinguishers should be serviced annually. Fire extinguishers more than ten years old will not be accepted without a new pressure vessel test. If hand-held extinguishers are replaced, e.g. because they have exceeded their service life, have been tripped or are in another condition, they must be replaced by equipment with at least similar extinguishing capacity.

9. Electrical system

The electrical diagram of the boat is shown in a separate annex. Location and operation of the main power switch:

- On the right of the vertical wall of the rear seat
  - "OFF" position: both batteries disconnected from the power supply
  - position "1": battery 1 as service battery, charger charges 1 battery.
- 2-battery switch in addition to
- position "2": battery 2 as service battery, charger charges 2 batteries.
- position "1+2": both batteries as service battery, the charger charges both batteries.

The cockpit gauges and electrical equipment switches are arranged as shown in Figure 5.

The fuses for the power circuits are placed next to the switches and the fuse sizes are also shown in Figure 5. The Silver Condor Cabin uses automatic fuses, which can be reset in the event of an overload by pushing the lever switch back up.

Do not change the amperage ratings of fuses or install components in the electrical system that exceed the rated amperage of the circuit.

Figure 5. *Location of switchboard and fuses*

When leaving the boat for a longer period, switch off the main switch. Also switch off the power if you are doing any electrical installations.

When removing or attaching batteries, be careful not to touch both battery terminals or the metal boat hull with a metal object at the same time.

Charge batteries only with a battery charger installed on the boat or of equivalent capacity. Charging at too high a current may cause an explosion. Ensure that the battery box has unobstructed ventilation.

NOTE! Never disconnect the main switch when the engine is running.

NOTE! Do not use the hull of a metal boat as a conductor.

Do not modify the boat's electrical system or related drawings; modifications and maintenance should be left to a competent boat electrician.

10. Steering features

Familiarise yourself with the boat's features, starting at a low speed. Practise harbour manoeuvres in a place where there is suitable space. Learn how to use the bow thruster in different wind conditions.

Driving at high speeds

The maximum engine power of the boat is 258 kW. **Do not use the boat if it has more engine power than the power indicated on the manufacturer's plate.**

The basic rules for adjusting the machine's angle of attack are as follows:

- When lifting the boat into a sliding "bow down" position.
- Once the boat is in motion, and if the swell is small, the bow is raised until the boat starts to launch or the propeller loses its grip. Lower the bow slightly from this point until the boat feels stable. With the help of the log, the angle of attack can be optimised.
- In a counter-wave, the bow is lowered downwards, softening the passage. In a wake, the bow is lifted upwards to prevent it from diving.
- Further instructions can also be found in the engine's own manual.

The outboard motor is normally intended to be mounted on the stern mirror at the first or second (1-2 mounting height) height level.

WARNING! Be careful when adjusting the angle of attack at high speeds - it will drastically change the way the boat handles. Do not drive with the bow too low, the boat may turn unexpectedly.

Do not drive the boat at high speed with the engine at a negative angle (bow down). The boat may roll sideways and there may be instability during turns.

The trim levels allow the boat's running position to be adjusted in a variety of ways. The basic rules are as follows:

- At semi-travel speeds, the "bow down" position.
- Once the boat is in motion, and if the swell is small, slowly raise the bow and watch the log to see how long the speed increases.
- In a counter-wave, the bow is lowered downwards, softening the passage. In a wake, the bow is lifted upwards to prevent it from diving.
- In a crosswind, the boat can be made to run straight by adjusting the trim levels.

WARNING! Adjust trim levels at high speeds with care - they will drastically change the way the boat handles. Do not drive with the bow too low, the boat may turn unexpectedly.

WARNING! Waves reduce the manoeuvrability of the boat and cause the boat to list. Take this into account by reducing speed as the waves increase.

WARNING! Avoid sudden steering movements at high speeds. They may cause passengers to stagger

Learn the rules of the road (e.g. from the booklet "Regulations for Waterborne Transport" published by Edida) and follow their guidelines and the requirements of COLREG (International Regulations for Preventing Collisions at Sea). Navigate carefully and use new or updated nautical charts.

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

- waves (also ask passengers for their opinion on a comfortable speed)

- your own waves (largest at slipstream, smallest at sinking speed, i.e. less than 6 knots). Observe the prohibitions on causing waves. Reduce speed and waves as a courtesy and for your own and others' safety.
- visibility (islands, fog, rain, contra-sun)
- route knowledge (time needed for navigation)
- narrowness of the route (other boaters, noise and waves on beaches)
- the space required for stopping and evasive manoeuvres.

Starting the engine

Before starting the engine, make sure that the gear is in neutral, as indicated by the warning plate (Figure 7) in front of the steering position. Otherwise, a sudden, abrupt start can be dangerous for the occupants of the boat.

A remote control device must be used with the engine installed on the boat to prevent the engine from starting with the gear engaged.

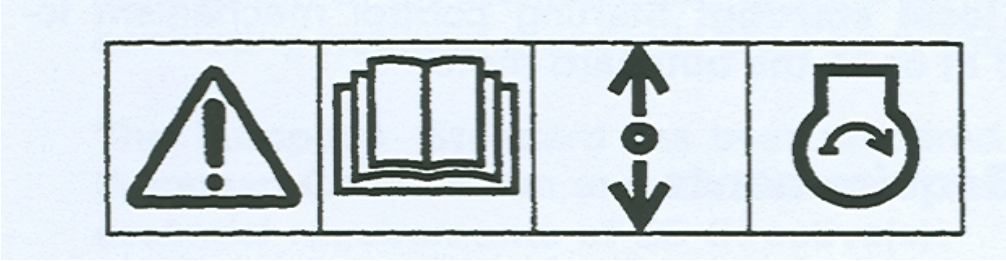


Figure 7. *Warning sign for starting the engine only at idle*

Attach the emergency stop cord to your hand or foot as soon as you have untied the lanyards. Refer to the engine manual for more detailed instructions. It is very important, especially when sailing alone, to stop the boat if for any reason you fall into the water or wobble. Remember, however, to remove the rope from your hand before the docking manoeuvre.

DANGER!A spinning propeller is life-threatening to a person who falls into the water or a swimmer. Use the emergency stop switch and turn off the engine when the swimmer or water skier gets on the boat.

Visibility from the driving position

Driving in fine, calm weather is easy as long as you organise adequate lookouts, including those required by COLREG rules. Always make sure that you have the best possible visibility from the driving position and that you have the opportunity to look even when visibility is temporarily restricted. This is particularly important at high speeds.

- Position your passengers, cargo, equipment, etc. so as not to reduce your field of vision.
- Don't drive at a constant slip-threshold speed at which the rise of the front end impairs visibility.
- Adjust the position of the boat using the trim levels and the power-trim angle so that the bow rise does not obstruct visibility.

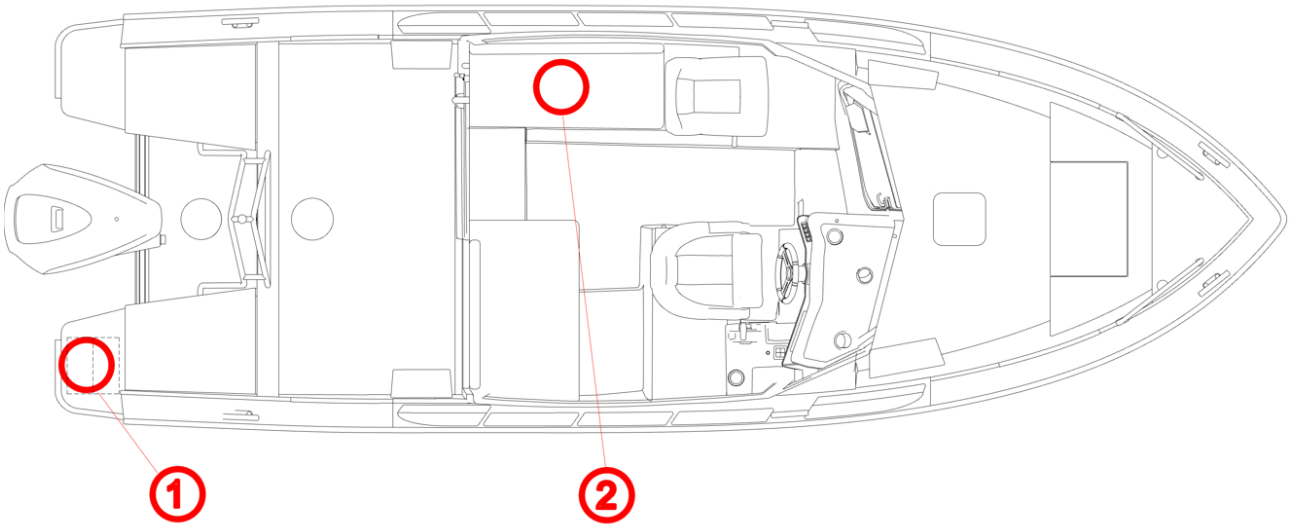
- In poor visibility (rain, darkness, fog, surf or splashes), look over the windscreen.
- Use windscreen wipers if necessary.
- Especially on shipping lanes, remember to also look behind you.

In darkness and when visibility is limited (e.g. fog), use appropriate traffic lights.

11. Correct use - other recommendations and advice

Preventing falling overboard and getting back in the boat

In calm weather, the easiest way for a person who has fallen into the water to get on board is to use the ladders placed on the stern mirror/swimming platform. The ladder can also be pulled down from the water. In rough weather, it is usually better to lift a person who has fallen into the water back into the boat from the side of the shelter.



1. Swimming ladder 2. Life raft

Figure 8. *Location of the swimming ladder and the lifeboat*

Lifeboat storage

There is a place for the rescue board in the storage space in front of the control panel as shown in Figure 8. The maximum weight of the liferaft is 28 kg.

Danger from moving parts of machinery

The moving parts of the machine are protected by various guards (see separate manual for the engine) and a net guard is attached to the propeller shaft to prevent accidental contact. If you remove these guards, e.g. during maintenance, always replace them carefully before leaving.

Attaching loose equipment

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

Taking the environment into account

Finland's archipelago and lakes are unique and preserving their nature is a matter of honour for boaters. So avoid:

- fuel or oil spills the discharge of sewage into water
- dumping rubbish or waste in a body of water or on the beach
- discharge of detergents or solvents into water
- loud noise both on the water and in ports
- the production of waves, especially in narrow and shallow waters.

In the Baltic Sea area, toilet waste water must not be discharged into the sea near the coast. So use suction discharge stations to empty the waste water tank.

Please take into account other local environmental laws and regulations. Familiarise yourself with the international rules for the prevention of marine pollution (MARPOL) and respect them as much as possible. Take care of the exhaust system and do not make any modifications that may increase noise emissions.

Anchoring, mooring and towing

Always moor your boat carefully, even in a sheltered place, as conditions can change rapidly. Mooring ropes should be fitted with elastic to absorb jerks. Use sufficiently large flaps to prevent chafing. See Figure 9 for attachment points.

The breaking strength of mooring, towing and anchor ropes shall not exceed 80 % of the strength of the anchorage in question. The strengths of the anchorage points are shown in Figure 9.

It is the responsibility of the owner/operator to ensure that mooring, towing and anchor ropes, anchor chains and anchors are suitable for the intended use of the boat and that the breaking strength of the ropes and chains does not exceed 80% of the strength of the corresponding anchorage points. The owner shall also assess what measures are necessary to ensure the securing of the towing rope.

Under normal conditions, we recommend the following mooring line thicknesses and anchor weights for your boat:

		ø diameter (mm.)	**length (m.)**	**weight (kg)**
Fixing ropes:		12	6-10	---
Anchor rope:		12	30	---
The main anchor:		---	---	5,5
Light tanker:	(Bruce, Danforth, CQR, etc.	---	---	
		ø diameter (mm.)	**length (m.)**	**weight (kg)**
A male or female:		---	---	
Anchor chain:				---

When landing in a natural harbour, make sure that the water depth is sufficient, e.g. with a probe line, and SETTLE THE ANCHOR WIDELY AWAY FROM THE SHORE. A reasonable grip is achieved when the rope is 4-5 times the water depth.

WARNING! Do not try to stop the boat by hand or by using your hands. put your hand or foot between the boat and the dock, the shore or another another boat. Practice beaching in good conditions, use engine power with restraint but determination.

NOTE! When mooring your boat, please take into account the wind turning, rising or falling water levels, stern waves, etc. Further advice is available from insurance companies, for example.

NOTE! Strength of anchorage and towing points 20kN (approx. 2000 kp)

When towing another boat, use a sufficiently strong, floating tow rope. Start towing carefully, avoid jerking, do not overload the machine. If you are towing a small dinghy, adjust the length of the towing rope so that the dinghy rides with the stern wave. However, in narrows and in big waves, pull the yawl close to the stern to reduce wiggling. Secure the dinghy well to prevent it from tipping over. In open water waves, cover the dinghy so that it is not filled with splash water.

When towing or if your boat has to be towed, attach the towing rope to the attachment points shown in Figure 9. The stability of the boat will be reduced if the mast booms are used for towing or lifting heavy objects.

WARNING! Always use low speed when towing or launching your boat. Do not exceed the speed limit of a sinking boat. the hull speed of a sinking boat.

WARNING! The tow rope is under great tension. If it breaks, the broken end can reach a lethal speed. Always use a rope of sufficient thickness and do not stay with the rope for long periods of time. at the extension.

NOTE! The towing rope must be detachable under load.

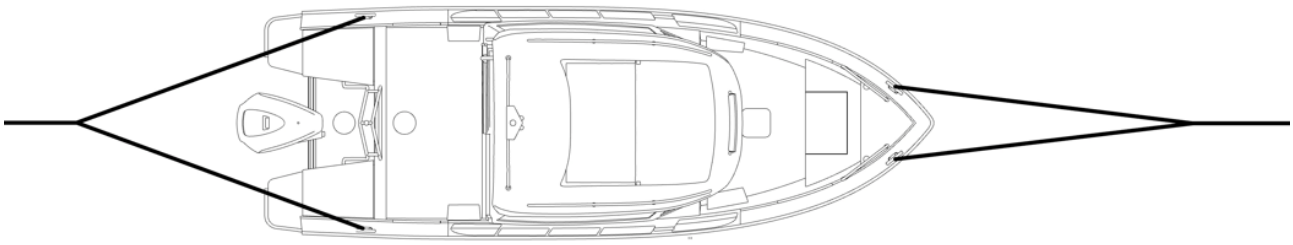


Figure 9.

Anchorage points should be replaced when they show signs of wear, visible cracks or permanent deformation. Please note that black materials are less susceptible to UV radiation than light-coloured materials.

Trailer transport

The Silver Condor Cabin has a design weight of 2335 kg when transported on a trailer. When lifting the Silver Condor Cabin onto a trailer, please ensure that the trailer is suitable for your boat; there are sufficient supports to reduce point loads, sufficient load capacity for the boat, its engine and equipment, etc. Your vehicle registration will show you the maximum permissible gross weight of the trailer.

Remove excess load and bilge water from the boat before lifting it onto the trailer. Adjust the trailer's side supports so that the cushions carry most of the boat's weight. Tie the boat firmly to the trailer before the actual transport. Check the engine manual for instructions on trailer transport.

NOTE! The trailer must be front-weighted. Make sure that that the boat is secured firmly enough to the trailer and that the weight of the boat is evenly distributed on the supports. A swaying boat will hit a single support during transport, which may damage the hull.

Petting in a Silver Cabin boat

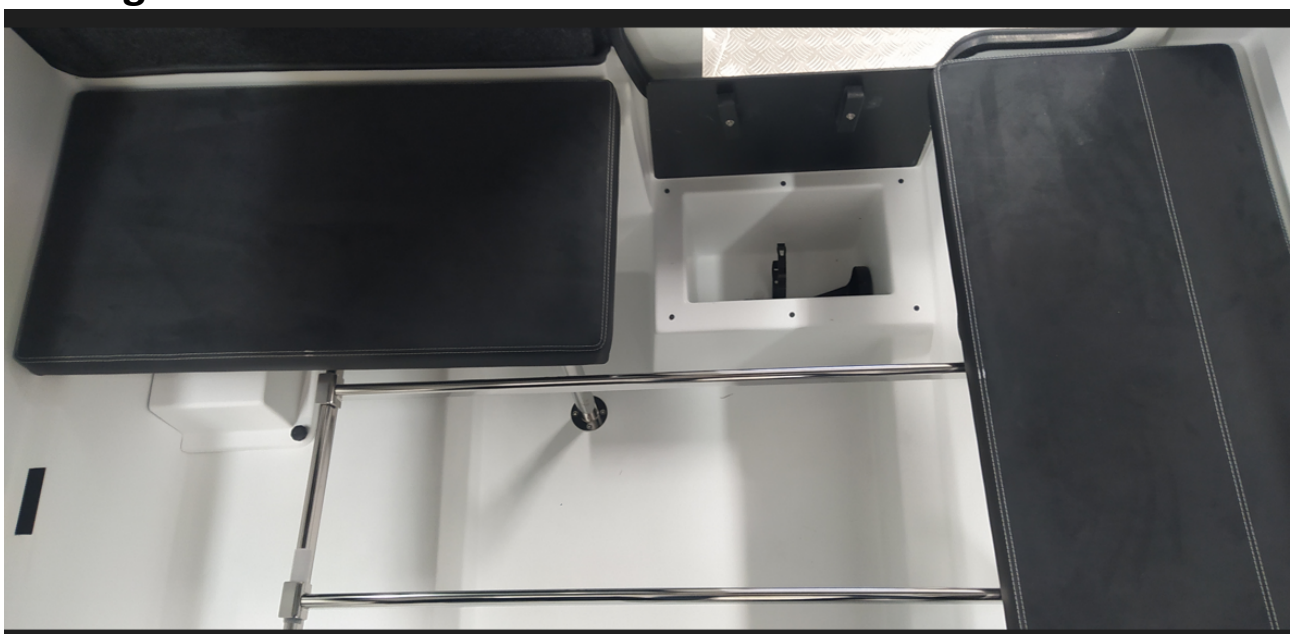


Figure 10.

1. Place the Oval Tube, on the SB side, parallel to the boat, in the brackets.
2. Insert two pieces of horizontal tubes, as shown in Figure 10.
3. Open the back flap cover and turn the mattress side supports upright, 90 degrees.

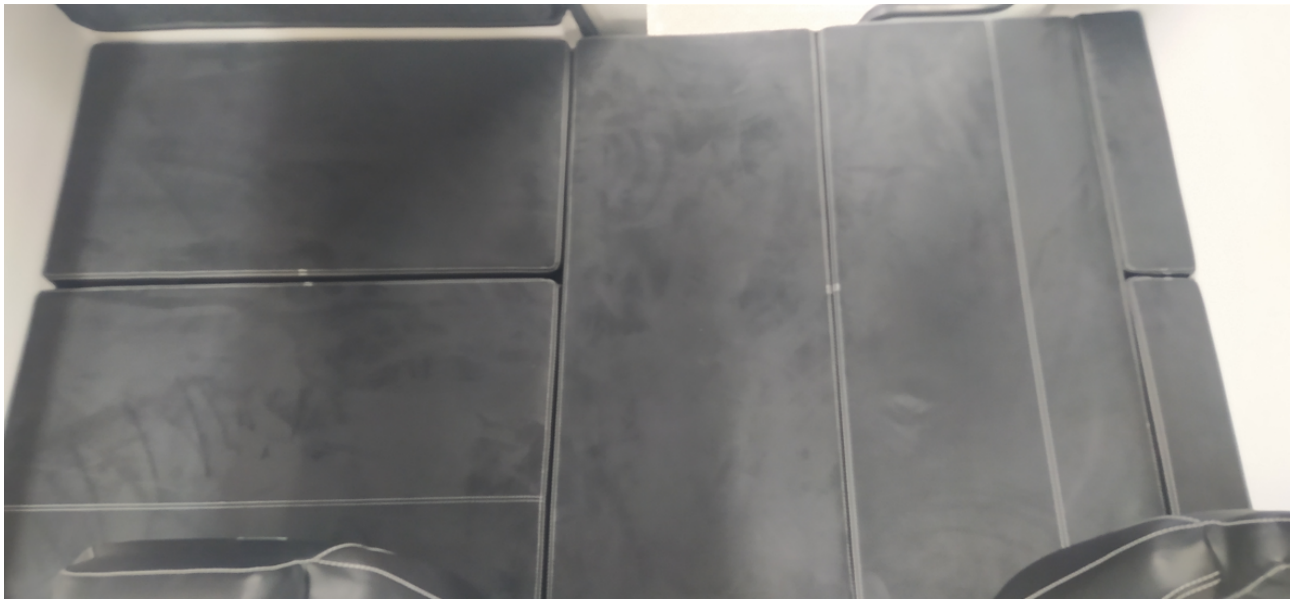


Figure 11.

4. Remove the PB side, SB side and rear seat back from their fasteners. The mattresses are released by lifting them straight upwards.
5. Place the mattresses as shown in picture 11.

12. Guarantee

The boat and the equipment installed on the boatyard are covered by a 5-year warranty in accordance with the attached warranty conditions. Warranties for the following equipment are the direct responsibility of the manufacturers of the equipment concerned:

- *engine with traction equipment*
- *trim level*
- *bow thruster*
- *cushions*
- *canopies and covers*
- *compass*
- *instrumentation*
- *navigation equipment*
- *Flexible feet*

Separate warranty documents and contact details of the suppliers of these devices are attached. For other warranty issues, please contact the factory.

13. Maintenance and winter storage

Please refer to the separate maintenance instructions in the engine's own manual. Do them carefully yourself or have them done by an authorised service agent. Other items requiring regular maintenance include:

- control device and controls
- trim level
- bilge pump
- fire extinguisher

Please carry out the maintenance of these in accordance with the separate instructions and manuals.

14. Corrections

In the event of engine or other equipment failure, please contact the relevant equipment suppliers in the first instance.

You can repair any minor damage to the gelcoat on the hull or deck yourself. However, achieving a clean and unobtrusive finish requires skill and effort:

- Protect the area to be repaired with tape.
- Grind the edges of the dent into a bevel and clean with acetone.
- Mix 1.5-2% hardener into the gelcoat.
- Apply the gelcoat to the area to be repaired so that the surface is slightly higher than the surrounding surface.
- Carefully place the tape over the repair.

- Once the gelcoat has cured, remove the tape and sand the patch clean if necessary.
- Polish the repair with sanding paste.

The colour shades used on the boat are shown in Annex 1. For more detailed instructions on patching, please contact your carving shop or gelcoat dealer.

Major damage should be left to the carving workshop or the next authorised boatyard.

NOTE! Some retrofitting and modifications, if done incorrectly, may cause damage to the structure of the boat or be a hazard to safety. Please contact your carpenter or other authorised shipyards before making or having made, e.g. new earthings, no fastenings should be made to the airlock that will puncture its wall.

NOTE! When servicing electrical equipment, switch off the power to the equipment. If you have to replace electrical equipment, make sure that it is suitable for the voltage of the boat.

Pre-winter winterisation measures

Get your Silver Condor Cabin ashore well in advance of the ice. Your boat is not rated for ice navigation or storage.

Before withdrawing, you should usually do the following:

- engine oil change
- initial washing of the boat
- emptying the boat of bilge water and any extra belongings. However, leave safety equipment, such as a fire extinguisher, still on board.

Washing and cleaning

Keep your boat clean and tidy. It increases comfort and safety, as well as the resale value of the boat.

Washing and waxing is usually sufficient to treat the deck and sides. Special boat cleaners are best suited for washing. Do not use strong solvents, as they can dull the gloss of hard plastic surfaces. Mildly abrasive polishes can be used to remove abrasions or stubborn dirt. For waxing, we do not recommend silicone-based waxes as they weaken the adhesion of the resin or paint, making it difficult to repair any damage.

After lifting, wash the bottom of the boat immediately. Algae and slime come off most easily when they have not had time to dry.

Winter storage and -maintenance

Carry out winter maintenance on the engine and other equipment in accordance with the equipment's own separate manuals. If your boat will be outdoors or in damp conditions during the winter, clear it of textiles and other equipment that may become mouldy or corroded by moisture. Ropes should be washed in fresh water and worn ropes replaced.

Electrical instruments are also best protected against both oxidation and theft by removing them and storing them indoors in a dry place for the winter. Unplug the batteries, put them in a warm, dry place and charge them at least twice during the winter. Spray the electrical system connectors with a suitable anti-moisture and anti-corrosion agent.

Check the condition of the body and remove the drain plug to allow condensation to escape.

Cover your boat so that snow does not accumulate inside the boat. However, make sure there is adequate ventilation. Snow will not normally accumulate on the cover if the ridge angle is 90° or less. In this case, the appropriate dimensions of the cover are 10 × 6 m.

NOTE! The cover or its attachment ropes must not come into direct contact with the surface of the boat, as they will abrade the gelcoat and aluminium surface when flapping and moving.

Measures before launching

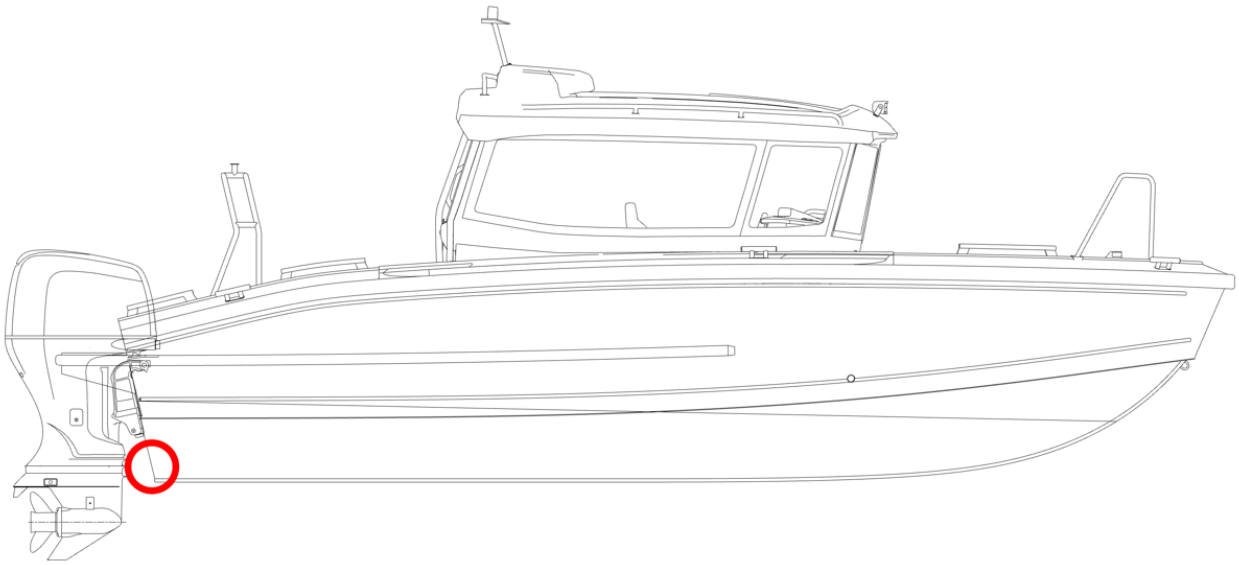
Repair or patch any dents in the gelcoat in accordance with section 15 "Repairs".

In marine areas, antifouling should be used to prevent the attachment of snails and vegetation to the bottom. Fouling of the bottom and especially of the propeller increases fuel consumption considerably. However, if the boat is kept in a river estuary or in the Bothnian Sea, or is lifted out of the water at least every 2 weeks or so, or the bottom is washed in some other way, antifouling is not usually necessary. When painting, carefully follow the instructions of the paint manufacturer. If you are sanding with old anti-fouling paint, remember that the resulting sanding dust or sludge is toxic.

In the lake area, no biocide is required and we do not recommend its use.

NOTE! Do not paint the anodes, the log sensor or the piston rods of the hydraulic cylinders on the trim levels. Do not use copper-containing paints on aluminium parts, follow the instructions of the paint manufacturer.

To prevent galvanic corrosion, Silver Condor Cabin has anodes installed on the boat. The anodes should be replaced at the latest when more than half of the material has worn away. The location of the anodes is shown in Figure 10.



Anodite

Figure 10. *Locations of anodes*

Carry out the maintenance required for the engine in accordance with the separate manual. Check the operation of the electrical equipment and remove oxidation from fuses, etc.

After launching the boat, check that there are no leaks in the hoses or fittings. For the location of penetrations, see Chapter 7 "Water ingress prevention and stability". Bring safety equipment on board before launching the boat.

7. Annexes

ANNEXES:	
ANNEX 1	TECHNICAL SPECIFICATIONS AND TANK CAPACITIES
DECLARATION OF CONFORMITY	***MALLI:***
OTHER ANNEXES:	**MANUFACTURER marks** (X) if connected
FUNDING SCHEDULE	X
ELECTRICITY SCHEME	X
WARRANTIES	X
ENGINE MANUAL	
BILGE PUMP MAINTENANCE MANUAL	X

ANNEX 1

TECHNICAL SPECIFICATIONS AND TANK CAPACITIES

The boat has a sequential serial number, the WIN code. The WIN code is marked on the hull at the starboard side of the stern / on the outside of the transom next to the line strip. You can enter the WIN code in the table below.

When dealing with a boatyard or dealer, please quote the WIN code and the type of boat to facilitate the delivery of the correct spare parts. If you need gelcoat for a repair, please quote the colour code when ordering.

Type marking:	Silver Condor Cabin
Designer:	
WIN code:	FI-SLVCC
Engine serial number:	
Colour codes	RAL9016
- frame:	Aluminium
- cover:	000
Body material:	Aluminium

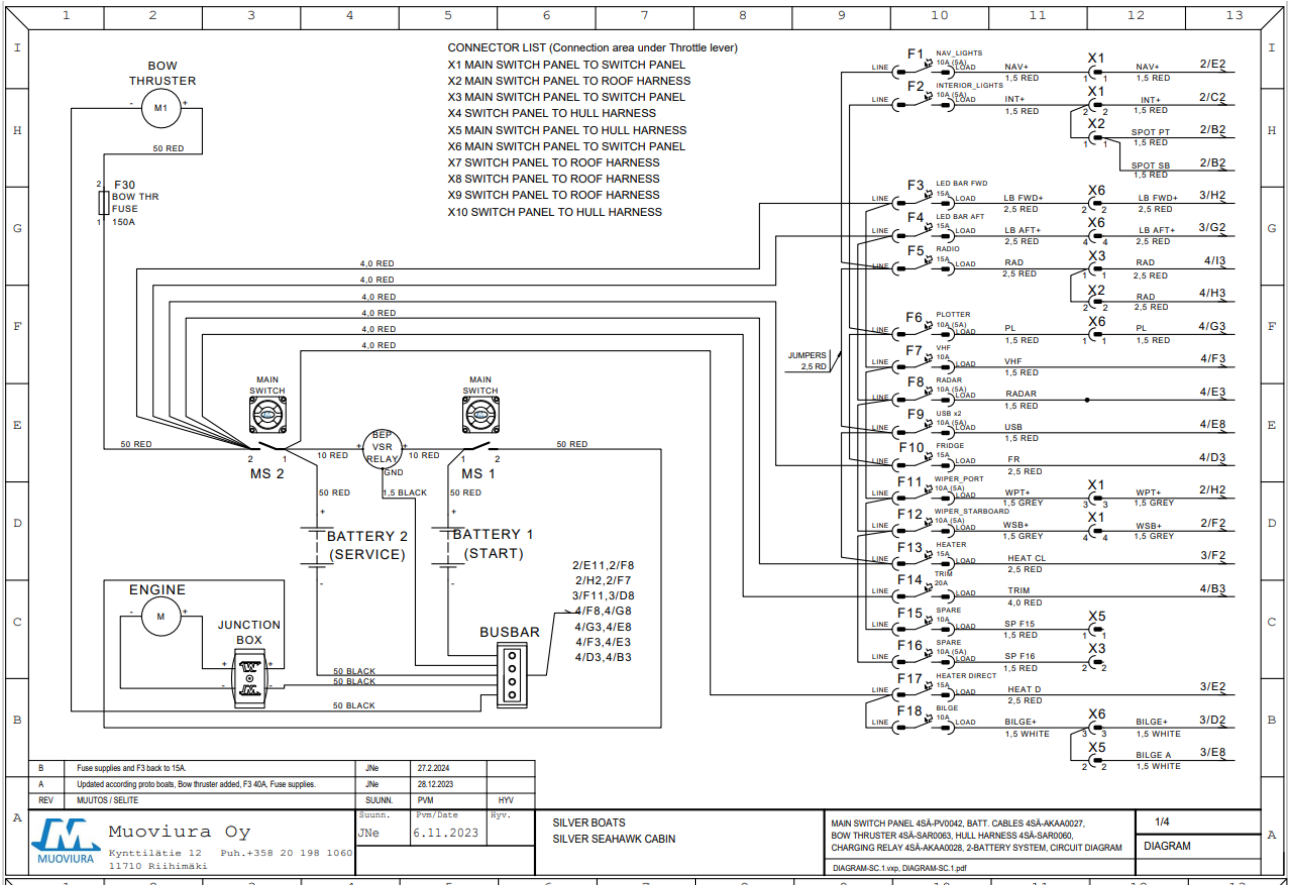
		NUMBER/ MOUNT	SECTION
Main dimensions:	Overall length Lmax	8,05	m
(according to ISO 8666)	Hull length Lh	7,43	m
	Maximum width Bmax	2,45	m
	Hull width Bh	2,10	m
	Depth at full load of *xxx* kg		m
	Maximum height above water (light load)		m
	Weight without load, liquids and equipment*, but including the weight of the maximum recommended outboard engine(s)*	2095	kg
	Total weight at full load		kg
	Weight during the performance test		kg
Load-bearing capacity:	Maximum recommended number of persons	10	persons from
(according to the manufacturer's plate, ISO 14946)	**The maximum recommended load, which includes:**	1170	kg
	Total weight of persons		kg
	- basic equipment		kg
	- liquids in portable containers:		
	- water		kg

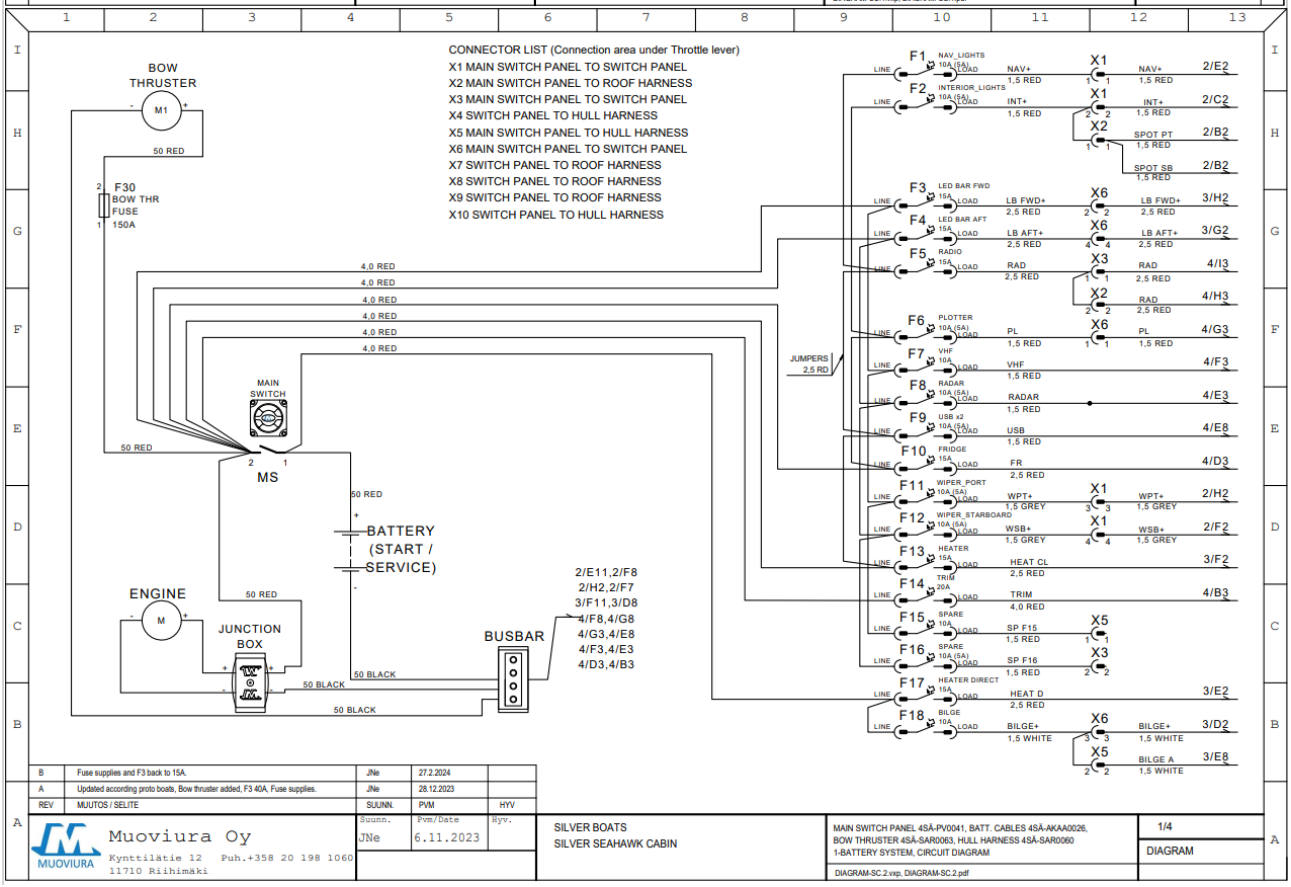
	- fuel		kg
		NUMBER/ MOUNT	SECTION
	consumable liquids in fixed containers:		
	water		kg
	- fuel (petrol/diesel)		kg
	- provisions and other stocks		kg
	- life raft		kg
	- cargo		kg
	Total weight of all liquids in solid tanks (tanks full)		kg
Tank capacities:	Fuel tank(s)	320	l
Propulsion type (primary)	Outboard engine	propeller	
Type of crime			
Maximum recommended machine power:		258	kW (hv)
Top speed:	(cargo situation in the performance measurement: 2 persons & full fuel tanks)	37	Ties
Electrical system:	Voltage	12	V equals.
	Battery capacity		x × Ah

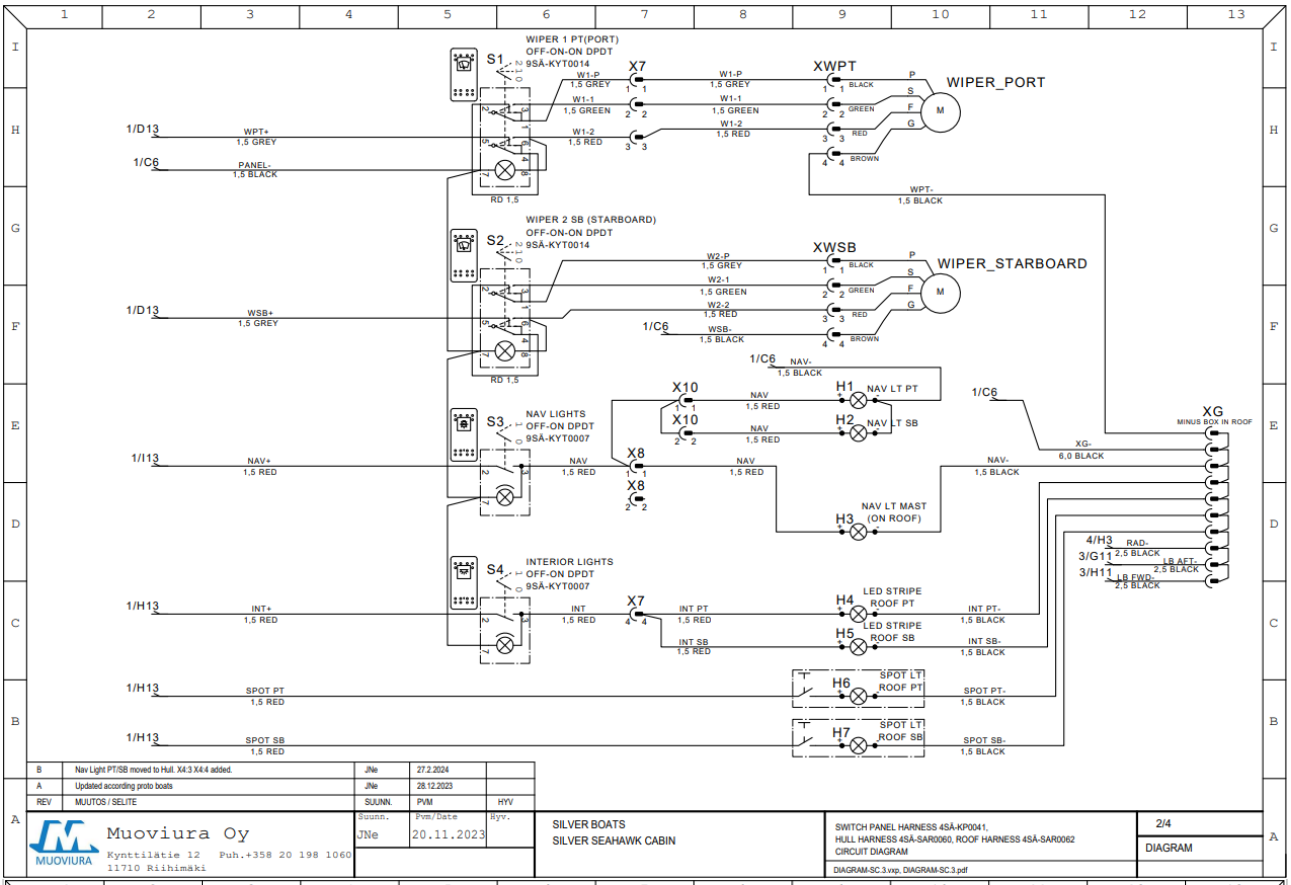
For technical production reasons, there may be small differences in the main dimensions and volumes.

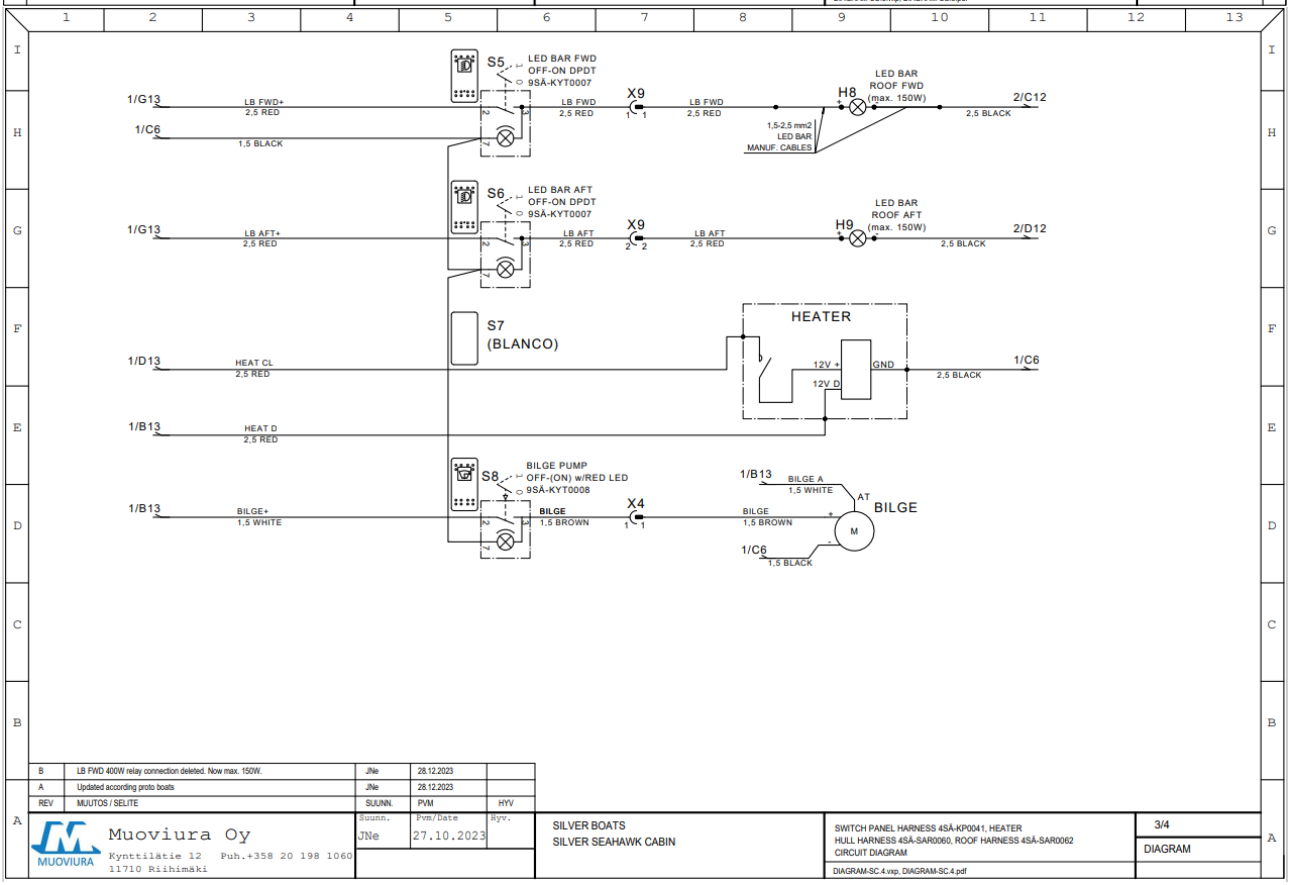
The fuel tank filler is located on the port side deck of the boat.

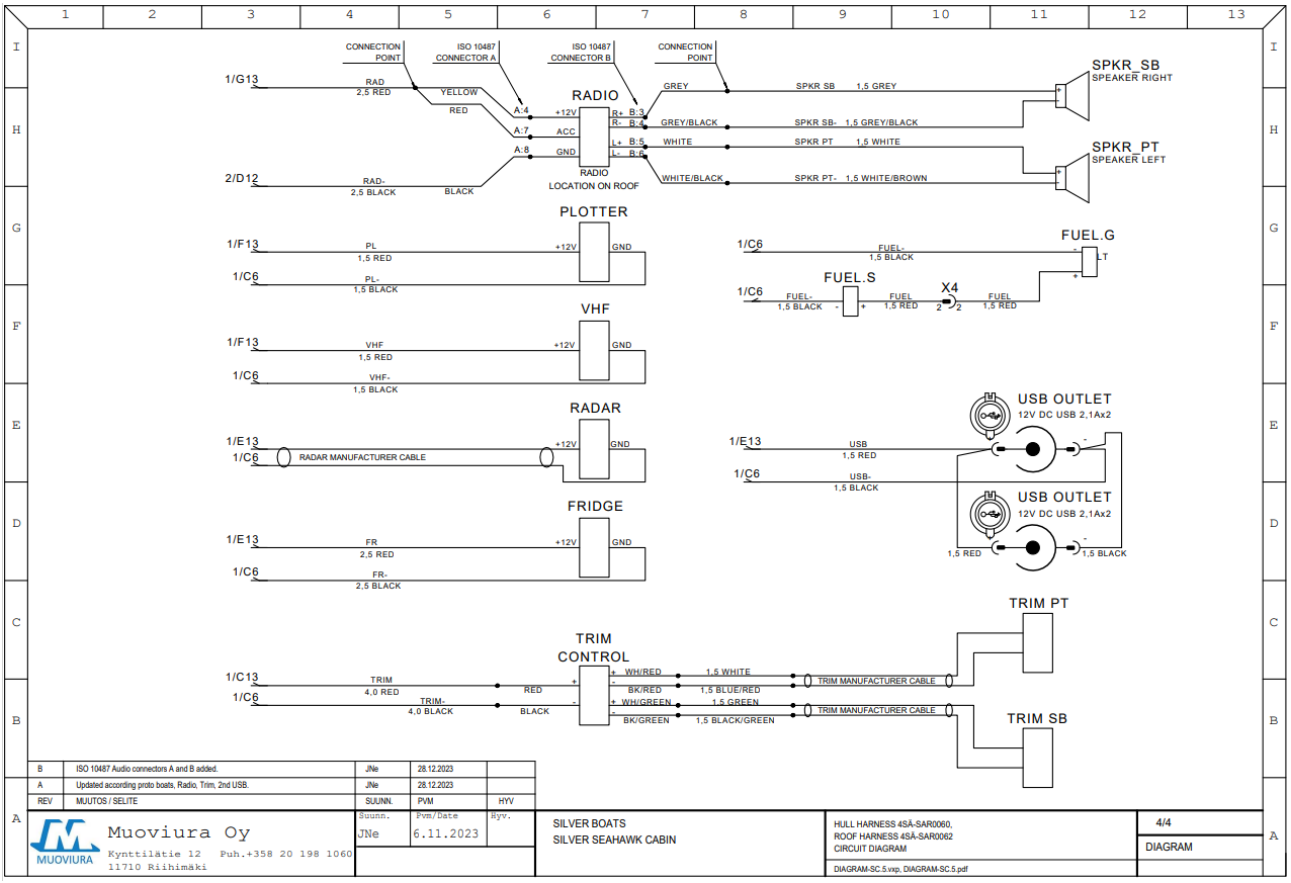
THE BOAT OWNER'S OWN NOTES:


CONNECTOR LIST (Connection area under Throttle lever)
X1 MAIN SWITCH PANEL TO SWITCH PANEL
X2 MAIN SWITCH PANEL TO ROOF HARNESS
X3 MAIN SWITCH PANEL TO SWITCH PANEL
X4 SWITCH PANEL TO HULL HARNESS
X5 MAIN SWITCH PANEL TO HULL HARNESS
X6 MAIN SWITCH PANEL TO SWITCH PANEL
X7 SWITCH PANEL TO ROOF HARNESS
X8 SWITCH PANEL TO ROOF HARNESS
X9 SWITCH PANEL TO ROOF HARNESS
X10 SWITCH PANEL TO HULL HARNESS
BOW THRUSTER
F30 BOW THR FUSE 150A
MAIN SWITCH
MS 2
MS 1
BEP VSR RELAY
BATTERY 2 (SERVICE)
BATTERY 1 (START)
ENGINE
JUNCTION BOX
BUSBAR
2/E11,2/F8
2/H2,2/F7
3/F11,3/D8
4/F8,4/G8
4/G3,4/E8
4/F3,4/E3
4/D3,4/B3
JUMPERS 2,5 RD
B Fuse supplies and F3 back to 15A. JNe 27.2.2024
A Updated according proto boats, Bow thruster added, F3 40A, Fuse supplies. JNe 28.12.2023
REV MUUTOS / SELITE SUUNN. PVM HYV
Muoviura Oy
Kynttilätie 12 Puh.+358 20 198 1060
11710 Riihimäki
Suunn. JNe Pvm/Date 6.11.2023 Hyv.
SILVER BOATS
SILVER SEAHAWK CABIN
MAIN SWITCH PANEL 4SÅ-PV0042, BATT. CABLES 4SÅ-AKAA0027,
BOW THRUSTER 4SÅ-SAR0063, HULL HARNESS 4SÅ-SAR0060,
CHARGING RELAY 4SÅ-AKAA0028, 2-BATTERY SYSTEM, CIRCUIT DIAGRAM
DIAGRAM-SC.1.vxp, DIAGRAM-SC.1.pdf
1/4
DIAGRAM


CONNECTOR LIST (Connection area under Throttle lever)
X1 MAIN SWITCH PANEL TO SWITCH PANEL
X2 MAIN SWITCH PANEL TO ROOF HARNESS
X3 MAIN SWITCH PANEL TO SWITCH PANEL
X4 SWITCH PANEL TO HULL HARNESS
X5 MAIN SWITCH PANEL TO HULL HARNESS
X6 MAIN SWITCH PANEL TO SWITCH PANEL
X7 SWITCH PANEL TO ROOF HARNESS
X8 SWITCH PANEL TO ROOF HARNESS
X9 SWITCH PANEL TO ROOF HARNESS
X10 SWITCH PANEL TO HULL HARNESS
BOW THRUSTER
F30 BOW THR FUSE 150A
MAIN SWITCH
MS
BATTERY (START / SERVICE)
ENGINE
JUNCTION BOX
BUSBAR
2/E11,2/F8
2/H2,2/F7
3/F11,3/D8
4/F8,4/G8
4/G3,4/E8
4/F3,4/E3
4/D3,4/B3
JUMPERS 2,5 RD
B Fuse supplies and F3 back to 15A. JNe 27.2.2024
A Updated according proto boats, Bow thruster added, F3 40A, Fuse supplies. JNe 28.12.2023
REV MUUTOS / SELITE SUUNN. PVM HYV
Muoviura Oy
Kynttilätie 12 Puh.+358 20 198 1060
11710 Riihimäki
Suunn. JNe Pvm/Date 6.11.2023 Hyv.
SILVER BOATS
SILVER SEAHAWK CABIN
MAIN SWITCH PANEL 4SÅ-PV0041, BATT. CABLES 4SÅ-AKAA0026,
BOW THRUSTER 4SÅ-SAR0063, HULL HARNESS 4SÅ-SAR0060
1-BATTERY SYSTEM, CIRCUIT DIAGRAM
DIAGRAM-SC.2.vxp, DIAGRAM-SC.2.pdf
1/4
DIAGRAM


WIPER 1 PT(PORT)
OFF-ON-ON DPDT
9SÄ-KYT0014
S1
WIPER_PORT
XWPT
X7
1/D13
WPT+
1,5 GREY
1/C6
PANEL-
1,5 BLACK
WPT-
1,5 BLACK
WIPER 2 SB (STARBOARD)
OFF-ON-ON DPDT
9SÄ-KYT0014
S2
WIPER_STARBOARD
XWSB
1/D13
WSB+
1,5 GREY
1/C6
WSB-
1,5 BLACK
1/C6
NAV-
1,5 BLACK
NAV LIGHTS
OFF-ON DPDT
9SÄ-KYT0007
S3
X10
H1
NAV LT PT
H2
NAV LT SB
1/I13
NAV+
1,5 RED
X8
H3
NAV LT MAST
(ON ROOF)
XG
MINUS BOX IN ROOF
XG-
6,0 BLACK
NAV-
1,5 BLACK
4/H3
3/G11
3/H11
RAD-
2,5 BLACK
LB AFT-
2,5 BLACK
LB FWD-
2,5 BLACK
INTERIOR LIGHTS
OFF-ON DPDT
9SÄ-KYT0007
S4
1/H13
INT+
1,5 RED
X7
H4
LED STRIPE
ROOF PT
H5
LED STRIPE
ROOF SB
INT PT-
1,5 BLACK
INT SB-
1,5 BLACK
1/H13
SPOT PT
1,5 RED
H6
SPOT LT
ROOF PT
SPOT PT-
1,5 BLACK
1/H13
SPOT SB
1,5 RED
H7
SPOT LT
ROOF SB
SPOT SB-
1,5 BLACK
B
Nav Light PT/SB moved to Hull. X4:3 X4:4 added.
JNe
27.2.2024
A
Updated according proto boats
JNe
28.12.2023
REV
MUUTOS / SELITE
SUUNN.
PVM
HYV
Muoviura Oy
Kynttilätie 12 Puh.+358 20 198 1060
11710 Riihimäki
Suunn.
JNe
Pvm/Date
20.11.2023
Hyv.
SILVER BOATS
SILVER SEAHAWK CABIN
SWITCH PANEL HARNESS 4SÄ-KP0041,
HULL HARNESS 4SÄ-SAR0060, ROOF HARNESS 4SÄ-SAR0062
CIRCUIT DIAGRAM
DIAGRAM-SC.3.vxp, DIAGRAM-SC.3.pdf
2/4
DIAGRAM


LED BAR FWD
OFF-ON DPDT
9SÄ-KYT0007
S5
1/G13
LB FWD+
2,5 RED
1/C6
1,5 BLACK
X9
H8
LED BAR
ROOF FWD
(max. 150W)
2/C12
1,5-2,5 mm2
LED BAR
MANUF. CABLES
LED BAR AFT
OFF-ON DPDT
9SÄ-KYT0007
S6
1/G13
LB AFT+
2,5 RED
H9
LED BAR
ROOF AFT
(max. 150W)
2/D12
S7
(BLANCO)
HEATER
1/D13
HEAT CL
2,5 RED
12V +
12V D
GND
1/C6
1/B13
HEAT D
2,5 RED
BILGE PUMP
OFF-(ON) w/RED LED
9SÄ-KYT0008
S8
1/B13
BILGE+
1,5 WHITE
X4
BILGE A
1,5 WHITE
BILGE
AT
BILGE
1,5 BROWN
1/C6
1,5 BLACK
B
LB FWD 400W relay connection deleted. Now max. 150W.
JNe
28.12.2023
A
Updated according proto boats
JNe
28.12.2023
REV
MUUTOS / SELITE
SUUNN.
PVM
HYV
Muoviura Oy
Kynttilätie 12 Puh.+358 20 198 1060
11710 Riihimäki
Suunn.
JNe
Pvm/Date
27.10.2023
Hyv.
SILVER BOATS
SILVER SEAHAWK CABIN
SWITCH PANEL HARNESS 4SÄ-KP0041, HEATER
HULL HARNESS 4SÄ-SAR0060, ROOF HARNESS 4SÄ-SAR0062
CIRCUIT DIAGRAM
DIAGRAM-SC.4.vxp, DIAGRAM-SC.4.pdf
3/4
DIAGRAM


CONNECTION POINT
ISO 10487 CONNECTOR A
ISO 10487 CONNECTOR B
CONNECTION POINT
1/G13
RAD 2,5 RED
YELLOW
RED
A:4 +12V
A:7 ACC
A:8 GND
RADIO
R+ B:3
R- B:4
L+ B:5
L- B:6
RADIO LOCATION ON ROOF
2/D12
RAD- 2,5 BLACK
BLACK
GREY
SPKR SB 1,5 GREY
GREY/BLACK
SPKR SB- 1,5 GREY/BLACK
WHITE
SPKR PT 1,5 WHITE
WHITE/BLACK
SPKR PT- 1,5 WHITE/BROWN
SPKR_SB
SPEAKER RIGHT
SPKR_PT
SPEAKER LEFT
PLOTTER
1/F13
PL 1,5 RED
+12V
GND
1/C6
PL- 1,5 BLACK
VHF
1/F13
VHF 1,5 RED
+12V
GND
1/C6
VHF- 1,5 BLACK
RADAR
1/E13
1/C6
RADAR MANUFACTURER CABLE
+12V
GND
FRIDGE
1/E13
FR 2,5 RED
+12V
GND
1/C6
FR- 2,5 BLACK
1/C6
FUEL- 1,5 BLACK
FUEL.G
LT
FUEL.S
1/C6
FUEL- 1,5 BLACK
FUEL 1,5 RED
X4
FUEL 1,5 RED
1/E13
USB 1,5 RED
1/C6
USB- 1,5 BLACK
USB OUTLET
12V DC USB 2,1Ax2
USB OUTLET
12V DC USB 2,1Ax2
1,5 RED
1,5 BLACK
TRIM CONTROL
1/C13
TRIM 4,0 RED
1/C6
TRIM- 4,0 BLACK
RED
BLACK
WH/RED
BK/RED
WH/GREEN
BK/GREEN
1,5 WHITE
1,5 BLUE/RED
1,5 GREEN
1,5 BLACK/GREEN
TRIM MANUFACTURER CABLE
TRIM MANUFACTURER CABLE
TRIM PT
TRIM SB
B ISO 10487 Audio connectors A and B added. JNe 28.12.2023
A Updated according proto boats, Radio, Trim, 2nd USB. JNe 28.12.2023
REV MUUTOS / SELITE SUUNN. PVM HYV
Muoviura Oy
Kynttilätie 12 Puh.+358 20 198 1060
11710 Riihimäki
Suunn. JNe
Pvm/Date 6.11.2023
Hyv.
SILVER BOATS
SILVER SEAHAWK CABIN
HULL HARNESS 4SÅ-SAR0060,
ROOF HARNESS 4SÅ-SAR0062
CIRCUIT DIAGRAM
DIAGRAM-SC.5.vxp, DIAGRAM-SC.5.pdf
4/4
DIAGRAM

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