

OPERATION MANUAL

# SEA DAZE

Bayliner 4788 Pilothouse

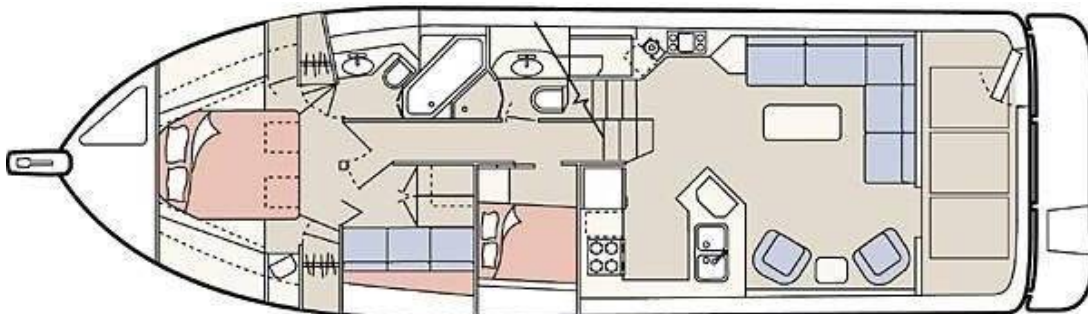
Home Port

Anacortes, Washington USA

## A Note from the Owners of Sea Daze

Welcome Aboard!

We are happy you have chosen *Sea Daze* for your vacation. *Sea Daze* is a 2001 Bayliner 4788 Pilothouse. She is a perfect yacht for cruising the Pacific North West and experiencing the incredible beauty of the intricate network of coastal waterways known as the Salish Sea. The Salish Sea is recognized as one of the best cruising areas in the world and *Sea Daze* provides an amazing view of the scenery from the fly bridge, while relaxing in the salon or from the pilothouse. We hope you will enjoy your time on *Sea Daze* and the splendor of this natural wonder that reaches from Desolation Sound at the north end of the Strait of Georgia to Oakland Bay at the head of Hammersley Inlet near Shelton WA.



We invite you to treat *Sea Daze* as your own while you are on your cruise. If you have questions about places to visit, please do not hesitate to ask the AYC staff.

Pleasant cruising!

# Table of Content:

1	Introduction:.....	6
2	Useful Information.....	7
2.1	Helpful facts for docking, maneuvering, and replenishment: .....	7
3	Departure.....	8
3.1	Stowing your personal belongings .....	8
3.2	Safety briefings for the crew .....	8
3.3	Pre departure checks and inspections.....	8
3.3.1	General.....	8
3.3.2	Shore Power Disconnection.....	9
3.3.3	Engine Checks .....	9
3.4	Starting the engines .....	10
3.4.1	Trouble shooting abnormal engine condition: .....	11
3.5	Electronics (Preparing for Navigation) .....	12
3.5.1	Selecting a course and preparing the electronics for navigation.....	12
3.5.2	VHF Radios .....	12
3.5.3	GPS and Chart Plotter.....	13
3.5.4	Paper Nautical Charts and Seamanship Reference .....	15
3.5.5	Depth Sounders.....	15
3.5.6	Raytheon L470 Fish Finder / Depth Sounder .....	<b>Error! Bookmark not defined.</b>
3.5.7	Radar.....	15
3.6	Boat Operations.....	16
3.6.1	Getting Underway.....	16
3.6.2	Cruising.....	16
3.6.3	Trim Tabs.....	16
3.6.4	Autopilot .....	17
3.6.5	Search Light .....	18

Operating Manual for Sea Daze 4788 Bayliner

- 3.6.6 Docking..... 18
- 3.6.7 Mooring Docks, Rope Lines and Buoys ..... 19
- 3.6.8 Anchoring ..... 19
- 3.6.9 Shut Down ..... 20
- 3.7 Fueling..... 20
- 4 Electrical System ..... 21
  - 4.1 AC Power ..... 21
    - 4.1.1 Plugging in... ..... 22
    - 4.1.2 Service Line Options..... 22
  - 4.2 DC Power System ..... 23
  - 4.3 Inverter Power ..... 25
  - 4.4 Generator ..... 25
- 5 Sanitation System..... 26
  - 5.1 Vacuflush Toilets ..... 26
  - 5.2 Holding Tank..... 27
- 6 Water Systems ..... 27
  - 6.1 Fresh Water System and Tanks ..... 27
  - 6.2 Water Heater ..... 28
  - 6.3 Raw Water Wash Down..... 28
- 7 Inside the house..... 28
  - 7.1 Showers ..... 28
  - 7.2 The Galley ..... 29
    - 7.2.1 Sink Countertop ..... 29
    - 7.2.2 Ice Maker ..... 30
    - 7.2.3 Microwave ..... 30
    - 7.2.4 Stove/Oven..... 30
    - 7.2.5 Trash Compactor..... 31
    - 7.2.6 Vacuum System ..... 31

7.3	Entertainment Systems.....	31
7.3.1	AM/FM Stereos, CD and iPod.....	31
7.3.2	Television/Blu-ray .....	31
7.3.3	Games .....	31
7.3.4	Crab Pots.....	31
7.3.5	Dock Chairs and Table.....	32
7.3.6	Barbeque .....	32
7.4	Heating Systems.....	33
7.4.1	Diesel-Furnace Heating System.....	33
7.4.2	Cabin Electric Heating System .....	33
7.5	Washer-Dryer.....	33
8	The Tender/Dinghy.....	34
8.1	Davit.....	34
8.1.1	To lower the dinghy .....	34
8.1.2	To raise and return the dinghy .....	34
8.2	Operating the Dinghy .....	35
9	Bilge Pumps.....	35
10	Miscellaneous .....	36
11	Clean up .....	37
12	Leaving the Boat Checklist.....	38
	Appendix A (Thru Hull Locations).....	39
	Appendix B (Sea Daze Specifications).....	40

## **1 Introduction:**

We have arranged this manual in what we believe is a sequence that is a likely order you will want to use the information. This allows you to follow the manual as a logical guide for operating the boat and its systems to insure you don't forget, or overlook something.

Each section represents a collection of systems that are commonly used together. Depending on what information is needed; it may be efficient to use the index to go directly to the topic of interest.

When you and your guests come aboard, a representative of Anacortes Yacht Charters (AYC) will conduct a checkout and systems review, including a briefing on safety and operating considerations. Please ask any questions, you wish, to clarify your understanding. Reviewing this manual prior to your departure will familiarize you with essential systems of Sea Daze and will help to make your cruise more enjoyable.

Our intent is to keep Sea Daze in top condition and well equipped, but there is always room for improvement. While on your cruise please write down anything you notice that we could improve or change to make your next cruise more enjoyable. Pass these suggestions and recommendations on to the AYC staff. We thank you in advance for your assistance.

## 2 Useful Information

### 2.1 Helpful facts for docking, maneuvering, and replenishment:

Length Overall (LOA) [pulpit + hull + Swim Step]	54-ft 0-in
Hull Length	47-ft 4-in
Beam	14-ft 11-in
Draft	3-ft 6-in
Bridge Clearance Height	19-ft
Displacement (approximate)	32,000 lbs.

#### Replenishment

Diesel Fuel	444-gal (2 tanks, each 222-gal)
Fresh Water Forward Tank	120-gal
Fresh Water Aft Tank	80-gal
Sanitation Holding Capacity	48-gal
Dinghy Gas Fuel	10-gal (gasoline only)
Barbecue Propane Fuel	Disposable Bottles

#### Lubricants/Fluids

Diesel Engine Oil Type	Heavy Duty SAE 15W-40
Diesel Engine Coolant Mix	Antifreeze-Water 50:50 Mix
Transmission Fluid	ATF
Trim Hydraulic Fluid	ATF (Chevron)
Steering Hydraulic Fluid	Mil-Spec 5606 (Sea Star)
Dinghy Motor Oil Type	SAE 30W
Wet Battery Fluid	Distilled Water
Diesel Furnace Hydronic Fluid	Antifreeze-Water 50:50 Mix

#### Anchoring/Docking

Working Anchor, Bruce-Type	66-lbs (30 kg)
Working Anchor Rode	300-ft 5/16" HT chain
Spare Anchor, Fortress (in Port Lazerette)	35-lbs (17 kg)
Spare Anchor Rode	30-ft 5/16" HT chain, 100-ft 5/8" nylon
Docking Fenders	6 – 10" x 26" (black), 12-ft whip
Dock Lines	2 – 25+-ft. 3/4" (blue dbl braid)
	2 – 25+-ft. 3/4" (white dbl braid)
Spring Lines	2 – 35-ft x 3/4" (black dbl braid)
General Purpose Lines	2 – 50-ft x 5/8" (white)

#### Conversions

1 knot = 1.15 miles per hour	16 knots = 18.41 miles per hour
1 mile per hour = 0.87 knot	25 miles per hour = 21.75 knots
1 nautical mile = 1.15 miles	
1 mile = 0.87 nautical mile	
1 mile = 1.6 kilometers	
1 kilometer = 0.625 mile	
1 gallon (US) = 3.785 liters	222 gallons (US) = 840.27 liters
1 liter = 0.264 gallon (US)	rule of thumb: 4 liters ~ 1 gallon (US)

## **3 Departure**

### **3.1 Stowing your personal belongings**

Sea Daze has ample stowage for your belongings and supplies. Each stateroom has hanging closet space and drawers, and the salon and galley have many cabinets for food and miscellaneous belongings. Drawers and doors have sea latches and catches to hold them secure when under way. Be sure to understand how these work to prevent injury, damage, and the potential for items to move around if you encounter rough seas.

Take a few moments to walk through the different decks to familiarize yourself with the different rooms, access ways and storage locations. In addition to stowage of house and personal items there is a lazarette in the cockpit that holds electrical cords, water hoses and spare anchor and rhode and space for tools, equipment and spare parts for the engine room.

### **3.2 Safety briefings for the crew**

Brief your crew on proper safety on the water, Washington State law requires that everyone on board must have an available life vest and to know how to put it on. In addition, state law requires that children under 12 years age must wear a life jacket any time the boat is moving and they are in an outside deck area.

Safety should be paramount to your daily cruising. A “person overboard drill” should be discussed and practiced using the throw ring in the cockpit.

#### **Safety Equipment**

- Life jackets are located on the fly bridge under the settee seat cushions. A total of 12 life Jackets are available. 8 adult and 4 child life jackets.
- There are 3 mounted fire extinguishers.
  - 1) In the Pilothouse, 2) in the master stateroom, 3) in the Engine Room Entry
- There is a “life ring retrieval system” with a 50’ line attached to the boat at the base of the ladder to the flybridge.
- Several safety items are stored under the port side seat fwd of the door in the pilothouse.
  - There is a flare kit for emergency signaling
  - There is a first aid kit
  - There are foul weather gear (rain suites)

### **3.3 Pre departure checks and inspections**

#### **3.3.1 General**

Verify all small appliance and personal items are stowed and secure. Cabin/Stateroom doors should be latched securely as they can swing during unexpected rough sea and may cause injury, or significant damage may occur to doors, windows and mirrors. Windows and port lights should be closed and latched to prevent spray from entering the cabins. Each state room has opening port lights, please ensure they are secured as appropriate. Check for items that may fall from tables and counters in rough water and put them in a safe place.

Pilot house window covers may be stowed in the pilot house under the starboard side of the settee. Fly bridge seat coverings and wet bar cover may be stowed under the lounge seat on the starboard side.



### 3.3.2 Shore Power Disconnection

If at a marina disconnect the shore power cable(s) and stow it under the starboard side of the pilot house settee. For safety always disconnect starting at the power pole to prevent dropping a live line into the water. Turn off the pole (breaker or switch), unplug the power cable and coil it neatly as you walk to the boat to avoid creating a trip hazard on the dock. Disconnect the cable from the boat, remove and store the adaptors in the container under the starboard Pilot House settee cushion with the coiled shore power cable.

### 3.3.3 Engine Checks

Remember “WOBBS” prior to each cruising day: **W**ater (Coolant), **O**il, **B**ilge, **B**elts and **S**ea Strainer. The inspection is best done in the morning while engines and engine room is cool.

The main engines on Sea Daze are very reliable Twin Cummins Diesels – Model 6TB 5.9 TD – 370 HP each. If treated correctly, they can be expected to give trouble-free economical cruising. The engine room is accessed through panels in the floor of the salon or through a hatch at the top of the companionway stairs next to the refrigerator.

Turn the engine room lights on at DC panel in pilothouse.

To inspect the engines you will need to lift the salon floor hatch covers. Slide the salon table and chairs to forward to the ice maker bar and roll up the salon area rug to access the engine covers. You will need to lift 3 of the 4 covers as follows. 1) the port aft nearest the cockpit door to access the port engine oil dip stick, 2) the port forward nearest the galley to inspect the coolant level, 3) the starboard forward hatch to access the starboard oil dipstick and coolant level.

While the covers are open visually inspect to verify bilge is dry, any significant water in the bilge could indicate thru hull leak, bilge pump failure, or other critical issues such as engine coolant leakage. If high water is noted check for sources and remedy before departing.

Check coolant level. Forward of each engine is an expansion tank. Fluid in the expansion tanks will indicate a proper coolant level. If the engines are cool, you can reach your finger in at the caps on the top of the engines. If you can reach coolant with your finger, it is fine. Coolant is a 50/50 mixture of antifreeze and water. If coolant level is down look for a sign of a coolant leak under the engine. If there are signs of leakage, do not run the engine. If no leak is identified add clean water.

Check Oil levels. Check the level of each engine’s oil with the dipsticks. They are located on top of each engine toward the aft. The oil level should be between the two marks on the dipstick. Use a paper towel to wipe the stick, reinsert, remove and check the level. The distance between the two marks is about 1.5 quarts. Only fill if oil levels are below the add mark. Do not overfill!!! The oil fill on each engine is atop its valve cover. After refilling, be sure to retighten the cap. Do not over tighten.

Reposition the hatch covers, rug, chairs and table

Lift the engine room access cover. This is the top stair of the companion way directly next to the galley floor. Set this cover in front of the ice maker and climb into the engine room entry space. To access the engine room you will need to open the sound barrier hatch. To open this hatch move all 4 cam handles 90 degree and using the center handle push the barrier into the engine room. Set the barrier off to the side and enter the room.

Visually inspect V-belts, hoses, engine mounts, coupling bolts, 3 sea strainers (they are located aft of each engine) and fuel filters. Look for leaks, wear, or looseness. To inspect sea strainers hold a flashlight behind the

filter and look through it for anything that could clog the filter. See labeled strainers located: in engine room (port and starboard side), generator-cockpit floor (starboard side, forward). Check the transmission fluid levels in each transfer case. Raise the dip stick on top of the transfer case housing; after inspection replace tightly to avoid contamination from water.

Visually inspect the bilge. Check under and around the engines. During your inspection, ask yourself if everything looks (and smells) right.

**Sea Strainers:** Ensure the valves on each RAW WATER THRU-HULL are open. (The lever is in-line with the hose or valve). The Raw Water Thru-hulls are normally left in the open position. However, if they are closed, there will not be any water flow from the stern exhausts when the engines are running. This will lead to a serious overheat condition and engine damage. Look through the glass of each RAW WATER SEA STRAINER for debris. A flashlight held behind the glass strainer makes it easier to see debris. **A clogged strainer will cause the engine to run hot or overheat.** If necessary, close the thru-hull valve, open the strainer cover, clean out debris and reassemble. Remember to the thru-hull valve.

Exit the engine room, reposition the sound barrier and lock in place with the 4 cams.

From the Cockpit Lazarette check the following:

- Steering fluid level
- Trim Tab fluid level
- The Battery electrolyte level should be checked once a week. Verify the electrolyte covers the plates, but remains below the fill tube.

*Use distilled water only, or you will damage the batteries. Distilled water is stored in the port side lazarette, do not fill with bottled water, or tap water it typically has small amounts of mineral, or other elements that will degrade the batteries. Do not over fill the cells as this can prevent venting of the battery during charging and cause an explosion.*

### 3.4 Starting the engines

The hour meters are at the aft side of the power panel in the pilothouse. Record these readings in your log entry and check the log to see what they read at the last refuel (Experience has shown that fuel gauges are often not accurate. We suggest that you track your fuel consumption rate as a double check on the fuel gauges)

Make sure the “Engine” and “Accessory” battery switches are on (they should have been left on). These are in the battery management panel on the port aft side of the salon.

At the top of the DC switch panel (the aft panel in the cabinet on the starboard side of the pilothouse) turn on the DC Master and the Ignition Power switches for the port and starboard engines.

**Ignition keys are in the pilothouse starboard drawer. Insert the keys into each key switch in the helm station.**

Place the transmission selector levers (levers with the black knobs) in **the Neutral (N) position and the throttle controls (levers with the red knobs) in the idle position** (pulled fully to the aft).

If starting the engines for the first time of the day, make sure to preheat the engines. Turn the Starboard engine ignition key clockwise; a buzzer will come on, when the green light comes on turn the key further to the right to start the engine. Follow the same process with the port engine. Wait for the buzzer to stop after starting the starboard engine before starting the port engine.

The engines usually start very quickly. DO NOT continuously operate the starter for more than 15 seconds at a time. If the engines don't start the engines have a neutral lockout and small adjustments of the transmission selector levers to verify they are centered may be necessary.

If engine doesn't start, wait for at least 30 seconds before making another attempt.

If after two attempts the engine does not start, try to determine the cause before proceeding. See trouble shooting a no-start condition below.

After engines start, verify the oil pressure is above 30 psi, walk out to the swim step and check the exhausts for water flow. If there is low oil pressure or no water flowing from the exhaust shut the engines off immediately and troubleshoot.

Raise the engine RPM to 1,000 for about a minute to stop the pre heat system and reduce power draw on the batteries. Reduce the RPM back to idle and warm engines a minimum of 5 minutes before maneuvering and span your initial acceleration over a 5- minute period to allow for warm up.

Caution: Continuous operation with low coolant temperature (below 140 degrees) or high coolant temperature (above 205 degrees) can damage engine.

If at any time an engine alarm sounds shut down immediately to prevent engine damage and trouble shoot the condition.

### **3.4.1 Trouble shooting abnormal engine condition:**

Engine Does not start: Check for low battery, engage the Battery Parallel Switch located at either the pilothouse or bridge helm to connect other batteries. The Parallel Switch must be held in position while starting. Releasing the switch will return the electrical system to the normal mode. **It is not normally necessary to have to use the Parallel Switch so be sure to inform AYC upon your return.**

Overheating, or no water flow from exhaust: Check the sea strainers, they may have picked up some debris. Sea strainers are the large bronze and glass cylinders, engine room. If dirty you will need to clean them, close the seacock valves, remove the strainers, clean, reinstall. **It is very important that you remember to close the seacocks before opening the strainers and REOPEN them when done.**

Alarms sounding: If engine alarms sound (due to low oil pressure or high water temperature), shut down the engine IMMEDIATELY and troubleshoot. Was there a lack of water exiting with the exhaust? Are thru-hulls open and debris cleared from sea-strainer? If you cannot identify the issue or on a restart attempt the alarm sounds again call AYC Service for help.

### **3.5 Electronics (Preparing for Navigation)**

The Salish Sea is a marvel of nature with many safe passages, stunning bays, harbors and marinas; however it also has many treacherous areas that require constant vigilance. The skipper has a tremendous responsibility for the safety of their passengers and to other boaters. Before departure the skipper should fully familiarize themselves with all navigation equipment and how it operates. Applicable charts should be reviewed each time the boat is put under way to assure the intended course is appropriate for a large vessel such as Sea Daze and that all hazards to safe navigation are known by the skipper and any person that will operate her.

#### **3.5.1 Selecting a course and preparing the electronics for navigation**

A word of caution, most skippers today rely on GPS and electronic charts with a perception that these highly useful devices provide pin point accuracy. The reality is that the entire GPS system is far less accurate than you may expect. For national security the civilian GPS signal is intentionally degraded and may be as far as 20 meters off. The date of publish on many NOAA and Canadian chart is deceptive. Many newer charts are based on surveys taken in the early to mid 1900's and the equipment of that era was common to be inaccurate to 20 meters or even greater. The majority of today's recreational chart plotters (GPS) are digitized from NOAA and other international paper charts. The digitization process is not precise and will introduce some error. If we take a 20 meter error in GPS, add a 20 meter error in the survey underlying the chart and consider the inaccuracy of digitization we may have 40 meters or more of potential error; 40 meters is 132 ft and that is close to 3 times the length of Sea Daze!

Sea Daze has a full set of navigating systems and devices. Electronics include two VHF Radios, two GPS systems with independent Chart Plotters, a Depth Sounder and Depth Sounder/Fish Finder, Radar and Electronic Hailer. It is recommended that you practice with these instruments to develop the familiarity you will need when you have to depend on them in a stressful situation.

This operator manual provides the basic operations for key electronics of the Sea Daze navigation system. In the pilothouse, in the cabinet below the power panel there are detailed manuals kept on board for each electronic device. Refer to these for additional information.

To turn on the system verify all navigation related electronics and accessory switches/breakers are on in the power control panel.

#### **3.5.2 VHF Radios**

There are two mounted VHF radios, one at each steering station. Always monitor Channel 16 while underway for safety information. Use channel 16 only for the initial contact to other boaters and marine services, or for emergencies. Once contact is made; switch to another channel designated for conversation. Remember everyone listening can hear what you say.

Both radios have channel tuner knobs, squelch and volume controls on the face of the units. They also have buttons for weather (WX) and quick return buttons to channel 16. The hand held microphone has a "push to talk" button. Push to talk, release to listen.

The Pilot house radio has Digital Selective Calling (DSC) and provides a distress call button. In the event of a life threatening emergency remove the red cover and press the button and hold for a few seconds to transmit a call to the Coast Guard providing them with GPS coordinates and vessel identification (the GPS must be on and active to transmit your location).

### 3.5.3 GPS and Chart Plotter

Sea Daze has two independent navigation chart plotter and GPS systems:

- 1) Raymarine E127 Multi Function Device (MFD) with built in GPS and Wi-Fi Smartphone remote viewing capability mounted in the port side Pilot House Helm.
- 2) Raymarine Raystar 112LP GPS with an HSB CRT Display shared with the Radar mounted in the starboard side Pilot House Helm. This may be used as a functional backup GPS in the event the E127 system fails.

#### The Raymarine E127 MFD Navigation System

The E127 MFD is the backbone of the Sea Daze Navionics. This system incorporates a built in GPS receiver, built in depth sounder, performs network integration for the autopilot, provides GPS coordinates to the DSC radio, provides waypoint information to the radar and feeds digital data to a set of Raymarine i70 Digital Data displays and a Raymarine E7 MFD set to default as a fish finder/depth sounder.

The E127 includes a Wi-Fi connectivity that can be used to display information on your personal Smartphone or tablet device. This may allow the skipper, or another crew member to monitor course, speed and depth from any location in the boat.

*To use this feature you will need to download and install the free Ray Control / Ray Remote app from Raymarine and log onto the Sea Daze Wi-Fi network to your mobile device. The apps are available from the Apple App store Amazon, or Google. The “Sea Daze” network is available when the E127 MFD is on. The network ID is “Sea Daze” and the Pass Code is “Sea Daze”*

Operating the E127 systems:

The E127 and E7 controls are a highbred of touch screen activated, push buttons and joystick. For some critical functions only the buttons and joystick are used, **a touch screen response may not be allowed**. This is a safety feature to prevent inadvertent actions from unintended touch of the screen while underway. ***An example of this is responding to the autopilot alarms to engage or disengage course tracking. This must be done by pushing in on the joy stick.***

Remove the sun covers from the E127, E7, i70 displays and the ST 6000 Auto Pilot and store these in the cabinet under the power panel.

***Please recover the displays when they are not in use to prevent damage.***

Press the power on button in the lower right corner of the E127. While the E127 initializes you may turn on the E7 MFD and i70 data displays. Press the button in the lower left corner of the i70 displays to turn them on.

The E127 will require you to accept /acknowledge a safety disclaimer. Press in on the joystick control in the top right of the E127 MFD; this will bring up the home screen. The home screen provides several pre-configured optional layouts. You may choose to view a single chart, dual chart windows, a chart with user manual, or just the user manual. For most navigation situations a single chart is best as it provides the largest viewing size and all supplemental data may be shown from the i70 displays.

*The user manual for the E127 is electronic media. You may view the manual any time even while the unit is in use for navigation. This is best viewed in a split screen mode selected from the home screen.*

The i70 displays have several pages with different information available. You may scroll through the different pages with the up-down arrow keys to present the information best suited for the type of maneuvering you may be performing. For close quarters/marina you may want the large rudder angle and depth displays.

Within the Pilot House, for auto pilot use, the pages that display 6 data fields in each i70 are configured to provide valuable information. If these 6 field pages are not showing use the up down arrow keys to scroll to these pages. All 6 fields will provide data when a route, or Go To waypoint is active. The upper i70 6 field page will show speed, distance and time and the lower i70 6 field page shows heading, course directions, turn and rudder position information.

### **Planning for navigation**

Zoom in at your start location sufficient to identify objects and hazards. Use the touch screen or joystick to position the cursor over your intended start point. From the menu select navigation, scroll down the menu with the joy stick, or the rotating color at the bottom of the joy stick and select the “Build Route” option. Select place waypoint (WP) from the menu. Position the cursor to the next waypoint you desire to create and select place waypoint again. Continue to position the cursor and place waypoints until you are satisfied your course is sufficient. Scroll the menu using the joy stick / rotary color and select finish/save to close out the course.

### ***Verify your course is good!***

Zoom in to see depth marks, navigation aid details and obstructions on the chart. Scroll/Pan along the route to review your course to be certain it does not cross any obstructions, or enter shallow water. If the course is not where you like, it is easy to adjust. To edit / add waypoints use the joystick to scroll over the course location or existing WP and a target should appear. Select the WP, or insertion location by pressing in on the joystick. This will pop up an option menu to insert/delete/edit/move waypoints. Select the action that will allow you to reposition, add, or delete a WP as needed.

To navigate existing courses return to the root menu and select “My Data” you may scroll through the table of existing courses and select and activate a course from the list.

When a course is activated and the autopilot is on you will be prompted to engage the autopilot. It is advised that you set the autopilot to standby and manually steer the course until you have verified the next waypoint is clear. You may initiate autopilot and track the course at any time by pressing the auto button and then the track button.

**Caution, Caution, Caution...** before engaging the autopilot, verify for certain the autopilot is targeting the next way point you want. If you are entering a course from other than its beginning you must use the menu options to advance waypoints or the Autopilot will turn and head directly to the start of the course or the last active waypoint. If objects, obstacles, debris, or land are between you and the active target way point it will not know this and it will not avoid these obstacles.

For additional information please review the section on Autopilot (section 3.6.4) later in this manual.

### **Raystar 112LP and HSB CRT Display**

The Raystar 112LP GPS Chart Plotter is available as a backup GPS. The 112LP and Pathfinder Radar use a common display screen. As the E127 MFD system is used as the primary navigation system the HSB CRT display will be defaulted to display only radar information. If you need to use the Raystar GPS system refer to the operator’s manual in the cabinet below the power system controls.

### 3.5.4 Paper Nautical Charts and Seamanship Reference

In the pilot house cabinet above the settee you will find the ships nautical library. This library contains paper charts and many useful books on seamanship, navigation and boating.

Please note that the charts are folded to display the chart title for easy identification. If you use these charts please fold them accordingly when returning them to the library.

Available Paper Charts:

Strait of Juan de Fuca	US	#18474
Strait of Juan de Fuca to Strait of Georgia	US	#18421
Desolation Sound and Satil Channel	Canada	#3538
Approaches to Toba Inlet	Canada	#3541
Juan de Fuca Strait to Strait of Georgia	Canada	#5990Y-#5990Z
Juan de Fuca Strait, Eastern Portion	Canada	#LC3461
Jervis Inlet	Canada	#3514

### 3.5.5 NavMan 2100 Depth Sounder

There is an individual NavMan 2100 depth sounder mounted in the fly bridge console. It is powered on from the flybridge switch panel. The sounder is typically reliable in waters less than 200 feet deep and at slower speeds. If the sounder is blinking, it might be a false reading due to excessive depths, brackish water, or strong currents. Watch your depth carefully in cruising unknown waters that might have rocks or obstacles.

***Remember that sounders do NOT look in front of the boat, only UNDER the boat. They do not tell you if you are about to run aground, only if you haven't already. Use them in close conjunction with your charts.***

### 3.5.6 Radar

Sea Daze is equipped with a Raymarine Pathfinder Radar with HSB display. To turn on the radar press and hold the power button in the lower left of the HSB display unit until the unit beeps. If the system is in Radar mode it will automatically start the warm-up countdown sequence for the magnetron. After the countdown is complete the radar will go to standby mode. To initiate transmit you need to press the power button again. The radar screen should begin to display images of nearby objects. Use the range key to adjust the range scale of the rings. Press display to zoom in or out to an appropriate scale for navigation. To turn off the radar press and hold the power button until it completes the countdown.

To read the radar assume you are at the center of the screen. The top of the screen is dead ahead. The higher the range you are displaying, the more gain you want. Use filters sparingly as they may filter out targets you are looking for.

If the E127 MFD is on the radar can display speed, direction to waypoint and coordinates to selected targets. The EBL (estimated bearing line) and the VRM (variable range marker) are extremely useful. These are operated with the track ball and menu keys.

The operating manual is in the cabinet under the power control panel if you desire more information on radar system functions.

Note: The HSB display is shared with the backup GPS Raystar 112LP GPS Chart Plotter. It should default to display radar, however if it is not press display and select the options to switch between the radar and chart plotter screens.

## 3.6 Boat Operations

### 3.6.1 Getting Underway

**Have a plan** on how you want to leave the dock and marina/anchorage prior to untying the lines. Make sure everyone knows the plan and don't be shy about asking for, or accepting help from fellow boaters. Don't ever assume others will do what you expect. Tell them exactly what you want them to do. Communicate with your crew.

All close quarter maneuvering should take place from the bridge helm. This will afford maximum visibility. If operating from the pilothouse, ensure both doors are open to allow quick access to both sides. Make certain the throttles are in idle and engage the gearshifts and maneuver the boat with differential steering.

Remove spring lines leaving only bow and stern lines. Always remove the upwind line last as you leave the dock. Once outside marina, have crewmembers bring in fenders and put lines away. Lines are stowed by hanging/tying to the fly bridge cockpit ladder.

Note: If anchored see section 3.6.7 for weighing anchor

### 3.6.2 Cruising

Slowly come up to your desired cruising rpm. (Do not exceed 1400 RPM until the engine temperature gauge reads at least 140 degrees). Sea Daze can cruise nicely at approximately 16-17 knots. However, the realities of vessel hull design and power plant engineering dictate that higher RPM operation will be less efficient on semi-displacement hulls. Thus, you will notice from the following table that every knot above "displacement speed" (about 7 knots) can get expensive.

RPM	Gallons/Hour	Speed (Knots)	Nautical Miles/Gallon
1100	2.6	7.0	2.7
1500	6.0	9.0	1.5
2300	22.0	17.0	0.8

Do not exceed 2400 rpm except for very brief intervals. (High engine speeds causes the engine to overheat (over 205 degrees) causing damage as well as high fuel consumption).

Always have a sharp lookout posted for logs, deadheads, or other possible hazards. A log hitting your prop can ruin your vacation. Debris does tend to gather along current lines. It is sometimes best to go around these areas and miss the minefields.

### 3.6.3 Trim Tabs

The Trim Tabs can be effective at bringing the bow to the ideal cruising attitude, or to adjust for a side wind. CAUTION: Do not press one tab down at the same time you press the other one up. This will blow a fuse. PLEASE, NOTE: the trim tabs should be operated one at a time (only port or only starboard) using a short tap on each switch back and forth until the desired attitude is achieved. Allow a few moments after each tap to



determine the effect of the adjustment each time. Once established at cruise, make minor adjustments and watch your speed on the GPS to see if it improves.

The trim tabs have a DC circuit breaker. The controls are to the right of each wheel. The trim tabs are for use at fast speeds only to help trim the bow down over its wave to a planning angle. It can also help level the boat to either side at lower speeds. Avoid trimming the bow too far down as this can decrease performance.

Whenever you slow down off a plane, turn the tabs all the way up. This can improve handling in trailing seas and docking. (To determine when they are up or down, individually press each control either up or down and hold while you count off 10 or 20 seconds)

### 3.6.4 Autopilot

*WARNING -- ALWAYS know the status of autopilot – is it on ‘auto’ or is it ‘standby’? Turning the wheel to avoid debris, or traffic WILL NOT disengage ‘auto’ mode -- the boat WILL maintain course. Press ‘standby’ mode to disable ‘auto’ mode. Refer to Raymarine autopilot manual in cabinet beneath Pilothouse Electrical Panel. Make certain to set the autopilot into standby when approaching harbor, docking or close quarters maneuvering or the helm will not respond at all.*

Turn on the Autopilot switch at the power control cabinet.

The Auto pilot may be operated from both the flybridge and the pilot house. The head unit is located on pilothouse helm portside. These units aid in maintaining course heading and can be set to follow a pre planned GPS course. The Raymarine ST 6000 autopilot also provides a rudder angle indicator useful for low speed operations and differential steering situations. The rudder position indicator is displayed at the bottom of the head unit and remote control display.

For autopilot operations at the flybridge use the wired remote. It is stored in the starboard side drawer in the pilot house. The remote unit plugs into a socket in the bridge radio cabinet and performs all functions via the push buttons and the small digital display. For night illumination, press the ‘Lamp’ button to change the light level of the autopilot and the tri-data display.

It is the skipper’s responsibility to maintain watch for objects and other vessels, or to designate a crew member to perform that watch at all times. This becomes even more important when operating under the autopilot. When operating under autopilot there should always be someone near the control, trained in how to put the system into standby and manually drive the boat.

Begin normal navigation under manual control (Standby mode) until you are certain the general course and direction is clear. Bring the boat to your desired speed and press the auto button to engage. The auto pilot will use its built in compass to hold the boat on the current heading until given other directions. It will compensate for current and wind as needed. To adjust direction you may use the 1 degree increment button, or the 10 degree increment buttons for changing heading to starboard or port as needed. In this mode the boat will continue indefinitely on whatever heading it is last set for.

Tracking to a planned course. If the E127 MFD system is online and receiving a GPS signal and a course has been planned and activated the autopilot may be set to track it. In this mode the autopilot will attempt to follow the course segments as programmed. Before initiating a tracked course, manually bring the boat within a few tenths of a mile of the nearest segment and its intended heading, verify the next waypoint is the target waypoint (if it is not use the advance waypoint option from the navigation menu). Visually check that no objects or other traffic is in the intended course and press the track button. Verify that the autopilot is tracking to the intended route by observing the E127 MFD charts and position indicator.

When approaching the end of a segment an alarm will sound. It is advised that the skipper take a moment to check that the new heading is clear of objects and other traffic. If the next segment is clear then push the track button, or push in on the joystick one time to advance to the next segment and allow the auto pilot to change course and continue.

If no action is taken the autopilot will continue on the last heading and the alarm will continue to sound. If it is decided not to advance to the next segment you may press standby to operate manually, or you may press auto to stop the alarm and tracking and continue on the last set heading.

Refer to the Raymarine ST 6000 Autopilot manual in cabinet beneath Pilothouse Electrical Panel for additional features.

### 3.6.5 Search Light

The searchlight has a DC circuit breaker labeled “searchlight”. Be careful, the light gets hot. The light works from either upper or lower helm depending on how you’ve switched the controls. It may be directed via the small joystick at each helm.

### 3.6.6 Docking

Before entering the marina or nearing a dock, **have a plan**. Prepare the boat and crew while away from the dock by placing fenders over the rails and have dock lines tied to cleats at appropriate locations; *pre-assign crew members to handle specific lines and fenders, discuss who will communicate information to the skipper, such as proximity of the transom to the dock.*

To bring Sea Daze into a dock, decide which side of the boat will go against the dock and set your fenders. Also attach a stern line, a midships line and a bow line so they are ready to use for docking. During docking, as with any close quarters maneuvering, it is best to use the bridge helm for maximum visibility. If using the pilothouse, make sure you open both doors so that you can quickly assess your clearance. Since it is difficult to see the stern from either driving position, it is wise to have an experienced person handling the stern line so that they can also advise you of your position. Give clear instruction to the crew on what you will expect of them (i.e. lines and fenders). Communicate with your crew.

Prior to docking, Ensure trim tabs are all the way up (bow up position). Throttles should be in idle position. While moving slowly towards the dock, center the wheel and use the gear shifts to maneuver the vessel. The one exception to idle speed is in windy conditions when it may be necessary to increase the rpms to maneuver the boat against the wind. It is not likely to need more than 800-900 rpms to deal with the wind conditions.

Tie the stern and bow lines off and attach spring lines as needed to secure the boat. Please place chafing protectors on all rub points to protect the lines. Chafing may occur on cleats, rub rails, hand rails, or any point that the line makes contact with another surface.

#### Dock lines:

Blue	Double braided	¾ x 15 to 25 ft	Bow/Stern
White/w gold	Double braided	¾ x 25ft	Bow/Stern
Black	Double braided	¾ x 35ft	Spring line
Teal	Double braided	¾ x 50ft	Spring Line
White	Twisted 3 strand	5/8 x 40ft	Varies

### 3.6.7 Mooring Docks, Rope Lines and Buoys

There are many marine park mooring options in Puget Sound, San Juan Islands and Canada. They may eliminate your need for anchoring and are recommended in crowded bays, etc. There is typically a nominal fee to support maintenance of the parks and these mooring aids.

Please be aware, Washington State parks limit use of their buoys to vessels of 45ft or less. These buoys are not sufficient to hold larger vessels. This will exclude Sea Daze from use of most buoys, however larger vessels may tie to floating docks and mooring rope lines anchored by pilings.

### 3.6.8 Anchoring

**GROUND TACKLE** The primary working anchor is a 20kg Bruce style with approximately 300' of all-chain rode; anchor wash down; and 12vDC reversing electric anchor windlass.

The chain is marked at 25ft intervals. From 0ft to 100ft the marking is blue, 100ft to 200ft yellow, from 200ft to 275ft red and the last 25ft of chain is all red. The chain is passed through the deck from the anchor locker. The locker can be accessed through the master stateroom (behind the mirror).

Always have the engines running when raising or lowering the anchor, the windlass draws very large amperage. The Windlass (Winch) main switch is located in the Pilot House Power panel fwd side of the cabinet.

The Windlass is operated by using the foot switch in the foredeck. On the front of the windlass are 2 pawls that have to be moved out of the way to lower the anchor. There is a short handle / lever on the windlass used to rotate the drum and free up the pawls.

Note: There is a Chapman's boating manual on board with discussions on anchoring.

#### 3.6.8.1 To Set Anchor:

- Turn on the "Windlass Power" switch in the power cabinet.
- Pull the pawls back away from the gear teeth at the front of the drum (winch is powerful so watch fingers and toes).
- Uncap the button on deck that points forward (one on the left). Tap it with your toe to get 1 or 2 feet of slack.
- Push the anchor out by hand until there is a little weight on the chain, then step on the "down" button.
- Put out the proper amount of scope. (use a minimum of 4:1, good practice is 7:1)
- Return the pawls back in place on the gear teeth. Forgetting this may burn up the clutch.
- Set the anchor with either or both engines in reverse, gently at first.
- Turn off the "Windlass Power" in the pilot house power cabinet.
- Remember your requirement to have your anchor light on during hours of darkness.

Note: on the starboard side of the winch is a three-pronged handle. This is a clutch that may be loosened to lower the anchor by gravity and control its descent, or tighten the clutch if the windlass is slipping.

### 3.6.8.2 To Weigh Anchor:

- Turn on the “Windlass Power” switch in the pilot house power cabinet.
- Uncap the button on the deck that points aft (the one on the right) and tap the button with your toe to take up slack chain on the rode. Have your first mate at the upper helm so you can communicate with each other. As you take up the chain move the boat SLOWLY forward with the engines being careful not to run over the chain.
- The rode chain and anchor will likely come up muddy or dirty. With the hose in the foredeck hatch, having turned on the wash-down pump, spray the chain and anchor to clean it as it comes in. PLEASE DON'T PUT THE CHAIN AWAY MUDDY AS IT WILL LEAD TO A SMELLY, MUSTY BOAT. While some scents of the sea are pleasantly memorable, this would not be one of those.
- When the anchor is clear of the water and close up to the bow roller, bring it in slowly so it doesn't slam into the hull or the roller. Usually it is best just to handle those last few feet by hand.
- Turn off the “windlass Power” switch.
- A spare anchor, chain, and line are located in the starboard lazarette. This “lunch anchor” is for emergencies and is not typically adequate to hold the vessel by itself.

### 3.6.9 Shut Down

Before shutting down, the engines should idle for about 5 minutes to let them cool. This is usually not an issue as engines will be at idle for a sufficient period of time during docking maneuvers. Ensure that each gearshift is in the neutral position and each throttle is in idle. Turn off the engines using the ignition keys.

## 3.7 Fueling

Sea Daze uses Diesel # 2 fuel. ONLY the skipper should fill fuel tanks being sure it is filled at the deck plates labeled “Fuel” and NOT “Water” or “Waste”. **This error has been made by a number of well seasoned skippers and will ruin a vacation and is expensive to remedy.**

**Make sure the fuel is indeed diesel and not gas (trace back to the pump). Each fuel tank must be fueled separately as they do not cross fill to the other side.**

Before pumping, have your oil/fuel absorbent ready to soak up any spilled fuel. Fuel spills can bring very large fines. All windows and ports should be closed to minimize fuel odor. You should have a rough idea of how many gallons you will need to keep from filling too fast and spilling over the deck or spewing from a vent. As the tank fills, the sound will rise in pitch or gurgle. With a little practice you can tell by the sound when the tank is nearly full. It is a good idea to have a crew member watch the pump meter and tell the skipper when it is near the expected amount but several gallons before the expected amount is pumped.

The fill tubes on occasion will burp back when filled too fast and this can be very messy. Wrap the nozzle with an absorb right at the filler to contain any back splash.

Some marina pump hoses are not long enough to reach both tanks from across the deck. One way to get to both fuel tanks, without moving the boat, is to open both pilot house doors and pass the fuel hose through the pilot house. **Please be very careful** when doing this to avoid spills in the pilot house cabin. Completely wrap the nozzle with an absorbent and have a crew member guide the hose from inside to prevent contact with settees,

walls and carpets. If diesel is spilled inside the cabin it can be a downer for your vacation as it is very difficult to remove the odor and expensive to clean from furniture and carpets.

Replace the deck fill caps, check your fuel gauges and turn on the engine room blower for several minutes, this may be done while you go and pay. Clean up any spatter and wash hands thoroughly.

- **DO NOT TRUST FUEL GAUGES.** As a policy, top off the tanks approximately every 15 engine hours. This leaves a margin to guarantee you will not run out of fuel. The port tank feeds the port engine and the starboard tank feeds the starboard engine and the generator so it may take slightly more fuel.
- RACOR fuel filters are mounted in the engine access under the top step next to the galley. Inspect them whenever you are in the engine room. Water will appear separate from the fuel and can be drained out the petcock at their bottoms. A little dirt is okay but if they look dirty call AYC to change the filters.

## 4 Electrical System

### GENERAL:

The Bayliner 4788 Pilothouse has an electrical system that requires special understanding. Before reporting any system failure, search for that system's second or even third switch. There are many redundancies. For example: the depth sounder circuit on the DC main circuit board must be on. Also the depth sounder switch on the flybridge to the left of the wheel must be on.

The electrical needs of a Bayliner 4788 Pilothouse can be very high. Therefore you may need to prioritize use of some appliances and these should only be used when others are turned off. Pay attention to the amperage meter on the main circuit board to keep tabs on the amperage draw. When plugged into a single 30-amp shore power, do not exceed 30 amps draw. The biggest amperage users are the water heater, the electric stove and the inverter; these may draw high current if charging the house batteries.

*Note that if you have two separate power sources you may configure up to 60 amp by setting the main panel rotary switches to "normal" vs. "parallel" settings Line 1-2 and/or Line 1-3. You will likely need to pay an extra fee to the marina for this extra power.*

### 4.1 AC Power

The AC panel is in the forward half of the starboard side cabinet in the pilothouse. Either plugging into shore power or turning on the generator energizes the panel. For very limited needs the inverter will also energize the AC panel. There are two knobs for selecting how to shore power your AC circuits. Both bridge settings 1-2 and 1-3 are located at the top of the AC panel.

There are 3 master AC switches and three columns of AC breaker switches that control what is powered. Note the following: *(this switching configuration is not intuitive please read this carefully)*

- **Dockside Master Line 1**, above the 1<sup>st</sup> column (far left) controls all items in the 1<sup>st</sup> column and most items in the 2<sup>nd</sup> (middle) column. *This is a consequence of the factory wiring for the inverter system and results in a potential for high amperage on switch circuit 1.*
- **Dockside Master Line 2**, above the 2<sup>nd</sup> (middle) column, only controls the range and the washer-dryer unit and vacuum. *Everything else in the 2<sup>nd</sup> column is controlled from Dockside Master Switch 1, column 1.*
- **Dockside Master Line 3**, above the 3<sup>rd</sup> (far right) column controls the electric heating units and any items in column #3.

#### 4.1.1 Plugging in...

Turn off the dock socket before plugging or unplugging either end of the cords. This prevents arcs, sparks, and shocks: and the cords, sockets and plugs will last longer. It is good practice to plug in the boat end of the cord before plugging into the shore outlet. Turn the dock socket on when both ends of the electrical cords are securely connected. It is important to make a loop around the dock receptacle and another around a boat cleat to keep the cord out of the water and to provide some slack to keep the plugs from detaching.

Two 30 amp Shore power cords are kept in the pilot house under the settee. A selection of cord adaptors are kept in a bin with the cords.

#### 4.1.2 Service Line Options

Sea Daze has four dockside electrical connectors, three are AC hookup lines and one is telephone and cable TV inlet. Shore power receptacles are located on the outside starboard, just aft the pilot house door.

The three forward most receptacles are the main shore power input and allow for multiple 30amp service. You may connect each receptacle to its own power source (pole) to allow more current draw, or these may be bridged together to draw from a single shore power source by placing the rotary switches in the AC panel. Each receptacle is paired with a Dockside Master Line on the AC power panel.

When connecting with only one 30 amp power cord use the receptacle for Dockside Line 1 (the receptacle towards the bow) and set the rotary selector switches in the AC system panel to “Parallel Mode”. “Parallel mode” is setup when Dockside Line 2 selector switch points to ‘Line 1-2’ and Line 3 Selector switch points to ‘Line 1-3’.

*NOTE – The most common usage, and the easiest method, is “parallel” mode with one shore power cord.*

In “parallel” mode, only Line 1 is connected to shore power and the total current being used is the sum of the three AMMETER readings. If the total current exceeds the capacity of shore power service, the Line 1 DOCKSIDE MASTER breaker will trip OFF. In this event you must turn off enough AC components to remain within the service capacity and reset the breaker.

*These appliances draw the highest amperage: inverter, hot water tank, range/oven, microwave, washer/dryer, vacuum.*

If more shore power service is desired and available, an additional power cord may be connected to a separate service pole. Then connect to receptacle for Line #2/ Line #3 and change rotary switch to “Normal”. In this “normal” mode, the current load is read for each separate line’s AMMETER.

When using additional power sources the following items may be powered separate.

- Line #2 in normal mode will provide power only for the range, vacuum and washer-dryer unit.
- Line #3 in normal mode will power the electric heaters.
- All remaining electrical circuits are always on line #1. This heavy loading to line #1 is due to the inverter circuitry. *The bottom line is you will need to manage the current load on line 1 to prevent tripping the circuit.*

### 4.1.3 Power-up

Have your source selector switched to OFF to confirm available voltage, switch on the meter at the top of each “line”. The voltmeter at the top of this panel will then confirm that you have 110 to 120 volts available. The red “polarity hazard” lights for each line should NOT be on. ***If either light is on, do not use shore power until you solve the problem.***

If no warning indicators are on, turn ON the master circuit breaker on at the electrical panel.

*Note: that if you have been running off battery power when you first power up on shore power circuit the inverter and battery chargers may draw a very high load (over 20 amp). This is normal and can take an hour or more while the inverter brings the batteries up. If you need to run a high power appliance you must either wait until the current draw goes down, or delay turning on the inverter until later.*

Turn on appropriate red appliance switches for battery charger, refrigerator, etc. Watch your amp meter for load. If the load exceeds the supplied amps, it will trip the breaker. If this occurs, wait to turn on one of your high draw systems (i.e. water heater, space heaters, oven, microwave, etc. until the use of power decreases).

If your outlets fail to work, check your GFCIs to make sure that they have not been tripped. One GFCI (like the one to the right of the galley stove, or in the pilot house) often controls more than one outlet (e.g. kitchen GFCI controls the salon TV outlets). 120-volt outlets are ground-fault protected (GFCI). If an outlet is not operating, first check the AC panel receptacle switch, and then check the GFCI outlet for the circuit DC Power

Receptacle Switch	Outlet Location	GFCI Location	Suggested Usage
Salon/Pilothouse	Port Side Helm	Portside Helm	
Salon/Pilothouse	Starboard Side Helm	Portside Helm	
Salon/Pilothouse	Above Stereo	Portside Helm	Cell, iPod Charger
Salon/Pilothouse	In-Front Stereo	Portside Helm	Cell, iPod Charger
Salon/Pilothouse	Salon Beneath Sofa	Portside Helm	Laptop Power Cord
Galley	Stove Starboard	Stove Starboard	Coffee Maker
Galley	Sink Counter	Stove Starboard	Small Appliances
Galley	Salon Stb Aft Floor	Stove Starboard	Laptop Power Cord
Galley	Pilothouse Aft Seat	Stove Starboard	Laptop Power Cord
Aft Stateroom/Head	Aft Head Cabinet	Aft Head Cabinet	
Aft Stateroom/Head	Aft Stateroom	Aft Head Cabinet	
Forward Stateroom/Head	Fwd Head Cabinet	Fwd Head Cabinet	
Forward Stateroom/Head	Fwd Stateroom Stb	Fwd Head Cabinet	
Forward Stateroom/Head	Fwd Stateroom Port	Fwd Head Cabinet	
Flybridge Refrigerator	Beneath Sink Cabinet	Sink Cabinet	Dinghy Battery Charger

## 4.2 DC Power System

There are three battery banks in the 12-volt system: Generator Start Batteries, Engine Start Batteries, House/Inverter Batteries.

The battery master switches are located aft, next to the salon sliding door on the port side. Normally you will leave the switches in the ON position. There is a DC MASTER SWITCH (it is black) on the left of the panel. It must be switched to the right for the DC system to work. Note that it will trip if it detects a problem with the DC circuitry. **Note: Changing the position of the battery switches with the engines running will cause damage! Only change positions with the engines off. Normally, it will not be necessary to change these. Call AYC if you need further directions.**

The DC panel is in the starboard cabinet in the pilothouse. The DC MASTER switch has to be on before any of these switches will work. ***Remember, there may be helm switches such as Navigation Lights or Depth Sounder that also have to be switched on or off at the upper helm.***

With the DC MASTER on and the ENGINE START switches on check the level of charge in the batteries by rotating the switch on the upper right and watching the meter to the left of the switch. This does not show the level of charge of the inverter batteries. The inverter will show the charge level of its own batteries.

The DC electrical panel (right side of the electrical panel in Pilothouse) shows all the systems supported by your batteries. You will be turning on these breakers for lights, water pressure, electronic, etc. This will allow you to manage your power usage. Certain breakers should be turned off after each use (engine room light, washdown pump, etc). Bilge pumps should always be left on.

When disconnected from shore power (and without the generator running), the 12-volt systems will drain the house batteries, especially when at anchor. **Monitor your batteries very carefully.** When anchored, turning off high draw items (icemaker, bridge lights, refrigerator, water heater) will extend battery time between charges. The DC voltmeter on the DC panel can be switched between the battery banks to measure battery voltage. Typically the bank should read from about 13.0 to 14.5 volts when being charged. While at rest, the voltage will drop as indicated in the figures below.

Voltage	Battery State of Charge
12.65 volts	100%
12.47 volts	75%
12.25 volts	50%
11.95 volts	25%
11.70 volts	0%

Note: Voltage will tend to read less than actual if the batteries are under load (being used). The only true voltage measurement comes from a battery that is not under load nor has been for a brief period of time. Therefore, you will probably have a little more battery power remaining than indicated.

All the batteries are charged while underway (above 1200 RPM) by the alternators. Caution: Alternators may not be able to keep up during times of heavy draw on house bank. The engine and house batteries are charged by the battery charger and inverter charger while connected to shore power or on generator power. Ensure that the battery charger (Start Banks) is on as well as the inverter charger (House Bank)

#### **Battery Locations:**

- **Starboard Engine Start Battery:** Starboard Engine charges it's own battery, the house batteries are in the Starboard Lazarette
- **Port Engine Start Battery:** Port Engine is started from the Starboard Engine battery.
- **House Batteries/ Inverter Batteries::** Charged by Starboard Engine In Starboard Lazarette
- **Generator Battery:** Charges its own battery. In Port Lazarette

**Note:** All batteries are charged by the generator or with shore power with “charger/Inverter” switches on



### 4.3 Inverter Power

The inverter is able to provide 2.5KW maximum of AC power to the 110-volt receptacle plugs and the microwave oven when the boat is disconnected from shore power. The inverter does not provide power to the water heater, trash compactor, range, vacuum or the battery charger.

The inverter panel is located on the salon next to the starboard end of the settee ice maker cabinet. The inverter itself is located under the settee seat. The inverter's power source is the DC house and inverter batteries. The quantity of DC power is limited to the capacity of these batteries. Running hair dryers, toaster, coffeepots, space heaters, etc will quickly discharge the house/inverter batteries. Use these items very sparingly and monitor your battery usage carefully.

When connected to shore power, the inverter automatically becomes a battery charger for the 12-volt house/inverter batteries. Should you detect the inverter failing to charge the house/inverter batteries, check the circuit breaker in the AC panel and the inverter control panel.

### 4.4 Generator

The Generator can supply up to 8KW of AC power and will power all 110 volt appliances and outlets. It can be run while under way or stopped. This gives tremendous flexibility, especially when at anchor.

Before starting the generator ensure that the oil and coolant level have been checked and the raw water thru-hull is open. To check oil you must remove the access panel first.

*Note: The generator dipstick is on the port side near the bottom of the generator and the coolant is checked at the expansion tank in the port side transom/cockpit cabinet.*

The generator controls are located on the bottom of the AC electrical panel in the pilothouse. To start the generator, hold the switch in the Start/Preheat position until the engine catches (10-15 seconds). Do not operate the starter for more than 15 seconds. If the generator does not start, wait 30 seconds, repeat steps above, and then attempt another start. You should hear the generator engine start as well as see the generator instruments light up on the electrical panel next to the switch.

Go to the swim step and make sure the cooling water and exhaust is exiting at the stern. If no water is observed shut down the generator immediately to prevent damage and check the through hull seacock is open and sea strainer is clear. The power panel has an engine temperature gage for the generator. The generator should not run above 220 degree F. If it is running hot turn it off and contact AYC.

*NOTE – If the generator starting motor is not operating, check the emergency 'STOP' toggle switch (silver-color) on the power control box at top, aft of generator. Remove the top panel. Toggle the position to 'RUN'. The switch is easy to toggle accidentally during routine maintenance)*

After the generator is running, turn on the Generator Main Breaker and check for good voltage. Then turn on the Generator Master Breaker. The Dockside Master Breaker Must be off for each Dockside Line Circuit and then slide the lock out guard down over the master Switch.

Turn on the AC systems as you would if hooking up to shore power. If you have been anchored for some time, the battery charger/inverter charger may take up a large load so you may need to keep other high draw items off initially. The generator can carry a large load, but too much load such a water heater, stovetop, etc may overload the system.

To turn the generator off, **first take off the load** by turning the AC breakers off. Turn off the main AC distribution switch. Turn off the Generator Main Breaker. Kill the generator by hold the switch in the stop position until it stops.

*Note: It is fine to run the generator as much as you see fit. **However, it is not good for the generator to run without a load on it.** That means you should have a reason for it to be running (water heater, oven/stove, recharge the batteries, etc.) It is usually not necessary to run the generator underway, as you have the inverter (unless the starboard alternator is not keeping up with high electrical usage)*

## 5 Sanitation System

Note: “Grey water” from the sinks and showers drains overboard through various above water thru-hulls.

### 5.1 Vacuflush Toilets

Sea Daze is equipped with Vacuflush heads. They are easy to use, odor free and are temperamental but reliable. They use fresh water for flushing. To keep them operating properly, use a minimum of toilet paper. Flush the heads by depressing the foot pedal and holding it down for a full 3 seconds. If you wish to add more water to the bowl, pull up on the foot pedal.

They are slightly noisy while the vacuum pump recharges. If the vacuum pump system periodically runs on its own it may indicate the ball flush valve is not seated. Even a very slight amount of tissue or other debris can keep the flush ball from fully seating. Examine the bowl for debris, use a brush to clean around the ball valve, lift the pedal to fill the bowl with a higher water level than typical and flush, repeat this a few times. If the system continues to run on its own contact AYC for assistance.

**NEVER PUT FOOD INTO MARINE HEADS OR PAPER TOWELS, NAPKINS, SANITARY PRODUCTS, and HOUSEHOLD Toilet Tissue. USE ONLY MARINE Toilet Tissue (PROVIDED BY AYC).**

The system can make or break your vacation. Therefore, it is imperative that every person on board be informed on the proper use of the toilet. If you don't tell them how to use the heads they will not know how to avoid clogs. The valves, openings, and pumps are small (about the size of a quarter) and can clog easily. If the head gets clogged, it is your responsibility. Always assist a child when flushing the head, so you can be certain of what is being flushed. If you have a large amount of waste it is advisable to flush the waste first, then flush the toilet paper.

#### **Trouble Shooting:**

If the toilet is not working at all verify you have Turned ON the two TOILET switches and the WATER PRESSURE switch on the DC panel.

If the bowl doesn't seal completely after use, try flushing again and making sure nothing is stuck in the seal.  
*Hint: release the pedal quickly.*

If the bowl fails to drain and the pump is working, the drain pipe may be clogged. The opening is small to protect the system. Turn OFF the TOILET and the WATER PRESSURE switches at the DC panel. Press pedal to open the ball valve. Clear debris from the opening. Turn ON the switches and flush a couple times.

## 5.2 Holding Tank

The sanitation holding tank holds approximately 40 gallons. Be aware of the rate of waste production. The tank monitor only provides a full indication. It is a no kidding the tank is full and needs to be pumped right now indicator. Due to the limit of the tank monitor it is necessary to check the holding tank level each day by looking at the level of water in the tank with a flashlight. You can shine the flash light against the plastic tank wall and observe the height of the waste in the tank. The holding tank is located in the engine room, on the starboard side under the salon sofa. The sewage production rate of the crew is about 1 gallon per toilet flush.

**The tank monitor is not to be trusted, they frequently fail regardless of good maintenance practices.**

If the tank becomes overfilled it may break a hose, clog a vent or burst the tank. **The result will be an indescribable catastrophe and an expensive fix to you.** Empty the tank at least every other day to avoid any problems. Our hope is that all guests will have a pleasurable vacation.

**The holding tank can be emptied in one of two ways:**

#1 At a pump-out station, remove the deck waste cap located starboard near the fuel fill. Be careful removing the waste cap. It is not connected to the boat. Insert the pump-out nozzle into the waste opening (double-check that you have the right deck opening). Turn on the pump on the dock and open the valve on the handle of the hose. When pumping is finished, close lever on handle and turn off pump. If there is a fresh water hose on the dock, rinse the tank by adding water for 1-2 minutes. Then pump again to leave the tank rinsed and clean. This also helps to eliminate any head odors.

#2 **This is absolutely not permitted in US Waters and is subject to very severe fines.** The tank's contents can be discharged at sea by using the macerator pump. To operate the macerator, after making sure the macerator seacock is open, depress both of the Macerator Rocker Switches (located on the DC electrical panel). Listen to the macerator's sound. When the pitch becomes higher, the tank is empty. The only way to hear the pitch is to bring the boat to idle and lift up the companionway stairs. It should only take a few minutes to empty the tank.

## 6 Water Systems

Sea Daze has a 200 gallon pressurized water system, a dock side water inlet and two Raw Water Washdown systems.

### 6.1 Fresh Water System and Tanks

Sea Daze has two water tanks, one is approximately 120 gallons and the other is approximately 60 Gallons. The remaining portion of the 200 gallons is in the lines and hot water tank. Fill each tank one at a time. To fill the tanks, be certain the area around the fill caps is clean and clear of debris. To minimize debris in the water tanks remove one of the deck water fill caps and fill the tank and replace the cap before filling the other, both fill caps are located on the port side of the bow. Use the food grade white and blue striped hoses. Fill only with potable drinking water.

A manifold to switch tanks is located under the companionway stairs (engine room access) on the port side of the compartment. There are two hoses feeding into the water pump. Each line has a shut off valve. Turn clockwise to close and counterclockwise to open. It may be wise to only open one tank at a time since the upper/forward tank (120 gallons) will empty first and then allow air to flow along with the lower/midship tank's water (60gallons) to the pump possibly causing sporadic water flow at the sinks and showers.

The water pressure pump is located under the companionway stairs (engine room access) on the port side. Activate the pump by turning on the “water pressure breaker at the DC panel. The pump is a demand pump and will only come on when pressure is needed. **If the pump continues to run, it is either out of water or has an air lock (which can be corrected by opening a faucet). If you run out of water immediately shut off the pump and turn off the water heater by turning off their respective breakers on the AC panel.** Switch to the full tank as directed in the preceding paragraph. **Serious damage to the heating element can occur if the water heater is on without water.**

A fresh water inlet is located on the transom for dock side water source. Connect a drinking water hose (white with blue stripes) to the dock spigot and run water through the hose to purge air and stale water. Turn off the water and attach the hose to the inlet. Turn the water back on. Turn off the water pressure pump at the power panel.

**Ensure the Water Pressure breaker/Dock Spigot is off if you are leaving the boat for an extended time to prevent loss of water (and running of the pump) through a faucet being accidentally left on.**

## 6.2 Water Heater

The WATER HEATER (*Seaward S-1800*) capacity is 20-gallons. Heated water is produced by:

- AC Power – Turn ON the WATER HEATER switch on the Pilothouse AC Panel for hot water  
When the AC breaker is on while connected to shore power or  
When running the generator (the Water Heater will not run off the inverter).
- Diesel Furnace – Set the control switch to SYSTEM HEAT
- Engine Heat – Set control unit to ENGINE HEAT while underway - port engine exchanger

The heater uses 1500W AC (12.5A); use fewer AC devices if connected to 30A or less power source.

**CAUTION – Turn OFF water heater if water tanks are low to avoid damage to heating elements.**

## 6.3 Raw Water Wash Down

There are raw water wash downs located on the bow (in the locker near the anchor) and aft in the port and starboard compartments in the cockpit. Be sure they are completely turned off after use (especially the aft wash downs) as they can potentially flood the bilge. The system uses its own pump (breaker on DC Panel). The Breaker should be turned off if not needed.

## 7 Inside the house

### 7.1 Showers

*Please, only use shower gels and soft soaps for all personal washing. Bar soaps have a caking agent that results in hair clumps that clog drains and sump pumps. AYC provides liquid soap.*

Before taking a shower, make sure the water pressure and shower sump pump breakers are on.

The Master Stateroom shower drains automatically by a float switch operating the master shower sump pump. If it is not operating properly, it may be clogged and need to be cleaned by carefully removing the lid (It is located behind the glass doors in the hallway).

The Guest shower drains via activation of the RED switch near the toilet (aft side of the vanity). You will know the guest sump pump is operating because it is quite loud. **If you fail to turn on the guest shower sump it will flood the companion hallway with water and soak the carpet. This is messy and unpleasant.** Turn off sump when shower is turned off.

Please wipe down the shower stalls when finished to keep the shower presentable. Pick up any accumulation of hair in the drains as it clogs the hoses and sump pumps. Ensure that the faucets are tightly- turned off after each shower.

There is a transom shower with hot and cold water for swimmers next to the door to the cockpit swim step.

## **7.2 The Galley**

The galley is fully equipped with a number of appliances for your convenience. Most of these are easy to operate. Nevertheless, there are some features that are different than a home model.

### **7.2.1 Sink Countertop**

Please protect countertops and sinks from damage. Use the cutting boards supplied.

Keep the countertops dry, Avoid splashes.

#### ***Refrigeration***

The refrigerators are dual voltage (110 volt AC and 12 volt DC) and will automatically use the 110-volt power when shore power/generator is on and DC power when AC is not available.

#### ***Galley Refrigerator-Freezer***

Leave both refrigerator breakers in the ON position. Carefully monitor the use of the each refrigerator when on 12-volt power such as when you are at anchor as they can drain the batteries rather quickly. Use a cooler when available to keep the refrigerator door closed as much as possible.

The Galley REFRIGERATOR-FREEZER is a *Nova Cool 7.0-cu-ft* model. To operate the galley fridge:

- Turn ON the REFRIGERATOR switch on the Pilothouse DC Panel
- Turn ON the REFRIGERATOR switch on the Pilothouse AC Panel
- Turn ON the power switch below the refrigerator door and adjust the temperature

#### ***Fly Bridge Refrigerator***

The Bridge REFRIGERATOR is a *Norcold 2.7-cu-ft* model. To operate the Bridge Fridge/

- Turn ON the ENTERTAINMENT CENTER switch on the Pilothouse DC Panel
- Turn ON the BRIDGE REFRIGERATOR switch on the Pilothouse AC Panel
- Turn ON the local power switch in the fridge and adjust the temperature

**CAUTION** – *The bridge refrigerator consumes much DC power. Use it selectively, or rely on a cooler. It also creates overhead motor noise in the Salon.*

Adjust the temperature to conserve power. A setting of 2.5 or 3 should be good for AC setup. It is advisable to turn the setting lower when on battery power and consider turning it off at night.

### 7.2.2 Ice Maker

The ICE MAKER is located in the Salon starboard. Turn ON the ICEMAKER switch on the Pilothouse AC Panel. The device power switch is reached through a finger hole at the top of the front grill, just below the door -- it is normally ON.

Swing the ice sensor bar-switch to the downward position to start ice-making.

*The Ice Maker is connected to the Inverter system -- it will continue to operate when AC shore power or generator are not used.*

*Ensure the plastic bin is in icemaker. Should power be turned OFF, the melting water will soak the carpet.*

*At the end of your trip turn the icemaker OFF and PROP IT OPEN to prevent mold.*

### 7.2.3 Microwave

The microwave is a *GE Spacemaker* unit. Turn ON the MICROWAVE switch at the Pilothouse AC Panel. The Microwave can be used with shore, generator, or inverter power.

The unit can use a large amount of power (up to 15 amps). It may be necessary to turn off other AC devices to avoid tripping the AC Circuit Breaker.

The Microwave is connected to the Inverter system, so it will operate when AC power is not available.

NOTE – During meal preparation, it may be necessary to turn OFF non-essential AC devices when shore power is less than 30-amps, in order to use several galley appliances. Microwave

### 7.2.4 Stove/Oven

The boat is equipped with a 3-burner *Princess* Range and Oven. Turn ON the ELECTRIC RANGE switch at the Pilothouse AC panel. The unit uses a large amount of AC power (up to 25 amps). It may be necessary to reduce use of other AC devices to avoid tripping the Circuit Breaker. Read the power consumption on Ammeters to determine total draw.

Lift the cook top surface cover to a vertical position, let it slide into its slot holder, and fold the top portion to form a shelf.

*NOTE – Ensure the metal cover is seated firmly into the vertical position slot to disengage the range ‘safety’ device; otherwise, range controls will not operate.*

The burners have different cooking temperatures. The LEFT and RIGHT burners are ‘High’ 1100-watt burners. The REAR burner is a ‘Medium’ 550-watt burner.

*NOTE – If removed for cleaning it is possible for the burner elements to become mixed up and they will not match the controls. The high 1100-watt elements should be in the left-front and right front positions and the medium 550-watt element in the rear position. Recheck the wattage values stamped on frame of each element.*

The RANGE TOGGLE switch enables COOKTOP and/or OVEN selection. Flipping switch to ‘Top Burners’ enables use of ALL three top burners. Flipping the switch to ‘Oven’ enables use of the OVEN, the REAR burner, and the RIGHT burner – the LEFT burner is disabled.

Counter lights beneath the Microwave illuminate the cook top surface. Turn on the MICROWAVE switch at the Pilothouse AC panel. Press ‘Light’ on the Microwave Oven panel to ‘Bright’ or ‘Night’.

The Microwave fan will vent odors, smoke, and steam overboard. Ensure the MICROWAVE is turned ON. Press 'Fan' on the Microwave panel to 'High' or 'Low'. If you are using the oven, you are limited to only two of the three top burners. The upper control on the far left of the stove/oven has two positions "Stove Burners" and "Oven". When switched to the oven position the front left burner on the stovetop will not function.

If the AC Master Breaker trips while operating the stove/oven, turn off other high draw items (like the water heater or icemaker) until finished cooking.

When done using the stove and/or oven, let the burners cool before lifting and lowering the lid. Without lifting the lid to clear the safety switch first you will damage the lid.

### **7.2.5 Trash Compactor**

The compactor is an AC-only appliance so it needs shore power or the generator on-line to operate. Please do NOT run it with little or nothing in it. The arm that presses down can over extend its elbow and jam. Generic compactor bags may be used. Please place a plastic bag, newspaper or other clean waste material on top before compressing to keep the compressor anvil clean.

### **7.2.6 Vacuum System**

Sea Daze has a built in central vacuum system for easy clean up. The vacuum station is in the companion way starboard side behind a sliding glass door. The vacuum hose is long enough to reach all parts of the house. Attachments, hose and extra bags are stored in the small compartment starboard side of the stairway.

To use the vacuum turn on the power switches at the pilot house power panel. The vacuum turns on when the metal end of the hose is inserted.

This is not a wet vac, please do not use it to clean up liquid (water) spills and flooding.

## **7.3 Entertainment Systems**

### **7.3.1 AM/FM Stereos, CD and iPod**

There are stereos in the salon and on the flybridge. Check that appropriate breakers in the pilothouse are on.

The fly bridge stereo is mounted port of the helm chair in the radio cabinet. It is capable of AM/FM and CD.

The salon stereo is next to the ice maker. It includes AM/FM radio and a CD changer with an iPod/iPhone/iPad compatible USB port. The USB port will also play MP3 and WMF files from a thumb drive, or other devices.

### **7.3.2 Television/Blu-ray**

There is a LED TV and a Blu-ray/DVD player in the salon. To use the salon systems the DC circuit breakers for "salon receptacles" and Stereo/TV must be on. A set of mini powered speakers are connected to the TV and have a separate power / volume control.

*There is no satellite TV and receiving local TV is unpredictable. The TV is best suited for viewing DVDs and Blu-ray.*

### **7.3.3 Games**

A variety of board games and cards are kept in the salon port side cabinets

### **7.3.4 Crab Pots**

Two crab pots are kept in the port lazarette, be sure you have the correct license and it is in season.

### 7.3.5 Dock Chairs and Table

A folding table and folding chairs are stored in the port lazarette.

### 7.3.6 Barbeque

Please be kind. If you use the BBQ clean it fully. This requires that you disassemble the unit to remove grease from around the burner. If you cover the grill with foil and poke holes in it, it keeps things much easier to clean and gives the same quality of barbeque.

Cleaning:

After allowing it to cool.... to disassemble, remove the grill grate by turning it clockwise a few degrees, remove the grease dispersion cap and pan ring (please be careful not to lose these parts they are expensive to replace) unscrew the burner head (IT SHOULD ONLY BE HAND TIGHT), remove the inner liner and outer liner. You can now clean all areas to remove grease. Be certain to re assemble all parts and securely hand tighten the burner.

Setup and Operating:

The barbecue is mounted on the starboard side of the fly bridge aft of the wet bar. The regulator is stored in the wet bar aft cabinet, be careful not to drop this overboard (attach it to the hand rail with the leader line) Insert the regulator with the control knob turned sideways. Gently slide the regulator in to the receiving tube. The regulator should lock in-place, as you rotate it down. Attach the propane bottle to the regulator.

The barbecue has as built in snap igniter. Open the propane to the start position and hold it down; press firmly on the red button until it snaps. It may require a few times to get it to light. The barbeque can be lit manually if you have trouble using the snap lighter, this may occur in windy conditions. If needed there are butane lighters located in the wet bar cabinet near the barbeque.

Ensure that there are no flammables near the barbecue.

This barbeque cooks hot and fast, keep an eye on your food.

Please clean and wipe down the barbeque with a rag, remove and clean the grill with a scouring pad and disassemble and clean the grill kettle when you are done.

For safety reasons, do not store an opened propane bottle in the salon or engine compartment. Propane is heavier than air and will settle in the bilge and could explode.



## 7.4 Heating Systems

The *Webasto Hydronic* DIESEL FURNACE system, rated at 45,000 Btu, uses little DC power and little diesel fuel. It can be used for every heating situation, especially when at anchor. The system has multiple independent zone control / fan heater units, and it will produce ‘warm’ tap water in the Hot Water tank when the system has been active.

The hydronic heating is also connected to an Everfast instant hot water coil that will provide heat and hot water when the engines are warm.

The *King* ELECTRIC CABIN HEATERS are AC-powered and are available when the boat is connected to Shore Power or to the Generator. The 4 units provide heating in local zones.

### 7.4.1 Diesel-Furnace Heating System

**WARNING – Do not to position a rafted boat, dinghy, fender, towels, or body over the exhaust port on the hull portside. The exhaust is VERY HOT and will cause injury or equipment damage.**

Turn ON the SYSTEM HEAT on the panel in the pilot house next to the fly bridge stair. Allow 10 to 15 minutes for the system to reach minimum operating temperature - the fans will turn ON.

The ‘system heat’ switch controls the boiler unit and circulation pump, located beneath the Lazarette port hatch.

Webasto fan-heater units provide heating in four comfort zones. In the evenings, and in cloudy weather during the summer, the outdoor temperature drops enough to require some interior heat.

After starting the furnace check the furnace exhaust on the exterior port side of the boat – aft cockpit area. *You will know the furnace is working if the exhaust is warm.*

### 7.4.2 Cabin Electric Heating System

Four *King* cabin heaters provide zone-controlled heating. A thermostat controls each heater- marked “Electric”.

Either AC-shore power or AC-generator power must be available. The most convenient use is when docked in a marina.

*WARNING – Do not to block a heating unit screen or place heat-sensitive objects nearby.*

The cabin heaters will maintain sufficient warmth in mild weather.

## 7.5 Washer-Dryer

The washer/dryer is located in the hallway between the staterooms. It is powered by 110 volts making it less powerful than a home dryer operating at 220 volts. Please use smaller loads for the machine to operate properly. **IMPORTANT: The washer uses much less soap than a home machine, approximately 1/3 the amount. A teaspoon is a good amount to use. Use liquid soap only!** Pour the soap, and softener if desired, and set the timer. The dryer operates slowly so please be patient or finish drying on a clothes line. Remember, normal house dryers have a much larger drum than a washer. To optimize drying time, sort washed clothes by weight and estimated drying time.

## 8 The Tender/Dinghy

Sea Daze is equipped with an 11-foot Zodiac RIB with a 25 HP Mercury outboard. **Please do not use it to go ashore unless there is a dock.** Most shorelines have rocks offshore that are nearly impossible to spot and can cause significant damage to the prop and hull. The outboard is a 4-stroke and uses regular gas (do not mix with 2 cycle oil). The dinghy is very fast and it can be easy to get thrown out at high speed. Use the “man overboard” tether and wear or take along one life jacket per person.

### 8.1 Davit

You need at least one other person and their COMPLETE ATTENTION. The control cable for the davit is located in the cabinet under the bar sink on the fly-bridge. It plugs in near the base of the davit. The davit arm must be raised to the upper position. Do this by removing the large pin at the base of the davit and reinserting after raising the arm.

#### 8.1.1 To lower the dinghy

**Do not allow anyone to ride in the dinghy while it is being lowered or raised.**

- Remove all loose items and extra weight from the dinghy before trying to hoist or lower.
- Put in the stern plug into the dinghy.
- Attach the 3-point harness and attach the lifting cable to the harness
- Release the ties holding the dinghy to the mounting brackets.
- Release the line that is tied to the front mounting bracket.
- Put on a bowline and a stern line on the port side of the Dinghy to help guide the dinghy as it's lowered.
- Station a crewmember in the cockpit to guide the dinghy as it is lowered and to keep it from swinging and damaging the dinghy or Sea Daze.
- Using the davit control cable, lift Dinghy about a foot above her mounts, push the davit arm so that it swings to port carrying Dinghy; swing the dinghy so that its bow faces aft of Sea Daze.
- Hand the bow line to the person in the cockpit. Using the bowline and the stern line to control the attitude of the dinghy, lower it slowly to the water.
- When the dinghy is in the water and tied to Sea Daze remove the 3-point harness and raise the lifting cable and attach it to its ring on the flybridge.

#### 8.1.2 To raise and return the dinghy

**Do not allow anyone to ride in the dinghy while it is being lowered or raised.**

Remove all loose items and any extra weight and water from the dinghy.

Attach the 3-point harness and attach the lifting cable to the harness.

Orient the dinghy, on the port side of Sea Daze bow facing aft. Attach a bowline and a port stern line to guide the dinghy. Raise the dinghy to a position about 1 foot higher than her chocks. Pull the dinghy and the davit arm inboard and rotate the dinghy as it swings across the deck so that dinghy bow turns to point to Sea Dazes

Bow. The dingy must be positioned directly over the chocks and in contact with the cockpit ladder rail. Slowly lower her to her resting points. Secure the dinghy to the deck with the bow strap and the two stern straps.

Remove the drain plug from the dinghy and place it in the dinghy splash well. Allow the water to drain from the dinghy.

Detach the lifting cable from the 3-point harness and attach the lifting cable to its ring on Sea Daze. To store the davit raise the arm to allow removal of the large pin. Lower the arm and re install the pin. Remove the davit control cable and replace it in the wet bar cabinet on the fly bridge.

The dinghy has a built in battery charger. If you have not run the engine long, or for anyreason it may be useful to charge the battery for a while. To charge the battery find the extension cord in the wet bar cabinet, plug into the connector plug in the bench seat of the tender and plug into the outlet in the wet bar. Verify the power to the wet bar is turned on at the control panel. Do not leave the charger on for more than a few hours.

## **8.2 Operating the Dinghy**

The key for the dinghy is located in the drawer by the starboard pilot house door. Verify you have plenty of fuel before loading passengers and gear. Tilt the outboard down if it has been raised. The tilt switch is on the shift control. Verify that you have oars (under the driver seat), that you have dock lines, and an anchor.

Check that all passengers have a life jacket. Help all passengers aboard the dinghy and arrange/position passengers and gear so that the boat is balanced. It is best to be slightly heavy aft and level side to side.

Check to be sure the red insert is in place on the “man overboard” tether. Secure the tether to yourself so that it will pull the red insert out of the control and stop the engine should you fall out of the dinghy.

To start the engine: Squeeze the black bulb, on the outboard engine until it feels firm and full of fuel. Lift the lever to the left of the throttle control. This is the choke. It will bring additional fuel into the engine to help during start. Pump the throttle a couple of times and with the choke lever elevated turn the key. You may have to try a few times if the engine is cold, or the dinghy has not been used for awhile. When the engine starts lower the choke lever to reduce the engine RPM, but not all the way or the engine may stop. Allow the engine to warm, about 5 minutes and then lower the choke lever all the way to idle. After releasing the lines from Sea Daze advance the throttle slowly to get underway.

## **9 Bilge Pumps**

Although you see only three circuit breakers on the DC switch panel for bilge pumps there are actually six bilge pumps. Three are wired directly to float switches that are directly wired to the Accessory Battery. These are designed as standby pumps, always guarding against the event that the boat might start taking on water when no one is aboard to notice and help out. The other pumps are energized by turning on the switches labeled “Aft”, “Mid” and “Fwd” on the DC panel, then using the switches at either helm.

Sea Daze is equipped with numerous automatic bilge pumps that can be manually activated from either helm. If you continually hear the bilge pump running, check your bilge. You may have a serious problem or you may have just accidentally hit the manual bilge pump to ON. Lights indicate operation.

It is advised that you run the bilge pumps at the end of each day if you have seen any water in the bilge. The forward and midship pumps will generally not pump anything unless you’ve been showering without the sump switch on and the passageway carpet is soaked. The aft one will usually pump a while because it is in the engine room and the shaft seal bellows are design so that they leak slightly for cooling of the shaft seals. Watch out the port side while these pumps are running so that when the bilge runs dry you can turn them off. Letting

them run dry may burn them out. Monitor how much comes out and check that it is not polluted. (If either becomes a concern, notify AYC)

## **10 Miscellaneous**

Please help protect the flybridge seat cushions by covering them in inclement weather and at night. If the cushions get wet tilt them up until they dry then cover with their canvas. The foredeck seat cushion may be stored in the guest shower. Please bring it inside and store it when your cruise is finished.

Some cabinet doors are braced open with long springs (power control panel lid and pilot house chart cabinet). Please remember to poke (bend) the side of the springs to close their doors. If you forget, the springs may rip out their screws at either end and damage the cabinets.

Please be sure not to crab off the stern as the crab line can easily get tangled in the prop as you swing with wind or current. You don't want to be the person who has to dive over and cut the line out of the propeller. It is best to use the dinghy to set your crab pot away from the boat (take care not to foul the dinghy prop also). Please clean up any seaweed or crab shells afterwards to keep the boat neat and tidy.

**DO NOT WALK ON THE BLACK PLASTIC HATCHES** on the foredeck. They are slippery and weak. Instruct your crew.

Spare filters and drive belts are located in a blue box in the engine room in front of the starboard engine

Oil , transmission fluid and coolant is located in the port side lazarette

A tool kit is located under the salon settee cushion and another tool box is kept in the engine room access area. The tool box in the engine room has a variety of small screws, and misc hardware that can be useful for simple repairs.

## 11 Clean up

Rinse salt off the boat ASAP. It eats into the fiberglass, metal and glass in a very short period of time.

Leave yourself plenty of time every trip to wash the boat. Don't hurry and try to return in time to do it in the daylight. A wash hose is under the starboard lazarette in the cockpit, buckets are in there too along with cleaning supplies. You can arrange for a cleaning service before you leave for your cruise and they will do the cleaning for you.

Try to get into the corners of things. If everyone tries to clean one extra area after each trip the positive momentum will be a marvel and we all will benefit.

To wash the boat its best to start on the bridge and get its canopy and outside plus the dinghy at the same time, then all the foredeck, each side deck and the aft deck with the transom---a total of 5 sections. While one person scrubs another can rinse and please rinse the salt off the sides of the hull. A soft brush works best for smooth fiberglass and a hard bristle brush for non-skid surface. Do not use abrasive on fiberglass.

Pay special attention to:

Removal of diesel soot from transom and from around the diesel furnace exhaust.

Removal of black streaks from hull.

Scuff marks removed from hull (usually made from brushing docks or from dragging hoses or cables on the top deck)

Windows cleaned with squeegee, may use provided mix of vinegar, water and a couple drops of liquid dish soap.

## 12 Leaving the Boat Checklist

Dinghy motor lowered, dinghy washed and scum removed, seats cleaned, fuel filled, tie down straps secured, cover boat, secured davit cable and weight. Place key in pilothouse starboard drawer and the davit control in the wet bar cabinet.

Bow cushions cleaned, removed and stowed in the aft head shower. Fly bridge cushions cleaned, dried and covered with canvas.

All window covering canvas installed, mini-blinds closed to keep sunlight off the carpet and upholstery

AC cord attached and secured against chafing, dock box switches on and 110 volts AC reading on the voltmeter. All selector switches set to shore power. On the AC panel line #1, leave on the “Battery Charger” & inverter/charger and the “Salon” and “Galley” receptacles for the space heaters. On line #2 leave on the “Master Stateroom” and the “Aft Stateroom” for space heaters. On line #3 in the winter leave on the receptacles.

All DC switches on the pilothouse electrical panel off. DC and Engine Ignition master switches off.

Lines and fenders secured: Fenders mounted low on both sides to protect from dock chafing. Two crossing spring lines tied securely on Starboard. Port and Starboard stern lines tied loosely. Port and Starboard bowlines tied loosely.

All portholes and windows closed and latched.

Do a last walk through the boat to check for forgotten personal gear, left open portholes, a head not cleaned, etc.

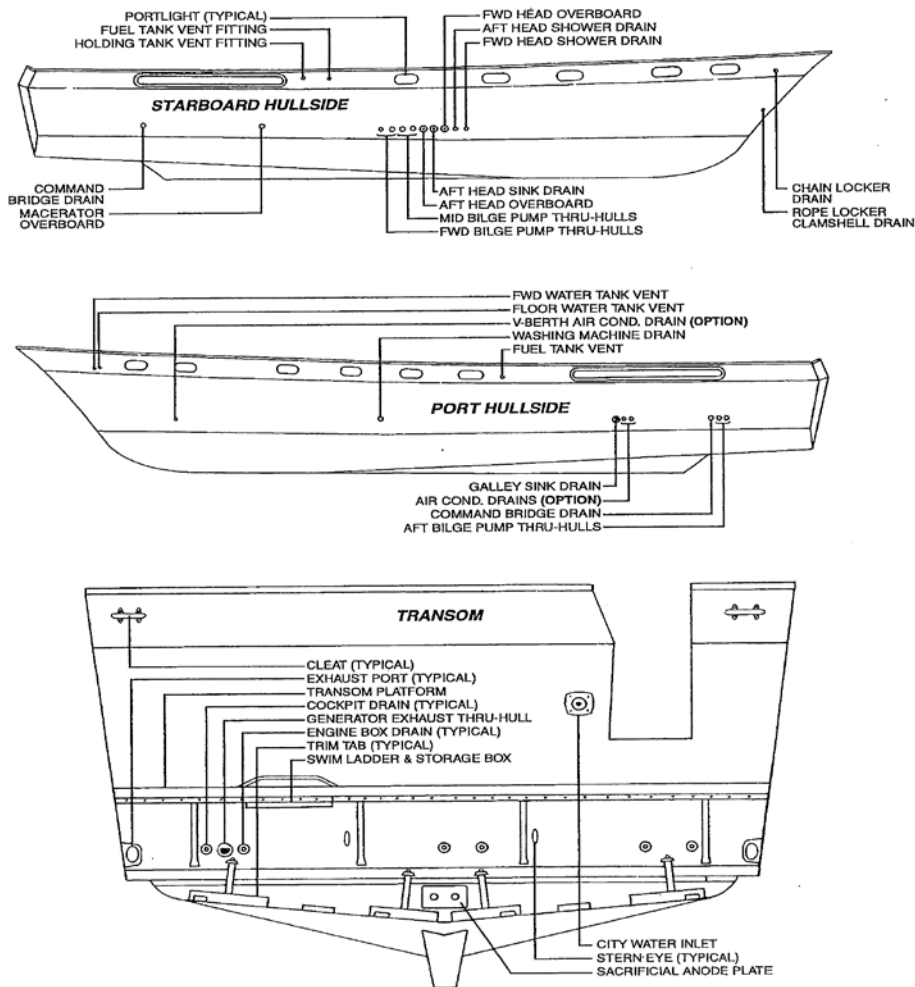
Lock pilothouse sliding door and salon door and place key in port cockpit cabinet. As you walk away, check the tie-up, fenders, and shore power connection again. Remember that no one may be using the boat for a long time.

Tuck away another great cruise, a wonderful experience and a colorful memory.

## Appendix A (Thru Hull Locations)

**BAYLINER®**

### Hull Exterior Hardware



4788 Motoryacht • Owner's Manual Supplement

## Appendix B (Sea Daze Specifications)

### Accommodations:

Sleeps 6

Recommended 6

3 Staterooms

- FWD: (2) Island Queen, 6' x 5'
- Mid-Fwd: (2) Over / Under Bunks, 5'11" x 30"
- Mid: (2) Double Berth, 6'6" x 4'

Master Head with Vanity, Tub and Shower

Guest/Day Head with Vanity and Shower

### Special Features:

Updated Electronics include a Raymarine E127 Multi-function chart plotter/GPS with integrated Autopilot and Wi-Fi remote to your compatible Smartphone/Tablet (Apple and Android). This allows you to view all navigation information from anywhere on the boat on your own mobile device (see section 3.5.3 in the Operations Manual for more information), 48 mile Raymarine Radar. Pilot house has both port and starboard doors for easy access to the deck when docking. A second anchor for transom tie in tight anchorage. Raw water wash down for cleaning anchor, 11ft Zodiac Dinghy, 25HP with center console controls and electric davit for launch and retrieval of dinghy. Flybridge with stereo, BBQ, wet-bar, fridge and Bimini. Salon with wrap around settee, barrel chair, dining table, stereo system CD player with iPod/iPhone compatible USB port, LED TV, Blu-Ray player, bar sink and ice maker. The galley contains: double SS Sink, Corian countertops, 3 burner range and oven, large fridge/freezer, coffee maker, blender, trash compactor, all cookware/kitchenware, full place settings for 8+. Hydronic Diesel heat with multi zone controls that also provides hot water when not on shore power, ships laundry washer/dryer combo, central vacuum. Crab pot and cooker pot, generator and inverter for power at anchor, folding chairs and table for dock side entertaining.

### Mechanical:

Engines: Twin 370HP Cummins

Cruising Speed: 16 -18 Knots

Fuel Burn rate: 17 GPH @ 16Kt cruise (will vary depending on sea conditions, speed and loading)

Fuel capacity: 444 gallon

Fresh Water capacity: 200 gallon

Dual Station Hydraulic Steering

Generator: 8KW

Inverter: 2500 Watt



**Galley:**

Midship, on salon level

Stove: Electric 3/2 Burner with Oven

Microwave: Space saver over range

Fridge/Freezer: Salon: Norcold 7 cu ft. Bridge: Norcold 2.7 cu ft

Ice maker in salon

BBQ: Magma propane

**Electronics:**

GPS: Raymarine E127 MFD with Smartphone/Tablet Wi-Fi remote capable connectivity

Depth Sounder: Ray Marine E127 MFD, Second Depth Finder on Flybridge

Radar: Raymarine 48 mile

Dual VHF Radios: Flybridge and Pilot House, Pilot House radio has DSC capability

AM/FM Stereos: Flybridge and Salon

Crew radios (FMRS)

**Cabin heat:**

Diesel Hydronic multi zone control- look for thermostats labeled "Furnace"

AC electric multi zone – look for thermostats labeled "Electric"

**Dinghy:**

Zodiac RIB 11ft w/console

25HP Mercury 4 stroke OB

**Specifications:**

LOA: 54ft from swim step to pulpit

LOD: 47ft 4in Transom to Bow

Beam: 15 ft

Draft: 3'6"

Bridge Clearance: 19 ft

Displacement: 32,000 lb

Year Built: 2001