SEALEGS®

BE AMPHIBIOUS

SEALEGS OWNERS MANUAL – 7.7M

USCG COMPLIANT

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CONTENTS

1. INTRODUCTION

ABOUT THIS MANUAL

This manual has been compiled to help an owner safely operate and maintain their Sealegs Amphibious Craft. Please read this manual carefully to become familiar with the craft before use.

This manual is designed to comply with the Recreational Craft Directive (RCD) and should not be perceived as an exhaustive guide to the vessel. This manual is to be read in conjunction with regional regulations required for local operation, the OEM manuals supplied for specific products (e.g. outboard, electronics, steering), and additional boat safety training course materials.

Please keep all manuals in a secure place and hand over to the new owner if the craft is sold.

EXPLANATION OF SYMBOLS AND LABELS

The craft and this manual show symbols which advise the owner/operator and crew of imperative safety precautions to follow when operating and/or servicing equipment. The following descriptions are used. They should be respected at all times.

	**Danger** Denotes an extreme intrinsic hazard exists which would result in high probability of death or irreparable injury if proper precautions are not taken.
	**Warning** Denotes a hazard exists which can result in injury or death if proper precautions are not taken.
	**Caution** Denotes a reminder of safety practices or directs attention to unsafe practices which could result in personal injury or damage to the craft or components.
	**Information** Denotes useful or important facts or suggestions that can greatly enhance safety and efficiency of operations.

The following additional symbols may be found on fittings and components on board the craft. They should be respected at all times.

2. BEFORE OPERATING CRAFT

BEFORE USE OF THE CRAFT

Before using a Sealegs Amphibious Craft it is important the operator familiarizes themselves with its operation and safe use. If the operator is unfamiliar with this type of craft, for comfort and safety, ensure they obtain handling and operating experience before assuming command of the craft. It is strongly recommended that:

- The operator fully reads this manual, and understands the craft's operation, maintenance and safe use. A manual however is not a replacement for experience and common sense.
- A complete detailed visual check of the craft is made before initial use, and before each subsequent journey
- All safety and emergency equipment is checked and confirmed to be correctly located on board (including appropriate lifejackets for all users, and ensuring the craft has a full emergency kit including flares and first aid kit on board), and all operators and passengers of the craft know how to operate this safety equipment

If the craft is being used for the first time, the following should also be checked:

- If an anchor is included with the craft, then the anchor should be checked that it is attached correctly to the rope and chain, and attached securely to the boat
- That the tube pump is assembled and operation understood

 CAUTION	The operator should be familiar with the location and functionality of the controls and all safety and emergency equipment before operating the craft on the land or water.

OUTBOARD RUN-IN TIMES

Some outboard engines require a run-in period. The separate outboard owner's manuals included in the document pack should be consulted for detailed instructions on the operation and maintenance of the outboard fitted to the craft.

 READ OWNER'S MANUAL	Please refer to the outboard manual for specific run in details for the type of outboard fitted. For example, generally there is no run-in period for the Evinrude ETEC outboards, but there is a 10 hour run- in period for the Yamaha outboards.

RESPONSIBILITY

It is the craft owner/ operator's responsibility to:

- Know the limitations of the craft
- Follow the rules of the road
- Keep a sharp lookout for people and objects in the water
- Ensure that the anticipated wind and sea conditions will correspond to the design category of the craft and that the operator and crew are able to handle the craft in these conditions
- Never operate when under the influence of drugs or alcohol
- Be aware of the crew/ passenger's safety at all times
- Ensure all crew receive suitable training, particularly with regards to location and operation of safety equipment
- Reduce speed when there is limited visibility, rough water, people in the water nearby, boats or structures
- Ensure the craft is properly maintained at all times
- Have the craft inspected by qualified personnel at regular intervals and whenever a cause for concern is raised
- Ensure compliance with all legislation in place in the area of operation. These may include requirements for the carriage of life saving equipment, licensing of the helmsman and respect for the environment

The owner and users of the craft are responsible for determining its suitability for any and all selected uses and assumes all risks in connection therewith when used, including the safety of persons and property, and only operating the craft under safe conditions. It is recommended all users undergo a marine safety course before going to sea.

SEAWORTHINESS AND CREW ABILITY

Regardless of the craft's seaworthiness and its certified RCD design category, protection from freak sea and wind conditions cannot be guaranteed. The ability, experience and fitness of the crew should therefore be taken into consideration before making any voyage.

As a minimum, ensure that the anticipated wind and sea conditions will correspond to the design category of the boat and that the crew are able to handle the boat in these conditions. See Craft Technical Summary *on page 4-17* for the RCD design category and description.

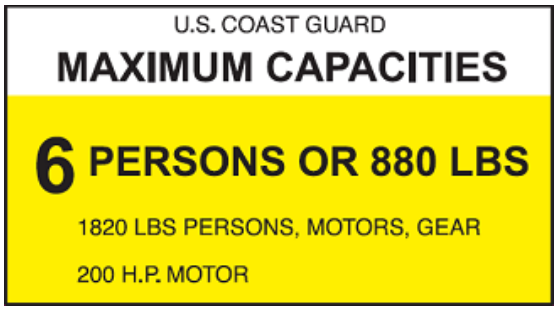
 CAUTION	Any boat, no matter how strong it may be, can be severely damaged by misuse.

CAUTION	Always maintain the craft properly. Make allowances for and ensure necessary maintenance is performed to allow for the deterioration that will occur over time as a result of use or misuse of the boat.

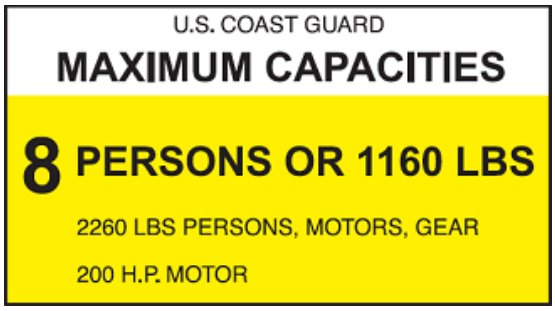
BOAT WARNING AND CAUTION LABELS

Before operating the craft, ensure the crew have read and understood all labels affixed to the craft.

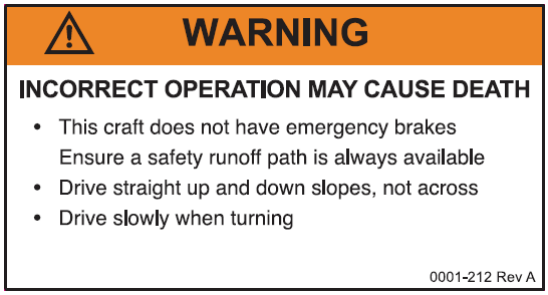
CAUTION	Do not remove or obstruct any safety label. Replace any label which becomes illegible.

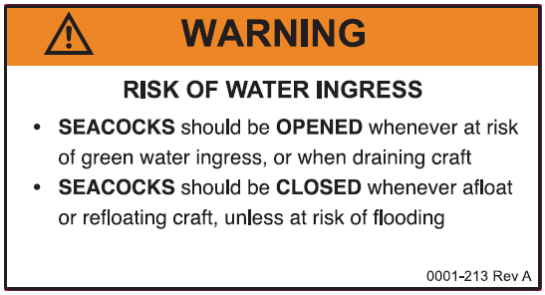


7.7m Cabin RIB



7.7m RIB





⚠ WARNING

BEFORE LAUNCHING

- **SAFETY AND MAINTENANCE** checks must be undertaken before commencing each journey
- **LAUNCH** or retrieve only in conditions or terrain suitable for a car towing the same sized boat

OPERATION

- **DO NOT** operate unless conditions and user capabilities allow safe operation
- **DO NOT** operate inboard engine more than 10 minutes (30 minutes with XRT) within 1 hour period
- **DO NOT** raise or lower the front wheel unless the steering is in the straight ahead position
- **DO NOT** leave anchored/moored boat unattended

WHEN OPERATING

- **PASSENGERS** must always be aware of driver intentions and be secure using two hand holds
- **SUDDEN STARTS/STOPS** should be avoided
- **REDUCE SPEED** before attempting a sharp turn
- **VISIBILITY** from the seated position is limited. A standing position may be necessary to maintain a lookout as required by USGC Navigation rules. Avoid serious injury or death from collisions
- **WHEELS** and legs must be clear of obstructions
- **APPROVED TOWING, WINCH AND LIFT POINTS** must only be used when installed and as detailed in the user manual
- **DESIGNED** and warranted for recreational use only
- **SINGLE-HANDED USE** requires a re-boarding device be deployed

AFTER EACH USE

- **BATTERY ISOLATOR** switch turned OFF
- **TRANSOM DRAIN PLUG** removed and bilge drained
- **WASH** all external components with fresh water
- **STORE** craft under cover when not in use

0001-484 Rev A

⚠ WARNING

PROPELLER RISK
AVOID SERIOUS INJURY

- **SWIMMING OR BOARDING** must only be performed with both engines switched OFF

INCORRECT OPERATION CAN BE DANGEROUS. REFER TO WARNING NOTICES ON CONSOLE

- **DO NOT** use this craft unless the operator has read the user manual
- **DO NOT** raise or lower wheels without ensuring they are clear of people or obstructions
- **DO NOT** exceed the maximum specified payload and ensure that all loaded items are secure
- **DO NOT** sit on transom when moving
- **DO NOT** sit on the wheels
- **DO NOT** stand on moving wheels
- **DO NOT** stand on the wheels on water
- **DO NOT** sit on inflatable tubes when exceeding 10kph (6mph) on water or when travelling on land
- **DO NOT** raise or lower using davit lift points with persons onboard
- **DO NOT** use illegally on public roads

100-0906-017 Rev A

⚠ WARNING

IN CASE OF FIRE

- **EXTINGUISHER DISCHARGE OPENING BELOW**
- **DO NOT** open or remove inboard engine seat top
- **SHUT DOWN** inboard engine and blower
- **DISCHARGE** the entire contents of portable fire extinguisher immediately and continuously through fire port

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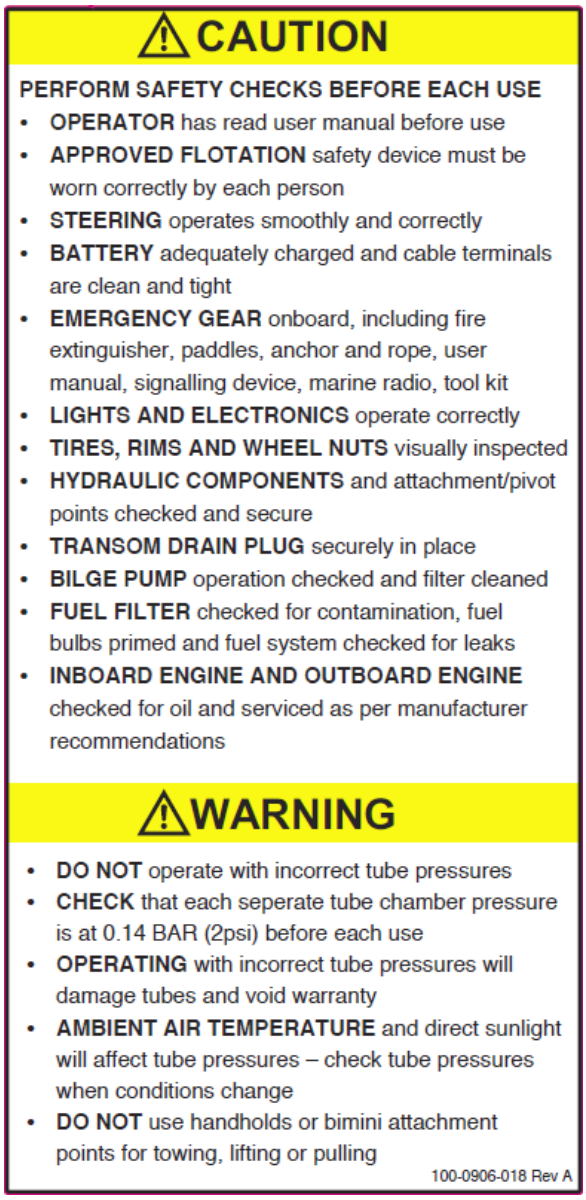
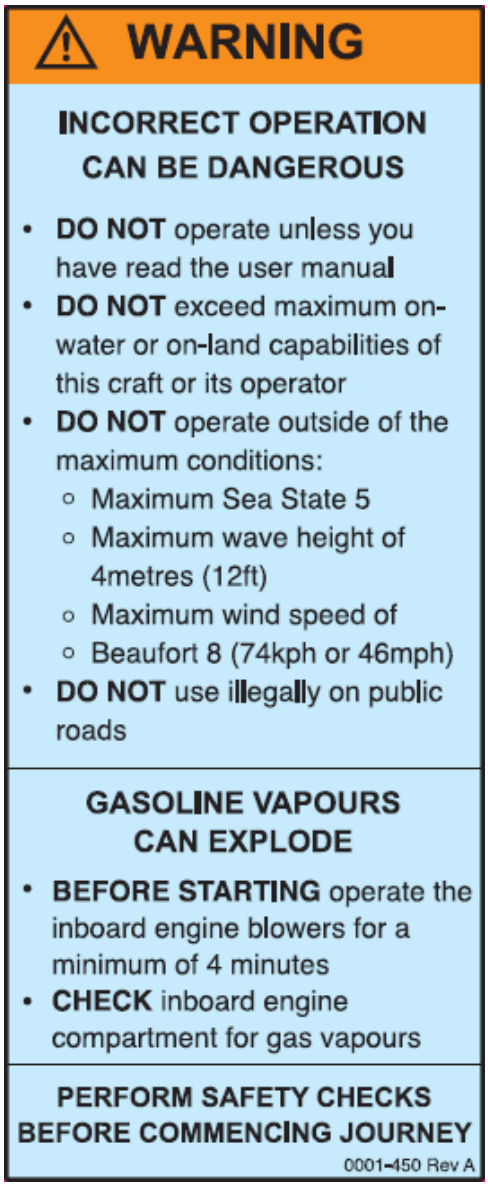

CAUTION
PERFORM SAFETY CHECKS BEFORE EACH USE
• OPERATOR has read user manual before use
• APPROVED FLOTATION safety device must be worn correctly by each person
• STEERING operates smoothly and correctly
• BATTERY adequately charged and cable terminals are clean and tight
• EMERGENCY GEAR onboard, including fire extinguisher, paddles, anchor and rope, user manual, signalling device, marine radio, tool kit
• LIGHTS AND ELECTRONICS operate correctly
• TIRES, RIMS AND WHEEL NUTS visually inspected
• HYDRAULIC COMPONENTS and attachment/pivot points checked and secure
• TRANSOM DRAIN PLUG securely in place
• BILGE PUMP operation checked and filter cleaned
• FUEL FILTER checked for contamination, fuel bulbs primed and fuel system checked for leaks
• INBOARD ENGINE AND OUTBOARD ENGINE checked for oil and serviced as per manufacturer recommendations
WARNING
• DO NOT operate with incorrect tube pressures
• CHECK that each seperate tube chamber pressure is at 0.14 BAR (2psi) before each use
• OPERATING with incorrect tube pressures will damage tubes and void warranty
• AMBIENT AIR TEMPERATURE and direct sunlight will affect tube pressures – check tube pressures when conditions change
• DO NOT use handholds or bimini attachment points for towing, lifting or pulling
100-0906-018 Rev A


WARNING
INCORRECT OPERATION CAN BE DANGEROUS
• DO NOT operate unless you have read the user manual
• DO NOT exceed maximum on-water or on-land capabilities of this craft or its operator
• DO NOT operate outside of the maximum conditions:
◦ Maximum Sea State 5
◦ Maximum wave height of 4metres (12ft)
◦ Maximum wind speed of
◦ Beaufort 8 (74kph or 46mph)
• DO NOT use illegally on public roads
GASOLINE VAPOURS CAN EXPLODE
• BEFORE STARTING operate the inboard engine blowers for a minimum of 4 minutes
• CHECK inboard engine compartment for gas vapours
PERFORM SAFETY CHECKS BEFORE COMMENCING JOURNEY
0001-450 Rev A

3. OPERATING THE CRAFT

This craft will provide hours of enjoyment when used and cared for in accordance with these instructions. Please take the time to learn to operate the craft correctly and safely.

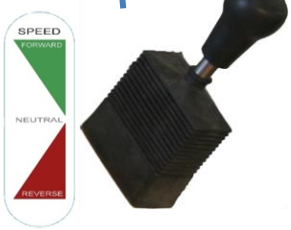
THE CONSOLE

Inboard Throttle

Inboard Ignition

Bow Wheel

Stern Wheel



Speed Joystick

Cabin RIB

Outboard Controller

RIB

RIB

Outboard Ignition

Cabin RIB

Battery Isolator

INTRODUCTION

The following sections provide more detail on how to operate the craft on the land, launching, on the water, and returning to land ready for storage.

A Sealegs has two propulsion systems – one for land, and one for sea. On water, the outboard engine(s) provides the power to propel the craft. On land, the inboard engine provides the power to drive the craft, and to raise and lower the legs. The main controls to operate the craft are located on the console, as detailed on the previous page.

On water, the **Outboard Controller** with integrated trim switches controls the outboard(s). The steering wheel is used to steer the craft on the water.

On land, the inboard engine provides the power for the wheels. Once the inboard engine is running, the forward and reverse speed of the craft is controlled by the **Speed Joystick**. Pushing the joystick forward moves the craft forward, and pulling the joystick backwards reverses the craft. Returning the joystick to the centre positions halts the craft. The steering wheel steers the craft on land.

The **Inboard Throttle** sets the overall amount of power available on land. The further this throttle is pushed forward, the more power is made available to the wheels but the louder the engine noise. Normally this will be set to the 'Drive' position, unless under heavy load, idling, lifting or lowering.

The inboard engine also provides the power to raise and lower the legs. This is performed using the **Bow Wheel** and **Stern Wheel** rocker switches on the console.

 WARNING	Sealegs Amphibious Craft are not road legal and should not be driven on public roads.

BEFORE EACH JOURNEY

Safety checks must be undertaken before each journey.

Recommended Safety Equipment

 CAUTION	The sea can be unpredictable. Be prepared by carrying the following equipment, as a minimum, at all times.

- Appropriate lifejackets or buoyancy aid suitable for each person
- Appropriate weatherproof clothing
- VHF radio and/or appropriate communications devices on board
- Binoculars

- Compass and Charts
- Anchor and line
- At least two warps. *See also Anchoring, Mooring and Towing on page 3-18*
- Distress flares
- Knife in protective sheath
- Drinking water
- First aid kit including compress and thermal blanket
- Bucket

 WARNING	To comply with CE category B offshore, a life raft with sufficient capacity to accommodate the maximum number of crew should be carried on board.

A life raft may be stowed in the forward cockpit, fixed to the installed tie-down eye fittings.

Passengers and Crew

- Ensure the person operating the craft has read and understood this manual, and understands the local rules and regulations regarding boat use.
- Familiarise each person on board with the safety equipment available on the craft.

Craft Visual Check

Before each journey conduct a visual check to ensure the craft is in good order, paying particular attention to the following:

- **Fuel**: fuel tank full, fuel filter checked for contamination, and fuel lines checked visually for leaks. Ensure there is sufficient fuel for the anticipated journey, including a margin for contingencies. *See Fuel System on page 3-21 and Petrol and Oils on page 4-2*
- **Engines**: inboard and outboard engine(s) checked for oil, and serviced as per manufacturer recommendations. Inspect exhaust system for leaks or vapours. *See Petrol and Oils on page 4-2*
- **Tyres**: pressure checked, and rims and wheel nuts inspected. *See Tyres and Rims on page 4-4*
- **Inflatable tubes**: inspected and pressure checked. *See Tube Maintenance on page 4-6*
- **Steering**: confirm smooth operation, and associated linkages visually checked. *See Steering System on page 4-7*
- **Battery**: charged and cable terminals clean and tight. *See Electrical System* and *Battery Maintenance on page 4-9*
- **Hydraulics**: operation checked, attachment/pivot points checked and secure, and all hydraulic lines and fittings checked visually for leaks (including wheel motors). *See Sealegs Hydraulic System on page 4-8*
- **Outboard Ignition kill switch**: outboard ignition safety bungee cord fitted and operational.
- **Navigation**: lights and electronics operate correctly, and navigation charts are available
- **Bilge pump**: operation checked and filter cleaned, transom drain plug securely in place. *See Bilge Pumps on page 4-12*

- **Scuppers/ Seacock:** check operation of scuppers and seacocks. When on water perform a visual check for leaks. *See Through Hull Fittings on page 4-14*
- **Fire safety equipment:** fire equipment checked. *See Fire Fighting Equipment on page 3-22*

For more information on the items above *see Section 4, Care and Maintenance.*

 CAUTION	If the craft is fitted with a folding or removable windscreen, this must be securely raised and fixed in place when operating the craft to avoid exposing sharp edges on the windscreen frame.

 DANGER	If a fuel leak or fumes are detected, do not start the engine. Ensure all crew leave the boat and have a qualified person repair the fault as soon as possible

Weather and Water Conditions

- Always check the local maritime weather and water conditions before commencing any journey.
- The ability, experience and fitness of the crew must be taken into consideration before making any voyage.
- As a minimum, ensure that the anticipated wind and sea conditions are within the capability of the boat and that the crew are able to handle the boat in these conditions.

DRIVING THE AMPHIBIOUS CRAFT ON LAND

Starting the Inboard Engine

- Turn the **Battery Isolator** switch(es) to the 'On' position.

Battery Isolator *Switch 'Off'*

Battery Isolator *Switch 'On'*

- Ensure that the **Speed Joystick** is in the neutral position, to ensure the craft doesn't move forward until you are ready once started.
- Set the **Inboard Throttle** approximately midway, ready for the inboard starting.

- To start the inboard engine, turn the **Inboard Ignition Key** clockwise to its final position. If the inboard is 'cold', apply the choke by pushing the key in momentarily after the inboard starts to crank.
- Continue cranking and applying choke intermittently until the inboard starts. If the inboard engine is 'warm' from recent use, choke is not normally required.
- Once the inboard engine starts and has idled briefly, gently move the **Inboard Throttle** towards the 'drive' position.

Steering, Acceleration and Deceleration

- To move the boat forward on land, gently push the **Speed Joystick** on the console forward. The further the lever is pushed, the greater the acceleration
- Return the **Speed Joystick** to the central neutral position to stop
- To reverse the boat, gently pull the **Speed Joystick** backwards
- Steer the boat left and right using the console steering wheel
- Greater control can be achieved by moving the joystick in small increments

If the inboard engine starts to stall while driving on land, such as climbing a steep gradient, ensure the **Inboard Throttle** is set to 'Max'. If the inboard engine continues to stall, pull back on the **Speed Joystick** to reduce the load on the inboard engine, but to still allow the craft to travel. The hydraulic wheel motors produce the most torque at lower speeds, so operating at a lower speed provides the most pulling power.

DANGER	Do not use the craft on slopes greater than 1:5 Do not drive the craft across slopes Do not park the craft on a slope Do not use the craft unless a safety runoff path is available

CAUTION	The legs must be straight and fully extended when driving or raising and lowering the craft on land. Driving when the legs are not fully extended may cause excessive load and damage. This is not covered under warranty.

CAUTION	As with any moving vehicle, appropriate care must be taken when driving the craft. The amphibious craft has a maximum speed of approximately 7km/h on land; however reduce to a safe speed to suit the conditions and terrain.

Recommended Inboard Run Time

Sealegs 7.7m models are fitted with Xtended Run Time (XRT) as standard. Depending on external air temperature, the recommended maximum run time of the inboard is up to 30 minutes continuous use per hour. *See Xtended Run Time (XRT) Operation on page 3-20.*

 WARNING	Running your inboard longer than 30 minutes per hour on XRT models can result in catastrophic hydraulic failure and may void the warranty.

Terrain

Sealegs 7.7m models are fitted with AWD operation which engages all 3 wheels, and generally provides more traction compared to standard rear-wheel drive. Sealegs fitted with AWD are designed to operate in terrain similar to where a 4WD car would be able to operate. That is softer or steeper land than normal, or with gravel, but the surface being generally free of rocks and potholes.

 WARNING	Driving a Sealegs over rocks, potholes, curbs or similar obstructions is not recommended. Operating a craft in this way will shorten the life of the wheel motors, and excessive abuse will cause failure. This is not covered under warranty.

 WARNING	Avoid driving across a transverse incline. Do not attempt to drive up or down slopes of greater than 14 degrees. Ensure a sufficient safety run-off path is always available.

When travelling over soft terrain or other at-risk areas it is important to safely maintain momentum and avoid excessive turning. Setting the **Inboard Throttle** to 'Max' to run the inboard engine at full speed and pulling back on the **Speed Joystick** will maximise the pulling power from the craft and decrease the chance of stalling.

To get out of difficult terrain, under-wheel traction aids such as *'Max Trax'* can be used to gain extra traction. For soft surfaces reducing the tyre pressure can also help to increase traction. Tyre pressure should not normally be reduced below the minimum operating pressure of 18psi (1.24bar). Ensure tyres are returned to a normal operating pressure as soon as possible.

DRIVING INTO THE WATER

When moving the Sealegs Amphibious Craft from land to sea, the objective is to achieve a smooth transition of power from the wheels to the outboard. While the process may appear involved at first, with practice launching will become easier.

The craft is first driven slowly into the water using the wheels. Once water depth is sufficient to cover the propeller the outboard is started, while still driving on the wheels. As the craft begins to float and the wheels leave the seabed, more power is applied to the outboard to take control of the craft. Once the boat is safely floating under control of the outboard motor, the wheels can then be stopped and raised out of the water and the inboard engine switched off, and powered away using the outboard.

 WARNING	Always ensure a smooth approach path. That is a clear pathway, free from people, potholes and obstacles. If the approach path is unknown extra care and caution must be taken. Ensure an extremely slow approach, ideally less than 2 km/hr.

 CAUTION	It is recommended that a calm, flat beach be used initially until the operator gains confidence entering and exiting the water. The operator may then wish to progress to more difficult conditions.

 CAUTION	Double check the transom drain plug is in place before entering the water

Note that the craft can be driven slowly in the water using the outboard while the legs are still down in the water, although obviously doing so with any speed will cause excess water to be splashed around the boat.

To minimise any risk of the boat being pushed out of control by adverse sea conditions when launching, it is normally more important that the boat be brought under safe control of the outboard power before the operator concentrates on raising the wheels. Please note however that when the bow wheel is down, craft steering control can be dramatically affected, especially in areas where a strong tidal flow is present.

Entering the Water

- Ensure the inboard engine is running with the **Inboard Throttle** towards the 'Drive' position.
  See Starting the Inboard Engine on page 3-4

- Line up a smooth approach path to the water and slowly drive the craft into the water, controlling the craft speed using the **Speed Joystick**.
- Prepare the outboard for starting by lowering the outboard into the water using the **Outboard Trim** buttons on the **Outboard Throttle**. As a general guide, on a flat sandy beach or ramp set the trim to approximately 70%. On a rocky launch area, the outboard can be trimmed out higher to help protect the lower part of the outboard (skeg).

- Confirm the **Outboard Throttle** is set in the neutral position. For safety reasons, having the outboard set to any position other than neutral will prevent the outboard from starting.
- Once the outboard propeller is fully submerged and in sufficient water depth, turn the **Outboard Ignition Key** to start the outboard and set the **Outboard Throttle** to a low comfortable speed. Note this should be done before the craft begins to float.
- Take control of the craft with the outboard as soon as possible. Once the water reaches sufficient depth the craft will begin to float like a traditional boat, and the wheels will break contact with the seabed. At this point the craft is controlled by the outboard. Gently increase the **Outboard Throttle** power so the boat moves forward and is under safe control.

Lifting the Legs

- Once the craft motion is safely controlled by the outboard, stop the wheels by returning the **Speed Joystick** to the neutral position.
- Move the **Inboard Throttle** towards the 'Lift' position.
- Press the **Bow Wheel** switch to the 'Wheels Up' position to raise the front wheel and leg out of the water. Hold the switch until the leg is fully raised and the confirmation 'beep' sound is heard.
- Repeat the process with the **Stern Wheels**.
- Once both front and rear legs are fully raised, the inboard engine can be stopped by returning the **Inboard Ignition Key** to the vertical position. *See Turning off the Inboard on page 3-15*

OPERATION ON THE WATER

When operating on the water, the following should be noted:

- It is expected the operator takes all reasonable care on the water, including respect for local laws and regulations.
- Incorrect operation of the boat on the water can result in serious injury or death, so it is recommended the operator undertake independent training on the safe use of watercraft.
- Ensure all crew are informed about the crafts behaviour. Before conducting any rapid acceleration or high-speed manoeuvres, passengers must be warned to sit and hold on.
- The helmsman may have to take sharp avoiding action at any time. Passengers should therefore be seated and holding on when underway.
- Periodic inspection of the propeller for excessive wear or damage is recommended in order to maintain peak performance and to maximise the longevity of the engine

 CAUTION	Seaways are infinitely variable and all craft can meet conditions that will challenge the boats handling characteristics and/or the helmsman's ability. Proceed with a margin for error at all times. Avoid making sharp turns at speed, particularly in a short seaway.

 WARNING	Incorrect operation on the water can result in serious injury or death.

 CAUTION	It is strongly recommended that helmsmen receive adequate training in boat handling before setting to sea for the first time

 CAUTION	Be aware that factors such as altitude, temperature, load, and bottom growth may affect performance

Visibility from Main Steering Position

The international regulations for preventing collisions at sea (COLREGS) and the rules of the road require that a proper lookout be maintained at all times, with observance of right of way. Make certain no other vessels are in the path before proceeding.

For the safety of those on and around the craft, ensure clear visibility is maintained at all times. Care must be taken as operator vision from the helm can be obstructed by high trim angles of the craft and other factors caused by one or more of the following conditions:

- Propulsion engine trim angles
- Loading and load distribution
- Speed
- Rapid acceleration
- Transition from displacement to planing
- Sea conditions
- Rain and spray
- Darkness and fog
- Persons or movable gear in operator's field of vision

Using the Outboard and Trim

Refer to the separate outboard manual for proper use and operation of the outboard. Become familiar with the outboard and trim operation in calm, controlled conditions before venturing into open sea or operating at speed.

The correct trim angle setting for the outboard will depend on the boat speed and environmental conditions. Setting the **Outboard Trim** on the **Outboard Throttle** adjusts the angle the boat rides through the water. Trimming in (bringing the propeller closer to the transom) pushes the bow down and raises the transom. Trimming out raises the bow and lowers the stern. Trimming out too far can lift the bow too high out of the water, while trimming too far in will push the bow into the water. A 'neutral' trim will flatten out the hull. Excessive trimming either direction can significantly alter the handling of the craft.

One method of setting trim in calm water is to trim the engine all the way in, and start trimming up slowly. The boat speed will increase as the most efficient trim angle is found. If the boat porpoises (regular bow up and down motion not caused by waves), speed starts to decrease or cavitation occurs (free air around the propeller causing a change in propeller speed), then this indicates the outboard has been trimmed out too far.

In choppier waters, bringing the trim in to flatten the angle of the hull can sometimes provide a more controlled and comfortable ride. If adverse conditions occur, reduce throttle and/or adjust the trim to maintain control.

Navigation Lights

Night boating requires running lights. The craft is fitted with navigation lights port and starboard (on the console, or on the cabin as appropriate), and a steaming light on top of the ski pole. The running/ navigation lights are controlled on the console.

 CAUTION	Check proper operation of navigation lights before heading out and carry replacement bulbs for all navigation lights

 CAUTION	Always replace bulbs with one of the same wattage

Risk of Loss of Stability

The stability and buoyancy of this boat has been assessed on the basis of the load data specified in the *Craft Technical Summary on page 5-1*.

This craft has been tested in a wide variety of sea and load conditions and no dangerous handling characteristics have been discovered during normal operation. However the helmsman should be aware that no high-speed craft can be guaranteed to handle safely in all conditions. Sea and climate can combine to create unique conditions. The helmsman should drive the craft according to the conditions, keeping full control of the craft's motions with a margin of safety in hand at all times.

It is strongly recommended that users undergo training in the safe operation of high speed craft before using this craft.

 WARNING	The boat should never carry more than the recommended load; *see Craft Technical Summary on page 5-1*. The load should be suitably distributed, bearing in mind that stability is most significantly reduced by any weight added high up in the boat.

 CAUTION	Stability can also be adversely affected by sloshing fluid. Bilge water should be kept to a minimum. If the boat should become swamped, do not undertake high speed manoeuvres until the water has been cleared.

 WARNING	Loose equipment can cause damage to the craft and affect stability. Ensure all loose equipment is properly stowed before setting out.

 CAUTION	The stability of this boat is significantly reduced at speeds above displacement speed.

 CAUTION	Stability may be reduced when towing or lifting heavy weights using a davit or boom.

 CAUTION	Breaking waves are a serious stability hazard

 CAUTION	This craft may be entirely clear of the water for short periods of time in normal operation (i.e. become airborne)

Risk of Flooding

 CAUTION	The following opening are marked “WATERTIGHT OPENING – KEEP SHUT WHEN UNDERWAY” and care should be taken to observe this warning: • Transom platform hatches • Console access • Deck locker hatch

 CAUTION	In rough weather, hatches, lockers and companionway/doorways should be closed to minimise the risk of water ingress

 CAUTION	Care should be taken to ensure the cockpit drains are not blocked and that the cockpit can drain freely

 WARNING	Ensure limber holes are clear

 CAUTION	Check the functionality of bilge pumps regularly and clear debris from their inlets.

Protection from Falling Overboard

Care must be taken to prevent passengers and crew from falling overboard, on both land and sea.

On this craft, the working deck area is defined as the forward deck, around the console and seating deck aft. Areas outside of this working area should only be used whilst the leaving or arriving at a mooring or whilst the craft is not underway.

 WARNING	This craft can operate at high speed and with great acceleration. All crew should be seated and holding the rigid handles provided at all times when underway. Accelerating or turning with crew standing is very likely to result in man-overboard.

 WARNING	A re-boarding device should be deployed whenever the craft is used singlehandedly. A boarding ladder may be useful for this purpose.

 WARNING	Most slips and falls occur during boarding and disembarking. Be aware that wet decks can be slippery. Wear slip resistant footwear at all times.

In the event of a member of the crew falling overboard, they should be recovered with assistance and pulled up over the side of the craft.

EXITING THE WATER

Exiting the water and returning to land is essentially the reverse of driving into the water. The objective is a smooth transition of boat control from the outboard to the inboard engine and wheels on land. This is achieved by starting the inboard engine and lowering the wheels whilst slowly approaching shore, then smoothly transitioning power from the outboard to the wheels.

 WARNING	Always ensure a smooth approach path. That is a clear pathway free from deep potholes and large obstacles. If the approach path is unknown extra care and caution must be taken. Ensure an extremely slow approach, ideally less than 1 knot.

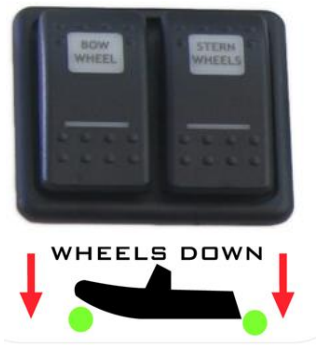
 CAUTION	It is recommended that a calm, flat beach be used initially until the operator gains confidence entering and exiting the water. The operator may then wish to progress to more difficult terrain.

CAUTION	Ensure the craft is only operating at slow speed when lowering the wheels into water as the drag created during this process will impact craft control and stability. Note that when the bow wheel is down craft steering control can be dramatically affected, especially in areas where a strong tidal flow is present.

Preparing to Exit the Water

- Choose a smooth and comfortable approach path and reduce outboard speed as the landing area is approached. Boat speed on approach should not exceed 5 knots.
- Start the inboard motor and move the **Inboard Throttle** towards the 'Lift' position. *See Starting the Inboard Engine on page 3-4*

Lowering the Legs



- Once near shore, lower the wheels. If a depth sounder is fitted, a reading of 1m may be useful guide. Press and hold the **Stern Wheels** button to lower the rear wheels. Leave the button depressed until the legs are in the fully lowered position and the confirmation 'beep' is heard.
- Once the rear legs are lowered, push and hold the **Bow Wheel** button to lower the front wheel until it is fully lowered and the confirmation 'beep' has sounded
- Drive the boat towards the land with both the outboard and inboard motors running. Note the outboard power may need to be increased to allow for the extra drag of the wheels.

Exiting the Water

- To help ensure a smooth transition to land, move the **Inboard Throttle** towards the 'Drive' position and set the wheels slowly turning by pushing the **Speed Joystick** partially forward, ready for contact with the seabed.
- As the craft comes into shore and the water level drops, the wheels will make contact with the seabed and the boat will stop floating. Use the **Speed Joystick** and steering wheel to ensure the craft is under control of the hydraulic wheel system, and drive towards shore.
- Once under control of the hydraulic wheel system, the outboard can be stopped. Set the **Outboard Throttle** to 'Neutral' and switch the **Outboard Ignition Key** to 'Off'. This should be completed before the outboard propeller is out of the water.
- Use the **Outboard Trim** buttons to raise the outboard away from the ground
- Use the **Speed Joystick** to increase the land speed if required, and drive the craft carefully and safely onto land

 CAUTION	The legs must be straight and fully extended when driving the craft on land. Driving when the legs are not fully extended may cause excessive load and damage. This is not covered under warranty.

Turning off the Inboard

- Drive the craft on land as required. *See Driving the Amphibious Craft on Land on page 3-4*
- Return the **Speed Joystick** to the 'Neutral' position to stop the craft.
- Move the **Inboard Throttle** to idle, and idle the inboard for 20 seconds.
- Stop the inboard engine by returning the **Inboard Ignition Key** to the vertical (off) position.

 CAUTION	After running the inboard engine, reduce the inboard throttle to idle for 20 seconds before turning off in order to prevent any exhaust backfire.

LOWERING THE CRAFT ON LAND

The following section describes how to lower the Sealegs on land. This may be useful to assist people boarding the craft, or when leaving the craft unattended for any length of time.

 CAUTION	Care must be taken when raising or lowering the legs on land, as damage to the hull and outboard can occur if not performed carefully or an appropriate soft surface.

 CAUTION	Raising and lowering legs on land requires the front wheel to be straight. Raising or lowering the front wheel on land whilst the steering is turned right or left may cause excessive load damage. This is not covered under warranty.

 CAUTION	Once lowered onto the ground, the boat may tilt suddenly to either the left or the right if the rear wheels are fully retracted.

Lowering the Legs on Land

- Ensure the ground that the boat will be lowered onto is flat and soft (preferably sand or grass). Alternatively ensure there is sufficient protection under the boat to prevent damage to areas where the hull contacts the ground.
- Ensure the inboard engine is running. *See Starting the Inboard Engine on page 3-4*
- Move the **Inboard Throttle** towards the 'Lift' position
- Ensure the front wheel is straight

- Ensure the outboard engine is fully raised using the trim switches
- Slowly raise the front leg to gently lower the hull onto the ground. Repeat with the rear legs. *See Lifting the Legs on page 3-8.*

CAUTION	Note the craft may lunge forward as the rear legs are raised. Ensure there is sufficient room around the craft to allow for this movement.

BRAKING & ABS (AUTOMATIC BRAKING SYSTEM)

While the engine is running, Sealegs Craft are braked hydraulically while the **Speed Joystick** is in the central 'neutral' position.

The ABS (Automatic Braking System) will automatically apply the park brake when the inboard engine is turned off. This means that the craft will not free-wheel or roll when the engine is turned off.

Emergency Stop Switch

ABS includes a red emergency stop switch. This switch is for the unlikely event of a hydraulic failure which causes a runaway scenario or loss of speed control. This switch is not intended for normal use and should only be used in emergencies.

Pushing this switch down firmly until it locks will instantly turn off the inboard engine and simultaneously engage the brakes. To allow the inboard to be re-started the switch needs to be rotated clockwise until it pops back to its normal position.

Using the brakes while the craft is underway causes wear to the braking system. After five applications of the brakes while underway, the craft must be taken to an authorised Sealegs servicing agent where they shall be inspected to ensure safe braking performance.

DANGER	Do not use the craft on slopes greater than 1:5 Do not drive the craft across slopes Do not park the craft on a slope Do not use the craft unless a safety runoff path is available

AFTER EACH JOURNEY

After each journey, the following steps should be performed:

- Ensure the **Battery Isolator** switch(es) are turned to the 'Off' position

Battery Isolator *Switch 'Off'*

- Run fresh water through the outboard motor. Consult the outboard manual for more detail.
- Open all seacock valves and drainage bungs to drain any water from the craft.
- Wash down the craft with fresh water, taking care to remove all salt, sand and debris.
- Close all seacock valves and drainage bungs once all residual water has finished draining.

LEAVING AND SECURING THE CRAFT

Removing the **Inboard Ignition Key** will help secure the boat; the inboard motor will be unable to start. Ensure the **Battery Isolator** is 'Off' when leaving the boat.

If the craft is fitted with a fold-down or removable windscreen, this may be lowered to reduce the craft height if required for storing in a shed or garage.

CAUTION	Note the windscreen must be securely raised when operating the craft, to avoid exposing the operator to sharp edges of the windscreen frame. Extra care must be taken when preparing the craft for storage with the windscreen frame folded-down or removed.

If the craft is going to be unused or stored, ensure the craft is fully clean, drained of water, dried and stored out of the water:

- Undertake outboard cleaning and storage recommendations as detailed in the separate outboard documentation, including flushing of the outboard. If required, perform the 'winterising' function of the outboard, as per the separate outboard owner's manual.

- Use a trickle charger/ maintenance charger to keep the battery in a charged condition. Batteries will self-discharge over time, and allowing the battery to deeply discharge may significantly shorten the battery life. The **Accessory socket** on the console is a continuous circuit suitable for the attachment of a low current trickle/ maintenance charger.

Accessory socket

- It is recommended that the hatches be opened and the seat squabs and carpet (if fitted) be removed to assist air flow.
- It is highly recommended that the craft be stored under a permanent covering such as a boat shed or garage, which shall provide full protection from sun, UV, rain, snow, and sand and/or salt spray.
- If it is impossible to store the craft undercover, consider using a full-length material cover available from Sealegs. Ensure the boat is dry before covering, and periodically remove the cover to ventilate the boat. This will help alleviate condensation build-up and minimise mould/mildew growth.
- Lubricate and protect moving parts of the craft with light machine oil or similar.

CAUTION	Failure to follow the recommended storage procedures will severely reduce the life and appearance of the fitments and finishes.

CAUTION	Do not leave the craft left in the water overnight. The craft is not designed to be left in the water for extended periods. The craft should be stored on land overnight.

ANCHORING, MOORING AND TOWING

Care must be taken when anchoring, mooring or towing the craft. It is the operator's responsibility to ensure that mooring and towing lines, anchors and chains are adequate for the vessel's intended use. Owners should also consider what action will be necessary when securing a tow line on board.

Only the points of the craft detailed below should be used for attaching. Never use fittings such as handles or bimini mount points for anything other than their intended purpose.


Front Cleats (7.7 Cabin)


Front Cleat (7.7 RIB)


Towing/Tie-down Points

The craft are not for accommodation or sleeping. The cockpit area should not be fully enclosed.

Towing

A towing point is fitted to the bow of the craft on the rigid hull under the hydraulic wheel. No other fitting should be used to tow the craft.

 CAUTION	The breaking strength of lines / chains should not exceed 80% of the breaking strength of the strong point to which it is attached.

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

 CAUTION	A tow line should always be made fast in a way that it can be released when under load.

Mooring

When moored, the seacocks must be in the closed position. *See Through Hull Fittings on page 4-14*.

 CAUTION	Do not leave the craft moored unattended. The craft is not designed to be left in the water for extended periods. The craft should be stored on land overnight.

 CAUTION	When refloating via the incoming tide (when the legs are either in the up or down position) ensure the seacocks are closed to avoid water ingress via the scuppers.

Trailering

When transporting the craft on a trailer:

- Secure the craft by the front towing point and the front tie-down point, using separate strops or chains.
- Tie the rear of the boat to the installed eyelets using strops of sufficient break strength rating. Do not tie strops on or around the steering rams, leg rams or hydraulic hoses.
- Observe any specific outboard trailering settings (e.g. engaging the outboard trailering bracket)
- Ensure the trailer is operated within local authority regulations

 CAUTION	Always check local authority regulations when trailering. Some regions may require the tubes to be deflated to keep within local maximum trailer width requirements.

Trucking

When transporting the craft on a flatbed truck or similar, secure the craft by the front towing/ tie down points, and tie the rear of the boat using strops of sufficient break strength rating.

Ensure the craft is lowered onto the hull and sufficiently stropped to the truck in case there is any movement of the legs during transit. The use of a wooden cradle should be considered if the journey will be long or arduous. *See also Trailering above.*

XTENDED RUN TIME (XRT) OPERATION

The Xtended Run Time (XRT) model of the Sealegs Amphibious Craft, has features installed that allows the inboard engine to run for longer periods of time, as well as providing longer battery run time. The XRT model can operate the inboard engine for up to 30 minutes continuous use per hour.

If the XRT option has been specified, then the following items will be installed on the craft:

- oil cooler and oil cooler fan will be installed inside the engine box
- thermal warning lights will be present on the dash panel
- an XRT alternator will be connected to the inboard motor inside the engine box

 WARNING	Running the inboard engine for longer than 30 minutes per hour on XRT models can result in catastrophic failure of the hydraulic system and may void the warranty.

Xtended Run Time (XRT) Warning Features

The length of time that the craft is able to operate safely on land before reaching maximum operating temperature is dependent on the external air temperature and engine load. The maximum recommended run time for XRT models is 30 minutes continuous use per hour.

When the temperature of the hydraulic pump exceeds 47C° the XRT oil cooler fan will switch on automatically. This is normal operation to extend the operating time.

The XRT system is also fitted with over-temperature alarms:

- Inboard Temperature: When the temperature of the Honda inboard becomes dangerously high a warning alarm will sound. The warning light 'Inboard Temp' on the dash panel will also illuminate.
- Hydraulic Temperature: When the temperature of the hydraulic pump exceeds 90C° a warning alarm will sound. The warning light 'Hydraulic Temp' on the dash panel will also illuminate.

Inboard Temp *Hydraulic Temp*

If either of the temperature warning alarms sound, reduce the driving load on the craft immediately. If the alarm does not silence within a short period, the inboard engine should be switched off and the craft allowed to cool.

Xtended Run Time (XRT) Alternator

An XRT alternator is installed on the Honda inboard motor providing extended battery operation time to the craft. The XRT alternator charges the system when the inboard engine is running.

XRT Charge Lamp

FUEL SYSTEM

The fuel filler is located on the starboard side of the console/cabin.

It is recommended that the craft should be refuelled at a petrol station on land to avoid the potential of spilling fuel overboard into the environment. Splashing water over surfaces around the filler cap may prevent spilled fuel from adhering to the deck surface.

Fuel Filler

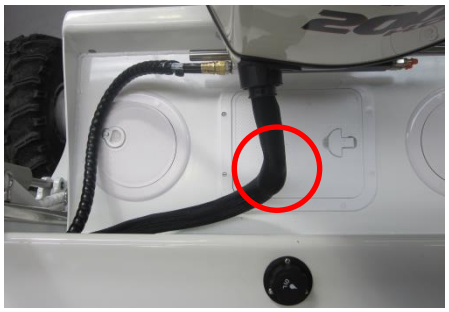
Unscrewing the protective fuel cover will reveal the fuel fill opening. Carefully add fuel, taking care not to splash any fuel. Ensure the appropriate fuel is used for the fitted outboard (*see Petrol Requirements on page 4-2)*. Do not fill the tank to its maximum; allow room for expansion. Close the fuel cap firmly, but do not over-tighten as this may damage the seals and fittings.

WARNING	Petrol is extremely flammable and highly explosive under certain conditions. Improper handling of fuel could result in property damage, serious injury or death.

CAUTION	Never smoke when refuelling, or inspecting or working with the fuel system

Priming the Fuel System

Should the fuel system be starved of fuel, it may be necessary to re-prime the system. Use the primer bulb(s) located inside the outboard sock(s) to prime the outboard engine(s). This is located at the transom, use the bulge in the sock(s) to locate the primer bulb(s). The inboard engine primes while cranking.



Fuel Primer Bulb(s)

Single outboard craft have one primer bulb and twin outboard craft have one for each outboard.

CAUTION	To avoid fuel spillage, it is recommended that care is taken not to overfill the fuel tank. Clean up any spilt fuel immediately

CAUTION	Fuel is considered chemical waste. Keep an absorbing cloth close by when filling tanks.

FIRE FIGHTING EQUIPMENT

It is recommended that a 1 kg powder fire extinguisher (of minimum rating 1A:10B:E) be carried on board at all times. This is normally located in either the console port locker or underneath the starboard queen seat.

Inboard Engine Fire Port Location and Operation

The inboard engine box has an extinguisher discharge opening. In the unlikely event of an inboard engine fire, the inboard engine should be stopped immediately using the **Inboard Ignition**. Turn the **Battery Isolator** switch off, push the fire extinguisher through the fire port opening and activate.

CAUTION	It is the responsibility of the boat owner/operator to: • check equipment at intervals as stated on equipment • replace any extinguisher used with one of same rating • inform all crew about the location and operation of all fire fighting devices

Risk of Fire

To help reduce the risks of fire:

- Never obstruct portable extinguishers in lockers
- Never obstruct safety controls (shut off valves, switches)
- Never smoke while handling fuel
- Never use gas lights in craft
- Never modify the craft's systems (especially fuel systems)
- Never fill any fuel tank whilst machinery is running
- The bilge system should be kept clean, and regularly checked for oil and fuel contamination. *See also Bilge Pumps on page 4-12*.
- Take care not to damage fuel lines, and check the condition of fuel lines regularly

 WARNING	Do not smoke or use an open flame when filling with fuel, if the fuel tank cap is removed, when working on the fuel system or in the engine bay.

 DANGER	Never use a flame to check for leaks

 WARNING	Inspect the fuel system for leakage regularly. Hoses in the fuel system must be inspected at least annually, and replaced if any deterioration or opening is found. If fuel leakage is present, have the system repaired before further use. System repairs should only be made by competent personnel.

 CAUTION	All components that burn fuel require an air supply. Ensure all air intakes are clear before fuel burning components are running.

BATTERY OPERATION

A dedicated house/ start battery system is fitted to the craft, the following items are installed:

- Two batteries, located under the port queen seat or in the aft face of the console
- Master **Battery Isolator** switch(es) are mounted on the front of the port queen seat or on the starboard side of the console

Switch 'Off'

Switch 'On'

Switch 'Combine Batteries'

Normal Use

- Turn the **Battery Isolator** switch(es) to the 'On' position. The craft is now ready for operation.

Battery Charging

Battery charging is automatic with either the inboard engine or the outboard motor(s) running. With the outboard motor(s) running the start battery will be charged first, followed by the house battery. With the inboard engine running the house battery will be charged first, followed by the start battery. The life of the batteries will be extended if they are used periodically.

Emergency Starting

- If the inboard engine or outboard motor(s) won't start then select 'combine batteries' to connect both batteries in parallel and then start the engine.

ANCHOR WINDLASS

If the craft is fitted with a powered anchor windless, then this may be operated by remote control from the steering position.

WARNING	Winches and windlasses generate large forces by the push of a button. Always • keep hands and feet away from the windlass • only allow experienced crew to operate the windlass • prevent accidental pressing of the switches

4. CARE AND MAINTENANCE

To ensure safe and reliable operation and to prolong the life of the Sealegs Amphibious Craft, periodic care and maintenance must be undertaken. Even if this work is not performed directly by the craft owner it is recommended this section be read for an understanding of the requirements.

Always use trained and competent personnel for maintenance, fixing or modifications. Sealegs cannot be held responsible for repairs or modifications not undertaken or approved by them.

 CAUTION	Always maintain the craft properly. Make allowances for and ensure necessary maintenance is performed to allow for deterioration that will occur over time as a result of use or misuse of the boat.

 CAUTION	Modifications that may affect the safety characteristics of the craft must be assessed, executed and documented by competent people.

 CAUTION	Note that any change in the disposition of the masses aboard the craft may significantly affect the stability, trim and performance of the boat.

 CAUTION	Attention is drawn to the completion process whereby structural items, for example steering consoles, seats and superstructures are installed by parties other than the manufacturer of the boat. These items should be installed comply with the relevant clauses of ISO 6185-4 so it can be ensured that any such installations do not invalidate the original assessment.

GENERAL CARE OF SEALEGS AMPHIBIOUS CRAFT

- Before each use, the operator should give the craft a visual inspection to help ensure safe operation. *See Before Each Journey on page 3-2.*
- After each use wash down the craft with fresh water, taking care to remove salt residue. Run fresh water through the outboard engine after every use. *See* After Each Journey *on page 3-16.*
- Do not clean the boat with solvents or any other chemicals. Solvents or petrol can damage inflatable tube material, or other components of the craft. Any accidental spills must be removed immediately with soapy water. *See also Tube Maintenance on page 4-6.*
- Both inboard and outboard engines should be maintained as per manufacturer's warranty
- Regular maintenance servicing is required by an authorised service representative to ensure safe operation. *See* Service Schedule Summary *on page 4-17.*

PETROL AND OILS

The craft's permanently installed petrol fuel system components include a fixed 180 litre (48 US Gallon) fuel tank located under the floor, with a fuel filler point on the starboard face of the console/cabin.

The inboard engine (located in the aft engine box on top of the sole) and outboard engines share the same petrol tank.

Petrol Requirements

As a general guide, the following are octane ratings for some common outboards fitted to Sealegs craft. These are provided for basic guidance only, and the included manufacturer's outboard manual should be consulted to confirm all fuel requirements. An anti-syphon valve is also fitted to the system.

- Evinrude 90HP, 150HP and 200HP ETEC outboards require 96 high octane fuel. Please confirm with the separate Evinrude outboard manufacturer.
- Yamaha 90HP, 150HP, and 200HP outboards require 91 regular octane fuel. Please confirm with the separate Yamaha outboard documentation.

The inboard motor operates on either 91 or 96 octane fuel, and therefore as it shares the same fuel tank as the outboard, the requirements of the outboard engine should be followed.

	The above is given as a basic guide only. Please refer to the outboard manuals for respective petrol specifications. Failure to follow the manufacturer's recommendations could result in catastrophic failure and may void the manufacturer's warranty.

	To avoid fuel spillage, it is recommended that care is taken not to overfill the fuel tank. Any fuel spilled should be cleaned away promptly and safely.

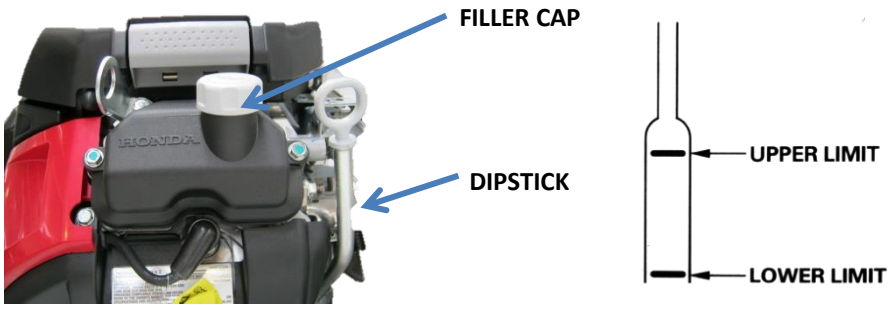
	The use of ethanol-based fuel is not recommended.

Inboard Motor Oil

The inboard engine is a 4 stroke air cooled engine, and requires regular checking of the oil level and routine oil replacements. *See Inboard Engine in* Service Schedule Summary *on page 4-17.*

To check the inboard oil level:

- Ensure the engine stopped and in a level position
- For the Honda GX690 inboard motor, start the engine and let it idle for 1 or 2 minutes. Stop the engine and wait 2 or 3 minutes
- Remove the dipstick and wipe clean
- Fully insert the dipstick, and then remove it to check the oil level. The oil level should be between the upper and lower level of the dipstick
- If the oil level is low, remove the oil filler cap and fill with the recommended oil to the upper limit mark on the dipstick
- Reinstall the dipstick and filler cap



Inboard engine recommended oil:

The recommended oil for general use is SAE 15W-40 with an API Service classification SJ or later. Hotter or colder climates may require oil of a different viscosity. Please consult the separate Honda Owner's Manual for more detail

READ OWNER'S MANUAL	Please refer to the Honda Inboard Owner's Manual for more detailed oil and service requirements. Failure to use the sufficient appropriate oil for the inboard engine can result in failure and may void the manufacturer's warranty.

2-Stroke Outboard Engine Oil Reservoir

The oil reservoir for the Evinrude 150hp & 200hp outboards can be found inside the transom, underneath the engine box. An oil cap is located on the top of the transom, and oil levels can be inspected by lifting the seat off the engine box to view the reservoir.

The oil reservoirs for the 90hp outboards can be found inside their individual engine cowlings.

The recommended oil for Evinrude 90, 150 and 200hp engines is Evinrude XD100. The Evinrude engine has been programmed for XD100 oil; using TC-W3 oil will damage the engine. If XD100 oil is hard to obtain, contact your BRP/ Evinrude dealer to reprogram the outboard to accept TC-W3.

	Please refer to the outboard manuals for oil specifications. Failure to use the appropriate oil for the outboard can result in catastrophic failure and may void the manufacturer's warranty.

TYRES AND RIMS

Tyres must be kept inflated above 18 psi (1.24bar), with recommended pressure not to exceed 22 psi (1.52bar). On soft surfaces (e.g. soft sand) better traction may be obtained by reducing tyre pressure to the lower end of the operating range.

The wheel rims are affixed to studs with wheel nuts. These should be inspected periodically, with the wheel nuts checked with a torque wrench and set as follows:

- Front and Rear wheels 70Nm

Note that excessive tightening without using a calibrated torque wrench could cause the hub bolts to fail. Tightening with a torque wrench is strongly recommended.

HULL AND FITTINGS

The hull and fittings should be inspected periodically for any signs of damage, leakage or loose fitment. This includes areas such as tie points and handles, console and engine box mountings, through-hull fittings such as drainage scuppers/ seacocks and bungs, and areas such as upholstery and windscreen mounts. Any loose or leaking fittings should be rectified.

OUTBOARD MAINTENANCE

	Please consult the separate outboard owner's manuals included in the document pack for detailed instructions on the operation and maintenance of the outboard fitted to the craft.

Ensure the manufacturer recommendations for maintenance are undertaken by competent service technicians.

If the craft is being stored for an extended period of time, consider performing the 'winterising' function of the outboard if required. Consult the separate outboard documentation for details.

If the outboard fails to start, check that the outboard controller is in the ‘Neutral’ position.

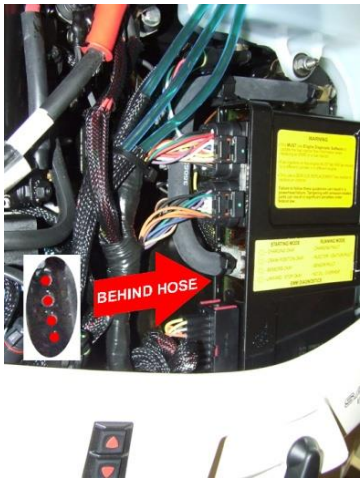
DANGER	If a fuel leak or fumes are detected, do not start the engine. Ensure all crew leave the boat and have a qualified person repair the fault as soon as possible

WARNING	Controls installed with the motor must have a start-in-gear protection device. It is the owner’s responsibility to ensure this is so, should the engine or its controls be repaired/replaced

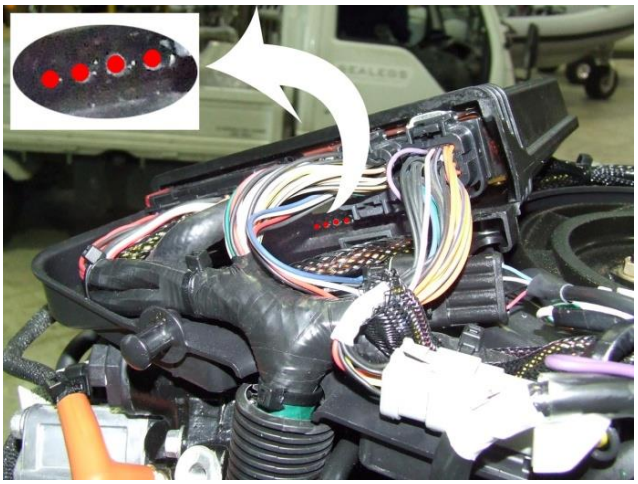
CAUTION	So as to avoid high-speed moving parts, never run a motor with the cover removed

Deciphering the Evinrude Diagnostic LEDs

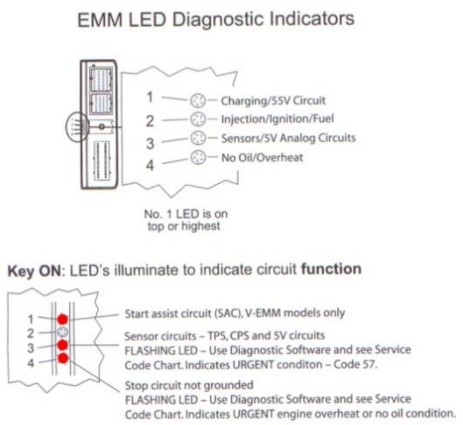
The outboard engine diagnostic LED indicators are found on the EMM unit.

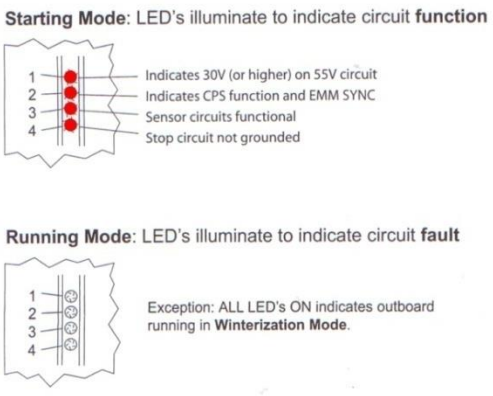


90HP ETEC



150 and 200HP ETEC





TUBE MAINTENANCE

Tube Pressure

Tube pressure will decrease in storage, and vary with ambient temperature. Tube pressure must be checked before each journey. Natural expansion may also occur in sunny conditions or in hot climates, so tube pressure should be periodically checked in these conditions to prevent excess pressure build-up.

The recommended tube pressure is 2 psi (0.14 bar). Do not use compressed air for inflating. Do not operate outside the safe working pressure of 2 psi to 3 psi (0.14 to 0.20 bar).

There are six individual air chambers in the boat. The tubes are inflated one compartment at a time using the tube pump provided. If all chambers are fully deflated, it is preferred to inflate the aft chamber, followed by the middle chamber, and finally the bow chamber.

To inflate one chamber, ensure the area around the valve cap is clean and free from dust and sand. Remove the valve cap from the valve by turning the cap anti-clockwise and pulling out. Connect the pump hose into the valve by pushing the hose end into the valve opening and turning clockwise to lock the hose in place, ready to inflate the tube.

Tube Inflation Valves

Inflate the tube until it is firm to touch. A tube pressure gauge is included to check the pressure is within the safe operating range. The gauge is connected in the same manner as the pump hose end as above.

If the tube is over inflated then air should be vented. To do this remove the valve cap and depress the plunger to release air to make small reductions in compartment pressure. If the tube is left over inflated the tube will tend to "ping" or fail to act as a dampening device when pounding into a sea. If the tube is under inflated it will tend to flap or flog; under no circumstances allow the tube to drag in the water when it is shuddering or flogging as this can significantly damage the tube.

Remember to always install the valve cap after using the valve. Push the cap into the valve opening and turn clockwise until it locks firmly in place.

Tube Cleaning

It is important to wash the craft down after use with soapy water or ORCA® Nautical Finish to remove salt deposits and any sand or grit that may become lodged and cause abrasion, especially around the tube ends and deck joins. To avoid mildew build-up, occasional cleaning with diluted bleach (hypochlorite) is suggested. Finishing products, such as silicones or similar are not recommended.

Checks should also be made for any signs of abrasion and repairs made as required. If the outer coating is damaged in such a way that the nylon fabric is exposed a patch is necessary.

The adhesives used in the tubes of these boats will show some darkening with age. This is quite normal and not harmful.

Suspected Tube Leaks

As described above, tube pressure may vary due to ambient temperature conditions, and will slowly loose pressure over time. Tubes may lose pressure over a 24hr period. If excessive pressure loss is suspected, the following may be checked:

- Cover the tube with a soapy water solution. Bubbles in the soap (as compared to foaming) will appear around the area of any leaks or perforations, indicating a minor repair may be required.
- Remove the valve protection cap, and place soapy water in the valve. Depress the valve plunger to clean any dirt or grit that may be trapped in the valve seal.

While puncture repair kits are available and may be useful in emergency situations, it is recommended that any non-emergency tube repairs be undertaken by qualified tube personnel.

 CAUTION	Certain liquids can be detrimental to the tube material. Rinse off immediately if any liquid other than water comes into contact with the tubes.

HYDRAULICS

The visible hydraulic hoses and fittings should be regularly checked for signs of leakage and excess wear and tear. If hydraulic oil is discovered in the bilge or any other hydraulic leaks are discovered then this should be reported to an Authorised Sealegs Reseller immediately before further use.

 WARNING	Any signs of hydraulic fluid leaks should be investigated by an Authorised Sealegs Reseller immediately. It may be dangerous to operate the craft in that condition, so the craft must be inspected before further use.

 WARNING	Hydraulic oil when under pressure can be extremely dangerous. A small leak when under pressure can cause great damage. Ensure hydraulic servicing is only undertaken by qualified personnel.

Steering System

The craft is fitted with a hydraulic steering system. The outboard steering ram located at the transom and the front wheel steering ram are connected by flexible hoses to the steering wheel helm station at the console. The hydraulic circuit is 'closed' and is without a separate reservoir. Should there be any slow leaks, 'notchy' or clicking noises, the steering will become difficult to operate. The craft should never be used in such a condition. Have an experienced marine engineer bleed and refill the system.

 CAUTION	Refer to the separate steering manufacturer's documentation for information pertaining to the steering gear.

 CAUTION	All components of the steering system must undergo periodic inspection and maintenance to ensure safe operating conditions. Refer to the Scheduled Maintenance section of this manual for further details.

 WARNING	Failure of the steering system will cause loss of control of your boat. Any change in steering such as looseness, tightness, binding etc. must be checked immediately by a qualified person.

 CAUTION	A kill-cord is provided at the helm so the engine will cut-out when pulled. The helmsman should connect him/herself to the kill-cord when the engine is running.

If the steering is not centred with the front wheel/outboard, a steering bypass valve (labelled inside the console beside the DC box) may be opened, the steering re-aligned, and the valve closed. Note it is important that the valve is fully closed, but not as tight as to damage the valve. If in doubt, see an Authorised Sealegs Reseller.

Sealegs Hydraulic System

A Sealegs craft is fitted with a hydraulic wheel and leg lift system powered by the petrol engine in the aft-mounted inboard engine box. The Sealegs hydraulic system has no user serviceable parts. This hydraulic system is a sealed system and should only be serviced by authorised personnel. Incorrect maintenance can have a catastrophic impact on the vessel.

DO NOT attempt to fill the hydraulic tank yourself. The introduction of contaminants to the hydraulic system may cause serious damage, and is not covered by the manufacturer's warranty.

	The Sealegs hydraulic system must only be serviced by an Authorised Sealegs Reseller. Incorrect maintenance may make craft operation unsafe, and may void the manufacturer's warranty.

FIRE FIGHTING EQUIPMENT MAINTENANCE

The fire extinguisher should be checked regularly. See also *Fire Fighting Equipment* on page 3-22.

- Check equipment at intervals as stated on equipment
- Replace any extinguisher with one of same rating or higher

ELECTRICAL SYSTEM AND BATTERY MAINTENANCE

Safe Operation of Electrical Systems

- Check battery and charging system condition before going to sea. Use the console gauges and check voltage levels after starting the inboard engine.
- Disconnect and remove the battery when the craft is in winter storage (cold weather areas) or long term storage
- Check the function of navigation lights before embarking on night passages and carry replacement bulbs for all navigation lights
- Never modify the craft's electrical system or relevant drawings; installation, alterations and maintenance should only be performed by a competent marine electrical technician
- Never leave the craft unattended with the electrical system energised (with the exception of the automatic 24hr bilge pump, fire protection or alarm circuits)

	Petrol vapour can explode. Only fit ignition protected marine parts to replace such items as starters, distributors, alternators, generators etc.

	Do not use jump leads in the petrol engine/tank space or carry out any activity that could generate sparks

	Never install or replace electrical appliances or devices with components exceeding the rated current amperage of the circuit. Never alter or modify the rated current amperage of over-current protection devices

CAUTION	When charging and connecting/disconnecting a battery ensure that no water or metallic objects can inadvertently come into contact with the terminals. Protective terminal covers such as rubber boots on electrical connections must be in place at all times except when servicing equipment.

Battery Maintenance

- Check the battery and charging system condition before going to sea, and regularly when stored.
- Ensure the **Battery Isolator** is turned off when leaving the boat.
- The battery on the craft must be inspected periodically for any signs of corrosion or deterioration. Keep batteries clean and dry.
- Disconnect and remove the batteries when the craft is in winter storage (cold weather conditions) or long term storage.
- Batteries will self-discharge over time, and allowing the battery to deeply discharge may significantly shorten the battery life. Use a trickle charger/ maintenance charger to keep the battery in a charged condition. The accessory socket on the console is a continuous circuit suitable for the attachment of a low current trickle/ maintenance charger. Follow the charger instructions.

Battery Disconnection and Removal

To remove the battery cables:

- Turn off all items drawing power from the battery
- Turn the **Battery Isolator** switch on the main centre console is turned to the 'Off' position
- Remove the negative cable first, then the positive cable. To replace the cables first replace the positive cable, then the negative cable.

CAUTION	Ensure the battery space is well ventilated at all times

CAUTION	When charging and connecting/disconnecting a battery ensure that no water or metallic objects can inadvertently come into contact with the terminals

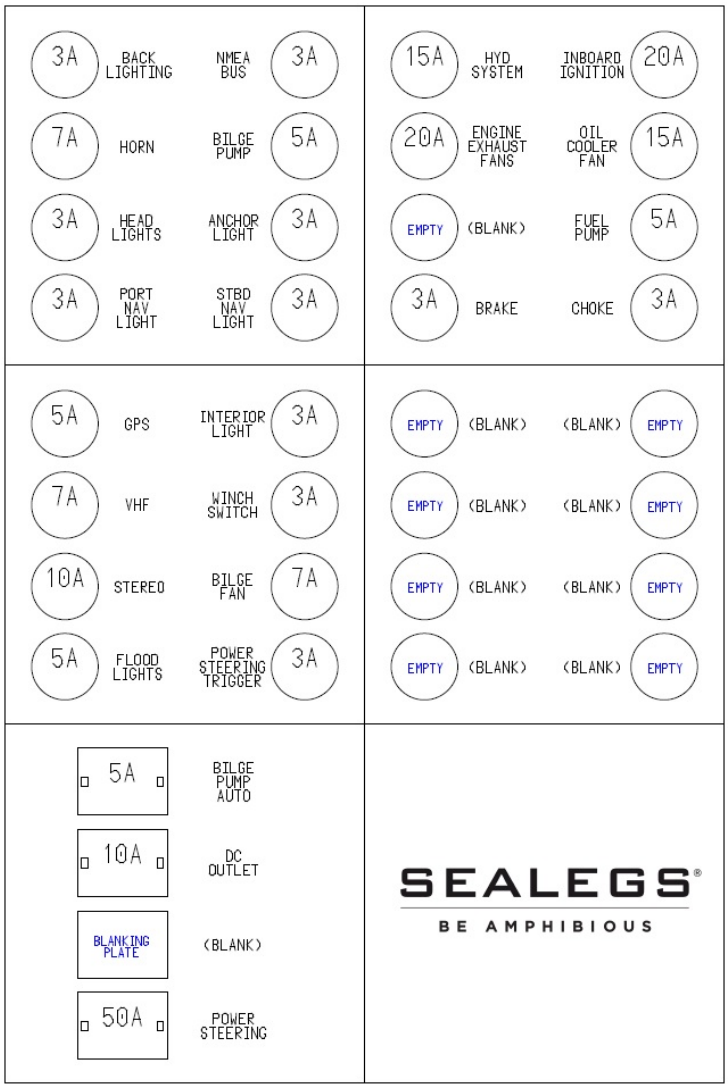
CAUTION	Do not disconnect the batteries while the engine is running; alternator and wiring damage could occur

Electrical System Description

The craft is not fitted with any AC electrical power. The DC system power sources are as follows:

Circuit	Voltage / Rating	Battery Location	Battery Cut-off Switch Location
Main circuits & inboard engine start – house battery	12V 72 AH	Inside Console (7.7m RIB)	STBD AFT face of console (7.7m RIB)
		Under port queen seat (7.7m Cabin RIB)	FWD face of port queen seat (7.7m Cabin RIB)
Outboard circuits and start – starter battery	12V CA 1000	Under console dickie seat (7.7m RIB)	STBD AFT face of console (7.7m RIB)
		Under port queen seat (7.7m Cabin RIB)	FWD face of port queen seat (7.7m Cabin RIB)

The main DC Box is located inside the console. The box contains circuit breakers as indicated by the label on the DC box:



Note that some accessories, such as the VHF radio may also have individual inline fuses as recommended by their manufacturer.

Electrical System Maintenance

- Always disconnect power sources and shut off battery switches, breakers, and/or pull fuses before checking electrical wiring or connectors.
- Check all wiring insulation for signs of fraying or chafing. Check all wiring for proper support.
- Check all terminals for corrosion; corroded terminals and connectors should be replaced or thoroughly cleaned. Tighten terminals securely and spray them with light marine preservative oil or similar.

WARNING	Work on electrical wiring can create shock hazards or sparks

WARNING	Never work on the electrical installation while the system is energised

CAUTION	To prevent arcing or damage to the alternator, always disconnect battery cables before doing any work on the engine's electrical system.

BILGE - BILGE PUMPS, BUNGS, SCUPPERS AND SEACOCKS

Access to the bilge (and access to the bilge pumps and lower scupper seacocks) is made through the pod access hatches.

Periodically inspect the bilge for any contamination, including signs of oil or other foreign objects.

Inside Pod Centre Access Hatch

Bilge Pumps

The automatic bilge pump operates by a float switch located inside the pump. The pump can also be manually operated using the **Bilge Pump** switch located on the console.

The bilge pumps fitted are as follows:

Pump Model	Capacity (l/min)	Type	Pump & Suction Point Location	Access
Rule 1100AM	69.3	Automatic Electric	Bilge sump at aft end inside pod	Centre Access Hatch
Wale Gusher Titan	90 (1 Stroke/sec)	Manual	Bilge sump at aft end inside pod	Stbd Access Hatch

The bilge should always be checked after launch. A small amount of water in the bilge is normal. Large amounts of water or any signs of fuel or oil should be immediately investigated. Never pump fuel or oil overboard when the boat is in the water.

Check the functionality of the rule pump regularly and clear any debris from the inlet filter. Release the supporting arm by unscrewing the black retaining knob. Unclip the pump from the mounting/filter by depressing the two blue push-releases on the pump. After inspecting and cleaning, reseat the pump, ensuring the pump is correctly held in the pump's own retaining clips, before the additional support arm is refitted and retaining knob secured.

Automatic pump with locking arm

The manual pump is intended for use in emergencies such as damage control or in the unlikely event of a failure of the rule pump.

Manual pump in stowed condition

To operate the pump:

1) Open the starboard pod hatch
2) Pull the free hose end out of the hatch and over the side of the pod into the water
3) Free the handle clipped next to the pump and Insert it into the pumps socket
4) Swing the handle port to starboard to evacuate water from the bilge

Ensure you choose a suitable and secure position free of obstructions to operate the pump (such as sitting on the transom, with the ski-pole stabilising the operator).

Manual pump ready for use

It is recommended that a bailer/bucket is also carried aboard for emergency bailing purposes. Ensure the bailer is protected against accidental loss.

CAUTION	The automatic bilge pump is not designed for damage control.

WARNING	Never use flammable solvents (e.g. kerosene) for bilge cleaning, however oily it becomes

Through Hull Fittings

Through-hull fittings in this craft are as described below.

Opening	Location	Recommended position	Condition
Bung	Aft face of pod	Closed	Whenever afloat
		Open	When draining on land after use
Upper Scuppers	Aft face of transom	Automatic	All Conditions
Lower Scuppers/ Seacocks	Aft face of pod/inside the pod access hatch	Closed	Whenever afloat, unless at risk of green water ingress to boat. When re-floating boat via incoming tide.
		Open	When draining or storing on land after use. Whenever afloat while at risk of green water ingress to boat.

Scupper *Bung*

Seacocks shown open

Seacocks shown closed

The lower scuppers fitted to the pod are controlled by seacocks fitted in the bilge. As a general guide:

- Seacocks should be opened whenever there is risk of green water ingress, or when the craft is being cleaned or drained
- Seacocks should be closed whenever afloat or re-floating the craft, unless there is risk of flooding

CABIN – CABIN TOP, WINDSCREEN AND CARPET

If your craft is fitted with a cabin, the following maintenance is recommended.

Cabin Top

The fibreglass gel coat top surface of the cabin should be regularly polished to avoid chalking and prolong its life. Recommended product is Meguiars “Marine Flagship Premium Marine Wax” or an equivalent product suitable for gel coat surface protection.

Follow the application instructions on the packaging.

Windscreen

For washing the windscreen, use mild detergent and fresh water only. Avoid dried salt, always apply fresh water prior to washing. Use only cotton rags to wipe the surface, strictly no brushes. Rainex or a similar product can be used for anti-fog and anti-misting properties if required.

To remove stubborn marks or buff out fine scratches, the use of a polishing compound suitable for use on acrylic surfaces is acceptable. Finish the polishing process by wiping down with a household non-abrasive plastic/glass cleaner using only cotton rags.

 CAUTION	The use of any medium other than clean cotton rags to contact the windscreen surface can cause irreparable damage to the windscreen. Always apply fresh water to the windscreen prior to washing.

Carpet

Cleaning:
If dry, vacuum the carpet to clean it, preferably with a power head vacuum or a normal suction vacuum. If wet, hose down with fresh water. If staining occurs it is always important to act quickly and use a solution of warm fresh water and mild household detergent to lightly rub the affected area. Allow it to soak for 2-3 minutes then rinse thoroughly with fresh water.

Drying:
It is always important to allow the carpet to dry in the open air. It is recommended that the carpet be removed from the cabin area to prohibit the build-up of mould or mildew. This is a minimum requirement before putting the craft into storage. *See Leaving and Securing the Craft on page 3-17.*

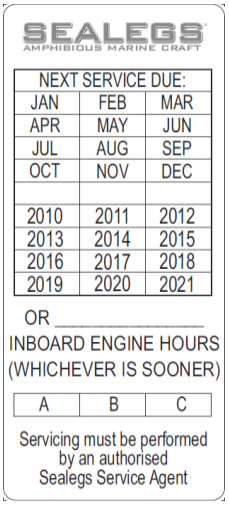
Maintenance:
It is recommended that the carpet is removed regularly to vacuum the floor area underneath and the back face of the carpet. The carpet should then be soaked with a solution of warm fresh water and mild household detergent for 2-3 minutes, then rinsed thoroughly with fresh water on both the front and back.

 CAUTION	Strong chemicals, acids and petroleum may affect the appearance of the product.

SCHEDULED MAINTENANCE

Routine inspection and maintenance is an essential activity to prolong the life of the Sealegs Amphibious Craft, outboard motor, and accessories, as well as being important for crew safety. The service schedule is determined by the frequency of use, application, and the environment in which the craft operates.

The Sealegs service schedule consists of an 'A', 'B', 'C' or 'D' service. A 'P' check is a pre-delivery check, which is normally undertaken by Sealegs or reseller prior to customer delivery. A service placard is placed inside the door of the centre console, and is used to track the next scheduled service.



 WARNING	Craft used in commercial or other high usage applications will require more frequent inspections and maintenance. Adjust the schedule for operating and environmental conditions.

 WARNING	It is highly recommended that only Authorised Sealegs Resellers undertake craft maintenance. Please consult the warranty document for more details. *See Sealegs Warranty on page 8-1.*

 READ OWNER'S MANUAL	Please consult the separate outboard owner's manual for maintenance information on the outboard engine fitted to the craft. *See Outboard Maintenance on page 4-4.*

Service Log

Each service must be completed by an authorised Sealegs Service Agent or Sealegs approved technician to maintain the Sealegs extended warranty. Below is a sample of the service log;

Service Type	**Service Provider/Technician**	**Signature**	**Inboard Hours**	**Outboard Hours**	**Date**
"A"					
Notes					

SERVICE SCHEDULE SUMMARY

The following tables show the required checks for the Sealegs Service Schedule

Boat Owners Name:			
Date:	**Boat Number:**	**Inboard Run Hours:**	**Technician:**

Service Interval Table

Service Type	Year	Inboard Hour Intervals	Outboard Hour Intervals
'A' SERVICE	1	20	50
'B' SERVICE	2	50	100
'C' SERVICE	3	50	100
'B' SERVICE	4	50	100
'D' SERVICE	4	Additional every 4 years irrespective of hours.	
'C' SERVICE	5	50	100
'B' SERVICE	6	50	100
'C' SERVICE	7	50	100
'B' SERVICE	8	50	100
'D' SERVICE	8	Additional every 4 years irrespective of hours.	
'C' SERVICE	9	50	100
'B' SERVICE	10	50	100
'C' SERVICE	11	50	100
'B' SERVICE	12	50	100
'D' SERVICE	12	Additional every 4 years irrespective of hours.	

The following tables provide guidelines for inspection and maintenance. Additional copies for each service may be obtained from the Sealegs Service Centre.

General	A	B	C	D	Reference	Comments	Complete ✓
NOTE: **'I'** = INSPECT FOR WEAR/DAMAGE/LEAKES **'R'** = REPLACE ITEM **'C'** = CHECK SPEC/COMPLETE TASK							
Complete any required Product Updates	C	C	C				
Service Placard fitted and completed	C	C	C				
Note emergency brake events	C	C	C			Number on Counter	

General Items	A	B	C	D	Reference	Comments	Complete ✓
Hatches	I	I	I				
Stickers and labels (Operational/Safety)	I	I	I		SB-02-030A		
Seats and upholstery	I	I	I				
Paintwork	I	I	I				
Deck grip	I	I	I				

Hull and Pontoons	A	B	C	D	Reference	Comments	Complete ✓
Perform tube pressure test	C	C	C				
Tubes or pontoons	I	I	I				
Attachments and fittings	I	I	I				
Bimini/Clears and attachments	I	I	I				
Hull and chine's	I	I	I				
Head light condition and mounting	I	I	I				
Clean between mount flange & pontoon	I	I	I				
Flush hull, ensure no debris in bilge	I	I	I				

Bow	A	B	C	D	Reference	Comments	Complete ✓

Tyre pressure and wheel assembly	I	I	I				
Fork, Fork Pivot and Stop Pad	I	I	I				
Inspect fork pivot O Ring	I	I	I				
Steering pivot, link arm & rod end	I	I	I				
Steering ram and mounting	I	I	I				
2WD Sealegs System	**A**	**B**	**C**	**D**	**Reference**	**Comments**	**Complete ✓**
Wheel nuts and studs	I	I	I				
Hub, Axle and bearings	I	I	I		SB-05-010A, SB-05-040A		
AWD Sealegs System	**A**	**B**	**C**	**D**	**Reference**	**Comments**	**Complete ✓**
Front wheel drive hub and studs	I	I	I				
Front drive motor and mounting	I	I	I				
T13 –T14 external drive hoses	C	C	C				
Hose routing and guides	I	I	I				
Lift ram fittings, body and shaft			I				
Bulkhead fittings			I				
Bow Bracket fasteners			I				
Trunion bolts/pivot bushes		I	C		SB-12-100A		
Hoses L1 – L2			I				
External steering hoses and fittings	I	I	I		SB-05-030A, SB-05-031A		
Yoke pivot pin and retainers	I	I	I		SB-05-030A, SB-05-031A		
Fork pivot end float (all models)	C	C	C		SB-05-010A,SB-05-040A		
REMOVE AND GREASE							
Yoke pivot pin			I		SB-05-030A, SB-05-031A		
Front fork pivot		I	I		SB-05-030A,SB-05-031A		
Yoke insert block and ram pivot pin		I	I		SB-05-030A,SB-05-031A		

Steering pivot, link arm and rod end		I	I				
Stern	**A**	**B**	**C**	**D**	**Reference**	**Comments**	**Complete ✓**
Tyre pressure and wheel assembly	C	C	C				
Rear wheel drive hubs and studs	I	I	I		SB-06-020, SB-06-021 SB-06-010A, SB-06-011A		
Rear drive motors and mounting	I	I	I				
Rear legs and stop pads	I	I	I				
Transducer mounting	I	I	I				
Scuppers	I	I	I				
Transom drain plug	I	I	I				
Ski Hoop and attachments	I	I	I				
Inboard exhaust outlet	I	I	I				
T7-T10 and L9-L12 hoses and fittings	I	C	I		SB-12-011A		
T7-10 and L9-12 hose routing.	I	C	I				
B1-B4 hoses and fittings	I	C	I				
B1-B4 hoses routing	I	C	I				
REMOVE AND GREASE							
Upper ram pivot		I	C		SB-12-110A, SB-12-111A		
Lower ram pivot		C	I				
Leg pivot		C	I				
Inboard Engine (Honda)	**A**	**B**	**C**	**D**	**Reference**	**Comments**	**Complete ✓**
Note: Inboard maintenance schedule intervals are determined by a combination of inboard hours and the "A, B, C, D" service schedule.							
Engine oil							
Check level	C	C	C				
Engine Oil		R					
Oil filter		R					
Air Cleaner							

Check/clean	C	C	C				
Replace (paper element only) every 200 inboard hours							
Spark Plugs	C	C	C				
Idle speed	C	C	C				
Valve Clearance							
Check /Adjust every 300 inboard hours							
Check/Inspect							
Cooling fans	I	I	I				
Choke Solenoid/Choke Function	I	I	I				
Wiring and connections	I	I	I				
Alternator/mounting and drive belt	I	I	I				
Engine mounts	I	I	I				
Engine box mounting	I	I	I				
Exhaust joints and mounting	I	I	I				
Flexible Exhaust Coupler							
Inspect for leaks/corrosion/wear	I	I	I				
Replace every 300 inboard hours							

Console	**A**	**B**	**C**	**D**	**Reference**	**Comments**	**Complete ✓**
Fire extinguisher	I	I	I		SB-08-010A		
Battery box and bracket	I	I	I				
DC Box and bracket	I	I	I				
Console mounting	I	I	I				
Fitments and accessories	I	I	I				
Dash and fittings	I	I	I				
Inboard throttle and cable		I	I				
Internal cable and hose mounting		I	I				

Steering	A	B	C	D	Reference	Comments	Complete ✓
TEST FUNCTION							
Helm/ Helm oil level	I	I	I		SB-01-010A, SB-09-011B SB-09-012A		
Power steering unit (if equipped)		I	I				
Bypass valve		I	I		SB-09-013B		
Alignment	C	C	C		SB-09-013B		
Outboard steering ram and cables	I	I	I		SB-09-010A		

Electrical	A	B	C	D	Reference	Comments	Complete ✓
INSPECT – Function							
Navigation lights	I	I	I				
Electronic accessories	I	I	I				
Inboard Charging system	I	I	I				
Bilge pump manual and auto function	I	I	I				
12V socket	I	I	I				
Winch	I	I	I				
Inboard/Outboard Run Light	I	I	I				
DC power box and circuit breakers	I	I	I				
Master switch and cables	I	I	I				
Fuel Level Gauge/s	I	I	I				
Bilge fan (If fitted)	I	I	I				

Fuel System	A	B	C	D	Reference	Comments	Complete ✓
Electric fuel pump	I	I	I				
Fuel lines and connections		I	I		SB-11-020A		
Fuel tank and sender		I	I		SB-11-010A		
Fuel filter/s		I	I				

Auxiliary fuel tank mounting (if fitted)		I	I				
Hydraulics	**A**	**B**	**C**	**D**	**Reference**	**Comments**	**Complete ✓**
Hydraulic oil level	I	I	I		RF-20-050A		
Tank top filter/s	I	I	R		RF-20-050A		
Transmission hoses T3 – T6 and T11-T12 if equipped with AWD		I	I	R			
Brake hoses B6-B10		I	I	R			
Lift hoses L3 – L8, L14 –L16		I	I	R	SB-12-010A, SB-12-011A		
Pilot hoses P1 - P4		I	I	R			
Suction and Case Drain hoses T1, T2		I	I	R			
Torque Transmission valve banjo bolts		I	I	C	120nm		
Lift Valve assembly/solenoids		I	I		SB-12-050A		
Brake Valve assembly/solenoid		I	I				
Hydraulic oil cooler and fan		I	I	I			
Hydraulic oil cooler hoses C1-C2		I	I	R			
Hose C3 if oil cooler not installed.		I	I	R			
Test Function	**A**	**B**	**C**	**D**	**Reference**	**Comments**	**Complete ✓**
Thermo switches		C	C				
Warning lights		C	C				
All-Wheel Drive		C	C				
Diff Lock		C	C				
Leg up/down alarm		C	C		SB-12-070		
Lift circuit relief setting		C	C		RF-20-050A		
Check leg interference up and down	C	C	C				
Front raise time	C	C	C		RF-20-050A		
Front lower time	C	C	C		RF-20-050A		
Rear raise time	C	C	C		RF-20-050A		

Rear lower time	C	C	C		RF-20-050A		
Drive relief setting forward				C	RF-20-050A		
Drive relief setting reverse				C	RF-20-050A		
Average wheel rpm forward	C	C	C		RF-20-050A		
Average wheel rpm reverse	C	C	C		RF-20-050A		
Test Drive on land	C	C	C				
Emergency Brake	C	C	C				
Transmission brake time (2 sec)	C	C	C				
Max land speed forward and reverse	C	C	C				

5. TECHNICAL INFORMATION

CRAFT TECHNICAL SUMMARY

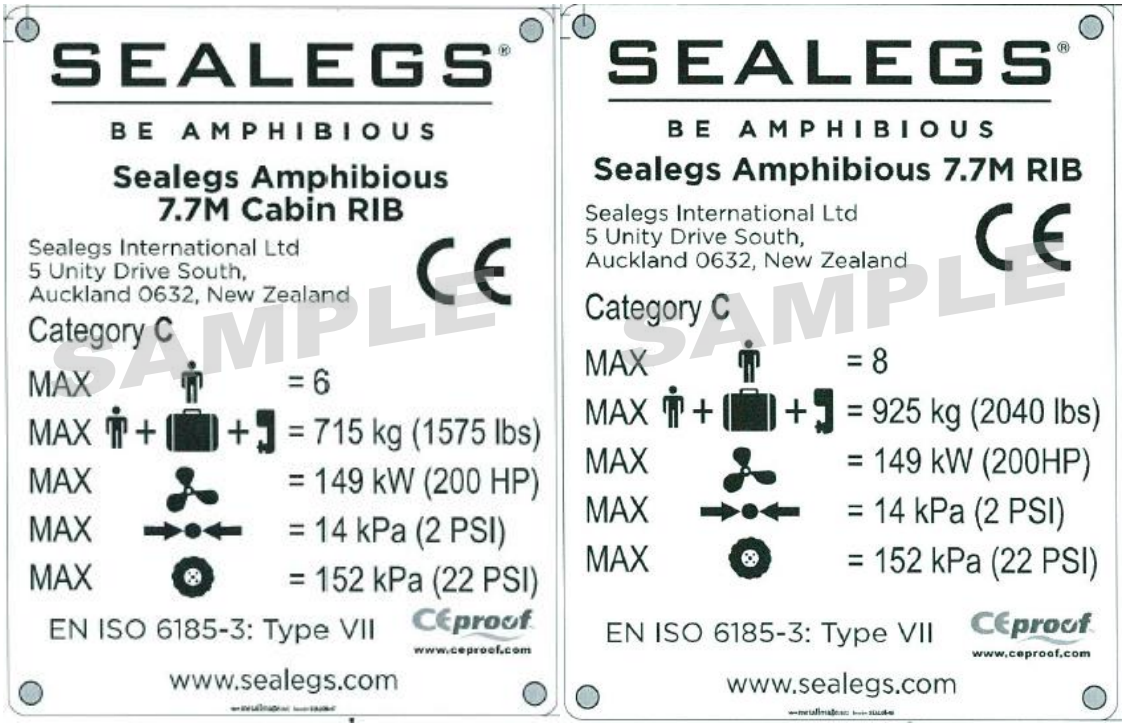
Name of Model / Type	**Sealegs Amphibious Cabin RIB 7.7m**	**Sealegs Amphibious RIB 7.7m**
Name of boat manufacturer	Sealegs International Limited - New Zealand	
Manufacturer's authorised representative	CE Proof New Zealand Ltd	
Maximum recommended number of people[1]	6	8
RCD[2] design category	Category B OFFSHORE: A boat given design category B is considered to be designed to operate in winds up to force 8 (Beaufort scale) and the associated wave heights (significant wave heights up to and including 4m). Such conditions may be encountered on offshore voyages if sufficient length or on coastal waters when unsheltered from the wind and waves for several dozens of nautical miles. These conditions may also be experienced on inland seas of sufficient size for the wave height to be generated.	
Principal Dimensions and Capacities		
Length overall (wheels up) [3]	7.74m (25' 5")	7.74m (25' 5")
Length of rigid hull	6.39m (21')	6.39m (21')
Beam of hull	2.61m (8' 7")	2.61m (8' 7")
Beam of rigid hull	2.07m (6' 9.5")	2.07m (6' 9.5")
Deadrise angle	21 degrees	21 degrees
Maximum draft (fully laden)	0.82m (2' 8")	0.82m (2' 8")
Air draft	2.23m (7' 3")	2.23m (7' 3")
Height on land (wheels down)	2.55m (8' 4")	2.45 (8' 1")
Height on land (wheels up)	2.05m (6' 9")	1.95m (6' 3")
Maximum outboard power	149.2kW / 200HP	149.2kW / 200HP
Maximum speed (sea)	80kph (50mph)	85kph (53mph)
Maximum speed (land)	7.5kph (5mph)	7.5kph (5mph)
Fuel capacity	180 litre (48 US gallons)	180 litre (48 US gallons)
Weights		
Unladen weight of craft (lightweight)[4]	1,870kg (4123lb)	1,470kg (3241lb)
Maximum number of persons[5]	450kg (992lb)	650kg (1433lb)
Baggage weight & other carry-on weights	50kg (110lb)	50kg (110lb)
Maximum capacity of fuel tanks	135kg (297lb)	135kg (297lb)
Maximum total outboard(s) weight	240kg (529lb)	327kg (719lb)
Maximum recommended load	500kg (1102lb)	700kg (1543lb)
Weight fully laden (Wet)[6]	2,505kg (5511lb)	2,305kg (5170lb)

[1] An adult person is considered to weigh 75kg (165lb). Ensure each passenger has two secure handholds.
[2] EU Recreational Craft Directive
[3] Includes 150HP ETEC
[4] Includes 150HP ETEC outboard engine weight of 196kg (431.2lb)
[5] An adult person is considered to weigh 75kg (165lb). Ensure each passenger has two secure handholds.
[6] An adult person is considered to weigh 75kg (165lb). Includes fuel and 150HP ETEC outboard engine weight of 196kg (431.2lb)

BUILDER'S PLATE

The Sealegs Amphibious Craft is fitted with an ISO/FDIS 14945 Small Craft Builder's plate. This is located on the starboard side inner face of the transom.

This plate provides detail on some of the craft's main capacities.



The Hull Identification Number (HIN) is engraved on the outside of the transom at the rear of the craft. This number is unique to each boat.

IGNITION KEY NUMBERS

To assist in arranging replacement keys, it is recommended that the key numbers are recorded here for safe keeping.

Key Numbers		
Inboard Key#:	Outboard Key #:	Twin Outboard Key # - Port: Stbd:

6. ENVIRONMENTAL AWARENESS

Sealegs encourages owners to respect others and the environment when using their Sealegs craft.

In many regions of the world there are also strictly enforced regulations regarding environmental protection. It is the responsibility of the owner/operator to be aware of applicable regulations and to ensure compliance with them.

TREAD LIGHTLY

Sealegs is an official partner of Tread Lightly!®, a non-profit organization with a mission to promote responsible outdoor recreation through ethics, education and stewardship. Some principles include:

Travel Responsibly on land by staying on designated pathways, trails and areas. Go over, not around, obstacles to avoid widening the trails. Cross streams only at designated fords. When possible, avoid wet, muddy trails. On water, stay on designated waterways and launch your watercraft in designated areas.

Respect the Rights of Others including private property owners, all recreational trail users, campers and others so they can enjoy their recreational activities undisturbed. Leave gates as you found them. Yield right of way to those passing you or going uphill. On water, respect anglers, swimmers, skiers, boaters, divers and those on or near shore.

Educate Yourself prior to your trip by obtaining travel maps and regulations. Plan for your trip, take recreation skills classes and know how to operate your equipment safely.

Avoid Sensitive Areas on land such as meadows, lakeshores, wetlands and streams. Stay on designated routes. This protects wildlife habitats and sensitive soils from damage. Don't disturb historical, archaeological or paleontological sites. On water, avoid operating your watercraft in shallow waters or near shorelines at high speeds.

Do Your Part by modelling appropriate behaviour, leaving the area better than you found it, properly disposing of waste, minimizing the use of fire, avoiding the spread of invasive species and repairing degraded areas.

For more information, visit http://www.treadlightly.org

tread lightly!® ON LAND AND WATER ®

LEAKAGE OF PETROCHEMICALS

Be aware of the risk of leaking oils and fuels. Always investigate the source of any oil leaks as soon as possible. Dispose of recovered spilt oil correctly, and have oil-absorbing cloths or rolls on board. Never dispose of any oil, paint or other chemical that is potentially harmful to the environment.

 WARNING	Any oil must be treated as chemical waste

HOUSEHOLD WASTE, BLACK AND GREY WATER

Be conscious of any waste created while on board. Dispose of any waste responsibly. Always retain household waste until it can be properly disposed of ashore.

 WARNING	The discharge of effluent into navigable waters is forbidden by law in many areas. If such discharge causes a film or sheen upon or a discolouration of the surface of the water, or causes a sludge or emulsion beneath the surface of the water, violators may be subject to a penalty. It is the responsibility of the boat user to ensure that they are aware of legislation regarding discharge

 CAUTION	Keep bilges clean to avoid automatic bilge pumps discharging illegal effluent

 WARNING	When at sea for periods longer than space allows on-board storage of waste, only jettison organic waste

NOISE

Never make excessive noise. Most people take to the water for relaxation, which is ruined by noise. Avoid running the engine unnecessarily, or at engine speeds higher than necessary.

WASH/ WAVES

Adapt your speed to the water in which you are navigating. Consider the comfort and safety of other boats around you.

 WARNING	Be aware that in some areas speed restrictions are in place to avoid erosion of banks/ coastline

7. SEALEGS OWNER FREQUENTLY ASKED QUESTIONS

Following are answers to some questions that have been asked by Sealegs owners.

Q. What options do I have if I get stuck in difficult terrain?

A. To get out of difficult terrain, traction aids can be used, and the tyre pressure reduced to gain the required traction. *See Terrain on page 3-6.*

Q. What is the best way to store the craft — wheels up or down?

A. Up or down is acceptable. Should the boats be stored with the wheels down, it is advisable to lightly coat the exposed lift cylinder rods with a light weight protective oil e.g. machine oil, Inox, fish oil, or similar (as is recommended with many parts of the boat that may suffer from not having regular usage). If the boat is stored with the legs down it is also recommended to trim the outboard up to help minimise damage to the outboard skeg should the craft suffer a hydraulic issue and lower onto the hull.

Q. Can the craft be moved on a truck or transporter?

A. Yes, however extra care should be taken. It is recommended that the craft be placed in a cradle and strapped down against this cradle and the transporter to prevent any movement. The hydraulic system of the legs and the hydraulic braking of the wheels should not be relied upon for transporting; a cradle will assist with this. *See Trucking on page 3-20*

Q. Are there any special concerns about freezing weather?

A. Yes, oils and fluids and other functions of the boat are not designed to store or operate in freezing conditions, and extra care must be taken with batteries and other parts. This craft therefore should not be stored or used in environments that are at or below $0^{o}C$ / $32^{o}F$.

Q. Why can't the craft be moored continuously in the water?

A. Essentially Sealegs craft are designed as 'day boats', with the addition of the wheels to assist in the launching and retrieving for easy storing on land when not in use. Therefore the craft has not been designed with anti-fouling and extra electrolysis protection required of a boat designed to be moored; any boat will quickly deteriorate without this extra protection. RIB tubes may prematurely wear if subjected to continuous abrasion when tied up. Being an open craft, other risks include exposure to rain water or other environmental events, and with the automatic bilge pump draining the battery to the point of failure. Any boat left moored will degrade considerably quicker if left exposed to the elements, e.g. sun, rain and salt water. It is therefore a condition of warranty that the craft not be left unattended in the water for any extended period of time. *See Anchoring, Mooring and Towing on page 3-18.*

Q. When does the hydraulic system need to be serviced and is there a filter to change?

A. Hydraulic servicing is not the same as internal combustion engine servicing. It is easy to think of it the same way, but this has the potential to create unnecessary work and cost. Consult the Maintenance section of this manual for a summary of the requirements.

Q. Does the inboard engine charge the batteries while operating?

A. Yes, the battery is charged by the inboard engine. Craft fitted with the XRT system are also fitted with a larger alternator, and therefore will recharge the battery faster. Depending on the model outboard fitted, a battery voltage reading is normally obtainable from the outboard gauge set. *See Battery Maintenance on page 4-10*

8. SEALEGS WARRANTY

We at Sealegs trust the purchase of your amphibious craft will bring many years of enjoyable and dependable service.

INTRODUCTION

Subject to the terms and conditions detailed below, Sealegs International Ltd warrants the Sealegs Amphibious Craft to be free from defects in material or workmanship for the defined warranty period, and will, at its option, repair or replace defective parts on return of the craft to the premises of an Authorised Sealegs Reseller.

This warranty applies to new Sealegs Amphibious Craft purchased from an Authorised Sealegs Reseller.

By using the Sealegs Amphibious Craft, the owner and operator understands and agree to undertake all instructions in the Sealegs Amphibious Boat Owner's Manual, and agrees to all warranty and liability terms and conditions contained in this warranty.

WARRANTY PERIOD

Sealegs warrants Sealegs branded components from the date of purchase for a period of:

- 12 consecutive months for normal personal recreational use
- 90 consecutive days for commercial, or any other use

The product is deemed to be used for commercial purposes when used in connection with any work or employment that generates or contributes towards income during any part of the warranty period.

Normal recreational use is defined as not more than 100 annual return trips with not more than 100 annual outboard hours, and not more than 20 annual inboard hours. Greater annual usage than this is not covered by the Sealegs recreational warranty.

ITEMS INCLUDED UNDER THIS WARRANTY

The Sealegs Amphibious Craft covered under the warranty includes the following:

- Sealegs hull and associated hull components
- Sealegs hydraulic system and associated components, including inboard motor
- Inflatable tubes

Other non-Sealegs branded peripheral components are covered under their separate manufacturer's warranty. These include (but are not limited to):

- Outboard engine and associated branded peripherals
- Electronic peripherals, including VHF, navigational and entertainment units

This warranty is limited to repair, or at Sealegs option, replacement of parts suffering from any of the defects described above during the warranty period. The judgment of Sealegs is final concerning the extent of items covered under warranty.

WARRANTY EXCLUSIONS

The following are not warranted under any circumstances:

- Replacement of parts due to normal wear and tear
- Routine maintenance parts and services, including but not limited to, maintenance requirements, oil and lubrication, replacement of fuses or bulbs, linkage adjustments, filters and spark plugs, tyres, and other consumable items
- Damage caused by not following procedures and recommendations in the Sealegs Owner's Manual
- Degradation of surface paint or coating from the effect of oxidation, dissimilar metals or as a result of damage from impact, abrasion or chemical spillage.
- Operating the craft beyond the certified conditions as detailed in the Sealegs Owner's Manual. Sealegs boats are certified to operate Category B Offshore conditions, in winds up to force 8 (Beaufort scale) and the associated wave heights (significant wave heights up to and including 4m/12ft). Such conditions may be encountered in offshore voyages
- Damage caused by improper or lack of maintenance, winterization or storage
- Damage caused by abuse, impact, accident, misuse, abnormal use or strain, neglect, racing, improper operation or operation not in accordance with the recommended procedures described in the Sealegs Owner's Manual;
- Damage or cosmetic changes due to exposure to the atmospheric or environmental conditions, including mould or marine organisms, or outside galvanic activity.
- Damage resulting from tears, punctures, abrasions, abuse, external damage, accident, submersion, water ingestion or contamination, fire, theft, vandalism or any act of God;

Additionally:

- The owner of the craft is expected to ensure the craft is properly operated and maintained as detailed in the Sealegs Owner's Manual, and to take all reasonable precautions to avoid or minimise loss, damage or liability. Sealegs may require proof of maintenance before authorizing warranty support.
- The owner and user of the craft is responsible for determining its suitability for any and all selected uses and assumes all risks in connection therewith when used, including the safety of persons and property, and only operating the craft under normal safe conditions.

- The owner acknowledges that the craft is to be stored completely under cover when not in operational use, and normal winterisation practices of the region must be undertaken.
- Sealegs may deem warranty to be void due to improper repairs or maintenance, or removal or modification parts, or use of parts or accessories not supplied by Sealegs, which in Sealegs reasonable opinion affects the serviceability or reliability of the craft or caused a specific failure.
- Sealegs does not assume responsibility for losses or damage from shipping in connection with repairs or warranty work.
- Sealegs reserves the right to enhance, modify or change product or specifications from time to time, without any obligation to alter previously manufactured craft.

OBTAINING WARRANTY COVERAGE

The owner must notify Sealegs or an Authorised Sealegs Reseller within 7 days of the appearance of a defect. In order to have any defect corrected, the owner of the boat must first contact via email, mail or fax *written* notification to either:

The authorised reseller from which the craft was purchased, or;
Sealegs International Ltd.
P.O. Box 303-221 North Harbour, Auckland
Phone: +64 9 414 5542 Fax: +64 9 414 5546 Email: service@sealegs.com

Either Sealegs International Ltd or an Authorised Sealegs Reseller will then advise the owner what to do. When requested, the owner must return the Sealegs craft, including any defective part therein, to the nearest Authorised Sealegs Reseller promptly, and within the warranty period. The expenses of transporting the craft to and from Authorised Sealegs Reseller for warranty service are to be borne by the owner. The owner must provide the Authorised Sealegs Reseller with reasonable opportunity to repair the defect.

Once the warranty claim has been accepted by Sealegs, the repair or replacement of parts will be done without charge for parts and labour, at the recommended Authorised Sealegs Reseller's premises.

Sealegs responsibility is limited to making the required repairs or replacements of parts with new or Sealegs re-manufactured or reconditioned parts. All parts replaced under this warranty become the property of Sealegs.

In the event that warranty service is required outside of the region from where the craft was purchased, the owner is responsible for any additional charges in obtaining the warranty service due to but not limited to, freight, insurance, taxes, fees, import duties, and any and all other financial charges required to interact with the nearest Authorised Sealegs Reseller.

TRANSFER

On the transfer of ownership of a craft, any remaining warranty period may also be transferred to the new owner provided that the former or new owner promptly contacts Sealegs, and the craft has only previously been used for recreational use, and will only be used for recreational use during the remainder of the warranty period.

It is the responsibility of the new owner to ensure the previous owner has fully maintained and operated the craft in accordance with this warranty document.

LIMITATIONS OF LIABILITY

Sealegs obligations and liability are limited to, at its sole discretion, repairing or replacing parts of the Amphibious Craft found to be defective in material or workmanship, in the judgment of Sealegs. In all cases Sealegs judgement will be final.

The warranty described in this document shall be in lieu of any other warranty, express or implied including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose. The parties agree that the owner's sole exclusive remedy against Sealegs shall be repair or replacement as provided herein, and the owner agrees that no other remedy shall be available, including any claims for incidental, consequential, direct, indirect or other damages of any kind, including but not limited to, expense for transporting product to and from Service Centre, freight, travel expenses (including alternate loan product), boat retrieval (including water charges, slip or dock fees, trailer or towing, storage), telecommunication charges, rental or hire charges of any kind, lost profits or sales, or any other incidental or consequential losses that may be incurred.

Sealegs is not responsible or liable for personal injury in connection with the use of this product.

SOME REGIONS OR JURISDICTIONS DO NOT ALLOW FOR THE DISCLAIMERS, LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR OTHER EXCLUSIONS IDENTIFIED IN THIS DOCUMENT. AS A RESULT THEY MAY NOT APPLY TO YOU. THIS EXPRESS WARRANTY GIVES YOU SPECIFIC RIGHTS, AND YOU MAY ALSO HAVE OTHER LEGAL RIGHTS WHICH MAY VARY FROM REGION TO REGION.

No other person or entity is authorized to make representation or warranty regarding Sealegs products other than detailed in this document, and if made, shall not be enforceable against Sealegs.

9. CE DECLARATION 7.7M CABIN RIB

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

Name of manufacturer: Sealegs International Ltd
Address: 5 Unity Drive South
Town: Albany, Auckland Post Code: 751 Country: New Zealand

Name of Authorised Representative (if applicable):
Address:
Town: Post Code: Country:

Module used for design & construction assessment: □ A ■ A1 □ B+C □ B+D □ B+E □ B+F □ H
Notified Body for design and construction assessment (if applicable): ID number: 1521
Name: HPI Verification Services
Address: The Manor House, Howbery Park
Town: Wallingford Post Code: OX10 8BA Country: United Kingdom
Report/Certificate Ref. No: HPiVS/R1016-014-I-01 Date (y/m/d): 2017/01/10

Module used for noise assessment: □ A □ A1 □ G □ H □ PCA
Notified Body for noise emission assessment (if applicable): ID number:
Name: Various engine options/certifiers
Address:
Town: Post Code: Country:
Report/Certificate Ref. No: HPiVS/R1016-014-I-01 Date (y/m/d): 2017/01/10

Other Community Directives applied:

Watercraft Identification Number:	NZ	-	SLG	72xxx	x	x	xx

Brand name of the craft: Sealegs Amphibious 7.7M RIB-Cabin-Series **Model or Type:** Recreational RIB

Type of construction:
□ rigid ■ inflatable ■ rigid inflatable (RIB)

Type of Hull:
■ monohull □ multihull

Hull Construction Material:
■ aluminium, aluminium alloys □ moulded fibre reinforced plastic
□ steel, steel alloys □ wood
□ other (specify):

Recreational Craft:
Design categories related to the maximum recommended number of persons::

Design Category	Number of persons	Maximum Load (kg)
A		
B		
C	6	715
D		

Length of hull LH 6.42m
Beam of hull BMAX 2.61m
Draught TMAX 1.03m

Deck:
□ fully enclosed
□ partially enclosed
■ open

Type of Main Propulsion:
□ sails
□ Human propulsion
■ Engine/motor propulsion
□ other (specify):

Type of Engine:
□ internal combustion, diesel (CI)
■ internal combustion, petrol (SI)
□ internal combustion, LPG/CNG
□ electric
□ other (specify):

Installed Propulsion Type:
■ outboard
□ inboard with shaft line
□ z or sterndrive
□ pod drive
□ sail drive
□ other (specify):

Integral exhaust propulsion ■Yes □No □N/A
Engine power:
Max. Recommended 149 kW

No. of propulsion engines 1
Max. recommended engine mass 223 kg

This declaration of conformity is issued under the sole responsibility of the boat manufacturer. I declare on behalf of the craft manufacturer that the recreational craft mentioned above fulfills the requirements in Article 4 (1) and Annex I of Directive 2013/53/EU.

Name & function: David McKee Wright / CEO
(identification of the person empowered to sign on behalf of the manufacturer or his authorised representative)

Signature:
(or an equivalent marking)

Date & place of issue (dd/mm/yyyy): 12/01/2017 Auckland, New Zealand

Essential Requirements (ref. relevant article in Annex IA & IC of the Directive)	Harmonised standards Full Application	Harmonised standards Partial application See technical file	Other reference documents Full Application	Other reference documents Partial application See technical file	Other proof of conformity See technical file	Specify the harmonised standards or other reference documents used
General requirements (2)	X					EN ISO 8666:2002 *
Watercraft Identification Number - WIN (2.1)	X					EN ISO 10087:2006 *
Builder's Plate (2.2)	X					EN ISO 14945:2004
Protection from falling overboard & means of reboarding (2.3)	X					EN ISO 6185-3:2014
Visibility from the main steering position (2.4)	X					EN ISO 11591:2011
Owner's manual (2.5)			X			EN ISO 10240:2004
Integrity and structural requirements (3)						
Structure (3.1)	X					EN ISO 6185-3
Stability and freeboard (3.2)	X					EN ISO 6185-3:2014
Buoyancy and floatation (3.3)	X					
Openings in hull, deck and superstructure (3.4)	X					EN ISO 12216:2002
	X					EN ISO 9093-1:1997
	N/A				X	No non-metalic skin fittings
Flooding (3.5)	X					EN ISO 6185-3:2014
	N/A				X	No quick-draining or watertight cockpit fitted onboard the craft
Manufacturer's maximum recommended load (3.6)	X					EN ISO 14946:2001
Liferaft stowage (3.7)					X	N/A - only required for Type VIII RIBs
Escape (3.8)					X	N/A - no enclosed accommodation
Anchoring, mooring and towing (3.9)	X					EN ISO 15084:2003
Handling characteristics (4)	X					EN ISO 11592-1:2016
Engines and engine spaces (5.1)						
Inboard engine (5.1.1)					N/A	N/A - outboard only
Ventilation (5.1.2)	X					EN ISO 11105:1997
Exposed parts (5.1.3)	X				X	No applicable standard
Outboard engine starting (5.1.4)	X					EN ISO 11547:1995
Personal watercraft running without driver (5.1.5)	X					N/A - not a PWC
Tiller-controlled outboard propulsion engines (5.1.6)	N/A				X	N/A - outboard is not controlled directly by its tiller
Fuel system (5.2)						
General - fuel system (5.2.1)	X					EN ISO 10088:2013
Fuel tanks (5.2.2)	X					EN ISO 21487:2012+A2:2015
Electrical systems (5.3)	X					EN ISO 10133:2012
	N/A					N/A - No AC electrics
Steering systems (5.4)						
General - steering system (5.4.1)	X					Annex II component, CE marked. See OEM declaration
Emergency arrangements (5.4.2)	N/A					N/A - outboard engine (RCD Annex 1 ER 5.4.2)
Gas systems (5.5)	N/A					N/A - no LPG system fitted
Fire protection (5.6)	X					EN ISO 9094-1 'Small Craft – Fire protection'
Navigation lights (5.7)		X	X			EN ISO 16180:2013
Discharge prevention (5.8)	N/A					N/A - no heads onboard
	N/A					N/A - No oily engine space
Annex I.B - Exhaust Emissions	X	X				2013/53/EU [RCD II]
Annex I.C Noise Emissions						
Noise emission levels (I.C.1)	X					Engine manufacturer's certificate/declaration
Owner's manual (I.C.2)	X					Engine manufacturer's certificate/declaration

Recreational Craft and Personal Watercraft Directive

2013/53/EU

Conformity Assessment Report

Certificate/Report number	HPiVS/R1016-014-I-01
Manufacturer	Sealegs International Ltd 5 Unity Drive South Albany, Auckland 751 New Zealand
Location of Inspection	Auckland
Date of Inspection	24/11/2016-
Description of Product	Sealegs Amphibious 7.7M RIB-Cabin
Name of Manufacturer	Sealegs International Ltd

Hull Length (m)	6.42		
Category	C		
Crew Limit	6	Max Load (kg)	715

ER	Description		Met?
3.2	Stability and Freeboard:		Y
	The watercraft shall have sufficient stability and freeboard considering its design category in accordance with Section 1 and the manufacturer's maximum recommended load in accordance with point 3.6. See ISO 12217 and/or ISO6185 for inflatable craft.		
	Comments:	Conforms to ISO 6185-3:2014	
3.3	Buoyancy and Flotation:		Y
	All craft shall be constructed so as to provide adequate buoyancy with the maximum load and crew aboard. All habitable multihull recreational craft susceptible of inversion shall stay afloat when inverted, and watercraft < 6m which are susceptible to swamping shall be fitted with sufficient flotation when swamped		
	Comments:	Conforms to ISO 6185-3:2014	

Conclusion and recommendations

The Technical Documentation has been reviewed and found to be complete, as required by the Recreational Craft and Personal Watercraft Directive and to be representative of the craft.
The Sealegs Amphibious 7.7M RIB-Cabin is considered to meet the relevant Essential Requirements of the RCD as shown above and Examination Report no. HPiVS/R1016-014-I-01 has been issued.

This certificate can be used for all examples of this model, provided that no changes are made to the product that could affect any of the assessed Essential Requirements.
HPiVS must be informed of any changes to the product that could invalidate this Certificate.
This assessment relates only to the Essential Requirements listed. The manufacturer or their authorised representative should sign Declarations of Conformity and affix the CE mark to products only when conformity with all of the applicable essential requirements has been documented.

Signature

Date 10-Jan-2017

Name Maria Garcia Donaire

HPi Verification Services

Examination Report

This is to certify that the product listed below conforms to the requirements of the

Recreational Craft and Personal Watercraft Directive

2013/53/EU, Module A1 - Annex II of Decision 768/2008/EC

Certificate Number	HPiVS/R1016-014-I-01
Date of Issue	10-Jan-2017
Manufacturer	Sealegs International Ltd 5 Unity Drive South Albany, Auckland 751 New Zealand
Product Description	Sealegs Amphibious 7.7M RIB-Cabin

Description of Product	Rigid Inflatable, Recreational RIB - Motor - Outboard			
Design Category	C		No of hulls:	1
Length (m)	Max. (L_{MAX}):	7.54	Hull (L_H):	6.42
Beam (m)	Max. (B_{MAX}):	2.61	Hull (B_H):	2.61
Maximum Load	People:	6	Mass (kg):	715
Displacement (kg)	Light Craft:	1721 - excl. engine	Max. (M_{LDC}):	2606
Maximum Power	kW:	149	HP / mHP:	197 / 200
Maximum Engine Mass (kg)	223			

This report confirms that HPiVS have assessed the craft against ER 3.2 'Stability' & 3.3 'Flotation'. The manufacturer is responsible for compiling Technical Documentation for all the other requirements.

Check this certificate is genuine

Managing Director

Technical Manager

This certificate is supported by a report bearing the same certificate number.
This certificate is the property of HPi Verification Services Ltd. & may not be amended or issued to others.
The manufacturer must inform HPi Verification Services of any changes that affect any of the assessed Essential Requirements. Failure to do this will invalidate the Certificate.
The applied conformity assessment module does NOT allow the client to affix the Notified Body's identification number on the product.

CE

EU Notified Body No. 1521
Company registered in England #7217086

Tel +44 1491 822818
Fax +44 700 600 6831
Email enquiries@eucertification.com
www.eucertification.com

HPi Verification Services Ltd.
The Manor House
Howbery Park, Wallingford
OX10 8BA, United Kingdom

10. CE DECLARATION 7.7M CONSOLE RIB

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

Name of manufacturer: Sealegs International Ltd
Address: 5 Unity Drive South
Town: Albany, Auckland Post Code: 751 Country: New Zealand

Name of Authorised Representative (if applicable):
Address:
Town: Post Code: Country:

Module used for design & construction assessment: □ A ■ A1 □ B+C □ B+D □ B+E □ B+F □ H
Notified Body for design and construction assessment (if applicable): ID number: 1521
Name: HPI Verification Services
Address: The Manor House, Howbery Park
Town: Wallingford Post Code: OX10 8BA Country: United Kingdom
Report/Certificate Ref. No: HPiVS/R1016-015-I-01 Date (y/m/d): 2017/01/10

Module used for noise assessment: □ A □ A1 □ G □ H □ PCA
Notified Body for noise emission assessment (if applicable): ID number:
Name: Various engine options/certifiers
Address:
Town: Post Code: Country:
Report/Certificate Ref. No: HPiVS/R1016-015-I-01 Date (y/m/d): 2017/01/10

Other Community Directives applied:

Watercraft Identification Number:	NZ	-	SLG	73 ×××	×	×	××

Brand name of the craft: Sealegs Amphibious 7.7M RIB-Console-Series **Model or Type:** Recreational RIB

Type of construction:
□ rigid ■ inflatable ■ rigid inflatable (RIB)

Type of Hull:
■ monohull □ multihull

Hull Construction Material:
■ aluminium, aluminium alloys □ moulded fibre reinforced plastic
□ steel, steel alloys □ wood
□ other (specify):

Recreational Craft:
Design categories related to the maximum recommended number of persons::

Design Category	Number of persons	Maximum Load (kg)
A		
B	6	725
C	8	925
D		

Length of hull LH 6.42m
Beam of hull BMAX 2.61m
Draught TMAX 1.03m

Deck:
□ fully enclosed
□ partially enclosed
■ open

Type of Main Propulsion:
□ sails
□ Human propulsion
■ Engine/motor propulsion
□ other (specify):

Type of Engine:
□ internal combustion, diesel (CI)
■ internal combustion, petrol (SI)
□ internal combustion, LPG/CNG
□ electric
□ other (specify):

Installed Propulsion Type:
■ outboard
□ inboard with shaft line
□ z or sterndrive
□ pod drive
□ sail drive
□ other (specify):

Integral exhaust propulsion ■Yes □No □N/A
Engine power:
Max. Recommended 149 kW

No. of propulsion engines 1
Max. recommended engine mass 223 kg

This declaration of conformity is issued under the sole responsibility of the boat manufacturer. I declare on behalf of the craft manufacturer that the recreational craft mentioned above fulfills the requirements in Article 4 (1) and Annex I of Directive 2013/53/EU.

Name & function: David McKee Wright / CEO
(identification of the person empowered to sign on behalf of the manufacturer or his authorised representative)

Signature:
(or an equivalent marking)

Date & place of issue (dd/mm/yyyy): 12/01/2017 Auckland, New Zaland

Essential Requirements (ref. relevant article in Annex IA & IC of the Directive)	Harmonised standards Full Application	Harmonised standards Partial application See technical file	Other reference documents Full Application	Other reference documents Partial application See technical file	Other proof of conformity See technical file	Specify the harmonised standards or other reference documents used
General requirements (2)	X					EN ISO 8666:2002 *
Watercraft Identification Number - WIN (2.1)	X					EN ISO 10087:2006 *
Builder's Plate (2.2)	X					EN ISO 14945:2004
Protection from falling overboard & means of reboarding (2.3)	X					EN ISO 6185-3:2014
Visibility from the main steering position (2.4)	X					EN ISO 11591:2011
Owner's manual (2.5)			X			EN ISO 10240:2004
Integrity and structural requirements (3)						
Structure (3.1)	X					EN ISO 6185-3
Stability and freeboard (3.2)	X					EN ISO 12217-1:2015
Buoyancy and floatation (3.3)	X					
Openings in hull, deck and superstructure (3.4)	X					EN ISO 12216:2002
	X					EN ISO 9093-1:1997
	N/A				X	No non-metalic skin fittings
Flooding (3.5)	X					EN ISO 15083:2003
	N/A				X	
Manufacturer's maximum recommended load (3.6)	X					EN ISO 14946:2001
Liferaft stowage (3.7)	N/A				X	No applicable standard
Escape (3.8)					X	N/A - no enclosed accommodation
Anchoring, mooring and towing (3.9)	X					EN ISO 15084:2003
Handling characteristics (4)	X					EN ISO 11592-1:2016
Engines and engine spaces (5.1)						
Inboard engine (5.1.1)					N/A	N/A - outboard only
Ventilation (5.1.2)	X					EN ISO 11105:1997
Exposed parts (5.1.3)	X				X	No applicable standard
Outboard engine starting (5.1.4)	X					EN ISO 11547:1995
Personal watercraft running without driver (5.1.5)	X					N/A - not a PWC
Tiller-controlled outboard propulsion engines (5.1.6)	N/A				X	N/A - outboard is not controlled directly by its tiller
Fuel system (5.2)						
General - fuel system (5.2.1)	X					EN ISO 10088:2013
Fuel tanks (5.2.2)	X					EN ISO 21487:2012+A2:2015
Electrical systems (5.3)	X					EN ISO 10133:2012
	N/A					N/A - No AC electrics
Steering systems (5.4)						
General - steering system (5.4.1)	X					Annex II component, CE marked. See OEM declaration
Emergency arrangements (5.4.2)	N/A					N/A - outboard engine (RCD Annex 1 ER 5.4.2)
Gas systems (5.5)	N/A					N/A - no LPG system fitted
Fire protection (5.6)	X					EN ISO 9094-1 'Small Craft – Fire protection'
Navigation lights (5.7)		X	X			EN ISO 16180:2013
Discharge prevention (5.8)	N/A					N/A - no heads onboard
	N/A					N/A - No oily engine space
Annex I.B - Exhaust Emissions	X	X				2013/53/EU [RCD II]
Annex I.C Noise Emissions						
Noise emission levels (I.C.1)	X					Engine manufacturer's certificate/declaration
Owner's manual (I.C.2)	X					Engine manufacturer's certificate/declaration

Recreational Craft and Personal Watercraft Directive

2013/53/EU

Conformity Assessment Report

Certificate/Report number	HPiVS/R1016-015-I-01
Manufacturer	Sealegs International Ltd 5 Unity Drive South Albany, Auckland 751 New Zealand
Location of Inspection	Auckland
Date of Inspection	24/11/2016-
Description of Product	**Sealegs Amphibious 7.7M RIB-Console**
Name of Manufacturer	Sealegs International Ltd
Hull Length (m)	6.42
Category	B/C
Crew Limit	6/8 **Max Load (kg)** 725 / 925

ER	Description		Met?
3.2	Stability and Freeboard:		Y
	The watercraft shall have sufficient stability and freeboard considering its design category in accordance with Section 1 and the manufacturer's maximum recommended load in accordance with point 3.6. See ISO 12217 and/or ISO6185 for inflatable craft.		
	Comments:	Conforms to ISO 6185-3:2014	
3.3	Buoyancy and Flotation:		Y
	All craft shall be constructed so as to provide adequate buoyancy with the maximum load and crew aboard. All habitable multihull recreational craft susceptible of inversion shall stay afloat when inverted, and watercraft < 6m which are susceptible to swamping shall be fitted with sufficient flotation when swamped		
	Comments:	Conforms to ISO 6185-3:2014	

Conclusion and recommendations

The Technical Documentation has been reviewed and found to be complete, as required by the Recreational Craft and Personal Watercraft Directive and to be representative of the craft.
The Sealegs Amphibious 7.7M RIB-Console is considered to meet the relevant Essential Requirements of the RCD as shown above and Examination Report no. HPiVS/R1016-015-I-01 has been issued.
This certificate can be used for all examples of this model, provided that no changes are made to the product that could affect any of the assessed Essential Requirements.
HPiVS must be informed of any changes to the product that could invalidate this Certificate.
This assessment relates only to the Essential Requirements listed. The manufacturer or their authorised representative should sign Declarations of Conformity and affix the CE mark to products only when conformity with all of the applicable essential requirements has been documented.

Signature **Date** 10-Jan-2017

Name Maria Garcia Donaire

HPi Verification Services

Examination Report

This is to certify that the product listed below conforms to the requirements of the

Recreational Craft and Personal Watercraft Directive

2013/53/EU, Module A1 - Annex II of Decision 768/2008/EC

Certificate Number	HPiVS/R1016-015-I-01
Date of Issue	10-Jan-2017
Manufacturer	Sealegs International Ltd 5 Unity Drive South Albany, Auckland 751 New Zealand
Product Description	Sealegs Amphibious 7.7M RIB-Console

Description of Product	Rigid Inflatable, Recreational RIB - Motor - Outboard			
Design Category	B / C		No of hulls:	1
Length (m)	Max. (L_{MAX}):	7.7	Hull (L_H):	6.42
Beam (m)	Max. (B_{MAX}):	2.61	Hull (B_H):	2.61
Maximum Load	Cat B:	6 People	Mass (kg):	725
	Cat C:	8 People	Mass (kg):	925
Displacement (kg)	Light Craft:	1335 - excl. engine	Max. (M_{INC}):	2243
Maximum Power	kW:	149	HP / mHP:	197 / 200
Maximum Engine Mass (kg)	223			

This report confirms that HPiVS have assessed the craft against ER 3.2 'Stability' & 3.3 'Flotation'. The manufacturer is responsible for compiling Technical Documentation for all the other requirements.

Check this certificate is genuine

Managing Director

Technical Manager

This certificate is supported by a report bearing the same certificate number.
This certificate is the property of HPi Verification Services Ltd. & may not be amended or issued to others.
The manufacturer must inform HPi Verification Services of any changes that affect any of the assessed Essential Requirements. Failure to do this will invalidate the Certificate.
The applied conformity assessment module does NOT allow the client to affix the Notified Body's identification number on the product.

CE

EU Notified Body No. 1521
Company registered in England #7217086

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