

WHITSUNDAYS AUSTRALIA

OPERATION MANUAL Seawind 1160 Lite- The Pearl

- **1-4.** Specifications and Layouts.
- 5-6. Electrical System.
 - **7.** VHF Radio.
 - 8. Navigation Instruments.
 - 9. Outboard Motor.
- **10-12.** Windlass, Emergency Anchoring and Moorings.
 - **13.** Refrigeration.
 - 14. Stove, BBQ and LPG.
- 15-17 Freshwater System, Showers and Hot Water.
 - **18.** Toilet and Holding Tank.
 - 19. Manoeuvring and Steering.
 - **20.** Sails.
- **21-22.** Dinghy and Tender.
 - **23.** Emergency Procedures.
- 24-25. Inventories.



Revised July 2018

Seawind 1160 Lite - The Pearl

Page 1- Specifications

Length 11.6 MetresWidth 6.5 MetresDraft 1.15 Metre

Displacement 7,000 kgs

Engines Twin Yamaha 25HP High-Thrust Outboards

Fuel Capacity 270 Litres
Freshwater Capacity 700 Litres

Private Cabins 3
Passengers Permitted 8

Double Berths 3 + Table

Single Berth 1

Refrigeration Upright Fridge

44 cm Long. 44 cm Wide. 66 cm High.

Bench Freezers (2 of each)

37 cm Long. 20 cm Wide. 4067 cm High.

Cooking Facilities 4 Burner Gas Stove, Oven, Grill

Oven dimensions

35 cm Long. 35 cm Wide. 27 cm High.

BBQ dimensions

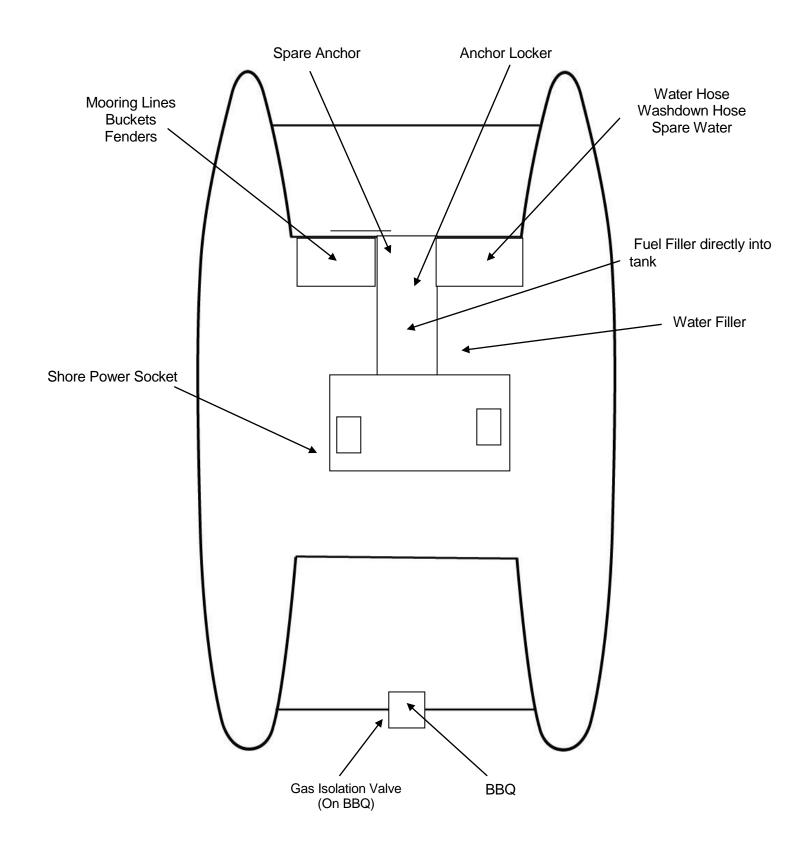
49 cm Long. 30 cm Wide. Gas.





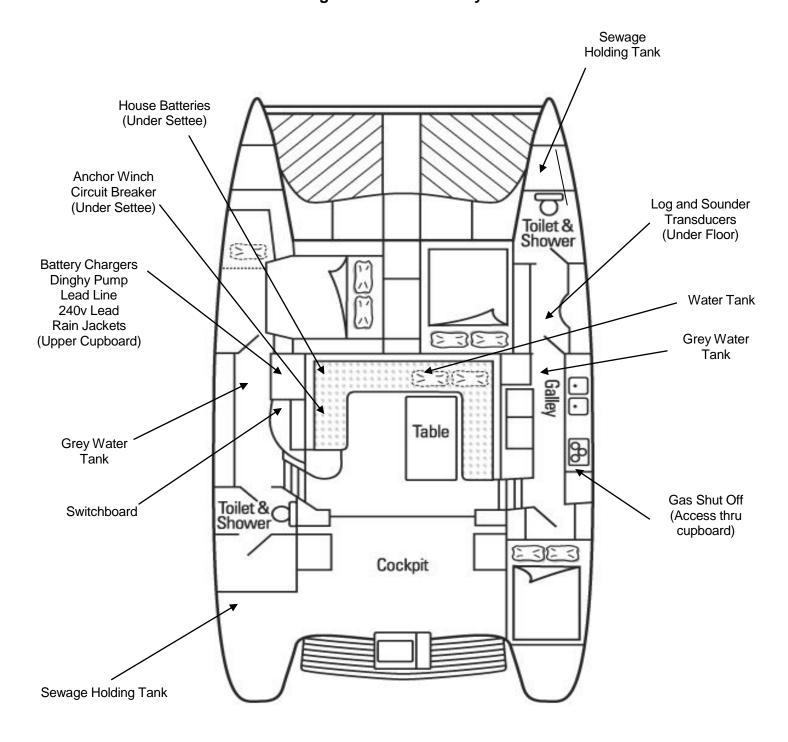
Seawind 1160 Lite - The Pearl

Page 2- Above Deck Layout



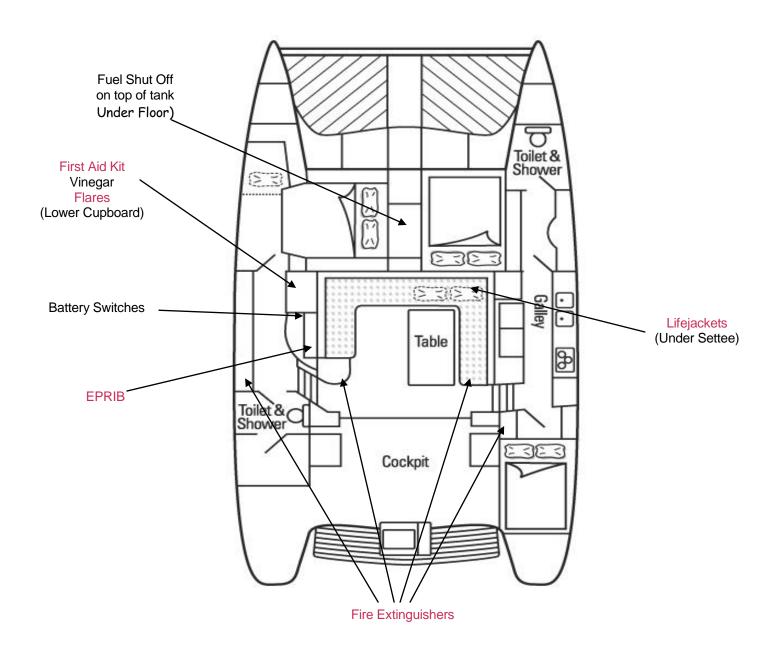
Seawind 1160 Lite - The Pearl

Page 3 - Below Deck Layout



Seawind 1160 Lite - The Pearl

Page 4 - Safety - Equipment and Door Use



Lifting the Bi-Fold Doors

To lift the saloon bi-fold door unbolt the door from the doorframe and take the lifting line together with its attachment from the cockpit roof and secure it to the door. Run the lifting line around the port winch and winch up the door until it reaches the cockpit roof where it can be secured by positioning the retaining bar.

To lower the bi-fold door ensure that the lifting line is secured on the starboard winch then fold back the retaining bar and slowly allow the door to drop to it's original position by controlling the rate of fall.

Warning

When lifting or dropping the bi-fold door ensure all people <u>especially small children</u> are away from the doorway.

Seawind 1160 Lite – The Pearl

Page 5 - Electrical System

Electrical System

The Pearl has ample power with an easy to use 12 volt system with separate power supply for the house and engines. She also utilises 240v shore power when in a marina for battery charging and operating 240v outlets.

All electrical lights and appliances are controlled from the circuit breaker switches at the main electrical panel.

The batteries are recharged by the **SOLAR PANELS**. The shore power also will power the battery charger / Inverter when on shore power in a marina berth. Although this provides ample power it is necessary to keep power consumption down by turning off lights or appliances when not in use.

Because The Pearl has a totally separate house and engine start battery system you will always have power to start your engines even if you allow the house batteries to run flat.

The Pearl has one engine battery situated under the saloon seats. This battery is recharged by the engines and shore power.

The house batteries are also located under the saloon seating on the port side. They are charged by the shore power when in harbour but when underway they are charged by the solar panels plus the engines.

Battery switches located adjacent to the switch panel are only for use in emergencies or when you are instructed by your base.

Do not use the Parallel switch for extending the life of the house battery power. This will flatten all batteries and you will not be able to start the engines.

Shore power

When you are in port, use the extension lead to plug into shore power. The inlet is below the port steering wheel. The battery charger turns on automatically.

Battery Condition Meter

This meter located on the switchboard gives information on the house batteries plus the start batteries.

CD/Stereo

The stereo has bluetooth available for playing music from your phone or other device. It is also you DVD player (TV must be set to HDMI source) and you TV sound system (Stereo must be set to AUX source).



Seawind 1160 Lite - The Pearl

Page 6 - Electrical System and House Batteries

Managing the House Batteries

The House Batteries hold 450Amp Hrs and the Start Battery holds 130 Amp Hrs

To keep the system operating correctly do not let the house battery capacity drop below 50%

To avoid battery problems keep the power usage down by turning off lights and appliances when not in use.

NOTE: If the house battery voltage drops below 11.8 volts all the refrigeration will shut down without warning.

ANCHOR WINCH CIRCIT BREAKER





Battery Monitor

Main Switch circuit breakers (under port saloon seat)



VHF

Stereo/DVD/CD

Seawind 1160 Lite - The Pearl

Page 7- Radio

VHF Radio

The Pearl is equipped with a VHF radio to communicate with base.

- Turn the radio on, select the channel, and adjust squelch to stop static.
- * Cumberland will call you at 9.30am and 2.30pm on Channel 81 and 82. At all times contact base on Channels 82 and 81.
- When talking to another vessel use channel 08 (zero eight).
- Detailed instructions are on the Cumberland Charter's radio instruction sheet.

Radio Schedules

Charterers are required to answer radio schedules twice daily on Channel 81 and 82 at 9.30pm and 2.30pm.

If reception is bad try Channel 82 in northern waters.

You must be in contact with base twice daily or you will be liable for search costs involved in locating you and your vessel.



Page 8 - Navigation Instruments

Navigation Instruments

The Pearl is equipped with instruments which give you boat speed, depth of water and wind speed and direction. There is also a chart plotter. The autopilot is also available.

Do not adjust these instruments as damage can occur to sensitive electronics if used incorrectly.

There is no need to adjust any settings by using the buttons on the instruments.

Note: Never rely solely on the sounder when moving in shallow water or when anchoring. The depth reading on the sounder is depth under the keel not ahead of you.

A crewman should look for coral from the bow and the vessel should manoeuvre very slowly.

Remember that the instruments are electronic and incorrect use of buttons can cause false displays or damage.



Depth - Speed Log - wind

Seawind 1160 Lite - The Pearl

Page 9 - Outboard Motors

Outboard Motors

The Pearl is powered by twin Yamaha 25 HP high trust outboards and cruises at six knots.





TILTED UP POSITION

TILTED DOWN POSITION

One 270litre fuel tanks give a cruising range of 40 hours running. The fuel is UNLEADED IMPORTANT!

Before starting engines make sure that the engines are tilted DOWN.





To Start Engines

- 1. Select neutral with gear lever in central position.
- 2. Turn key clockwise to start.

To Stop Engines

- 1. Select neutral.
- 2. Turn Key anti clockwise.

To Engage Gears

Push forward to engage forward gear. Pull back control to engage reverse.

Always pause at neutral for a few seconds when changing from forward to reverse.

Seawind 1160 Lite - The Pearl

Page 10 - Windlass

The Pearl is fitted with an electric anchor winch, 75 metres of chain and a CQR type anchor. The winch raises the anchor when the **UP** foot switch is pressed and lowers the anchor when the **DOWN** switch is pressed.

Always run the engines when using the winch.

The circuit breaker for the winch is located under the saloon seat port side. If the winch is overloaded the circuit breaker will trip. Push the switch lever up to reset.





To Lower The Anchor

- 1. Select your location from the 100 Magic Miles and check water depth and tidal movement. Stop the vessel with the bow into the wind.
- 2. Keep Tender on davits when anchoring.
- 3. When the required length of chain (minimum 30 metres) is released, allow the vessel to lay into the wind while keeping the engines in neutral.
- After about 10 minutes check to ensure your position is the same and the anchor is holding.
- Attach the bridle and let out some more chain so the boat load is taken on to the bridle. Not the winch.

To Lift Your Anchor

- 1. Open anchor locker hatch and make sure the chain doesn't stack up.
- Motor very slowly forward, so the chain is vertical. Press the UP foot switch. Don't over run the chain and make sure chain comes up vertically. Keep the skipper informed so the vessel moves ahead only as fast as the chain is retrieved.
- The windlass is designed to lift the weight of the chain and anchor only. Do not overload it by pulling the boat forward.
- * CAUTION If the anchor is snagged in rocks or coral and you try to break it free don't let this load go through the winch. Use the bridle or secure the chain to the main bollard.
- * NEVER engage the foot switch while the handle is in the gypsy clutch.
- * Ensure the chain is falling into locker easily. If the chain stacks up you will have to access the locker and pull the chain away from the "drop in" point. Keep hands away from the winch gypsy.

WARNING

When using a windlass, it is important to keep your fingers and toes well away from the teeth of the windlass and the chain as it passes over the bow roller, as accidentally trapping them could cause serious injury.

Keep your fingers and toes away from the chain as it passes over the bow roller.

Seawind 1160 Lite - The Pearl

Page 11- Windlass



Emergency Manual Anchoring ONLY

To Release Chain

Carefully release the gypsy by turning it anti-clockwise with the anchor winch handle.

As soon as the gypsy is free the chain will run out so do this slowly.

Do not touch the switches and keep your fingers away from the winch.

If the gypsy does not release it might need a gentle tap to break it free.

You could also manually pull the anchor forward and lower it into the water for a few metres.

- * Once the anchor is falling freely regulate its descent by tightening the gypsy with the handle.
- * Check the chain markers to ensure you let out the minimum 30 meters but more if needed.
- * When you have enough chain out tighten the gypsy to stop the chain.
- * When the anchor is set attach the bridle and let out the chain so it takes the load.
- Retighten the gypsy.

CAUTION - Do not overtighten the gypsy. Use only one hand on the handle and about 10 kilograms force. If it slips tighten it slightly.

Seawind 1160 Lite – The Pearl

Page 12 - Moorings

Mooring Procedures

Public Moorings

When approaching a public mooring, position the vessel so that it's down wind of the mooring and approach the mooring with the wind coming directly at you.

Remember to have the dinghy on the davits during this manoeuvre. Mono hulls Dinghy alongside.

Station a crewmember on the bow with the boat hook and when the vessel is in position the crewmember can pick up the mooring line with the boat hook.

The helmsman should take directions from the crewmember when approaching the mooring.

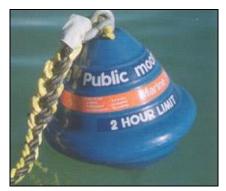
Feed the mooring line over the spare bow roller, but under the life lines. Attach it to the largest cleat available.

Or use the dedicated Mooring Strop that attaches cleat to cleat (As per briefing).

WARNING! The Mooring line should never be attached to the Anchor Winch, the Anchor Bridle or the Anchor Snubber.

When releasing moorings the vessel should be reversed until clear of the mooring buoy and rope.

ONLY when you can see the buoy and pick up line then should you motor forward to clear the mooring line in the water. Remember to have the dinghy on the davits during this manoeuvre. Mono hulls Dinghy alongside.



Public Mooring



Cumberland or private Mooring

Cumberland and Other types of Moorings

The procedure for using these moorings is the same as public mooring except that they are fitted with a smaller pickup buoy, which is attached to the main Mooring Chain.

Pickup the small buoy, haul the chain onboard and attach the Chain over the cleat

Page 13 - Refrigeration

Refrigeration

The Pearl has two bench freezers and an upright fridge in the galley.

To operate ensure the **two** circuit breakers on the main switch panel are on. These switches should be left on at all times.



Freezers



Fridge

Seawind 1160 Lite - The Pearl

Page 14 - Stove and BBQ

LP Gas appliances

Your vessel is fitted with a remote gas solenoid facility that will shut the gas off when not in use. This solenoid is situated in the galley just above the freezers.

A shut off valve is also located next to the LPG bottle. Before the galley stove or BBQ may be operated the LPG circuit breaker switch and the LPG gas solenoid switch must be turned on.

It is recommended that the LP gas solenoid is switched off

BBQ

To light the BBQ turn on the gas bottle and at the yellow valve adjacent to the BBQ. Then press the control knob in and turn anti-clockwise. At the same time press the manual igniter button. The valve opens fully as soon as it starts to turn. Turn it fully anti-clockwise for low heat.

To Light Stove Burners

- 1. Press the burner control knob in. Turn anti-clockwise.
- 2. Press the igniter and hold down until lit.
- 3. Once lit, hold the knob in for 20 seconds to warm the fail-safe unit. If the burner goes out repeat the procedure.

To Light Oven and Grill

- 1. Open the oven door.
- 2. Push knob in and turn to the left for the oven and right for the grill.
- 3. The igniter is built in and will only operate with the door open.
- 4. Once lit hold in for 20 seconds to warm the fail-safe unit.
- Leave the oven door open when grilling.





Page 15 - Fresh Water, Showers and Hot Water.

Fresh Water

The Pearl has one freshwater tank located under the settee seat in the saloon. The tank gauge is located adjacent to the electrical panel and the switch for the pump is located on the panel. Make sure the pump turns off when taps are off.

Deck filler caps for the tank is located in front of the mast.

Showers

The Pearl has three showers, one in each bathroom and a deck shower on the port transom.

To operate ensure one FRESH WATER PUMP switch is on at the switchboard. When finished - turn everything off again.

All grey water including showers and sinks is held in tanks under each hull floor. These must be emptied each day by turning on the grey water pump switches for five minutes.

Hot Water Service

The Pearl is equipped with a 10 litre Gas hot water system.





Seawind 1160 Lite - The Pearl

Page 16 - Fresh Water, Showers and Hot Water.

5.5 Gas adjustment

Lower water temperature. Use less gas.

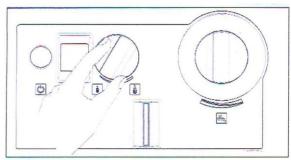


Fig. 11

Higher water temperature. Use more gas.

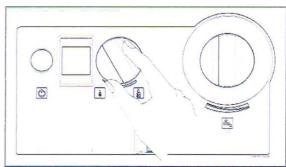


Fig. 12

5.6 Temperature/flow adjustment

► Turn anti-clockwise Increases flow and decreases water temperature.

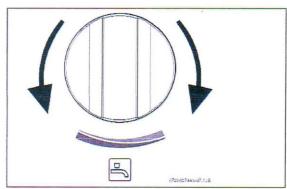


Fig. 13

► Turn clockwise.

Decreases flow and increases water temperature.

Regulating the temperature to the minimum required value reduces energy consumption.

CAUTION:

The temperature on the display is not precise, always check before bathing children or elderly people.

5.7 Draining the appliance

There are two ways to drain the appliance if there is a risk of freezing.

After turning off the inlet water valve and gas supply, open a hot water tap to relieve pressure then proceed as follows:

Water valve draining (see fig 14)

- Remove the fixing lock from the filter screw cap (no.
 1) situated in the water valve.
- Remove the filter screw cap (no. 2) from the water valve.
- ▶ Empty all the water contained in the heater.

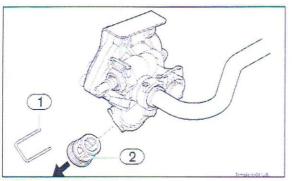


Fig. 14 Draining

- 1 Lock
- 2 Filter screw cap

Cold water inlet pipe drain (see fig 15)

- Remove the pressure relief screw (no. 1) situated in the water inlet pipe.
- ▶ Drain all the water contained in the heater.

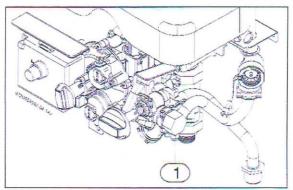


Fig. 15 Draining

pressure relief screw

Seawind 1160 Lite - The Pearl

Please note that L.P.Gas can be an extremely dangerous substance if not properly installed and maintained.

Water Heater

The optional Bosh LPG Hot Water System is installed behind the panel in the port bathroom. To operate turn on the gas at the LPG Bottle on the transom, at the optional remote solenoid switch in the galley and at the ball valve behind the Bosh LPG Heater itself. To light and operate the Gas Heater, Please refer to the Bosch Operating Instructions on the following two pages.

5 Operating instructions



Open all water and gas isolation valves. Purge the pipes.



CAUTION:

The front stainless steel panel in the burner and pilot burner area may reach high temperatures, with risk of burning in case of contact, and must not be removed.

5.1 Digital display - description

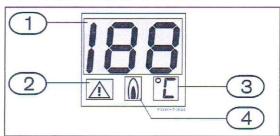


Fig. 7 Digital display

- 1 Temperature/error code
- 2 Malfunction indicator
- 3 Temperature measurement units
- 4 Heater in operation (burner turned on)

5.2 Before starting up the heater



CAUTION:

- Initial startup must be performed by an authorised gas fitter who will provide the customer with all the necessary information for optimum operation of the gas heater.
- ► Check if the gas indicated on the rating plate is the same as the one used at the location.
- ▶ Open the gas valve.
- ▶ Open the water valve.

5.3 Turning the heater on and off

Turning on

▶ Press the switch ___, position ___.

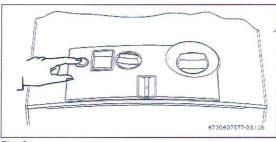


Fig. 8

Turn Hot Tap on, LED light on = Main burner on

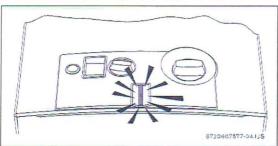


Fig. 9

Turning off

▶ Press the switch ___, position ___.

5.4 Water flow

If the red LED starts flashing during operation, check the water flow.

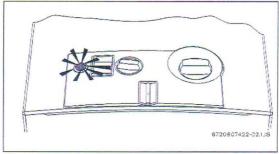


Fig. 10

Seawind 1160 Lite – The Pearl

Page 18 - Toilets and Holding Tanks

Toilets and Holding Tanks

The Pearl has two electric MACERATING toilets, each permanently connected to its own holding tank. Toilet waste is treated by maceration when you flush it. It is then discharged into the sea via the holding tanks.

IMPORTANT!

When you are visiting a **MARINE PARK** "B" zone (Green Zone) or a Marina you must not discharge even treated waste from the toilets. To comply with government regulations - turn the large valve located on the tank to the **OFF** position to prevent waste from discharging. When you depart the **GREEN ZONE** or marina swing the valve to the **OPEN** position and flush each toilet. The holding tanks have a limited capacity and are only designed to hold waste generated over a 24 hour period. They therefore need to be emptied regularly.



Port Tank Valve in **CLOSED** Position



Starboard Tank Valve in OPEN Position

Only human waste and toilet paper can be put in the toilet.

- Sanitary pads, tampons or panty liners etc.
- Baby Wipes.
- · Washing cloths.

ALL of these waste items **must** be disposed of in the rubbish as they will block and damage the system.

Ensure all crew-members know how to use the toilet properly because a blocked toilet can spoil your holiday!!

Operation

Before using toilet.

1. Press button to introduce water to wet bowl.

After using toilet

1. Press FINISH button and hold for at least 20 seconds.

If the toilet is blocked - call Cumberland Charter Yachts.

If the toilet is blocked during charter you will have to return to base to have it cleared.

Page 19 - Manoeuvring and Steering

Manoeuvring and Steering

When moving in a marina or a confined anchorage at slow speed you will have to use your engines to steer.

The Pearl will turn on its own length with one engine in forward and one in reverse.

When engaging reverse PAUSE before using revs so reverse lock engages properly.

Be careful you don't overload the steering when trying to turn in a small area. Use the engines instead.

Always ensure the tender is on the davits or alongside and secured fore and aft when manoeuvring. Or if moving astern trail it from the bow.

The best place to learn how your vessel manoeuvres is when you have plenty of space at an anchorage. Familiarise yourself there before entering a marina. Engage reverse and test the vessel's response when it reaches 2 to 3 knots.

Before you approach a berth have your fenders down, almost touching the water.

In strong winds use extreme care when moving to a marina berth. Don't reverse into a berth. Approach the dock slowly but ensure you are moving steadily to retain good steerage. Make sure you know which side of the dock you will be tying up to. Don't be afraid to ask marina staff for assistance if required.

The tender can be used as propulsion for the vessel if you need to manoeuvre and only one engine is operational.

Tie the tender securely fore and aft and have a crewmember operate the outboard to the skipper's instructions.

Make sure the outboard is in the locked down position so you can use it in reverse.

THIS IS FOR EMERGENCIES ONLY AND CAN ONLY BE DONE IF INSTRUCTED BY CCY BASE.

Seawind 1160 Lite – The Pearl

Page 20 - Sails

Sails

The Pearl has a roller furling self tacking headsail and a slab reef mainsail.

Always head into the wind when raising or lowering the mainsail.

Headsail

When unfurling the headsail head off the wind to stop the sail from flogging on the rigging.

- 1. Release furling line at cockpit.
- 2. Pull sheet rope to unfurl sail.
- Lock off furling rope if you want to reduce sail.
- 4. To furl sail away release tension on sheet rope and pull the smaller furling rope. Lock off cleat when sail is fully rolled in.

Never use a winch on furling lines as damage to the forestay may result.

Never release tension on mast headsail halyard which is secured with plastic ties. This is only released when removing the sail for maintenance.

Close hatches when sailing to avoid damage if a rope catches on hatch.

Mainsail

The Pearl's mainsail should be reduced to the first reef point when winds reach a constant 15 knots on the wind instrument and to the second reef point at 20 knots.

Do not use the mainsail if the winds exceed 30 knots. In heavy weather conditions it is best to motor or motor/sail with a minimum amount of headsail.

To Raise the Mainsail

- 1. Unclip the mainsail cover completely.
- 2. Move vessel slowly straight into the wind by using the motor.
- Release the mainsail sheet rope in the cockpit.
- 4. Release the halyard tie back on the boom.
- Raise the mainsail by pulling the mainsail halyard by hand. If using the winch make sure the sail does not jam in the track.

To Reef the Mainsail

- 1. The Pearl has two reefs which both operate on a single line reefing system.
- To operate Pull the appropriate reefing line until the connection points at the front and back of the sail are just below the top of the sail cover.
- 3. Hoist the sail and tension the halyard in the usual way.

To Lower the Mainsail

- Steer vessel into the wind and release mainsheet. Release the halyard to drop mainsail. Most of the mainsail should fall into the lazy jacks and the rest can be pushed in by hand. Using the motor will assist you in steering into the wind.
- Pull the halyard away from the mast using the tie back.
- Clip up the mainsail cover.

Seawind 1160 Lite - The Pearl

Page 21 - Tender and Outboard

Tender and Outboard

The Pearl has a tender powered by a 6hp Mercury Outboard.

To Start Motor

- 1. Lift motor slightly and release tilt lock peg on the rear starboard side of the motor and lower outboard into the water.
- 2. Prime the squeeze bulb in fuel line if necessary until it is hard.
- 3. Ensure gear lever is in the central or neutral position.
- 4. Twist throttle handle 10 degrees to low throttle setting.
- 5. Pull starter cord.

To engage gears move gear lever forward or back at low idle revs.

To stop outboard press red button on power head.



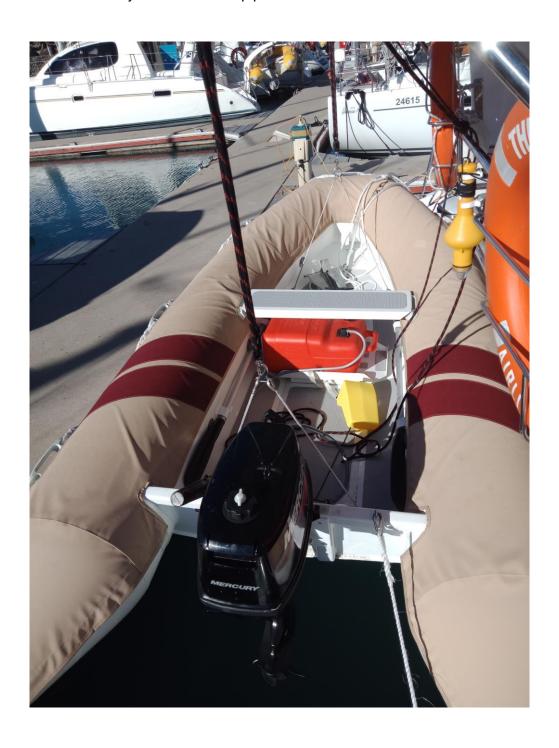
Page 22 - Tender and Outboard

Tender

The tender is also a life raft for The Pearl.

It has separate compartments fitted with air filler caps should they require refilling.

Keep the dinghy tubes pumped up hard. If you notice the tubes getting soft please pump them up and if they continue to deflate by the end of the trip please let Cumberland Know.



Page 23 - Emergency Procedures

Emergency Procedures

The Pearl has a number of safety features which include:

Life raft

The inflatable tender is also your liferaft. Handheld flares and other liferaft emergency equipment are stowed under the seat.

Lifejackets

Are stowed in the locker beneath the settee.

Safety Equipment

Flares, V-Sheet etc. are beneath the settee.

Fire Extinguishers

There are two dry chemical fire extinguishers on board. They are located in the aft cabins.

Fuel Shut-Off

- * The fuel shut off valves are located on top of the fuel tank in the fwd locker`.
- * The valves must be closed if there is a fire in the engine room.



Seawind 1160 Lite – The Pearl

Page 24 - Inventories (Removable)

Galley Inventory

Mixing Bowls (metal/plastic) 2/5

Baking Dish	1	Pillows	8
BBQ Lighter		Plates - Dinner	8
Bowls – Soup/Dessert		Plates – Bread & Butter	
Blankets –		Saucepans – S,M,L,	
Can Opener – Jag/Winding	1/1	Sealed Containers	
Clothes Pegs and Container		Serving Trays	Yes
Coffee Plunger		Sink Plugs	
Colander	1	Sink Plunger	1
Corkscrew	2	Spatula – BBQ/Plastic	1/1
Cutting Board	2	Spoons – Dessert/Soup	10/10
Egg Rings	3	Spoon – Serving/Wooden	2/2
Forks	10	Strainer	1
Fork – Large	1	Teaspoons	10
Frypan	1	Toilet Brush	2
Glasses – Wine Goblets/Flutes	10/10	Tongs – Salad	1
Glasses – Tumblers	10	Tongs – Stainless	1
Grater	1	Vegetable Peeler	1
Kettle	1	Whisk	1
Knives – Carving	1		
Knives - Dinner	10		
Knife – Vegetable	2		
Masher	1	-	
Measuring Jug	1		

Seawind 1160 Lite – The Pearl

Page 25 - Inventories (Removable)

Vessel Inventory

Dinghy Inventory

100 Magic Miles Yes Paddles 2 Fuel Tank and Container 1 240 Volt Lead Yes

Anchor Winch Handle Yes Dinghy Anchor 1

Binoculars Yes Dinghy Bailer 1

Boat Hook Yes Flares 3

Buckets 2 Painter Line 1 Charts (252, 254, 925) Yes

Compass (hand held) Yes

Deck Brush/Broom Yes

Dinghy Pump Yes

EPIRB Yes

Fenders 4

Fins (pairs) 9

Fire Extinguishers 2

First Aid Kit and Vinegar 1

Flares and Emergency Container Yes

Garden Hose Yes

Leadline Yes

Life Jackets 10

Life Ring Yes

Linen as Required Yes

Man Overboard Light Yes

Masks and Snorkels 9

Mooring Lines 4

Pencil/Dividers/Parallel Ruler Yes

Spare Water Container Yes

Tide Tables Yes

Toolbox and Spares Yes

Torch and Spare Battery Yes

Vessel Manual and Radio Sheet Yes

Wet Weather Jackets 6

Winch Handles 3