

## Notes from the Owners of Seahome

Grand Banks 42 Classic



Dear Friends,

Welcome aboard *Seahome*.

After sailing and then power boating for many years in the Great Lakes and then then Puget Sound, we purchased *Seahome* in 2019 and placed her in charter with San Juan Sailing and Yachting. We've made many wonderful cruising memories in the San Juan Islands and points North. Our hope is that you enjoy *Seahome* as much as we do.

If you can think of anything that would make *Seahome* more enjoyable for you, please let us know through San Juan Sailing and Yachting, or call us. We've tried not to overlook any detail in our effort to make her our ultimate boat.

We wish you fair seas and wonderful memories. Thank you for being our guests!

Sincerely,

Dan and Ariane Ringler

Dan's Mobile 360-393-5654

### The Name "Seahome"

Sehome was one of the four original villages along the coast of Bellingham Bay that joined to become Bellingham. Sehome was named after Chief S'-yah-whom (a.k.a. Chief Sehome) of the Samish Nation. Chief Sehome lived near the present site of Western Washington University, the Sehome Arboretum and Sehome High School, where our grandchildren graduated. We hope that you will have a wonderful time in our home waters and beyond.

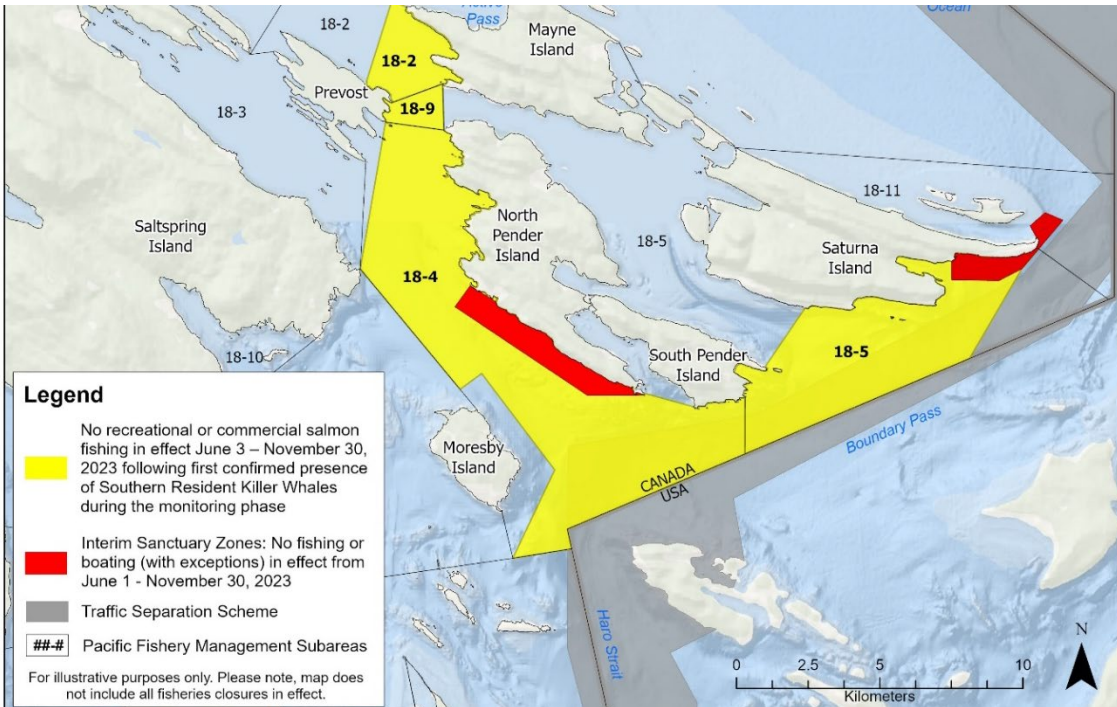
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### Being Whale Wise

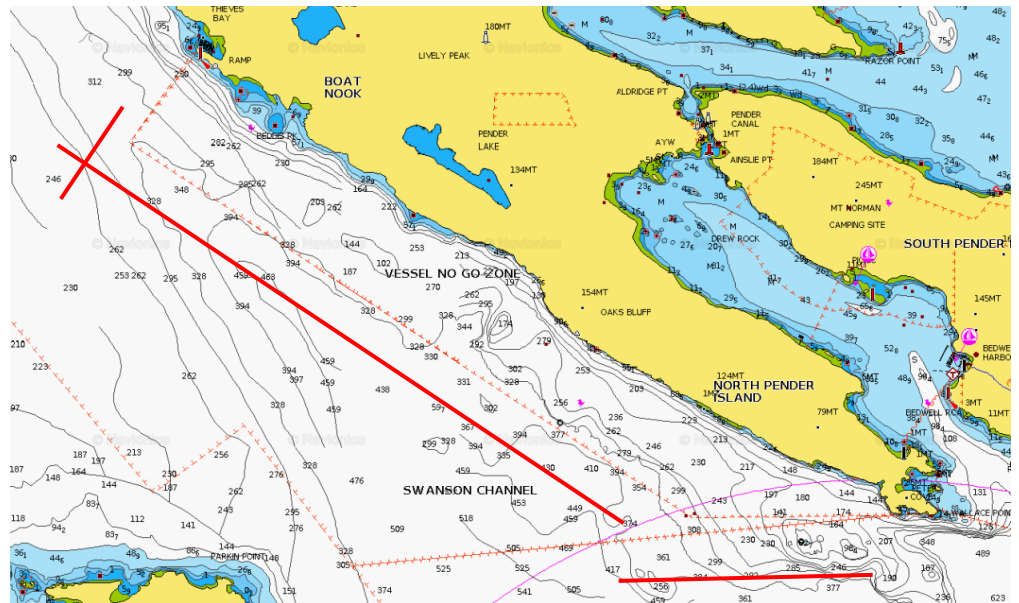
Our local Killer Whales are a wonderful part of the local family. But they are having a difficult time surviving due to declining salmon runs. These whales use echo location to find and catch their food. Therefore, noise pollution from boats and ships make it harder for them to thrive. In an effort to decrease human impact both the Canadian and US governments have implemented rules. We provided you a summary of these rules in the packet you receive when you arrived and there is more information in section 10 of the white reference book onboard Seahome. In general, stay at least 400 yds. away from the whales. Sometimes they come to you, if this happens shutdown the engine and turn off the instruments (assuming this is safe to do). They can hear the pings of the depth sounder – this is why we have you turn off the instruments.

In Canada they have gone a step further by creating some zones where boats are not allowed. This further improves the environment for the whales. The red areas in the diagram below show these zones.



And here is an example of what they look like on Seahome chart plotter(s). The red lines have been added to help point out the dashed lines, which are what you will see on the plotter.

Note this is just to the west of Bedwell Harbour, so on your way in or out of there be sure to avoid this area.



## Specifications and Vessel Information

### Vessel Information:

**Washington State Parks Annual Permit Decal** – Located on the transom, port side.

**U.S. Customs Re-Entry Decal** – Located next to the entry door, starboard side.

**Vessel Official Number - 1020493** (same number as shown on the Coast Guard Certificate of Documentation found in Section 5 of the **Charter Guest Reference Manual** (white binder). Permanently affixed vessel number is located in the engine room on the port stringer. Look for 3" high characters.

**Coast Guard Boarding Document** – Refer to the **Charter Guest Reference Manual** (white binder), Section 5 Documentation. Explains what to expect if you are boarded by the Coast Guard and where to find the information/equipment they may ask to see as part of their safety inspection.

**Carbon Monoxide (CO) sticker** – Above galley sink

**Oil pollution Placard** – Engine room forward bulkhead

**MARPOL Decal (marine pollution)**—Inside face of cupboard under galley sink

### Specifications:

Year:	1995	Engine:	2-300hp diesels
Make/Model:	Caterpillar 3116TA	Fuel: (2 tanks)	240 US Gal each
LOA:	47'	Water:	176 US Gal in 2 tanks (88/88)
Beam:	14' 1"	Holding:	40 Gallons
Draft:	4' 11"	Heads:	2 fresh water macerating
Displacement:	34,000lbs. (Dry)	Electronics:	Garmin

Staterooms: Aft double, berth; Fwd double V-berth; Salon settee 2 single berths

Aft Stateroom: Headroom: 6' 4", Berth Dimensions: 7'-3" X 4'-6"

Fwd Stateroom: Headroom: 6'-4", Berth Dimensions: 7'-7" (head), 3'-6" (foot)

Salon Headroom: 6' 4"

Refrigerator: 2.25 cu ft

Salon Berth Lengths: 6' and 6' 10"

Freezer: 3 cu ft

**Engines, Generator and Transmission Oil:** CAT Special Application Engine Oil SAE 30. (In engine room liquids tub)

**Engine & Generator Coolant:** CAT DEAC Coolant PreMixed 50/50 with water. (In engine room liquids tub)

**Operating Parameters (Estimated):** Based on GPS readings during sea trials of Seahome. Fuel consumption is based upon Caterpillar 3116 engine specifications for RPM settings.

RPM	Speed	Fuel Consumption	Naut. Miles/Gallon
1200	8.2 knots	2.9 GPH	2.82
1500	9.7 knots	5.2 GPH	1.86
1800	11.2 knots	8.4 GPH	1.33
2000	11.9 knots	11.4 GPH	1.04
2200	12.4 knots	15 GPH	0.82
2400	14.2 knots	19.4 GPH	0.73

## Nuances For Guests

There are a few things about Seahome that are not 'typical'. These are the things that may require special attention or where it may be best to deviate from customary operating procedures. We have listed some here because we believe they will help you plan your charter.

### Kayak and Paddleboard Storage

To prevent damage, please store kayaks and paddleboards only on the aft deck between the dinghy and the aft rail. They should be stored athwartships and never rested on the teak rails. For planning purposes this space measures 13' x 3'. Be aware that storing kayaks and paddleboards here does block easy access to the aft lazarette.

### Run Hoses Through Hawseholes

When filling water tanks or washing the decks please run the hose through one of the metal hawseholes. This will prevent damage to the teak rails.

### Throttle and Gear Controller (See also Appendix 1 of these notes Electronic Throttle and Gear Controller)

The GEAR switch on the DC Electrical Panel must be flipped "On" to shift the gear to forward or reverse or to control the throttles. Advancing the control handles past the detent in either forward or reverse increases engine speed.

**Chain Jam During Anchor Retrieval.** Frequently, when retrieving the last 30 or so feet of chain, the chain will pile up to a peak in the chain locker and block the chain pipe. Use the pole (stored in the forward berth hanging locker) or the wooden paddle (stored in the forward head cabinet under the sink) to poke the chain pile and push it over. This will allow additional chain to enter the locker. A blue tarp (stored with the paddle) can be used to protect the forward berth bedding. It may be convenient to ready the pole, paddle and tarp prior to retrieving the anchor. The crewperson with this duty is the "chain monkey".

**Tachometer shows zero at low rpms.** This is because the electronic tachometers are powered by the engine alternators. If the batteries are fully charged there may not be enough demand on the alternators to power the tachometers. Generally, sufficient demand will be created by advancing the throttle slightly or turning on the electronics, autopilot, radar, navigation lights or bow lights.

**Holding Tank Overboard Macerator Pump is Inadvertently Left On.** When the Macerator Pump switch is flipped "On", it is best to set a timer (on your phone?) so that the pump isn't inadvertently left on leading to a

malfunction. Five minutes is sufficient to pump the full holding tank contents overboard. Draining of the tank should be monitored by observing the Holding Tank Level Gauge in the aft head.

**Refrigerator and Freezer Settings** – The new refrigerator compressor is very powerful. The coldness control inside the refrigerator must be set at “0” or slightly below lest the lettuce will freeze. The **Freezer** coldness setting should be near “6” on a clock face and should not need to be adjusted by charter guests.

## Emergency/Safety Equipment

**SAFETY REMINDER:** It’s difficult for people holding lines on the dock to stop the momentum of a heavy cruising power boat. It’s also a bad idea to use dock lines on a cleat to stop movement; this can result in a sudden swing of the boat and damage to cleats, boat, and/or dock. And please, no crew should jump to the dock. If you can’t step off calmly, back-up and try again.

**SAFETY REMINDER:** When coming into San Juan Sailing Docks in strong winds, or if you’d just like a little assistance on arrival, hail “San Juan Sailing” on **VHF Channel 80**. They’ll be glad to offer some coaching and/or catch your lines. In fact, most marinas in the Islands will help you if you hail them and ask for assistance. Asking for docking assistance is usually a sign of smart seamanship.

**SAFETY REMINDER** –Whenever you are departing or arriving at the dock have a crew member designated as the “**roving fender**” mate. If you are going to accidentally “touch” a boat or other object, lower the fender to the point of contact.

**SAFETY EQUIPMENT**--You are not likely to need many of these items, but must know their location and operation.

**Cockpit Cushions.** In case of a person overboard, throw anything that floats, quickly.

**Life Ring and Lifesling,** A throwable life ring is stored on the Sundeck near the stairs. A **Life-Sling** is stored on the flybridge. Please review the cartoons on the face of the case for procedures. The lanyard is secured to the boat so that tossing the **Life Sling** overboard allows it to be towed behind the boat like a ski tow rope. Circling the person overboard will draw the recovery line near them. Circling to the port side works best since the lanyard is attached to the port flybridge rail.

**Personal Floating Devices (PFD), Inflatables (4ea).** Located in the stateroom hanging lockers. Safety Officer: please check for “green” visible at bottom of clear canister before each cruise. That verifies the auto-inflate function when immersed. We wear these at all times when on deck while underway.

**PFDs, Foam Vest (4ea).** Located in the compartment under the port aft cushion on the flybridge.

**Propane Detector.** The propane detector and solenoid switch control panel is in the galley, above the stove.

**Tapered Plug, Universal Foam Orange StaPlug.** Hanging on the forward bulkhead in the engine room. Tapered plugs secured near each through-hull.

**Tools.** Second drawer down, under lower helm seat and in engine room near forward bulkhead.

**Handheld fire extinguishers (6 total):** (1) & (2) in the forward and aft staterooms, (3) in the galley near stove, (4) outside on the sun deck alongside the dinghy davit, (5) on the flybridge forward of the port front seat, (6) on the dinghy console

**A Fire suppression system** in the engine room automatically releases halon; this system also provides automatic engine shutdown to prevent engines inhaling halon (engines can be restarted after pressing a button on helm overhead Fireboy display). The halon system can also be manually activated by pulling a Red Pull Handle near the lower helm seat. If the system is activated or the engines will not start, contact San Juan Sailing.

**Horns:** The main boat horn button is located just forward of the lower wheel and on the fly bridge on the panel to the right of the wheel. A hand-held horn is in the lower helm desk.

**First Aid Kit:** Located in the "Emergency Drawer" in the end of the salon "L" shaped settee

**Flashlights: (5ea)**

- 1) in the Engine Room on the forward bulkhead
- 2) in the "Emergency Drawer" at the end of the "L" shaped settee in the Salon
- 3) on the wall in the Forward Stateroom near the fire extinguisher
- 4) in the Master Stateroom port bedside table, top drawer
- 5) in the Helm Desk

**Extra Flashlight Batteries** in the "Emergency Drawer" at the end of the "L" shaped settee

**Flares:** In the "Emergency Drawer" in the end of the "L" shaped settee.

**VHF radio** at each helm and **a portable VHF radio** in the lower helm desk (it can also be used in the dinghy). The portable VHF radio charger is also in the helm desk.

The VHF radio just above the lower helm has Emergency Selective Calling and location capabilities, with operating procedures posted adjacent.

**Bilge Pumps:** The boat has five bilge pumps. See Section 8 (Bilge Pumps)

**Carbon monoxide monitors:** Located in the salon and forward and aft cabins

**Smoke Detectors:** Located in forward and aft cabins

**Automated Identification System (AIS)** )The Garmin Chart Plotter provides an **AIS System** that provides information about other vessels in the area (name, hailing port, heading, speed, size etc.) while providing them with pertinent information about Seahome.

**Emergency Tiller** - The boat has cable steering. In the event of a steering system failure, an emergency manual

tiller is provided. It is stored on the forward bulkhead of the lazaret. To use the tiller:

- 1) remove the plastic "cap" in the stbd lazaret hatch lid
- 2) remove the tiller handle from its storage location in the lazaret (remove protective wrap at end)
- 3) lower the stbd lazaret hatch lid into place
- 4) insert the shaft of the emergency tiller through the hatch lid opening and engage the rudder
- 5) steer with the tiller until repairs can be made

(The need for the emergency tiller is exceedingly rare!).

**Alarm Panel and Windshield Wiper Controls** - An Alarm Panel overhead at the lower helm provides information about several anomalies in the boat's systems. Lights illuminate if **engine water temperature is high** or if **oil pressure is low**. Lights also indicate when forward or aft bilge pumps are running. Finally, a light indicates that the engine room lights are on. **The windshield wiper controls are also here**. Turning the knobs activates the windshield wiper; pressing any knob activates the windshield washers for all three wipers. Fans to dissipate windshield fog are located in the lowest drawer under the lower helm seat.

**Raw Water Alarm** – Engine overheating is a serious problem. An electronic system monitors the temperature of the exhaust sea water from the engines. The system alarms if the water temperature rises above a set point. The **Alarm Panel** is located overhead at the lower helm (labeled Raw Water). If the alarm sounds, the offending engine should be shut down immediately and the cause of the alarm investigated. The alarm can be muted by pressing the Mute button on the alarm panel. Debris in the sea water inlet or strainer leading to the engine is the most common cause of an alarm. The inlet and strainer should be examined and cleaned (see **Inspecting and Cleaning Sea Strainers** on page 34). The second most common cause of overheating is obstruction of the thru-hull due to plant material on the intake. If engine overheating occurs, contact SJS&Y.

## Anchors and Windlass

### Highlights

- Windlass raise/lower anchor foot pedals are located on the deck just aft of the windlass.
- Please do not use the windlass controller at the helm, unless the foot pedals are inoperative.
- Anchor rode chain length marking are shown at the right and on a plaque at the windlass.
- Windlass breaker is a chrome pointed rotating switch on the Anchor Windlass Panel on the wall just to the right of the lower helm.

### CHAIN LENGTH MARKING

2' lengths of line woven into chain:

- 1 piece every 25'
- 2 pieces at 100' + 200'

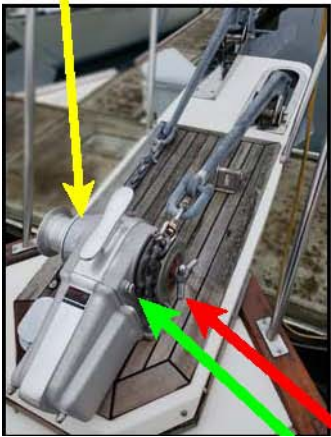
### Anchor Windlass

The anchor is raised and lowered by a windlass on the anchor platform. The windlass can be controlled by foot switches at the platform and switches at both helms. The rotary circuit breaker for the windlass is on the



Windlass Panel on the starboard wall of the salon helm.

**Be sure to leave the breaker "Off" when the windlass is not in use. This prevents damage in the event that a footswitch fails due to salt water contamination!**



The up & down footswitches



The yellow arrow points to the Emergency Ratchet and to the Insertion Hole for the emergency handle (stored in fore-deck locker). Note: The Insertion Hole may face forward and be difficult to see. The red arrow points to one of the clutch adjustment points. The green arrow points to the Emergency Cog which can be engaged to prevent the chain from running free.



The windlass breaker is to right of the lower helm.

If the windlass should fail to operate when the foot switches are operated, trouble-shoot as follows:

- Be sure the **Windlass Breaker switch** on the Windlass Panel is "On".
- Press the "Reset" button on the windlass panel.
- Try the manual up/down switch at either helm (if this works, use these switches instead of the foot switches until the foot switches can be repaired).
- If these steps fail, use the Emergency Windlass Handle (stored in the forward deck locker).
- With the clutch tight, insert the handle into the hole in the ratchet on the left side of the windlass (the hole may be on the forward side of the ratchet and difficult to see).
- Pull the handle backward to bring in the chain (the ratchet will hold the chain tight as additional strokes are made until the anchor is aboard). This is a time consuming process. See the windlass manual in the aft stateroom.

## Details

The scope normally used in the islands is 4 to 1, definitely not 7 to 1 (unless conditions call for it, i.e. sustained winds over 25 knots). Most of the anchorages are well protected and popular, so you will likely have someone anchored nearby. Most coves are 20'- 40' deep; so expect to pay out about 100'-180' of rode. Tides can change water depth up to 12' in the San Juans so be aware of where you are in the tide cycle when choosing an anchorage and deciding how much rode to put out.

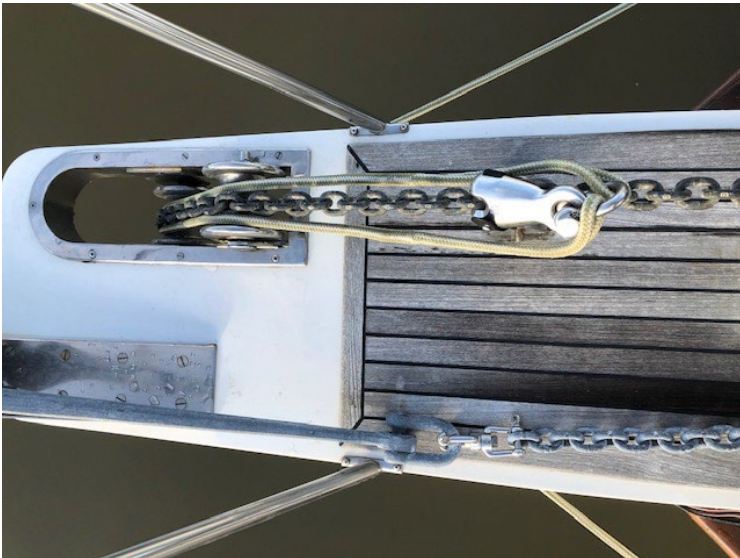
Anchoring safely requires two persons, one at the helm maneuvering the boat and one on the bow operating the anchor. Turn ON the **Windlass breaker** (on wall starboard of lower helm). The anchor restraint is released,

then the windlass foot-switches are used to slacken the chain. The anchor is eased slowly and carefully over the bow roller. Take care that the anchor does not swing into the hull.

Lower the anchor slowly to the bottom using the windlass. When the chain begins to slacken, indicating that the bottom has been reached. Release another few feet of chain then back the boat slowly away by reversing the engines for 2-3 second bursts: eddies from the chain indicate motion. (Backing downwind may be easier) Resume lowering the anchor while the boat is slowly moved backward (use of thrusters may be helpful in steering) (watch the eddies and add another burst of reverse if necessary) until the desired amount of chain is laid out on the bottom. Stop paying out chain. Engage reverse with one engine for 2-4 seconds at a time until the chain starts to pull straight off the bow toward the anchor. A straight chain indicates a "set" anchor!

NEVER pull on the chain for more than four seconds, and never with both engines or at any engine RPM other than idle! Putting the boat's weight plus its horsepower on the chain forcefully, even at idle, may pull the anchor loose even if it is well set. If while checking the "set", a taught chain can't be achieved, or the chain rumbles and clunks, and seems to release in bursts, the anchor is not holding. Be patient: it may not set on the first try and you may have to repeat the process to get a good "set".

### Anchor Bridle



*Anchor bridle Mantis Claw attachment with lines over anchor roller.*

There is a Mantis Claw anchor bridle stowed in the forward deck locker. Use it when anchoring overnight, as it accomplishes three goals: 1) It takes the strain of the anchor off the anchor platform and windlass and directs it to the bow cleats which are more suited to hold it; 2) It reduces substantially the chain noise transmitted to the occupants of the forward cabin; and 3) It allows the anchor rode to have a lower angle relative to the sea bottom, thus increasing the anchor's holding power.

To use the bridle:

- Lower and "set" the anchor normally.
- Hook the bridle (Mantis Claw) on the upper side of the chain with the attachment ring aft. It may be necessary to lift the chain slightly to insert the Claw into the chain. (Don't be gentle!) Fasten the rubber restraint strap to keep the Claw in place. Feed the ends of the bridle lines forward through the bow roller aperture and over the roller. Let them dangle almost to the water. Then, using a boat hook lead them to and through the port and starboard hawseholes respectively and secure to the adjacent cleats.

- The bridle lines should be equal in length and as long as possible.
- Last, put a bit of tension on the anchor and operate the windlass slowly in short bursts to pay out anchor chain so that the Claw passes over the bow roller and the chain tension is supported by the bridle. The excess chain should then form a dangling loop just **aft** of the Claw. The weight of the drooping chain forms an effective “snubber”, so the boat is gently held against the pressure of wind and tide.

## Windlass Operation, Chain Jams & Stern Tie

### Windlass Operation

The chain goes from the windlass into the chain locker through the chain pipe behind the cog wheel (wildcat). Be especially careful to keep fingers, hands, arms, etc. away from the chain when it is moving! You should use the foot switches just behind the windlass to control it (not the control by the lower helm), this allows you to observe the chain engaging with the windlass and moving into or out of the chain pipe.

### Rinse Debris from Chain and Anchor:

While retrieving the chain and anchor, rinse off the debris and mud using the salt water spigot and hose adjacent to the anchor platform. The Salt Water Pump breaker (SW PUMP), in the DC Electrical Panel, must be “On” to enable the pump to run when the spigot is opened. Turn the breaker “Off” when finished to prevent flooding the boat if a salt water pipe in the engine room should break.

### Chain Jams

If the chain jams while **lowering** the anchor, it may be that, inside the chain locker, one loop of the chain has fallen inside another loop when the chain pile fell over or shifted. It is impossible for the chain to knot so you should never need to disconnect it at either end. One way to disentangle the chain is, while wearing gloves, (stowed in the lower helm step to the deck) grasp the chain on the forward side of the cog wheel, and, while lifting it above and behind the cog wheel, rapidly yank it up and down through the chain pipe. This will usually free it. If this “yanking” technique fails, a crew member can access the chain locker from the forward berth and un-overlap the layers of chain in the pile (a blue tarp stowed under the sink in the forward head can be used to protect the bed). Be especially careful to keep fingers and hands away from the chain when it is moving!

If the chain jams while **retrieving** the anchor, it may be that the chain, in the chain locker, has piled up to a peak and blocked the chain pipe. (A frequent occurrence.) Use the pole (stored in the forward berth hanging locker) or the wooden paddle (stored in the forward head under the sink) to poke the chain pile and tip it over. Then, additional chain can enter the locker. A blue tarp (stored under the forward head sink) may be used to protect the forward berth bedding. It may be convenient to ready the pole, paddle and tarp prior to retrieving the anchor. The person with this duty has been termed the “chain monkey”.

In the chain locker, the end of the chain is attached to the boat using a strong nylon line. If the anchor can't be retrieved, the anchor and chain can be cut loose from the boat. Attach the end of the chain to a fender for

flotation and record the location of the anchor and chain for later retrieval. If possible, contact SJS&Y for advice before abandoning the anchor and chain.

### **Secondary Anchor**

A secondary anchor is mounted on the bow pulpit adjacent to the primary anchor. It is attached to a 200 ft rope rode. The winch can also be used to retrieve the secondary anchor.

### **Stern Tie to Shore**

When a stern tie to the shore is appropriate, an anchor is set 200-300 feet from shore, with the boat backing toward shore during anchor-setting. (Anchor distance from shore depends on expected final stern distance from shore, plus boat length, plus expected length of chain necessary.) Of course, water depth at the anchor, at the boat and expected tides must be taken into account.

The shore line is on a reel in the lazaret. Place the reel in the corner of the cockpit. Pass the line through an aft hawsehole and hand it to a crew member in the dinghy. With a crew member keeping the boat in position, take the dinghy to shore pulling the end of the shore line along. Pass the line around a tree or any solid object and pull it back to the boat then through the hawsehole again. Pull the line tight and cleat both the outgoing and incoming lines. With 100' or more of line out: there is plenty of sag/stretch, and we want to keep the boat in its area! If necessary, put a crab pot float or fender on the line to warn others that it's there. During this process, be sure to keep clear of rocks near the shore. Then, to depart in the morning just release the bitter end from the boat and wind the line aboard.

## **Barbecue**

### **Highlights**

- Propane hose shut-off valve is located on the top of the propane tank just below the grill. Shut off each after each use.
- Please clean grill (using the wirebrush, stored in the port salon step drawer) when finished cooking.

### **Details**

To operate: Open the valve on top of the propane tank; open the lid; open the burner valve; push the lighter button several times until lit or use a butane match (from port salon step drawer) through the lighter hole. Adjust the flame level using the rotating burner valve. When finished, press and turn the burner valve to off and close the shut-off valve on the tank. A grease catch pan under the burner may need to be emptied.

## **Batteries, Charging and Inverter**

### **Highlights**

- Please keep batteries above 12.2 volts (50% charge) at all times. 12.6+V is fully charged.
- When charging, battery voltage will read above 13V.

- Ensure batteries are charging when connected to shore power – see details below in Battery Charging section.
- When underway, the engines automatically charge all batteries.
- At anchor, when the generator is not running, the house battery bank is sufficient to handle normal DC loads (including lights, fridge, diesel cabin heater plus entertainment systems) overnight.
- Caution is needed when using 120V power from the inverter. Only low wattage items such as phone chargers, computers or entertainment center should be used. High wattage items like microwave, hair dryer coffee maker, toaster or electric heaters will quickly deplete the batteries. These items require 120V power from the generator or shore power.

## BATTERIES

Seahome has the following battery groups:

- House (powers inverter, instruments, lights, pumps, windless, davit, USB outlets)
- Port Engine Start
- Starboard Engine Start
- Generator Start
- Thrusters (separate bow and stern)

All batteries are charged automatically when connected to shore power or generator or while either engine is running. The **Inverter Breaker** on the AC Electrical Panel must be "On" to charge on shore or generator power. Monitor charging with the Victron Display on the lower helm overhead (see below)

### Battery disconnect and Parallel switches

The battery disconnect rotary dial switches and the battery parallel switches are located on the forward bulkhead in the engine room. Charter guests should not use these switches. The exception is the unlikely event that an engine start battery is depleted. (Very rare). Contact SJS&Y if an engine fails to start.

## BATTERY CHARGER/INVERTER

Seahome is equipped with a Victron Multiplex Inverter/Charger power management system. The Victron Touch Control Panel is shown in the photo below. It is located on the overhead panel above the lower helm. It shows 1) Upper left--The amount of AC power (in watts) flowing into the boat from either the shore cord (do not exceed 3000 watts) or generator (do not exceed 7000 watts) depending on which source is selected on the AC Breaker Panel. 2) Upper right shows the present AC Load (in watts) being used by all appliances. 3) Lower left shows the state of the House Batteries showing the % charged, **(Do not let % charge fall below 50%, -- connect to shore power or start generator)**, also shown are the present battery voltage (V), present power use in watts (-W) and amps (-A). 4) Lower middle shows the present DC power consumption in watts (W).



*Victron Inverter/Charger Touch Control Panel*

### Charging – Connecting to Shore Power

- Ensure that the **Master Switch** on the AC Panel is “Off”.
- Connect the 30 Amp shore power cord to a receptacle on the bow pulpit or at the stern (near the lazaret). Connect the cord to the marina power source.
- Select the **forward** or **aft** receptacle with the large rotary switch on the AC Electrical Panel.
- Flip “On” the Master Switch
- Flip “On” the INVERTER breaker on the AC panel.
- The Victron Inverter-Charger will automatically start charging the batteries (after a 20 second startup).
- **Monitor the second meter down on the starboard wall (AC Amps) and do not exceed 30 Amps, the capacity of the power cord. The Inverter-Charger plus Hot Water Heater plus Ice Maker plus Freezer may overload the cord. One or more of these may need to be temporarily turned “Off”.**

### Charging – Engine

- All batteries are automatically charged when either engine is running.

### Charging – Generator

Start the Generator. (Instructions inside AC Panel Door) Wait for a minute or so to allow the generator to warm up. Switch the Large Rotary Switch on the AC Panel to GEN. Flip ON the Master Switch just above the Large Rotary Switch. After a few seconds delay the Victron Display will indicate the amount of power in watts (W) flowing to the batteries, to the AC appliances and the DC load. Unfortunately, the Victron Display continues to display the source of power as Shore but you know, with the selector switch at GEN, the generator is the true source of power.

**Inverter (The inverter and battery charger are one unit.)**

- If 120V AC power is needed for low wattage devices when shore power is not available, the Inverter breaker on the AC Panel, must be turned "On". It converts 12V power in the House Batteries to AC power.
- The inverter powers only the 120V outlets on the PORT side of the boat and the MICROWAVE OVEN.
- **Do not let the inverter or appliances draw the house battery charge below 50% charge.** (Connect to shore power or start the generator to bring the battery back up toward 100%.)
- The fridge, ice maker, freezer and water heater are not connected to the inverter. The fridge is connected directly to house batteries through the FRIDGE breaker on the DC Panel. The ice maker, freezer and water heater run only when AC power is available from the shore or generator, and their respective breakers are turned "On". Water is also being heated whenever the port engine is running.

**Berths and Bedding**

*Seahome* has a large V-berth with head, shower and hanging locker forward, a master stateroom aft with a standard size bed, head, shower and two, hanging lockers. There are ample sources of lighting in each berth, with a master switch near the entry and individual controls for reading lights. All hatches and windows come equipped with screens. The main central salon has two settees that can sleep two adults. The forward, aft and salon sleeping areas are equipped with 110V outlets that are powered by the inverter and are suitable for CPAP power.

**Bilge Pumps****Highlights**

**Bilge Pumps** - The boat has five bilge pumps.

A built-in piston type hand pump is concealed in the lower helm starboard step to the side deck. It takes several strokes to prime the pump before bilge water is pumped overboard.

Two electric bilge pumps are controlled by switches in the DC panel by the lower helm. **In the center row, the breakers labeled FWD Bilge Pump and AFT Bilge Pump should always be left "On" otherwise the pumps will not work.** These switches provide power to the pumps. To the right of these two breakers each Bilge Pump has a 3-position toggle switch labeled "Auto" (down), "Off" (center) or "Manual" (up). These switches should always be left in the "Auto" (down) position.



When in "Auto" (down) the pump is controlled by its float switch.

When set to "Off" (center) the pump will not run. This position is only used if the float switch is defective and will not turn off.

When set to "Manual" (up) the pump will run without regard to the float switch. This is used by the operator to drain water below the range of the float switch or to bypass a defective float switch. (An alarm sounds whenever a bilge pump is running.)

There are two EMERGENCY ONLY high-volume engine seawater pumps that can draw from the bilge. Each of the engines' seawater intake hoses has a "T" with a lever valve to a large hose in the bilge. To allow the engine seawater pump to draw from the bilge, 1) cut the zip ties and move the valve handle to point at the hose running to the bilge. 2) loosen the thru-hull T-handle and close the thru-hull valve, (Note: In an emergency, these valves will probably be under water), The engine pump should not be run dry. Manage the valves to ensure that the engine pump (while running) always has water.



Emergency bilge pump valve (red handle) and sea strainer. **IN AN EMERGENCY ONLY** -Cut zip ties and rotate **red handle** in line with hose to bilge. Close through-hull using the **yellow** handle at base of sea strainer. [ must loosen t-handle (right arrow) to allow yellow handle to move] Monitor bilge water level and manipulate red and yellow levers to ensure that the engine seawater pumps do not run dry.

## Cockpit and Flybridge Enclosures

Seahome enclosure panels can enclose the forward half of the flybridge. The forward windshield panels can be partially zipped down for ventilation or can be removed. The side plastic windows and aft central section can be rolled up and snapped up with restraining straps. The aft central section should be stored snapped up or completely zipped down to prevent damage from flapping in the wind.



**TIP:** The plastic windows in the panels are vulnerable to scratching from dirt and salt crystals. When salt spray dries on the plastic, tiny salt deposits are left behind and tend to obscure your vision. Please avoid directly touching the plastic with a damp rag or sponge. It's like rubbing the plastic with sand paper! Salt does dissolve in water, but not as fast as you might think. The salt crystals remain undissolved for several seconds of fresh water rinsing. To clean, use generous amounts of fresh water in a pan from the galley or dock hose and "flood" the plastic to dissolve the salt crystals away. If the panel windows are really clear, you can thank previous guests for their diligence. And we thank you too!

**Caution:** Most spray-on sunscreens and bug-sprays react chemically with the plastic windows. Please inform your crew to spray downwind of all the panels. And please don't lean against the windows with sunscreen on your back and shoulders. Once that chemical reaction takes place, the plastic becomes permanently hazy.

Thank you for helping us keep the plastic windows clear!

## Defrosters

Battery powered windshield defroster fans are stored in the bottom drawer under the lower helm seat. These fans can be positioned to best defrost the windshield or side windows. Extra batteries are stored in the Emergency Drawer under the end of the L-settee.

## Dinghy, Outboard and Davit

### Highlights

- 11' Novurania hard-bottom inflatable boat with console, Garmin chartplotter and 30 hp Tohatsu outboard. (Plotter is stored in the port salon step to the deck.)
- Do not tow the dinghy, raise on davit and store on cradle when underway.
- Mantis anchor and Anchor Buddy hold the dinghy when beaching.
- The dinghy motor has an automatic choke, there is no manual choke to adjust.
- Use only the fuel tank under driver seat. Open the breather valve on the tank cap.

## Dinghy



The dinghy is an 11.0' Novurania hard-bottom inflatable boat with a console.

For safety, and compliance with U.S. rules, there must be a life jacket aboard the dinghy for each passenger and children under 12 must wear it while the dinghy is afloat.

The dinghy is equipped with an outboard motor with remote controls, a console, Garmin chart plotter, (stored in salon step to port deck) lights, depth sounder, bilge pump, battery, anchor and Anchor Buddy rode, shore line, paddles, and a 6 gallon fuel tank under the driver's seat. (WE DO NOT USE THE DINGHY BUILT-IN FUEL TANK IN THE BOW).(Dinghy fuel is

Regular Gasoline (87-octane)

## Davit



*Davit Remote Control Assembly.*

The boat has an electric davit to move the dinghy from its cradle to the water.

**Please be careful not to damage anything with the outboard lower unit.**

To operate the davit, turn "On" (Up) the toggle switch circuit breaker on the wall starboard of the lower helm.

- 1) Connect the remote control (stored under the flying bridge starboard aft seat) to the socket under the davit motor. Lower the controller to the side deck. It is best to operate the davit from the walkway near the davit base.
- 2) Lower the hoist a foot or so and remove the cover and restraint lines and straps. **Put in the drain plug.** (FAILURE TO INSERT THE DRAIN PLUG IS THE MOST COMMON ERROR IN LAUNCHING) If the plug is not in, the dinghy will quickly take on sea water. If you forget, hoist the dinghy a few inches at a time and wait for the water to drain. IT TAKES A LONG TIME!!

Then hoist another few inches and wait. When draining is finished, raise the dinghy to the rail and insert the plug. When not in, the plug should be tied to the steering wheel or the dinghy cover cinching cord under the motor. A spare is in the lower helm cubbyhole.

- 3) **To Launch** -- Using the tilt control on the outboard motor cover, tilt the outboard lower unit maximally up. Raise the dinghy until the hull just clears the cradle. Grab the outboard lower unit and rotate the motor inboard and pull aft to allow the bow to clear the davit base. Move the dinghy bow around the davit base. (This takes some force.). Swing the dinghy over the rail while holding onto the bow and stern lines.
- 4) Lower the dinghy until afloat then pay out more davit cable in order to move the dinghy to the end of the swim step. Release the large lifting shackle. Hold onto the heavy shackle until it is lifted above the rail and secured.
- 5) Bring the dinghy to astern the swim step.
- 6) **To store the bridle** -- Release the bridle bow shackle from the dinghy and store the bridle behind the driver's seat with the two aft shackles still attached.
- 7) Secure the davit boom to Seahome so it will not swing if the boat rolls.

To re-stow the dinghy reverse the procedure, being sure to raise the outboard lower unit before raising the dinghy from the water. This will help prevent the lower unit from damaging the rail. Take care to adjust the dinghy for best fit in its cradle then lower the lower unit. Attach the bow and stern restraints. If heavy weather is expected, it is best to attach the red webbing straps, with ratchets attached, around the dinghy and through the cradle. (red straps with ratchets are stored under starboard aft flying bridge seat)

If the dinghy is stored on its cradle uncovered, remove the drain plug in rainy weather so that it doesn't fill with water. (attach it to the steering wheel with a twister tie, nylon line or wire). Additional plugs are located in the lower helm cubby hole. The hand bilge pump and air chamber pump are stored under the aft starboard flying bridge seat.

Using the Anchor Buddy, one can drop the anchor 30-45' from shore then stretch the rode to shore. Be careful, the point and edges of the Mantis Anchor flukes are sharp. Attach the dinghy to a shore line and then let out the shore line and the Anchor Buddy will pull the boat out to the vicinity of the anchor. To retrieve the dinghy, pull the shore line. The Anchor Buddy should not be used for overnight anchorage.

When pulling the dinghy ashore on a beach. It is best if you raise the motor and bump up to the beach carefully and step ashore over the bow, pulling the dinghy a little more ashore as each person off-loads. If two persons are present, hull scratches can be reduced if one lifts from each side as the dinghy is moved forward. Don't forget to raise the outboard lower unit as you approach shallow water then shut it off and glide or paddle to the beach!

### Outboard Motor

The dinghy has a new Tohatsu, 4-cycle, 30-hp outboard motor with remote controls, electric-start and tilt.

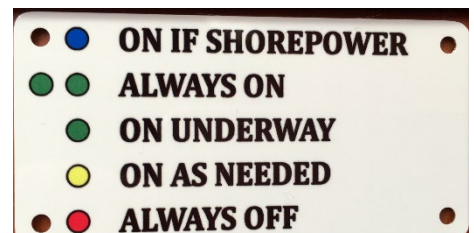
**Don't forget to open the fuel tank vent in the cap of the tank. Do not add oil to the fuel.** It is permissible to practice starting and running the engine for up to 15 seconds in neutral while the dinghy is in the cradle.

When operating the dinghy, the ignition lanyard should be attached to the operator.

## Electrical

### Highlights

- The AC and DC panel breakers use the color dot convention shown on right:
- The **AC Master Switch** is located on the **AC Panel** (lower panel) to the right of the lower helm. It is just above the large rotary selector switch.
- The **Master Shore Power Selector** is the large rotary switch on the same panel.
- **Emergency Parallel Switch** is a large rotary switch on the **DC panel** (upper panel) right of the lower helm. This switch should always remain on HOUSE.
- The AC Outlets on the **port** side of the boat and the microwave can be powered by the Inverter if AC is not available from Shore or Generator.



**Switches and Controls on the Electrical Panels**

**AC Panel Breakers (Lower Electrical Panel)**



*The AC panel controls 110-volt AC power throughout the vessel whether it is received from the shore power cord or generator or inverter.*

AC PANEL Name of Breaker or Switch	Function	While Motoring	At Dock with Power	At Anchor or Buoy
PORT OUTLETS <i>(Needs shorepower, inverter or generator to function)</i>	Powers Outlets on Port Side of Boat	On	On	On
STBD OUTLET <i>(Needs shorepower, or generator to function)</i>	Powers Outlets on Stbd Side of Boat	On	On	On
WATER HEATER <i>(Needs shorepower or generator to function)</i>	Turns ON Water Heater	Off (water is automatically heated by engine)	On	As needed (only heats when GEN running)

AC PANEL Name of Breaker or Switch	Function	While Motoring	At Dock with Power	At Anchor or Buoy
UNUSED BACK-UP BATTERY CHARGER (SENTRY) <i>(Needs shorepower or generator to function)</i>	Powers <b>UNUSED</b> Back-Up Battery Charger	Always Off	Always Off	Always Off
ICEMAKER <i>(Needs AC from shorepower or generator to function)</i>	Powers Icemaker when AC Power is Available	On (Only makes ice when generator is running)	On (Only makes ice when AC available)	On (Only makes ice when generator is running)
MICRO-WAVE (Needs AC from shorepower, inverter or Gen)	Powers Microwave When AC Present	On	On	On
INVERTER-CHARGER <i>(Needs shorepower or generator to charge batteries)</i>	AC to Inverter for Battery Charging	On	On	On
FREEZER <i>(Needs shorepower or generator to function)</i>	AC to Freezer	As needed	As needed	As needed
GENERATOR ON/OFF (upper right) (Must be "On" to start or stop generator) (Must turn off after Stopping Generator)	Powers Generator Control Circuits	OFF — Only On when starting and running Generator	Off	OFF — Only On when starting and running Generator
HEATER Button	Powers heaters in cylinder head before starting	Hold for 15 seconds, release before pushing START	Hold for 15 seconds, release before pushing START	Hold for 15 seconds, release before pushing START
STOP (Gen ON/OFF must be "On" for STOP to work)	Pressing Button Stops Generator (hold till GEN stops)	As needed to stop generator	As needed to stop generator	As needed to stop generator

AC PANEL Name of Breaker or Switch	Function	While Motoring	At Dock with Power	At Anchor or Buoy
Master Switch	Turns on AC Power to boat if AC is Present	Turn ON After Generator Starts	Turn ON after Shore Power is Connected	Turn ON After Generator Starts
AC Supply ON (Yellow Light)	Lights if AC is Present	Should Light After Generator Starts and AC Power Selector (below) is set to GEN	Should light when shore power cord is plugged in. If not, check Shore Pedestal Switch is ON and AC Power Selector (below) is set to FWD SHORE or AFT SHORE as appropriate	Should Light After Generator Starts and AC Power Selector (below) is set to GEN
Reverse Polarity Light	Lights if wiring on the dock is faulty. If lighted, turn OFF Master Switch Immediately	OFF	If lighted when shore power is ON, turn OFF Master Switch Immediately	OFF
AC Power Selector	Selects Source of AC Power	OFF (unless generator is running)	Select FWD or AFT (where cord plugged in)	Select GEN (if generator running)

### AC Reverse Polarity

If the "Reverse Polarity" light should illuminate when connecting to Shore Power, immediately disconnect the power cord from the marina outlet and contact harbor personnel advising them of the problem. Do not risk shock or system damage!

## AC Shore Power, Disconnecting & Connecting

The large AC selector switch on the bottom of the AC power panel is used to determine the source of AC power for the boat. The switch has four positions, "Off", "Gen", "Fwd Shore", and "Aft Shore". The "Shore" positions represent the bow and stern shore power connectors for the shore cable.

The switch should be "OFF" whenever you are connecting or disconnecting the boat to shore power or starting or stopping the generator.

As you turn on AC appliances, watch the Victron Display and don't exceed the dock's available supply, typically 3000 watts. Typical current demand for AC power devices is:

- Inverter – 2000 watts (if batteries are very low when shore power is plugged in)
- Water Heater, Microwave or Toaster – 1500 watts
- Hair Dryer – 1200 watts
- Coffee Maker – 1000 watts
- TV – 150 watts

## Direct Current (DC) Electrical Systems (12 volts)

### Direct Current (DC) Concepts

Most of the equipment on the boat is run by 12-volt DC electricity from the boat's batteries. This is true because DC is always be available: we have batteries aboard even when there is no shore power! Since the batteries are used so much, we must replenish, or charge them. The usual way we do this is by running the alternators on the ship's engines. In most cases, one engine will provide enough electricity to run everything, and still have some energy left over to add back to the battery, that is, to charge it.

So a good skipper and crew has "electrical power management" always in mind.

### DC Batteries

#### Battery Arrangement

To have redundancy, there are several "banks" of batteries assigned different tasks.

The **port and starboard starting** battery banks are used for starting the engines only. That way, we don't risk running these batteries down and then are unable to start the engines.

The **generator starting** battery is used exclusively for starting the generator.

The biggest sets of batteries, the **house bank**, is connected to the **DC circuit breaker panel** at the lower helm. This bank powers the boat lighting, refrigerator, pumps, heads, anchor windlass, dinghy davit, electronics and inverter (which converts DC power to AC power for the microwave and port side 110 volt outlets).

**DC Power Panel**

The nerve center of the DC electrical system is the **DC Power Panel** by the lower helm.



\*There are two bilge pump toggle switches in the right row of breakers. These switches are fed electricity by the bilge pump breakers in the middle row. The switches control the operation of each pump as follows: In the down, "AUTO", position, the pump is controlled by its own float switch. This is the normal position for these switches. In the middle position, the bilge pump is totally "OFF"; this might be used if the pump's float switch fails and the pump could burn out from constant running. In the up, "ON", position, the pump is running under the operator's control; this might be used to test the pumps, or to remove water below the float switch but above the pump. An alarm sounds while the bilge pump runs. **Ensure that the toggle switches are always DOWN.**

The Emergency Parallel Rotary Main Battery Switch on this panel should always be left in the "House" position. NEVER switch it to "Off" with the engine running!

**Switches and Breakers in Direct Current (DC) Power Panel**

Name of DC Breaker	Function	While Running	At Dock with Power	At Anchor or Buoy
Horn	Power to Horn Buttons	On	On	On
Wiper	Power to Wiper Switch	On	On	On
Nav & Inst Lts	Turns on Nav and Instrument Lights	On dusk to dawn	Off	Off



<b>Name of DC Breaker</b>	<b>Function</b>	<b>While Running</b>	<b>At Dock with Power</b>	<b>At Anchor</b>
Anchor Light	Turns on Anchor Light	Off	Off	On dusk to dawn
Spreader Light	Turns on spreader light to light deck	On as needed	On as needed	On as needed
Fwd, Salon, Aft Cabin Lights (3)	Power to light switches	On	On	On
Drain Pump	Power to shower drain pump switches	On	On	On
F. W. Pump	Power to Fresh Water Pump Pressure Switch	On	On	On
Galley Vent	Power to Galley Vent Switch	On	On	On
Level Indicator	Power to Holding Tank Level Indicator	On	On	On
S. W. Pump	Power to Sea Water Washdown Pressure Switch	Off	Off	On while washing anchor and rode
Macerator Pump	Dumps Holding Tank Overboard	On as needed to dump holding tank (10 minutes max; Set timer)	Off	Off
Oil Change Pump	Power to Oil Change Pump	Used at servicing	Used at servicing	Used at servicing
Fwd Electric Head	Power to Forward Electric Toilet (ET)	On	On	On
Aft Electric Head	Power to Aft ET	On	On	On

<b>Name of DC Breaker</b>	<b>Function</b>	<b>While Running</b>	<b>At Dock with Power</b>	<b>At Anchor</b>
Stereo	Power to Fusion Audio System Switch	On	On	On
Trim Tabs	Power to Trim Tab Switches	On	On	On
Gas Stove	Power to Propane Switch in Galley	On as needed to use range	On as needed to use range	On as needed to use range
Fridge	Power to Refrigerator (only off when defrosting)	On	On	On
Electronics	Power to chart plotter, VHF, wind instrument	On	Off	Off
Bow Lights	Turns on Bow Downward Lights	Off	Off	On as needed to illuminate rode
Autopilot	Power to Autopilot Switch	On	Off	Off
Radar	Power to radar	On	Off	Off
Fwd Bilge Pump	Power to 3-way Bilge Pump Switch	On at All Times	On at All Times	On at All Times
Aft Bilge Pump	Power to 3-way Bilge Pump Switch	On at All Times	On at All Times	On at All Times
Eng Rm Lts	Turns on Engine Room Lights	On while in Engine Room	On While in Engine Room	On While in Engine Room
Stop Sol	Powers Solenoid that Stops Engines	On	Off	Off

Name of DC Breaker	Function	While Running	At Dock with Power	At Anchor
Power (Port)	Powers Port Engine Controls	On	Off when Port Engine Not running	Off when Port Engine Not Running
Power (Stbd)	Powers Stbd Engine Controls	On	Off when Stbd Engine Not Running	Off when Stbd Engine Not Running
Vent	Turns on Engine Room Blower	Off	On only to cool engine room	On only to cool engine room
Gear	Powers electronic gear shifting and throttle	On	Off	Off

## Electronics and Instruments

### Instruments

The **Instrument Panel** at the upper and lower helm provides instruments that monitor several aspects of engine operation.

TACHOMETERS - shows engine speed in revolutions per minute. See Nuances for Guests regarding showing 0 at low rpms.

AMPS shows current flowing from engine alternators. (Typically very low or 0).

ENGINE HOURS-shows hours of engine operation since Seahome was launched.

F degrees– shows engine coolant temperature (typically 180 degrees Fahrenheit on inside scale).

PSI – shows Oil Pressure in Pounds per Square Inch (typically 20-40).

### CHART PLOTTER

#### Highlights

- *Seahome* is equipped with Garmin chart plotters at the lower helm and fly bridge. They are powered by the **Electronics** breaker on the DC electrical panel. There are also Power buttons on each plotter.

- After power is turned On, “Agree”, to the Disclaimer, “Ok” the Map Warning The most popular selections for screen formats are accessed by selecting Home then Select “Charts” and choose the preferred chart. Usually Navigational Chart or Radar Overlay.
- Please refrain from changing settings beyond the typical functions such as chart orientation, radar overlay, AIS overlay and range.
- Commonly used chart plotter selections are detailed below. For a more complete orientation of how to operate and get the most value from a Garmin chart plotter, we recommend downloading the user manual for the Garmin GPSMap 8616 (lower helm) and GPSMap 8212 (flybridge plotter).
- See Appendix 2 – Garmin Chart Plotter –Helpful Hints



*Chartplotter, Autopilot, Garmin Data Display*



*Lower Helm, Chartplotter, VHF, Inverter Display, Safety Panel*

## Commonly Used Chart Plotter Functions

### Finding the Navigational Chart: xx

- Home>Select Charts, Select one of the Navigation Charts, usually the Nav Chart.

### Zooming in and out: xx

- Spread fingers or use + or – toggle on the screen...

### Returning the screen to the vessel's current location:

- Press Stop Panning on the screen...

### Chart Orientation: subject to your preference, we recommend either Heading Up or North Up.

- From Chart >Menu>Settings>Orientation (Select North UP or Head UP or Course UP)

### Display Brightness:

- Press Power Button once <Backlight (Adjust Backlight)

**Course over Ground (COG) Vector/Line:**

- From a chart>Menu>Layers>My Vessel (Can adjust Heading Line, Range Rings etc)

**Displaying and using a Split Screen:** Ex. Chart zoomed-in on one side and zoomed-out on the other or Nav Chart on one side and Radar on the other.

- Menu>Charts>Navigational Charts> Chose the split screen.

**Radar Overlay:**

- From Chart>Home>Charts>Select Radar Overlay> on Left of Screen touch square button "Xmit Off" to begin transmitting. Use these square buttons to adjust radar.

**AIS Overlay & Targets:**

- From Chart>Menu>Layers>Other Vessels>AIS > On or Off (then other details}

Please see additional Garmin Chart Plotter Helpful Hints, Appendix 2 at the end of these Owners Notes.

**A.I.S. (Automatic Identification System):****Highlights**

- Seahome transmits her position and data via an AIS signal as well as receives AIS signals from other vessels equipped with AIS transmitters (Commercial vessels are required to have AIS, recreational vessels are optional). Seahome is transmitting her position full time (The AIS unit is wired directly to the batteries).
- On the chart, the AIS Overlay shows the positions of other vessels. As green triangles, if these triangles are less than 500ft distant, they turn red. Make sure the AIS overlay is turned ON. (From a chart>menu>Other Vessels>AIS
- AIS information supplements marine radar. However, visual observation by the helmsperson and crew is the primary method of avoiding marine collision.

**Details**

AIS vessels appear on the chart plotter screen as green triangles (must have AIS overlay turned ON – see Notes above for how-to). The triangle points in the direction that the vessel is moving and if you touch the screen over the triangle the system will give you additional information (such as name, size, speed, bearing, etc.) about the vessel. The system also transmits this same type of information about *Seahome* to other vessels with AIS.

AIS is an added safety feature that allows large commercial vessels to easily see you and your direction/speed. They may try to contact you via VHF channel 16 to verify your course intent. In addition AIS allows San Juan Sailing/Yachting to provide faster assistance in case of unplanned maintenance issues as well as alert San Juan Sailing/Yachting of *Seahome's* return approach. Vessels with AIS can be viewed in real-time through mobile device apps and websites like [www.marinetraffic.com](http://www.marinetraffic.com) that will reveal vessel name, course, speed, track, and other information.

## AUTOPILOT

### Highlights

- The Autopilot circuit breaker is located in the middle row of the DC Panel.
- To engage the autopilot, while it is in STANDBY, press the left oblong button and HEADING HOLD is displayed on the screen.
- To disengage the autopilot, press "STBY" and the word STANDBY appears in yellow at the top of the screen.

### Details

If the autopilot circuit breaker is ON, the lower right circular power button turns the System On, or (if held for 3 seconds) turns it Off.

The lower left red STBY button disengages the autopilot and permits the wheel to steer. At the top of the screen the word STANDBY appears in yellow.

The large numeral shows the current heading in degrees magnetic.

**Rudder Position** just below the large current heading numerals, the "P - S" diamond symbol shows the current rudder position port or starboard. **When maneuvering in the harbor using the engines, the rudder must be centered.**

When in "Standby", pressing the left oblong button engages the Autopilot to steer the current course and "Heading Hold" is displayed on the screen.

Then, pressing the right or left oblong buttons increases or decreases the course setting by one degree. Holding either button, increases or decreases the course setting in 5 degree steps. To disengage the autopilot press "STBY".

To "Go To" a specific point on the chartplotter:---Touch that point on the screen then touch "Go To" at the top of the screen. The course (pink line) from the boat to the point appears on the chart. Then touch "Engage Autopilot" when it appears at the bottom of the screen. To stop navigating to that point before reaching it, press "Menu" then "Nav Options" then "Stop Navigation". The Autopilot will return to "Standby". Remember, at any time you can press "STBY" to steer with the wheel.

When in "Standby", pressing the center oblong button produces a Menu of possible actions on the screen. The right button scrolls through the Menu and the center button selects the highlighted action. Pressing the red Standby button escapes the Menu and returns the Autopilot to "Standby" and allows wheel steering.

**Charter guests should not need to use the Menu.**

For full details, see the Autopilot Manual located in the aft stateroom.

Maintain a careful lookout when using the autopilot! It is an aid to comfortable cruising, not a replacement for an aware helmsperson! **Remember, you can always disengage the autopilot quickly by pressing "STBY".**

### Garmin Data Unit (next to the Autopilot)

This unit can show **Potable Water** Level in tank, Relative Wind Speed, Relative Wind Direction, Water Depth, Boat Speed, and a variety of other data.

Scroll through the readouts using the ^ or v oblong buttons.

### VHF RADIOS

#### Highlights

- Garmin 200 VHF on lower helm overhead, Garmin GHS 10 Handheld VHF tethered unit on flybridge and an ICOM VHF portable handheld that can also be used in the dinghy.
- Refer to Tab 7 in the [Charter Guest Reference Manual](#) for: VHF Radio Tips, VHF Marine Radio Channels and Frequencies, Marine Weather Guide, San Juan Islands Weather and Current Resource Guide, Weather Reporting Sites.



Garmin VHF 200

## Details

### VHF Radio on Lower Helm Overhead

- Powered by **Electronics** Circuit Breaker on DC Panel. The radios turn on whenever the circuit breaker is flipped ON.
- **Can also Turn ON or OFF by holding down the red 9/16 button on the unit. (This is NOT intuitive)**
- Reduce Squelch, turn upper knob counterclockwise until static is heard. Adjust Volume (right knob) then turn Squelch clockwise to silence the static.
- Quick press of red button returns to channels 6 or 9 alternately.
- Lower right knob rotation selects operating channel. Pressing this knob selects Weather channels then rotation of knob scrolls through weather channels. Pressing knob again returns to working channels.
- Three oblong "soft keys" perform the function displayed just above on the screen.
- HI/LO button permit reducing transmission power from the normal 25 watts to 1 watt in harbors and marinas. (Pressing the 9/16 red button automatically changes the power to 25 watts.) To transmit at 1 watt, press HI/LO button then the soft button under 1W on the screen. To return to 25 watts, press the 9/16 red button.
- DSC button opens a menu for programming Digital Selective Calling. Do not press this button, if pressed inadvertently, press again to cancel DSC programming.
- MENU button opens a menu of configuration options. Do not press this button, Pressing again returns to the HOME screen.
- CLEAR button cancels or mutes an incoming Digital Selective Calling transmission.

**International & U.S. channel modes** – The unit can be switched between USA and Canadian modes. Press MENU<Channel<Frequency Band. Select USA, Canada or International.

**Monitoring Multiple Channels** – Dual Watch allows you to monitor Channel 16 and a second channel. Tune to the second channel then select WATCH> DUAL. The currently selected channel and Channel 16 are displayed on the screen (ex. DUAL WATCH CH: 75 + 16). The receiver monitors both channels. To exit Dual Watch, select EXIT. This is used for example to communicate with a companion vessel or flotilla group.

**Flybridge VHF Radio** – This radio automatically turns "On" when the Electronics Breaker is flipped "On". The Vol/SQL button toggles the Channel knob between volume and squelch.

**See Additional Radio Info** in the [Charter Guest Reference Manual](#) binder on board, section 7, VHF Procedures & Weather Reporting.



## Engine



*Starboard Engine and Generator*

### Highlights

- Main engine room access is through floor hatch in the Salon or the door under the steps in the forward berth.
- The Engine Room Light Switch is the bottom switch in the middle row of the DC Panel (upper door). When the engine room light is ON a yellow light will be illuminated in the Safety Panel above the lower helm and on the Safety Panel at the flybridge helm.
- There is an engine room ventilation blower switch on the DC panel right side (labeled VENT) The blower is not needed for engine start/operation. It can be useful for cooling the engine room after operation if you need to spend time there. Checking the engine room in the mornings ensures a cool room.
- Our Maintenance Pros will check oil and coolant levels, belt tension and debris in raw water strainers weekly. Charter Guests are NOT required to perform these checks unless the engine overheating alarm sounds. If on a multiple week charter, check engine vitals (oil, coolant) weekly.
- Raw water strainers are located just forward of each engine and the generator.
- Economy cruise is 8.2 kts @ 1200 RPM using approximately 3 gph.
- Fast cruise is 10 kts @ 1500 RPM using approximately 5 gph.
- Do not exceed 2300 rpm.

## Details

### Prep for Engine Start

- Check around outside of vessel for loose lines in water.
- Close the salon doors to keep engine exhaust out.
- Turn ON Electronics, Autopilot, Navigation Lights if needed, Turn ON Radar if anticipating use.

### Starting (See Starting-Stopping Engines Procedure Posted Inside DC Electrical Panel Door)

- Gearshifts in neutral
- On the DC Panel (upper door), right side, Turn ON Stop Sol, Turn ON Port Power (low oil pressure alarm will sound until engine starts), Press silver Port Start until engine starts (alarm will silence), Turn ON Stbd Power (alarm will again sound), Press silver Stbd Start button until engine starts (alarm will silence), Turn on GEAR switch.
- After the engines start, check for water flowing from the exhausts under the swim platform.
- On the gear shifter base the Neutral Gear Lights (green), and the Take Light (red) and Warm (red) lights will turn on automatically. The system is in WARM Mode. In this Mode, the Control Handles can be advanced to increase the speed of the engines while the gear remains locked in Neutral.
- Engines need only 1-2 minute warm-up before maneuvering
- To shift the transmissions Press WARM button once (the WARM (red) light will go out). You are now in CRUISE mode and the gear can be shifted.
- When either handle is advanced to the detent, the boat will move forward and the Forward Gear Light (red) will illuminate. Same for reverse.
- See Appendix 1. Electronic and Throttle and Gear Controller for additional information.

### Shut Down (See Starting Stopping Engines Procedure Posted Inside DC Electrical Panel Door)

- Press and hold both Stopping buttons until engines stop.
- Turn "OFF" both Power Switches
- Turn "OFF" Stop Sol Switch
- Turn "OFF" Gear Switch

### Engine overheating:

Engine overheating is a serious problem. An electronic system monitors the temperature of the exhaust sea water from the engines. The system alarms if the water temperature rises above a set point. The Alarm Panel

is located overhead at the lower helm (labeled Raw Water). If the alarm sounds, the offending engine should be shut down and the cause of the alarm investigated. The alarm can be muted by pressing the Mute button on the alarm panel. Eelgrass in the raw water strainer leading to the engine is the most common cause of an alarm. The strainer should be examined and cleaned. Rarely, the eelgrass sticks to the outside of the thruhull. If engine overheating occurs and cleaning the strainer does not solve the problem, contact San Juan Sailing/Yachting.

Tip: Keep an eye out for eelgrass mats, especially along those “soapy” looking tide and eddy lines in the water, and don’t run over the grass. When eelgrass gets sucked into the engine cooling water intake, it collects in the raw water strainer.

### **Inspecting and Cleaning Sea Strainers**

Once each week or immediately if the Raw Water Alarm Sounds or if the generator fails to run, check the appropriate sea strainer for eelgrass. The main engine strainers are just forward of each engine. The generator strainer is just forward of the generator cabinet. The strainers can be easily checked by shining a flashlight through the strainer to observe for debris. To clean the strainer: close the seacock by loosening the small T-handle at the thru-hull and moving the Yellow Handle to the closed (horizontal) position. Remove the strainer cap using the spanner (dangling from the starboard engine strainer). Pull out the strainer and rinse out the debris by jostling in a bucket (or engine room waste basket) of water. A bucket with line attached is in the lazaret. To check for eelgrass blocking the water intake, momentarily open the seacock and water should flow freely from the top of the sea strainer. When reassembling the strainer ensure that the rubber O-ring in the cap is in place and the base of the strainer is positioned in the center of the unit. If the strainer protrudes too far, the cap will not screw on smoothly. **Centering the lower end of the strainer perfectly can be exasperating.** Use the flashlight. When the cap is in place, open the seacock (yellow lever is vertical) and tighten the small T-handle at the thru-hull. Check for leaks.

### **Loss of coolant**

Check the coolant level in the plastic coolant recovery tank every week. Be aware that the level when the engine is hot is very different than when the engine is cold. It is best to check when the engines are cool. If the coolant is markedly low, add premixed coolant from the plastic jug in the liquids tub. Check under and around the engine for pink fluid. If coolant is found, contact San Juan Sailing/Yachting immediately.

### **Checking the Engine Oil Level**

With the engines stopped, preferably for an hour or two, the oil level should be in the cross-hatched area on the dipstick located on the inboard side of each engine. Using a paper towel from the roll provided, wipe the stick, reinsert, and take reading. The distance between the two ends of the cross-hatched area is about 1.5 quarts. Add only enough oil to bring it up to the middle of the hatched area, say a quart. Use the 30w oil stored in the replacement liquids tub adjacent to the inverter on the port side. The oil fill tube on each engine is located on the inboard side. The cap has a T-handle.

After adding oil, be sure to tighten the cap, but do not over-tighten. DO NOT OVERFILL the crankcase (above the "full" mark), as the engine will quickly waste excessive lubricant. If oil is required more often than every few days, contact San Juan Sailing/Yachting. Routine checks of the pans under the engines should show no more than an occasional drip.

### **Loss of Oil Pressure (Very Rare)**

Loss of oil pressure is a very serious problem. If the engine loses oil pressure, a warning buzzer will sound and the yellow oil pressure light on the Safety Panel above the lower helm will illuminate. Shut down the engine, immediately. Check the engine oil level. If it is low, determine whether oil is dripping from the engine. Contact San Juan Sailing/Yachting.

**OPERATING TIP: Bottom line – you're on vacation!** If an engine is giving you problems, call SJS/Y for assistance. They have repair teams in the islands to assist you.

## **Entertainment Systems**

The electronic entertainment system is located in the port aft corner of the main salon. It provides a high definition flat screen TV, Blue Ray DVD player, Fusion high fidelity audio with Sirius/XM radio (for best reception, the small puck antenna should be pointed to the southern sky), CD player, AM/FM radio and Bluetooth or hard wired connectivity to your audio sources. Manuals are in the adjacent wall basket and cabinet top drawer. The Stereo breaker powers the system.

## **Fuel**

- Seahome has two fuel tanks. Each engine draws from the tank on the same side of the boat. The furnace draws from the starboard tank but use is minimal.
- The fuel tanks hold 300 gallons each but for ease of refueling **charter guests are asked to fill the tanks to 240 gallons.**



stainless steel handles and decks; have someone help.

**Fuel tank sight tube:** Note valves at top and bottom of sight tube."

## Refueling

Fueling will go smoothly if you follow these procedures:

- Refueling supplies are stored in the lower helm **step** to the deck along with fuel fill cap wrenches, oil spill pads, towels and rubber gloves.
- Before fueling, open the valve at the top **and** bottom of each tank's sight tube to allow the sight tube fuel level to match the tank level. For each tank, record the amount of fuel necessary to **bring the fuel level to 240 gallons**.
- Add the calculated amount of fuel to each tank through the on-deck fuel pipe.
- **Take care of the brightwork.** Please don't drag the fuel hose over the teak rails. Pad the rails with the Sunbrella rail covers or a terry cloth towel or drip pads. Fuel each tank separately, taking the hose over the **forward** cabin top to reach the opposite side deck fill pipe. Take care to protect the forward cabin-top,

- stainless steel handles and decks; have someone help.
- Start slowly, control the fill rate. This will avoid blow-back/spattering. Please make every effort to prevent fuel drips on the teak deck.



Starboard engine fuel filters mounted on side of starboard fuel tank. Two on left are switchable for the starboard main engine; filter on right is for the generator.

- It is not necessary to "top off" the tank or fill it up to the deck inlet, just bring the level to 240 gallons.
- After fueling recheck the sight tubes to confirm that 240 gallons was achieved.
- Close the sight tube valves (4) after the final reading.
- **Caution:** On the starboard deck the waste tank pump out connection is located near one of the fuel fill locations. Do not mistake it for the fuel fill. **Fuel in the holding tank is a serious error.**

## Fuel Filters

- Filters are checked and changed regularly by our Seahome Maintenance Professional. Charter guests should not adjust the filter valves.

## Generator

### AC Generator System

The ship's Onan Generator provides 8,000 watts (ca 80 Amps) of AC power and is mainly used for battery charging, water heating, and powering the freezer and ice maker.

The generator is in the engine room. Its oil and coolant levels are checked before each charter by Seahome's Maintenance Professional. Access to the generator is by unlatching and removing the starboard side panel on the sound-shield cabinet. The generator sea strainer should be checked (using a flashlight) every few days to be sure it has not accumulated substantial debris, especially if the generator has been run for extended periods at anchor. **Starting the Generator: (See instructions on inside of AC Panel door.)**

- 1) Turn on the "Generator Breaker" at the very top right of the AC panel. (difficult to see)
- 2) Press and hold /the "Preheat" button for 15 seconds (this energizes "glow plugs" to warm the engine's cylinders). THEN RELEASE IT.
- 3) Press the "start" switch and hold until you hear the engine start.
- 4) Check the generator exhaust, (underwater, port side, midship) to confirm that cooling water is being circulated.
- 5) After a brief warmup of a minute or so, switch the AC Power Selector, in the AC power panel, to "Gen". You should see the "AC Present" pilot light go on!
- 6) Turn ON the Master Switch

**Stopping the Generator: (See stopping procedure posted inside AC Panel door.)**

- 1) Switch the AC Power Selector to "Off". This removes the load from the generator.
- 2) After at least a minute or so, to allow the generator to cool down, press and hold the "stop" switch until the generator comes to a complete stop. **TURN OFF THE GENERATOR BREAKER!!** (Hard to see at very top right of AC Panel.)



### Generator Problems:

The generator monitors its own operation! It has two fault-detection systems: one of these will detect any loss in **oil pressure**, the other detects **overheating**. If either condition occurs, the generator will shut down and will not restart .

If this occurs, you can confirm that the cause was such a fault by looking on the aft starboard side of the generator where you will see a “fault” button (red arrow in photo). If a fault has occurred, the button will pop out; it is normally flush with the panel if there is no fault.

If the generator stops, check the sea strainer for debris and clear it; then, with the cap off, open the seacock and ensure that seawater flows freely from the top of the sea strainer. If the generator will not restart, contact San Juan Sailing/Yachting for assistance.

## Heads and Holding Tanks

### Highlights

- Only what has been eaten and small amounts of toilet paper go into the toilet. **Facial tissues, tampons, towels etc. will clog the system. These items must be placed in the waste basket.**
- Both toilets are electric with fresh water flushing. The FWD Electric Head and AFT Electric Head breakers on the DC Panel must be ON for the toilets to operate.
- The toilets are controlled by white rocker switches just under the edge of the counter top near each toilet. Pressing the TOP part of the switch adds water. Pushing the BOTTOM part of the switch flushes the toilet.
- Both toilets flush into one holding tank.
- The holding tank level gauge is located in the aft head, just under the counter. The Level Indicator breaker on the DC Panel must be ON for the indicator to operate.
- The holding tank capacity is 45 gallons. Please empty BEFORE it's full.
- Emptying the holding tank – see detailed instructions below.
- Please note that in U.S. waters it is illegal to discharge holding tanks overboard. While in Canadian waters outside of bays and harbors overboard discharge is allowed.

### Details

San Juan Sailing staff will discuss holding tanks and pump outs on your arrival. They ask that you do not over fill the holding tank as leaking sewage is most unpleasant! Thank you.

## Emptying the Holding Tank

### Emptying Holding Tank via Deck Pumpout

A holding tank "Waste" fitting is located on the starboard side deck adjacent to the salon. The cap wrench is located in step from the lower helm to the deck. A shore-side pump out hose can be inserted into this fitting. Any drips on the teak deck should be rinsed away.

### Discharging the Holding Tank Overboard

While underway, flip "On" the "Macerator" switch in the DC panel. It takes about ten minutes to empty a full holding tank. If bubbles come out from under the starboard side of the hull, the tank is empty. Check the tank level indicator in the aft head to confirm that the tank has emptied. When finished, flip "Off" the "Macerator" switch. **If the pump runs dry for an extended period it may be damaged. It is advisable to set a timer, on your phone, when the pump is turned on so that turning it "Off" is not forgotten.**

## Heater (Cabin)



*Espar Furnace Thermostat*

The boat is equipped with an Espar Diesel Forced Air Furnace. The fuel comes from the starboard engine fuel tank, but it uses a negligible amount of fuel, about a pint each hour when running. The on/off rocker switch and thermostat are mounted on the back of the lower helm seat. (I green light = On: O red= Off). As an aid in setting the thermostat, a "click" can be heard as the dial is moved past the present room temperature. The furnace will cycle on and off to maintain the set temperature.

**CAUTION: The furnace exhaust is on the starboard side of the hull below the salon entry door. It can be very hot! Do not place fenders in front of it nor let anything contact it.**



## Lighting

### Interior Lighting

- Breakers for interior lights are on the DC panel. They should be left "Always On".
- Light switches are located on or near the various lights.

### Navigation and Instrument Lights

The Navigation Lights and Instruments Lights switch (NAV & INST LTS) is located on the DC Panel.

### Anchor Light

The Anchor Light switch is located on the DC Panel. The Anchor Light should be illuminated from dusk to dawn while at anchor.

### Deck Lights

To illuminate the deck, very bright downward facing lights are mounted under each spreader. This switch is located on the DC Panel labeled SPREADER LIGHT.

### Bow Lights

Forward facing lights located under the bow pulpit illuminate the anchor rode and the water around the bow. The switch is located on the upper middle row of the DC Panel labeled BOW LIGHTS.

## Refrigerator, Freezer and Ice Maker

### Highlights

- The ideal control setting for the **refrigerator** is about 0 on the dial or slightly below, lest the lettuce will freeze. The dial is located inside the refrigerator. The circuit breaker for the refrigerator is in the DC Panel labeled FRIDGE. It should be "Always On".
- The ideal thermostat setting for the **freezer** in the aft cabin is about 6 on the dial clock face inside the freezer. It should not need adjustment. The freezer only operates on AC current from the shore or generator. If AC current has been available during the day, the freezer can be switched off at night if the compressor in the lazaret disturbs aft cabin sleep. The Freezer circuit breaker on the AC Panel must be ON for the freezer to operate.

- The **Ice Maker** has no thermostat but there is a switch just below the door and a circuit breaker on the AC Panel. Both must be ON for the ice maker to operate. Of course, the bail must be down for ice production.

## Showers, Sumps and Waste Water

Wastewater from the galley and head sinks flows overboard, via gravity, in accordance with U.S. and Canadian law. Since the floor of the showers is below the water line, shower sump pumps operate to lift the water back above the waterline and dump it overboard.

**When showering, it is critical that the "Drain Pump" breaker in the DC panel be "On" and the Push-Pull switch in the shower must be Pulled Out, lest the shower will flood. I prefer to leave both switches "On" and let the float switch on the drain pump operate the sump pump automatically as necessary.**

There is a shower on the aft deck. It is useful for rinsing after swimming.

## Spares, Tools, Engine Liquids

**Hand Tools:** In bottom drawer under lower helm seat. Additional tools in Engine Room tool bag. Socket set in plastic case near tool bag.

**Spare parts:** In plastic bins in Engine Room.

**Engine Liquids** in Liquids Tub in engine room. ie. Engine, generator and transmission oil, (all the same 30w oil) premixed coolant, distilled battery water (transmission oil and battery water are checked routinely by our Maintenance Professional and should not require charter guest attention).

## Storage

**Food:** Port-side shelf at stairs to forward berth; Floor of forward hanging locker; Compartments under salon settees; Compartments under steps to aft stateroom.

**Clothes:** Forward stateroom hanging locker and drawers; Aft stateroom, 2 hanging lockers, drawers, including under bed, under step compartments.

**Fenders:** Forward-deck brackets; side-deck walkways while underway; lazaret; lashed to cleats under tender cradle.

**Dock Lines:** Hanging holders on rails, lazaret

**Cooking Utensils:** Drawers in galley; drawer under oven; appliance garage in port-side cabinet at stairs to forward berth; compartments under salon settees.

**Galley Appliances:** In appliance garage in port-side cabinet at stairs to forward berth.

## Stove, Oven and Microwave

### Stove

Princess propane stove with three top burners and a thermostatically controlled oven/broiler.

#### To Light a Burner:

1) The propane valve circuit breaker in the DC panel must be "On".



2) The "propane" switch on the overhead panel above the stove must be "On". (when the switch is on, a red square on the panel will illuminate).

3) Turn the knob for your selected burner to "IGN" and **press and hold it in**, then press the black "Burner Ignite" button on the left several times until the burner lights or use a barbeque lighter.

4) After the burner lights, continue to hold the knob in for a few seconds while the thermocouple heats up. Then adjust the flame.

#### To Light the Oven: (Detailed instructions are printed on the inside of the oven door.)

The operator must light the oven "pilot light" when the oven is to be used **but first light a top burner and let it burn for a minute** or so to ensure that air is purged from the gas lines.

1) As above, ensure that the "Gas Stove" circuit breaker and "propane switch" overhead are "On".

2) Locate the pilot light assembly at the right front under the oven.

3) Turn the oven control to "light", press and hold the red "Push to Light" button, use a match or barbeque lighter (located in top drawer under sink) to light the pilot light. Hold the red button in for another fifteen seconds after the pilot is lit to allow time for the thermocouple to heat up. If the pilot will not stay lit, relight the pilot and hold the red "Push to Light" button in longer!

**Note: The oven burner will not light immediately but will after a 20-30 second delay!** Adjust the thermostat to the desired temperature.

4) After baking, you may leave the control in the "light" position if the oven will be used again within an hour or so. The pilot light will remain on.

5) When finished with the oven turn the control "Off". The pilot light will go out. If finished with the stove, turn "Off" the propane switch overhead and the Gas Stove breaker in the AC panel.

### Microwave

The Princess microwave operates conventionally. It should only be used for short-term heating or reheating (less than 5 minutes) unless the generator is "On" or the boat is plugged into shore power.

## Thrusters (Bow and Stern)

The bow and stern thrusters are controlled by joystick panels at both helms or a remote control neck pendant. More detailed instructions are in the front cover pocket of this Charter Guest Reference Manual and the Remote Pendant is described more fully in Appendix 3 of these notes. Operation Manuals are located in the aft cabin.

### Operation of the thrusters-



1. Press Both "ON" buttons simultaneously to activate the system. Press the left "ON" button again to change between day and night lighting.
2. The forward speed control joystick operates the bow thruster. The aft joystick operates the stern thruster. Sideways joystick movement controls the speed of the thruster.
3. Pressing either Hold Arrow operates both thrusters in the direction of the Arrow. Press "+" repeatedly for more thruster power in the direction selected or "-" for less power (there are 6 steps). Three "+" is a good starting point. The Hold function will move the boat sideways or can press the boat gently against the dock to facilitate securing dock lines. Practice It. Moving the either joystick in the opposite direction deactivates the Hold function. (Note: The thrusters can only be deactivated from the upper or lower controller where they were

activated.)

4. Press "OFF" to deactivate the system.

Emergency "OFF" switches are located in the cabinet under the V-berth (for bow thruster) and in the port side of the lazaret (stern thruster). Pushing down on the large red button deactivates the thruster.

## Wash Down (Sea Water)

While retrieving the chain and anchor, rinse the debris and mud off of the chain and anchor using the salt water spigot and hose adjacent to the anchor platform. The S.W. Pump breaker in the 12 Volt Electrical Panel must be "On" to enable the pump to run when the spigot is opened. Turn the breaker "off" when finished to prevent flooding the boat if a saltwater pipe in the engine room should break.

## Water (Potable)

### Highlights

- The water pump breaker (F.W. PUMP) is located on the DC panel. It can be left ON for the duration of the cruise. Fresh water is available on demand in the galley, both heads and showers, a shower on the aft deck and a green hose in the engine room.

### Water Heater

Hot water is produced in two ways:

- a) Connected to shore power or generator with the WATER HEATER breaker on the AC panel flipped ON.
- b) Whenever the port engine is running.

### Water Fill and Measurement

**Fresh Water Fill Location** There are two water tanks located in the lazaret. These are filled by using a fill pipe on each. **Fill the tanks individually** (because the interconnecting pipe is small but they drain together.) **Pass the water hose through a hawsehole, not over the teak rails.** A water tank gauge reads out on the Garmin Data Instrument adjacent to the Autopilot. Scroll through the menu to find Water Tank. Full tanks together provide 176 gallons of water.

## Windshield Wipers and Washer

*Insert photo of controller...*

The wipers are variable speed and are operated from the Safety Panel on the overhead above the lower helm.

### To Operate:

- The WIPER breaker on the DC panel must be ON.
- Using the wiper control panel above the lower helm, rotate the wiper knobs to turn on the wipers and control the speed. Pressing any knob activates the washer for all three windows.
- The washer fluid is just water from the fresh water system.

**We hope this information helps. Have a great time!!**

## Appendix 1. Electronic Throttle and Gear Controller

(also see a copy of the Glendinning Reference Guide in the front or back pocket of the Seahome Charter Guest Reference Manual)

This new Glendinning electronic engine control (EEC) system manages throttle position and transmission (gear) shifting. **The system is turned "On" and "Off" by the GEAR breaker on the engine portion of the DC Panel. If the system malfunctions, turn the GEAR breaker "Off" then "On" to reboot the system.** The Control Handles should be in the Neutral position when the system is turned "On" then the Neutral Gear light (green) and the Take and Warm (red) lights will be illuminated. The system is then in the WARM mode. In this mode, the control handles can be advanced to increase the speed of the engines while the gear remains locked in Neutral. To exit the WARM mode and gain gear operation, bring Control Handles back to Neutral and Press and Release the WARM button once. The WARM (red) light will go out. The system is now in CRUISE mode and the gear can be shifted. The Neutral Gear Lights will be illuminated (green).

When either handle is advanced forward to the detent the Forward Gear Light (red) will be illuminated and the boat will move forward. Same for reverse. TO GET A FEEL FOR DELAY IN GEAR MOVEMENT DURING MANEUVERING, MOVE THE PORT OR STBD HANDLE FORWARD TO THE DETENT FOR 1 SECOND THEN BACK TO NEUTRAL. REPEAT IN REVERSE. (Initially, I suggest doing this several times while securely tied to the dock.)

**Be Careful:** Moving either handle past the first detent in either direction increases the speed of the engine.

**To transfer stations** (i.e. to fly bridge), **control handles at both stations must be at the same position** (While learning, neutral at idle is best). At the **Inactive Station**, the TAKE light and the appropriate GEAR light should be blinking once every 2 seconds (inactive station heartbeat). **To initiate Take**, press and release the TAKE button. Both the TAKE and GEAR lights blink rate will change. A **slow blink rate** indicates that the handle positions **do not match** the other station. A **quick blink rate** indicates that the **handles match** the other station. If necessary, adjust the handles to achieve a quick blink rate. When quick blink rate has been achieved, press and release the TAKE button again. A solid TAKE light indicates that transfer is complete. The new station is now in control. TAKE and gear lights at the inactive station will now be blinking one time every 2 seconds (inactive station heartbeat).

**To synchronize engines at cruise**, both handles should be in the AHEAD gear and at approximately the same speed. Press and release the SYNC button, the SYNC and TAKE lights will blink slowly. The engines will be synchronized and the STBD handle will control the speed of both engines. To disengage SYNC mode, either press and release the SYNC button once or bring both control handles to Neutral. 07-19-23

## Appendix 2. Garmin Chart Plotter – Helpful Hints

Flip On the Electronics, Autopilot and Radar Breakers – The Chart Plotter, Autopilot and Data Instrument should light up and stabilize within a minute or so.

On Chart Plotter screen “Agree” to Disclaimer ---Disregard the chart warning and Press OK

To select a Navigation Chart on plotter – Touch “Home” then select Charts. Select one of the Navigation Charts, Usually the Nav Chart.

**To select magnification** Touch + or – on screen or use finger spread on screen.

**Find boat** – Touch “Stop Scanning” on the screen, boat symbol should appear in center of screen with heading displayed.

**Hold Heading with Autopilot** – Press **left** oblong soft button, which selects “Engage” just above the button. Then. “Standby” (in yellow) at top of Autopilot Display changes to “Heading Hold” in green. Pressing right or left oblong soft button changes heading by one degree with each press.

**Disengage Autopilot** – Press red STBY button on lower left of Autopilot Display. Autopilot top display changes to yellow “Standby”.

To have Autopilot **steer to a point ahead** – Drag the screen to show the point. Touch the Navigation Chart on Chart Plotter screen at the selected point. + appears on at the selected point. Press “Go To” at top of screen, then press “Engage” on next pop up screen. “Follow Route” appears at the top of the Autopilot display in green. Distance to that point appears at the top of the Chart Plotter screen and in a white box on the Autopilot screen. To discard the current route or at the end of the route, press “Menu” then “Navigation Options” then “Stop Navigation” then “To Standby” to steer with the wheel.

**Steer manually** with the wheel at any time, press red “STBY” button on Autopilot. To return to Route, press **center** oblong soft button to select “Menu” then again to select “Engage Route”.

**Activate radar** (to get a radar overlay ) from Nav Chart – Press Home< Charts, choose Radar Overlay, the radar overlay appears (To activate radar, press the small square button, labeled “Xmit Off”, on the upper left of the screen.) **To control radar features** from Radar Overlay screen, use these buttons.

**Chart Combos** include Split Nav which allows low magnification on one and higher magnification on the other.

The chart, **Smart Mode Docking** provides Nav Chart on one side and Aft facing video camera on other.

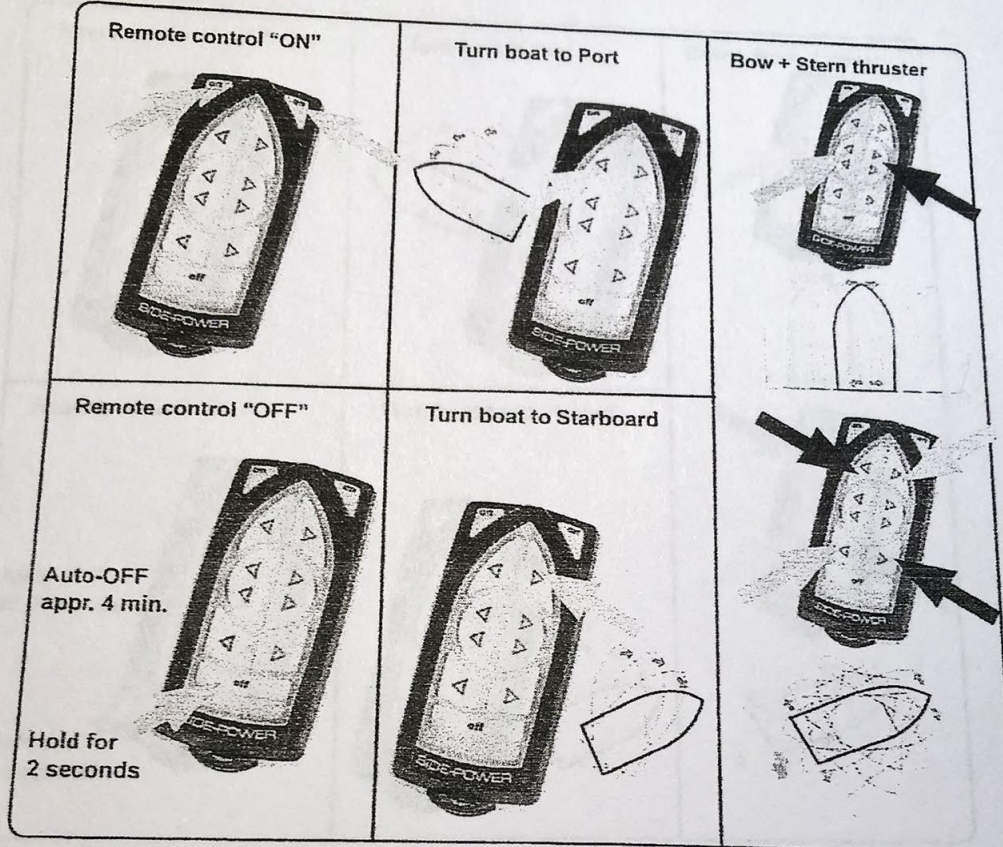
**Activate the aft looking video camera**, press Home>Select “One Helm AV Gauges”, Select Video. To return to chart, select Home, select Charts, select Nav Chart.

1-28-23

Appendix 3. Thruster Remote

# SEA HOME THRUSTER REMOTE

RCS-20U



**How to use a bow/stern thruster**

1. Turn the main power switch for the bow/stern thruster on. Turn on the power to the receiver.
2. Turn on the transmitter by pushing the transmitter's two "ON" buttons. The remote system is now activated and then turns off automatically appr. 4 min. after the last usage.
3. Please take some time to exercise thruster usage in open water to avoid damages to your boat.
4. Turn the bow/stern in the desired direction by pushing the red button for port movement or the green button for starboard movement.

**How to use a bow & stern thruster combined**

The combination of a bow and stern thruster offers total manoeuvrability to the boat and the opportunity to move the bow and the stern separately of each other. The remote middle buttons gives you the opportunity to operate both thrusters in the same direction with one keypress, making sideways movement easier.

**Remote Control Deactivation**

Push the transmitter's "OFF" button for 2 seconds (the remote control deactivates automatically after approx. 4 minutes after the last usage).

- If in doubt, try in open water first!