

# Owner's Manual Information




## 2400



**Dealership:**

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## **General Introduction**

Congratulations on your purchase of the SmartWave SW2400 boat. This manual has been compiled to help you operate your craft with safety and pleasure. It contains details of the craft, the equipment supplied or fitted systems and information on its operation and maintenance. Please read it carefully and familiarise yourself with the craft before using it.

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

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



The Safety Alert Symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! Please pay particular attention to the corresponding section in this manual and around the craft.



A **CAUTION** indicates special precautions that must be taken to avoid damage to the boat, engine or crew.



Failure to follow **WARNING** instructions could result in severe injury or death to the boat operator, crew or bystander.



### **Safe Boat Handling:**

**Always wear an approved life jacket.**

**Do not operate this craft at maximum speed while in congested high traffic waterways or in weather and sea conditions of reduced visibility, high winds or large waves. Reduce speed and wake as a courtesy and as a safety consideration to yourself and others. Observe and obey speed limit and No Wake Zones.**

**Observe right-of-way as defined by Rules of the Road and required by COLREG**

**Always be certain to have sufficient distance to stop or manoeuvre if required to avoid collisions**

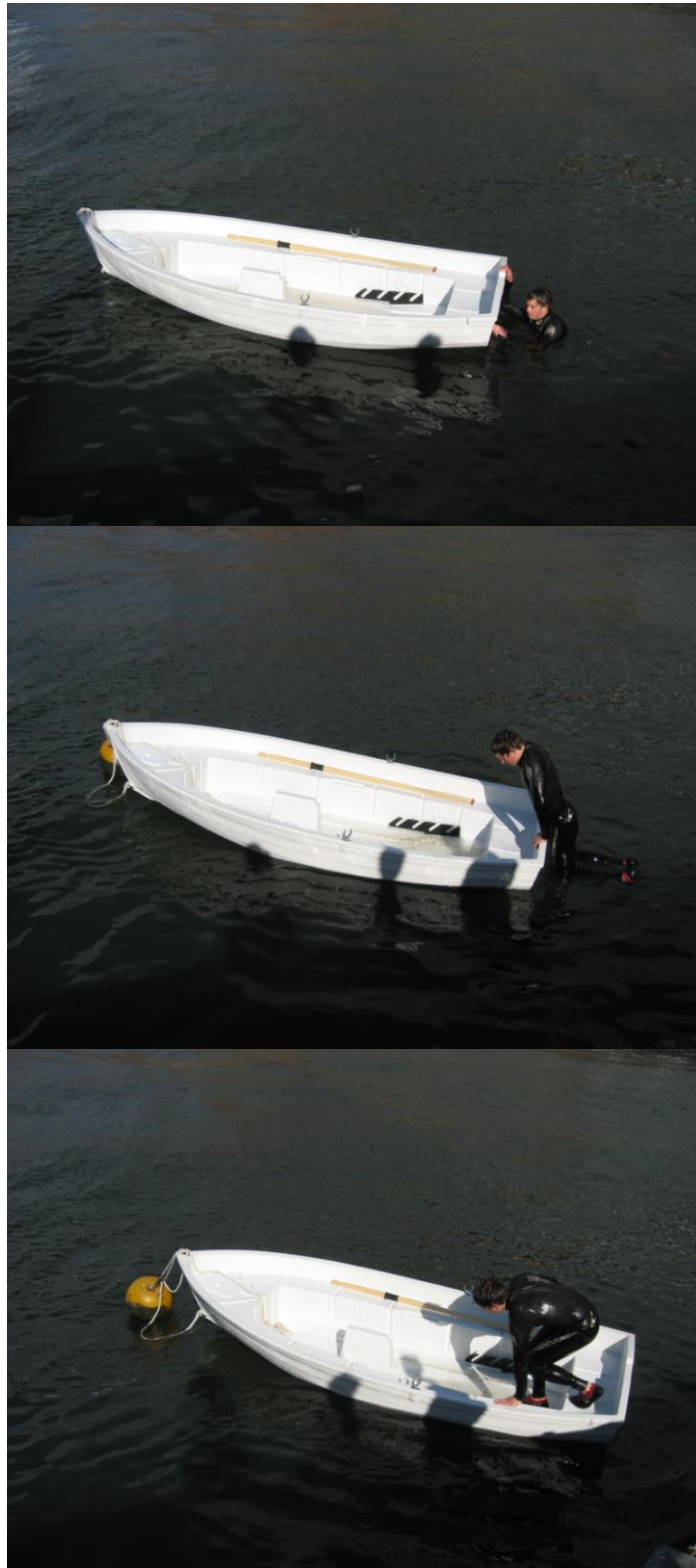
**Ensure the crew and load is distributed throughout the boat evenly to maintain safe operational trim.**

#### **Man-overboard Prevention and Recovery (BS EN ISO 15085)**

Re entry at the stern of the boat is recommended if the vessel is in the swamped condition

**NOTE:**

This boat does not require any specific device to re-board due to its characteristics. Re entry at the stern of the boat is recommended and demonstrated in the following pictures.



## Drink and drugs

Be sensible about drinking alcohol, as it will impair your judgement. Consider it as irresponsible for a skipper and crew to be in charge of a powerboat under the influence of alcohol as it is for the driver of a car. Beware of the side effects of any medication which may impair judgement and reduce the effectiveness of the person concerned.

## Environmental considerations

Polyethylene thermoplastic is fully recyclable, an important feature in a world where we are conscious of our impact on the environment

Safe handling practices should be observed when handling fuel, oil and cleaning agents to avoid contaminating the environment.

Remember, that wake and wash produced by your craft can cause erosion to shore lines. Always observe the speed limits in restricted areas.

During refueling or re oiling operations on or off the water, please avoid any spillage, and ensure that nothing is discharged into the water or drains

## Boat Design

The rotationally moulded virgin grade polyethylene construction of this craft is extremely strong, It will not rot, rust, corrode or split. It is temperature stable; UV stabilized and will not support marine growth.

The Hull is manufactured as one piece and twin skinned. An air space between the hull provides buoyancy in the swamped condition.

## Design Category

This craft was designed for voyages on small lakes, rivers, canals and sheltered waters.

### Marine Revolution SW2400

<b>Type of craft;</b>	Motor boat with oars
<b>Type of hull;</b>	Tri Hull
<b>Deck;</b>	Open Boat
<b>Construction Material; ISO12215</b>	Linear low density polyethylene.
<b>Propulsion;</b>	Petrol/Electric engine and oars
<b>Type of engine;</b>	Outboard
<b>Max. recommended engine power;</b>	3.75 kW = 6hp
<b>Length and beam of hull (m);</b>	2.40 x 1.30 m (ISO 8666)
<b>Draught (m);</b>	0.15 m
<b>Fuel Capacity;</b>	5ltr (Manufacturer's external tank)
<b>Battery Capacity;</b>	none
<b>Maximum Total Load;</b>	270kg = <b>number of persons 2</b>

## **Essential equipment**

### **Engine**

#### **⚠ WARNING**

- Please refer to engine manufacturer's handbook as supplied with your craft.
- Start in gear protection (ISO 11547) is provided with your engine control system
- **Please read the engine manual and familiarize yourself with its safe operation before using your craft.**
- **Carry an alternative means of propulsion like oars**
- A spare can of fuel is essential and should be clearly marked if different types are carried, eg petrol or diesel

#### **⚠ WARNING**

(BS EN ISO 11592)

**Do not operate this craft with an engine of rated power larger than that posted on the capacity label of the craft.**

**Do not operate this craft at negative propulsion unit trim settings (bow down) at high speed. Craft may lean over on side and instability may result. Use negative trim to accelerate to planing speed from displacement speed and at lower planing speeds in choppy water (applicable to craft equipped with propulsion unit power trim)**

### **Anchoring & Towing**

(ISO 15084)

**Responsibility:** It is the owner's/operator's responsibility to ensure that mooring lines, towing lines, anchor chain(s) anchor line(s) and anchor(s) are adequate for the vessel's intended use, i.e. the lines or chains do not exceed 80% of the breaking strength of the respective strong point. Owners should also consider what action will be necessary when securing a towline onboard.

Where non-metallic strong points are installed, their limited lifetime shall be taken into consideration. They shall be exchanged once they show any signs of deterioration, visible surface cracks or permanent deformation.

#### **⚠ WARNING**

**Replace strong points showing visible signs of deterioration.**

#### **⚠ CAUTION**

**Always tow or be towed at a slow speed. Never exceed the hull speed of a displacement craft when being towed.**

#### **⚠ CAUTION**

**A towline shall always be made fast in such a way that it can be released when under load.**

It is advised to always carry an anchor of suitable type and size with sufficient warp to anchor in your operational area and holding ground.

When towing the craft, ensure the craft is restrained onto the trailer using the towing eye at the bow and tie down straps near the stern. It is not recommended the trailer winch is used to restrain the craft at any time.

It is imperative to use an "approved" and correctly sized trailer when removing your Smartwave Boat from the water for inspection, transportation or storage. Use of any other trailer or transportation without the use of an outboard engine support bracket will void the boat warranty.

Smartwave Boat trailers are constructed using runners to support the boat and avoid point loading associated with rollers. Do not leave your boat on blocks or on the trailer unmoved for long periods of time.

If your boat is kept on the water it is beneficial to periodically slip your boat in order to inspect the hull and any fittings, equipment, etc.

### **⚠ CAUTION**

Do not use the tilt support lever or rely on the hydraulic tilt to support the outboard when trailering the boat. The outboard can shake loose or the hydraulics may fail causing the motor to fall. The outboard motor should be trailered and stored in the normal running position. If there is insufficient road clearance in this position, then trailer the outboard motor in the tilt position using a motor support device such as a transom saver bar.

## **Bilge pumping system (ISO 15083)**

It is the responsibility of the owner/operator to have at least one bailer/draw bucket on board, secured against accidental loss

## **Engine Cooling System**

Refer to manufacturer's manual supplied.

## **Fire Extinguishing System (ISO 9094-1)**

### **⚠ CAUTION**

Although No fire safety equipment is required to be carried on this craft, it is highly recommended you do so.

In case of fire, the bucket/bailer can be used.

### **General Requirements for a Fire extinguisher;**

- Any portable fire extinguisher is readily accessible
- If the portable fire extinguisher is located where it is exposed to water spray, the extinguisher operating nozzle and triggering device is shielded, unless the extinguisher is certified or listed for marine service.
- The extinguisher may be stowed away in a locker or other protected or enclosed space. The locker or opening part of the enclosed space door shall carry the appropriate ISO symbol.

Fire extinguishers and fire blankets must be checked and maintained in line with manufacturer's recommendations. Make sure they are stowed correctly and fully accessible and that every crew member knows when and how to use them. Check fire extinguisher pressure and expiry date.



## Fuel System

### **⚠ WARNING**

- Gasoline is highly flammable and its vapors are flammable and explosive.
- Regularly check your fuel system for any leaks or signs of wear or damage.
- **Use care** when transporting the fuel tank, whether in the boat or car.
- Close the air vent and fuel cock to prevent fuel from leaking when in storage or transportation
- Do not fill the fuel container to maximum capacity. Gasoline will expand considerably as it warms up and can build up pressure in the container. This pressure can cause leakage and a potential fire hazard.

Please refer to the engine owner's manual for specific fuel system information.

## Location of through-hull fittings



1 x drainage bung is located at the stern, on the back edge of the keel. This is only removed if it is necessary to drain water from between the hull skins.

1 x internal bung is located on the inside of the transom at floor level as seen above. This is used to drain the deck of the boat whilst out of the water and during storage. This bung has a non-return valve fitted. The non-return valve may leak if debris becomes trapped under the seal or if damaged.

### **⚠ CAUTION**

**Ensure all drain bungs have been secured before launching the boat**

## Steering System

For Tiller steering details refer to the engine manufacturer's manual.



## **Crew Safety**

This boat does not require any specific device to re-board due to its characteristics. Re entry at the stern of the boat is recommended and demonstrated in pictures on page 4.

## **Additional Safety information**

### **Lifebuoys**

Some motor boats do not carry a lifebuoy in the belief that the boat is likely to be travelling too fast for practical use. However all offshore lifeboats carry lifebuoys as a safety aid that can be thrown to a man overboard (MOB) casualty. A lifebuoy should be mounted where it can quickly be thrown overboard. It should be marked with the boat's name and retro reflective tape and fitted with a drogue to prevent drifting, a whistle to attract attention and an automatic light (projecting a continuous beam) or a strobe.

### **Throwing lines**

A throwing line should be carried for instant use on deck, regardless of whether the boat is fitted with a lifebuoy. The brightly coloured floating line is coiled inside a throwing sack, with a wrist-loop or handles to retain the pulling end. Achieving a long distance throw with good accuracy requires practice, with a possible reach of over 20m.

### **Safety Checks**

- Make sure everyone onboard knows how to use a life jacket, flares and operate the radio in case of an emergency
- Check your vessel is in good order before you leave and do regular inspections when you can spend more time checking the safety of your vessel
- Someone onshore is aware of your journey and times of arrival and departure
- Check the weather
- Everyone has warm and waterproof clothing
- Check the engine is in good working order and does not need any maintenance
- Make sure you have enough fuel and spare fuel
- Carry an alternative means of propulsion like oars
- Make sure you have enough lifejackets and emergency flares
- Be sure all fire extinguishers are in date and ready for use
- Check your radio equipment is operational
- Check you have food and water in case you have to spend more time at sea than you first anticipated.
- Make sure you have a first aid kit and know how to use it.

### **Seasickness**

Seasickness strikes down many a sailor, particularly those with little to do. Its effects are dangerous if the crew becomes too incapacitated to maintain proper control of the boat:

- Seasickness medication works for some people and should be taken well before the trip. Check the instructions for possible side effects, which may include drowsiness.
- Don't get cold and miserable. Dress up warmly and take a spell at the wheel to occupy your mind.
- If a crew member feels sick, the skipper must decide if it is necessary to seek shelter before the problem gets worse.

- Get someone to help if you need to be sick. The boat must stop, but there may still be an unpleasant motion and hanging over the side is potentially dangerous. The safest and easiest solution may be to use a bucket in the cockpit.
- Do not continue on an empty stomach. Dry toast, bread or plain biscuits are all good fill-ups. You must drink plenty of water to offset dehydration.

## **Maintenance**

### **General care and cleaning**

Top quality virgin grade polyethylene is used in the manufacture of this boat, which contains powerful ultra violet stabilizers designed to survive in harsh environments. Polyethylene is impervious to osmosis, corrosion, rot, and rust, and has no gelcoat or paint to maintain.

Wash down using a mild environmentally friendly detergent is recommended after use in salt water. Avoid using oily or abrasive substances. Read labels and instructions carefully to avoid products that could damage polyethylene or other plastics. DO NOT use products that contain phosphates, chlorine, solvents, non-biodegradable or petroleum based products. Citrus-based cleaners are excellent for marine cleaning purposes, and are safe to use. Household cleaners should be used sparingly and not discharged into waterways. Never mix cleaners and be sure to work in a well ventilated area

For engine care /maintenance refer to the manufacturers recommendations

### **Repairs to hull/deck**

#### Minor abrasions

These can be lightly scraped or sanded back and the surface heated/flamed to restore to a shiny finish. Use a hair dryer or hot air gun to gently heat the area and restore the finish. Be careful not to over heat and deform the plastic or scorch the surface.

#### Major abrasions

The polyethylene thermoplastic construction means it can be repaired by Plastic Welding. Small indentations can be repaired by applying heat to the area and gently returning the plastic to it's original shape. In many instances minor dents will come out if left in a warm area or in the sun due to the plastics' memory effect.

If in doubt please refer to your local dealer for further details.

### **Storing Your Boat**

Your boat is UV stabilized and uses only stainless steel and alloy hardware, so it will stand up well to the elements for many years. To maximize the life of your boat we recommend the following:

- Protect your boat with a storage cover or flip it upside down when left for any period.
- If your boat will remain unused for long periods, store it indoors if possible.
- If you keep your boat in a windy area, tie it down
- Store the boat with the engine in the running position.
- Consult your engine owner's manual for specific storage and winterising information.

## **Warranty**

Please refer to the warranty card contained within your owners pack for warranty details and registration information

## **Trouble shooting**

### **Engine Failure**

The main cause of engine failure is likely to be blocked filters;

A blocked fuel filter will reduce power until the engine stops. Change the filter and restart the engine.

If dirty fuel is the culprit, several changes may be required.

A blocked salt water inlet filter will cause rapid overheating, indicated by increased steam from the exhaust, and eventual seizure. Check the filters for blockage and clear as necessary. Also check pump is functioning and for leaks in the system.

Refer to your engine owner's manual for specific trouble shooting information.

### **Reduced Power/Revs**

Your engine is fitted with safety devices to minimize damage if it overheats or is low on oil. Please refer to the manual for specific information of the various protection functions

## Identification Details

### Identification;

Craft identification as per EN ISO 10087 **HIN** number (small craft – hull identification-coding system)

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Builder's Plate as per ISO 14945 Serial Number (small craft- builder's plate)

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## Notes

This image shows a full page of blank white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page, providing a template for writing or drawing. There are no margins, text, or other markings present.