

OPERATION MANUAL

POWER BOAT

Sea of Memories



Welcome aboard!

From our family to yours, we are happy you have chosen “Sea of Memories” for your vacation. We are sure you will enjoy cruising the lovely islands of the Pacific Northwest.

Sea of Memories is a well-equipped 2006 Silverton 38 Sport Bridge. She is supported by a 12’ Apex tender, equipped with a 30hp outboard. Sea of Memories comfortably sleeps 6 and her tender also holds 6. We trust that you’ll enjoy all the amenities she has to offer and will treat her well.

We trust this manual will help you become familiar with the boat. We’ve also included some good tips on how to use the various systems and equipment on the boat so please review this manual to make the most of your time on Sea of Memories ☺.

Please take care of Sea of Memories as if she were your own boat and let us know if there is anything that needs our attention or improvement for the future.

If you have questions about the boat or about places to visit, please do not hesitate to ask the AYC staff. We hope you have a safe and relaxing trip.

Revised 8/11/2024

TABLE OF CONTENTS

Boat Operation	Page
Engine Inspection	3
Start-Up	3
Shutdown	4
Getting Underway	4
Cruising	4
Docking	5
Fueling	5
Boat Electrical	
A.C. (Shore) Systems	6
Generator	8
D.C. (House) Systems	9
Batteries	10
Sanitation Systems	
Marine Toilet	11
Holding Tank	11
Water Systems	
Fresh Water Tanks	13
Fresh Water Pump	13
Hot Water	14
Shower	14
Galley	
Range/Stove	14
Refrigeration/ Ice Maker	14
Heating Systems	
Diesel Flybridge Heater (DC)	14
Reverse Cycle Heat/Air Conditioning (AC)	15
Electronics	
VHF Radio, Depth Sounder, Radar	16
GPS/Plotter	17
Entertainment	
AM/FM/CD/Bluetooth Stereo	17

TV/DVD	18
Anchoring/Mooring Cans	18
Barbecue	20
Dinghy/Outboard	20
Crabbing/Fishing	21
Other: Bilge Pumps/Safety	22
Other: Thru-Hull Locations	22
Other: Flybridge Enclosure	22
Appendix	23

BOAT OPERATION

Engine Inspection

Remember your “**WOBBS**” every morning: **W**ater (Coolant), **O**il, **B**ilges (Inspect and Pump-out), **B**elts and **S**ea Strainer.

Check the level of COOLANT in the expansion tanks. Check the level of OIL in each engine by checking your dipsticks located in the engine room. Look at the etch marks on each dipstick that indicate the proper oil level. **DO NOT OVERFILL OIL!** Only fill if oil levels are below the ½ way mark. Please use a paper towel or oil rag, not the dish towels! Check the general condition of the BELTS, HOSES, and FUEL LINES.

Ensure the valve on each RAW WATER THRU-HULL is in the ‘open’ position (lever in-line with valve). Observe the glass of each RAW WATER STRAINER for debris. If necessary, close the seacock, open the strainer cover, clean the strainer, and reassemble. Remember to reopen the seacock. Check your generator fluids as well.

Start-Up

Before starting the engines, do your inspection. Ensure GEARSHIFTS are in ‘neutral’, or the engines cannot be started because of the “neutral lockout”. This vessel is equipped with electronic combined throttles and shifters. This system must be powered up first, PRIOR to starting engines. Press switch to the left of the steering wheel. Verify controls show power (neutral lights should illuminate green). Insert both keys into the IGNITION SWITCHES at the flybridge helm. Normally, plan to start the port engine first.

Turn the key clockwise partially until the ENGINE ALARM sounds and pre-heat the engine. Note the voltage drop on the port engine gauge. Once voltage returns to approximately 12-13 volts, turn the key fully clockwise to engage the engine. If the starter does not engage when the key is turned, move the gearshift lever slightly until you find neutral and try again while turning key.

If the engine cranks slowly or fails to turn over, check the condition of the battery on the ELECTRICAL PANEL. If the battery is low, try the BATTERY PARALLEL SWITCH located to the left of the steering wheel on the flybridge to connect the other engine battery. Press and HOLD to engage parallel switch.

Verify port engine is showing adequate oil pressure, approximately 15-20 psi and no alarms. Repeat this same startup process for the starboard engine. Verify both engines have adequate oil pressure.

Allow the engines to run for a few minutes. Verify that 'WARM' light is illuminated on controls. Move the port engine control to the FORWARD position. Verify transmission does not engage. Move the starboard engine control to the FORWARD position. Verify transmission does not engage. Move THROTTLES to raise the engine speed to 1000 rpm on the TACHOMETER. Warm the engine for about 5 minutes before engaging transmission. Observe the readings of the gauges. The oil pressure will register about 20-40 PSI. The engine temperature should rise slowly. At cruise speeds with engines warm, oil pressure will typically be between 40-50 PSI. It is normal when coming down to idle speed, with nice warm engines, the oil pressure could drop as low as 10 PSI. This is a normal condition of a well-running and warm Cummins 6BTA. So long as the oil pressure alarm is not buzzing, you should not be alarmed.

Note -- If oil pressure alarm activates, shut down engine, and inspect engine compartment and look for possible cause (for example, loss of oil.) Caution -- If an engine is overheating or there is lack of raw water expelled in the engine exhaust, stop the engine immediately. Recheck the raw water-cooling system to ensure the seacock is 'open' (handle in-line with valve). Next, check the raw water strainer for debris. Remove the strainer, clean, re-assemble, and reopen the raw water intake valve (seacock). Restart the engine and re-check water flow from the exhaust. If water is not flowing properly, the RAW WATER PUMP may need to be serviced. Seek help.

Shut-Down

Before shutting down, allow the engines 'idle' for about 5 minutes to cool them gradually and uniformly. The time engaged in preparing to dock the boat is usually sufficient. Ensure each GEARSHIFT/THROTTLE is in the 'neutral/idle' position. Turn off engines by turning the keys counter-clockwise, one engine at a time. It is a good idea to run the BLOWER while at slow speed coming into the marina, docking, and a few minutes after shut down. The engine room gets quite hot and the blower will help reduce the load on the boat's air conditioning systems.

Getting Underway

DISCONNECT the shore power cord (see 110-Volt next page). Close the PORTHOLES, WINDOWS, and FORWARD HATCH. Turn on your VHF and electronics. ASSIGN crew members their various positions. Once outside the marina, idle the engines while crew brings in fenders and lines.

Cruising

Ensure that throttles are in the neutral position. With the WARM light illuminated, press WARM once to disengage warming mode and allow transmissions to shift into gear. This will allow the transmissions to engage when you operate the combined throttles and gearshifts. Engage the GEARSHIFTS. Cruising speed is a maximum of about 2600 RPMS. If you run at 1800 RPMS you will cruise at approximately 10 knots and use about 10 gallons of diesel per hour. Your speed will vary depending upon the weight and load and weather conditions. When running at cruise speed, TRIM TABS should be put in the BOW DOWN position to improve performance. Remember to return trim tabs to full BOW UP position prior to entering a marina for close quarter maneuvering.

Note -- Avoid higher engine speeds as it causes higher engine temperature, possible damage, and higher fuel consumption.

Engines can be synchronized using the ‘SYNC’ button on the controls. Both port/starboard throttles must be in the forward positions with about the same throttle applied. Press the ‘SYNC’ button to make the STARBOARD throttle the master control of both engines. Remember to TURN OFF/DISENGAGE the sync control when approaching a marina or other close quarters maneuvering otherwise you will not be able to split the engines.

Docking

Have your crew make ready the lines and fenders and give clear instructions on how you will be docking. Often times your crew will need to step off from the swim step with the stern line. Another crew member will need to be at the bow or mid-ships to hand over the next lines.

Rock TRIM TAB switches to the BOW UP position (8 to 10 seconds) to make slow-speed backing and turning easier. While moving slowly to the dock or mooring location, center the WHEEL (e.g. rudders straight) and use only the GEARSHIFTS and THROTTLES to maneuver the boat.

Enable the bow thruster by pressing both of the ON switches simultaneously. Note that after ~15 minutes of inactivity, the control will be disabled. Remember to ensure control is powered up PRIOR to needing the thruster. The thrusters are intended to be used for minor/moderate adjustments of alignment and in short bursts (3 – 5 seconds) at a time.

If it is at all windy, open up both side panels of the flybridge enclosure. This will help prevent the wind from pushing the boat around as much.

Fueling Up

OPEN FILLER CAP(S) located in the cockpit, on the port and starboard rails with a DECK FITTING KEY which is kept in the bottom of the breaker panel.

MAKE SURE YOU HAVE THE RIGHT FUEL! DIESEL! DIESEL! DIESEL! MAKE SURE IT IS GOING INTO THE RIGHT DECK FILL! DOUBLE-CHECK!

Before pumping, have an oil/fuel sorbs handy to soak up spilled fuel. Absorbents are available in the storage locker under the stairs labeled ‘cleaning supplies’. You should have a rough idea of the number of gallons you will need by the engine hour indicator. Also periodically have someone turn on the key to watch the fuel gauge.

Place the DIESEL nozzle into the tank opening, pump slowly and evenly, and note the sound of the fuel flow. Pumping too fast may not allow enough time for air to escape, which may result in spouting from the tank opening. As the tank fills, the sound will rise in pitch or gurgle. Pay attention to the TANK OVERFLOW VENT on the outside of the hull near the tank opening. The sound may indicate that the tank is nearly full. Top off carefully and be prepared to catch spilled fuel. Spillage may result in a nasty fine from law enforcement.

Replace each tank cap and snug only with DECK FITTING KEY. Turn on blower before starting engines. *Caution -- Clean up splatter and spillage immediately for environmental and health reasons. Wash hands with soap and water thoroughly.*

BOAT ELECTRICAL

The electrical system is divided into two distribution systems: 110-volt AC and 12-volt DC.

The systems are controlled from the AC and DC ELECTRICAL PANEL and BATTERY SWITCHES located on the port side aft of the main salon. When not connected to shore power, batteries are providing all power. Therefore, monitor the use of onboard electricity carefully with your volt meter and ammeter located at the top of each electrical panel and load bank. Always turn off electrical devices that are not needed to avoid unnecessary battery drain. Conserve those volts.

Most breakers are labeled by colored dots. Green signifies “usually on”. Red is “usually off” Blue dots are water pressure or water-related like pumps. Yellow signifies electronics or items to use cautiously. No dots are breakers signify irregular use or use with discretion.

110-Volt AC System



SHORE POWER supports all AC equipment and receptacles on board, as well as the battery chargers.

To connect to shore power, verify SHORE POWER is turned off in the AC ELECTRICAL PANEL. Plug the 30 amp POWER CORD into the boat and then into the dock receptacle. Check the power rating/plug size of the nearest dock receptacle (that is 50 amp, 30 amp, 20 amp, or 15 amp). If necessary, add a CORD ADAPTER located under the forward stateroom. Turn the dock power on. Cords coming off the bow can be wrapped loosely around the bow line.

At the ELECTRICAL PANEL, flip the SHORE POWER on. Check for reverse polarity. Then turn on appropriate breakers for battery charger, refrigeration, water heater, reverse cycle heat and AC systems. Watch your 110-Volt AC ammeter to keep the load below 30 amps. If the load exceeds the rating of the dock power breaker, you will pop the breaker. If this occurs, wait to turn on one of your systems (i.e. water heater) until your use of volts drop.

If your outlets fail to work, check your GFIs (outlets with test/reset buttons in center) to make sure that they have not been tripped. There are four GFI's located on the vessel:

Salon

Port side aft, near A/C control and remote VHF



Galley

Counter, behind sink



Forward

Port side guest berth, down low on forward bulkhead of outside bunk



Exterior

Flybridge - Forward side of wet bar



If the reset button is found to be protruding, unplug the suspect electrical device and press in to reset.

Generator

To start your GENERATOR, first check that your generator's fluids are topped off and the raw water intake is open. Generator is located in the lazarette. Remove the front cover only using the black push in release to gain access to check the fluid levels. The raw water intake is located below the walk platform. Open the center cover to access the aft bilge.

The generator controls are located in the electrical panel. Hold the switch to the right while the generator starts (about 3-5 seconds). Make sure water and exhaust is exiting to the aft port side.

After generator is running, turn your AC distribution switch to generator at the main AC distribution panel. Then turn on AC systems as you would on shore power one system at a time.

To turn the generator off, first take off the load by turning off AC breakers. Then turn off main AC distribution switch by disconnecting the GENERATOR main breaker. Lastly kill the generator by moving the same switch used to start.

The generator fuel source is set to the port fuel tank by default. If directed by AYC, the generator fuel source can be switched between port and starboard fuel tanks. Generally this should not need to be changed, but see appendix 1 for the fuel selector diagram to be familiar with this if needed.

Inverter

This vessel is NOT equipped with an inverter. All AC loads must be provided by generator (ships power) or shore power.

House (12-volt) System



5 battery banks support 12-volt DC power: 1) port engine battery bank 2) starboard engine battery bank 3) bow thruster battery bank 4) house battery bank 5) Generator starting battery

The ENGINE BATTERY SWITCHES are located in the bottom of the electrical distribution panel. The BOW THRUSTER BATTERY SWITCH is located in the bilge access in the main berth. HOUSE BATTERY BANK SWITCHES are located in the main DC electrical panel, at the top of each load bank. GENERATOR BATTERY SWITCH is located to the starboard of the generator in the lazarette. Normally, leave the ENGINE, BOW THRUSTER, GENERATOR, and HOUSE SWITCHES in the 'ON' position.

Note -- Do not change the position of the switches while the engines are running or the alternator diodes will be damaged. Change positions with the engines off.

Your 12 volt panel shows all the systems supported by your batteries. Primarily you will be turning on the breakers for your lights, water pressure, electronics, reverse cycle heat/AC, etc. Bilge pumps should always be left on.

Your breakers such as the Windlass Control, Davit, and Range should always be turned off after every use.

House Battery Bank & Switch

The HOUSE BATTERY BANK provides power for all DC systems, except for starting the engines, automatic bilge pumps, and the anchor windlass. When disconnected from shore power, all 12-volt devices drain the house battery. Use devices as needed. The DC voltmeters on the DC panel shows the House Battery bank to measure charging or resting battery voltage. This vessel is equipped with a large (600 ah) house battery bank located under the forward stateroom mattress access panel.

When a battery bank is being charged, the voltage will read from about 13.1 volts to 14.4 volts depending upon state-of-charge of the battery bank. When the battery bank is at rest, (that is, not being charged), the voltmeter can give a rough indication of the state-of-charge of the battery bank.

Starting and house batteries are charged by the engine ALTERNATORS while underway. The engine/house batteries are also charged by the BATTERY CHARGER when connected to shore power. Ensure the Battery Charger circuit breakers at the electrical panel are ON. The GENERATOR will also charge the batteries.

The thruster batteries are ONLY charged by running the generator or while connected to shore power. The thruster batteries are NOT charged by the alternators while running.

Voltage (Wet Cell Battery)	Battery State
12.65 volts	100%
12.47 volts	75%
12.25 volts	50%
11.95 volts	25%
11.70 volts	0%

Advanced Battery Monitoring

This vessel is equipped with a Victron Energy Smart Battery Monitor on the House Bank. You can access advanced data including state of charge (in percent remaining), total load (in amps), and hours/days remaining based on current usage.



Using any Bluetooth-equipped device such as an iPhone, iPad or Android, search for the “VictronConnect” app in the app store. Once installed, open the app and the Smart Shunt should show up as an available device. Connect to it using the PIN **119052**. Once connected, you should be able to access plenty of data to help manage your battery usage on the hook and make the most of your available volts.



VictronConnect

Note that the Bluetooth range is quite short and the bank is located forward in the forward stateroom. If you’re having trouble connecting, be sure you’re either in the galley, or more forward. It is not necessary to remain connected as the Smart Shunt stores all the data. Each time you connect, you’re just viewing the current status and the historical data available.

Starting (Port and Starboard) Battery Bank & Switch

Each ENGINE BATTERY is connected to its corresponding engine. Voltage can be monitored at the helm using the voltmeters when the key for each engine is in the ON position. The disconnect

switch for each engine battery bank is located in the main electrical panel. These should always be left in the ON position.

Starting Battery Parallel Switch

Should one engine battery be insufficiently charged to start its engine, the other engine battery may be momentarily connected to provide a boost. Press and hold the BATTERY PARALLEL SWITCH located at the helm, to the left of the steering wheel, and attempt to start the engine. Release/disengage after the engines start up.

If the battery parallel switch fails to allow the engine to start, contact AYC. You can also start the generator and engage the generator breaker in the AC electrical panel, to power up the onboard battery chargers. Contact AYC prior to doing this though a the need to do this indicates an issue that will need to be resolved.

SANITATION SYSTEM

Marine Toilet

The vessel is equipped with a vacuum-operated marine toilet that is fed with freshwater and uses the 12VDC system to operate the whole system.

It is important that every member of the crew be informed on the proper use of the MARINE TOILET. The valves, openings, and pumps are small and may clog easily. If the toilet clogs, it is YOUR RESONSIBILITY!

Always pump the head for children, so you can make sure nothing foreign is being flushed.

*Caution – **Never put paper towels, tampons, Kleenex, sanitary napkins, household toilet paper, or food into the marine toilet. Use only the special dissolving marine toilet tissue provided by AYC.***

To use the toilet, verify that the toilet breaker is turned on in the breaker panel and either a water hose is connected or the fresh water pump and breaker is also turned on.

Move the FOOT HANDLE ‘up’ (to wet bowl). To flush, press the foot handle down and hold open briefly. After using the toilet, lift the FOOT HANDLE to wet the bowl again. Flush sufficiently to move effluent in the hoses; heavy effluent may clog hoses. Clean the toilet as necessary.

The TOILET is fed with freshwater if you need to shut off the water to the toilet. Clean the toilet as necessary. If the toilet-pump handle squeaks or sticks, squirt ‘pump lube’ into the toilet and pump the toilet slowly to draw the lube into the pump unit. The ‘pump lube’ is located below the sink.

Holding Tank

The sanitation HOLDING TANK holds approximately 40 gallons. Be aware of the rate of waste production. (about 1 gallon per flush). With an overfilled tank, it is possible to break a hose, clog a vent, or burst the tank. The result will be indescribable catastrophe and an EXPENSIVE FIX to you. Empty the tank EVERY OTHER DAY to avoid this problem.

The HOLDING TANK is located mid ship, in the hatch across from the galley. Some may be subject to a visual check with a flashlight or the “watermelon” test by thumping it. There is a tank gauge located at the electrical panel. There is no warning light, so monitor the tank level daily.

The holding tank is emptied in one of two ways:

#1 At the Marine Pump-Out Station, remove the WASTE CAP located mid-ship starboard with a deck key. Insert the pump-out nozzle into the waste opening. Double-check your deck fitting! Turn on pump and open valve located on handle. When pumping is finished, close lever on handle and turn off pump. Remove from deck fitting.

If there is a fresh water hose on the dock, rinse the tank by adding 2 minutes of water into tank. Then repump to leave the tank rinsed for the next charter. This also eliminates head odors.

#2 The tank's contents can be discharged with the MACERATOR only in Canadian waters.

To operate the macerator, open the seacock when regulations allow you to do so. The seacock is located under access hatch outside door to head. With the thru-hull open, turn on the MACERATOR breaker in the DC electrical panel. Listen to the macerator's sound. When the pitch becomes higher, the tank is empty. Discharge may be observed on the starboard side. It should only take a few minutes to empty the tank. After tank is empty, close seacock.



Be familiar with the applicable laws concerning dumping sewage directly overboard. When returning to US waters, close the macerator discharge thru hull and remove the handle.

Y-Valve

This vessel is not equipped with a Y-VALVE.

WATER SYSTEM

Fresh Water Tank(s)

The FRESH WATER TANKS hold 110 gallons (55 gallons each side). Observe the water level by visually checking the level on the tanks in the engine room when conducting WOBBS. The freshwater gauge above the electrical panel is unreliable and will incorrectly show empty or ½ full tanks at times. Waste water from the sinks and showers drains overboard through various thru-hulls usually located under the sinks.

To refill the tank, remove the WATER CAP located mid-ship port with a deck key. Both tanks are filled from the single deck fill port. Avoid flushing debris from the deck into the tank opening. **DO NOT** fill water and diesel at the same time!

Both tanks are connected together internally in the vessel. Both are filled and consumed together. There is no manifold nor is it necessary to select which tank you are filling or using.

Fresh Water Pressure Pump

The FRESH WATER PUMP is located in the engine room on the starboard side of the aft bulkhead. Activate pump at the DC panel by turning on the breaker. If the water pump continues to run, you are either out of water or might have an air lock and need to bleed the system by opening a faucet. If you run out of water **SHUT OFF YOUR HOT WATER HEATER** on the AC panel. Serious damage can occur!



Hot Water Tank

The HOT WATER HEATER has a 10.5-gallon capacity tank and is available when connected to shore power or generator while underway. To use on shore power or generator, flip on the water heater circuit breaker on the AC electrical panel. Do not use the water heater if the water tank level is very low. The water heater is located in the lazarette, in the starboard aft corner.

The vessel is not equipped with a heat exchanger to pre-heat the hot water system from the engines. The electric water heat must be running on either the generator or shore power to provide hot water. Allow approximately 30 minutes to get hot water for showers.

Shower

Before taking a SHOWER, make sure water pump is on. The shower is connected to a shower sump equipped with a dedicated bilge pump. The shower sump is activated by a float switch. If the shower backs up, access to the sump is via the bilge access panel between the head and mid-stateroom. Take only very short “boat” showers (turning off water between soaping up and rinsing). To keep shower tidy, wipe down the shower stall and floor. Use the squeegee provided to eliminate excess moisture to help control moisture in the boat. Check for accumulation of hair in the shower and sink drains. An additional FRESH WATER SHOWER is located on the accessway from the cockpit to the swimstep. Use this shower to rinse of sand and debris, otherwise this may clog the shower sump. Ensure that the faucets and nozzle are completely off after use.

This vessel is not equipped with a RAW WATER WASHDOWN system. All showers/washdowns are via the FRESH WATER system, so use sparingly to conserve your freshwater.

GALLEY

Range/Stove

The range/stove and is electric and requires either generator or shore power to operate. Turn on the RANGE breaker on the AC panel.

Bridge/Galley Refrigerator and Cockpit Ice Maker

The BRIDGE and GALLEY REFRIGERATOR are dual voltage (12-volt and 110-volt power). They will automatically use 110-volt power when the shore power is connected or generator is running; otherwise, they will operate on 12-volt power. Monitor the use of the refrigerators when the engines are not charging the 12-volt battery system. The local power switch is located below the front door. It can be turned down to the lowest position when anchored or moored or turned off when turning in for the night.

HEATING/COOLING SYSTEM

Flybridge Diesel Heater (DC)

The flybridge is equipped with a DIESEL FORCED-AIR FURNACE located under the starboard access door to the helm. It provides heat in the same way as a household furnace. Turn on the TOGGLE SWITCH located on the helm. Set the THERMOSTAT to the desired temperature. Generally low is a good setting to start with to avoid overheating the bridge. The furnace gets toasty ☺

Check the furnace EXHAUST located to the port side of the flybridge for any obstruction such as fenders or lines. Do not block this opening when operating the furnace. Heat will damage fiberglass or rubber. Once it is on, allow it to run for at least 15 minutes before turning it off. Turn 'off' the furnace heater by turning switch back off.

You may need to re-fill the **DIESEL DIESEL DIESEL** tank as it is not connected to the engine main tanks. There is a fill port located on top of the helm and a jerry can located in the lazarette. Take precaution not to spill any diesel fuel on the helm. Typically the system will run for a week when using periodically without needing to be refilled.

Reverse Cycle Cabin Heat and Air Conditioning (AC)

Two REVERSE CYCLE HEAT-A/C are available when connected to shore power or when running the generator. One is located in the forward stateroom and one is in the salon. Make sure the AIR COND PUMP, FWD AIR COND, and SALON AIR COND breakers in the AC panel is on.

The salon thermostat is located to the right of the TV. The forward stateroom is located to the starboard, next to the closet. Turn on the thermostat with the button to the top left. Adjust the mode and set your temperature.

If running on plane for an extended period, the Air Conditioning Pump can become air-bound. If you start up the system and no water is flowing out the side of the boat and/or you get a high pressure fault (HPF) on the controller, you'll need to open the air purge near the pump.

With the pump turned off, in the ENGINE ROOM reach under the port aft storage shelf. Under the shelf, near the top is a T shaped valve. Turn it Counter-Clockwise (loosen) approximately a quarter turn. You'll hear air and some water will come out. Purge the air until a steady stream of water comes out. Close the valve by turning clock-wise securely. Restart the system and you should have water flowing.

If you're unable to feel the valve, you can remove the two storage bins and there is a removable section in the shelf that provides access. Generally, it's much easier to do this by feel.



ELECTRONICS

All electronic manuals are located in the guest/port stateroom closet.

VHF Radio

There is one VHF RADIO. It is located at the flybridge helm, with a remote in the salon. Make sure the Electronics and Bridge Main breakers are on located at the DC breaker panel. Always monitor channel 16 while underway.

Depth Sounder

There is one DEPTH SOUNDER, located on the multi-function display to the left of the tachometers. To activate the DEPTH SOUNDER, press the power switch. Set the scale, shallow alarm, and deep alarm as desired. The sounder should provide reliable readings in shallow waters. If in doubt, switch it off, then turn it back on to reset sounder. If your reading is blinking, it is a FALSE reading. False readings can occur in depths of more than 200 feet or in areas of strong currents or tides. Depth sounder may not immediately show a depth when first powering on the system and may require a few minutes of travelling before registering in shallow or deep waters.

Remember to ALWAYS consult your charts for depth!

Radar

To operate the Navnet RADAR located on the flybridge, press and hold the POWER button to turn the multi-function display. Then press DISPLAY and choose your desired view (radar only, chartplotter/radar split screen, etc). Once on the desired view, follow the instructions on screen to take the radar out of standby and into transmit. To turn off, press and hold POWER button about 3 seconds. Remember it is not suggested per your charter agreement and insurance policy that you are not allowed to travel in reduced visibility or at night. It is suggested to utilize the radar during clear, daylight hours to have a clear understanding of the information displayed should you need the system.

Global Positioning System (GPS)

A fixed mount GPS (Furno Navnet) is on the flybridge. Ascertain that your breaker is on and then press the power button to activate. Navigat to the desired view. Zoom in or zoom out or pan via the buttons on the unit. Refer to the manual normally found in the guest/port stateroom closet.


Note -- GPS is considered a navigation aid. Do not rely on it. Compasses, charts, and dividers are the tools to plot position, course, and speed.

ENTERTAINMENT SYSTEMS

AM/FM/CD/Bluetooth Stereo

An AM/FM/CD/Bluetooth stereo unit is located at the flybridge. It operates like a normal car radio. There are two speakers (stereo) on the bridge and two (stereo) in the cockpit. The FADER controls the distribution of the bridge and cockpit speakers. The BALANCE controls the sound distribution in the left and right speakers.

To connect to the Bluetooth input of the flybridge/cockpit stereo:

Bluetooth® Operation	
Pairing a Device	
Preparation	Before you can use a Bluetooth device, it must be paired and connected. Make sure that Bluetooth is activated on your device before you begin the pairing process.
Pairing a New Device	The AMB600W broadcasts the pairing signal constantly when no devices are currently connected. Complete the pairing sequence from your Bluetooth device. Refer to the owner's manual for your device for more details. The device name is "DUAL BT" The Bluetooth passcode "1234" Note: The AMB600W can be in any mode of operation when pairing is performed.
Pairing Additional Devices	If a device is currently connected, press and hold  to disconnect the current device before a new device can be paired. Then begin the pairing sequence from the new Bluetooth device.

The Bose 321 AM/FM/CD/DVD/Aux Bluetooth/TV entertainment system is located in the salon. There are two speakers (stereo) and a subwoofer in the salon. Use the source button to select your desired input. Selecting 'TV' source on the Bose 321 to have all TV audio come through the Bose system. Use the large gray remote to control volume.

To connect to the Bluetooth input, select **Esinkin BT Adapter** in your device's Bluetooth device list.

TV/DVD

A TV/DVD is located in both the primary stateroom and the salon. To use, turn on the power with the remote and go to the input on the TV noted.

The salon TV is a Smart TV and applications such as Netflix, Hulu, and other streaming providers can be utilized, but you will need to connect the TV either to your phone hotspot function or to marina WiFi. Alternatively, an HDMI auxiliary input has been provided to use your personal device such as laptop or tablet. Select the 'Tablet' or 'HDMI 2' Input is noted on the cables. Please make sure to leave the USB-C and Lightning to HDMI adapters so that the next charter can utilize them. ☺ Please do not unplug/plug in cables from the back of the TV. Auxiliary inputs (HDMI, USB-C, APPLE LIGHTNING) have been provided for your convenience to plug in any external device.

To use the DVD player, select 'CD/DVD' on the Bose 321 system and insert a DVD. On the TV, select 'DVD Player' or 'HDMI 1'

The forward stateroom TV is equipped with only a DVD Player. Select the DVD Player input.

ANCHORING

The primary WORKING ANCHOR is a Delta Plow 35lb and is attached to 300 ft chain passed through the deck from the ANCHOR LOCKER. The locker can be accessed through the bow deck hatch, adjacent to the windlass cover. Release the anchor keeper.

The WINDLASS CONTROL CIRCUIT switch is located in the DC breaker panel. Turn on, and at the bow, tap gently on the 'down' foot control to lower the anchor. If necessary, guide the anchor over the anchor roller to prevent binding on the pulpit. A control is also available at the helm, but the bow control is recommended as there's greater visibility of the chain and windlass.

Let out sufficient ANCHOR RODE (chain) before setting the anchor. Colored markers are placed per the color marking table below. If the anchorage is crowded put down at least a 3 to 1 scope (60 feet for 20 feet of water), back the anchor in with a short burst from the engine. Then let out additional scope dependent upon conditions.

ANCHOR RODE PAY-OUT	
Chain markings correspond to following color codes:	
25' WHITE	150' BLUE
50' BLUE	200' YELLOW
100' GREEN	300' RED
	350' BLACK

Note: Yellow marking every 10 ft for the first 30 ft are provided so that you know when the anchor is close to being hauled in.

There is a 26 ft bridle system located below the flybridge lounge seat to provide improved anchoring performance, reduce rolling and pitching, and reduce strain on the windlass. Account for this if you plan to use the bridle as you can initially let out less chain relative to your desired scope, until the bridle is attached. Connect the bridle first by attaching to the bow cleats, keeping the line on the outside of the rail. Then connect the chain hook to the chain. Let out additional chain until the bridle takes the load off the windlass. Do not anchor for extended periods or overnight without using either the bridle or a rope secured to the rode and anchor tie off cleat, to relieve strain from the windlass.

Before raising the anchor, ALWAYS start the engines as it uses large amounts of power. The windlass is connected directly to the port starting batteries. Turn 'on' the WINDLASS CONTROL CIRCUIT switch and as the boat moves toward the anchor, press the 'up' control to take up slack line. Give the windlass short rests as you are pulling it up. Place yourself in position to guide the anchor onto the roller. As the anchor rises, be careful not to allow it to swing against the hull. Wash it down with the FRESH WATER WASHDOWN before it goes into anchor locker.

If the clutch in the windlass slips, use the WINDLASS HANDLE in the center star bolt to snug up the clutch to allow the windlass to haul up the rode and anchor sufficiently.

Reconnect the keeper between the anchor and the vessel. Close the plastic covers on the FOOT PEDAL CONTROLS and the Windlass cover. Turn 'off' the WINDLASS CONTROL CIRCUIT switch.

A SPARE FLUKE ANCHOR is normally stowed in the bow anchor locker. The 165 ft of SPARE ANCHOR RODE is located in the bow anchor locker. The rode is attached via shackle to the spare anchor.

In case of emergency, the anchor can be retrieved manually. Using the handle located in the helm starboard storage locker (located on the flybridge). First, secure the anchor with the bridle or a rope tying the anchor off to the cleat to take the load off the windlass. With the handle, place it in the center of the Windlass to release the clutch. Then, place the handle in the outer portion of the windlass drum to allow it to be manually winched in. Take up tension on the chain and release the rope or bridle. Note that if you let go of the handle, the windlass will free-spin, deploying more chain. It's recommended to have two people perform this operation to prevent free-spinning and trade off as you get tired.

Mooring Cans

The State Park Sticker on your vessel allows you to pick up the MOORING CANS in the parks for free. You only need to register at the kiosk usually located at the heads of the docks or by calling the phone number on the buoy. Mooring cans have a metal triangle at the top upon which is a metal ring. The metal ring is attached to the chain which secures your boat. IT IS VERY HEAVY. The strongest member of your crew should be picked for this job.

Come up to the CAN into the wind as you would for anchoring. Have crew members on the bow, one with a boat hook and one with a mooring line secured like a bow line. As you are coming slowly up to the can have the crew holding the boat hook point at the can with the hook so the skipper always knows where it is. Hook the can and bring the ring up to the boat to allow the second crew to thread the ring with the line. Release the hold with the boat hook. If your mooring line is led out the starboard chock bring the end of the line back through the port side. You will essentially create a bridle with about 10 feet of slack from the chalk to the can.

BARBECUE

The BARBECUE with MOUNTING BRACKET is installed in the cockpit. If it is not already installed, it is located in the LAZARETTE.

Place the BARBECUE and MOUNTING BRACKET into the two mounting posts on the port aft corner of the cockpit (if not already installed). To remove, press in on the button on the left post (when facing the Barbecue) to dismount barbecue. Attach a PROPANE BOTTLE to the REGULATOR installed on the barbecue. Carefully light the unit using the red igniter button (usually have to spark it 4-5 times) or preferably with a long-stem butane lighter. The barbecue generates a lot of heat and cooks hot and fast. Please burn off grease/cooking residue and wipe with a paper towel before storing to prevent grease and dirt soiling the boat.

Note: Two (2) propane bottles are stocked by AYC. You may need to purchase additional during your trip. Caution -- For safety reasons, do not store an opened propane bottle within the salon or engine compartment. Chances are these will leak slightly once opened and propane gas could settle into low spaces. Store these bottles under the stairs in the locker labeled 'cleaning supplies'. Do not store propane bottles in lazarette or engine room. Ensure gasoline and flammable materials are not near the barbecue.

DINGHY & OUTBOARD MOTOR

Your 12' Apex center console DINGHY with a 30hp Nissan 4 stroke engine is stored on the davit on the aft swim step. It has a capacity of about 1350 pounds (motor, equipment, and 6 people). It has a 6 gallon fuel tank located under the bow storage hatch and takes UNLEADED GASOLINE – no pre-mix or diesel. It is equipped with an automatic bilge pump which may periodically run when in use.

To deploy the dinghy, first remove the covers from the dinghy and motor and the black tie down straps. Clip the loose end of the tie downs back onto the davit. **Install the drain plug** (located in main vessel electrical panel) Turn on the davit breaker in the main DC electrical panel and remove the remote. Connect the remote to the black plug located just to the right of the swim step access. Raise the dinghy just enough to take the weight off the safety clips. Unclip the safety clips and lower the dinghy into the water. Watch for any objects around the bow of the dinghy or outboard. Disconnect rigging and raise davit up into a stored/out of way position. Install the seatback.

Dock lines, fenders, oars, and foot pump can be found under the aft seat. Fire extinguisher, air horn, and emergency kit is located in the mid storage locker of the center console. A 50' line, anchor, and anchor buddy/bungee line is located in the bow storage locker.

Use the key located in the main ship electrical panel to start the outboard. The safety clip must be installed and connected to you when operating. Generally it should start right up without having to squeeze the primer. Once started, you can use the 'warming handle' to increase the throttle slightly to warm up the outboard. Verify that the 'tell tale' is flowing water on the starboard side of the outboard. If it is not flowing, there is a small wire next to the outboard to use to clear the 'tell tale'. Do not continue running if the tell tale does not flow as the outboard could be damaged from overheating.

We don't recommend towing the dinghy and instead strongly encourage using the davit.

If you must tow the dinghy, always keep it tight to the boat any time that you slow down or stop. Assign one of your crew members as the "dinghy" person to be responsible for taking up slack. You don't want to wrap a propeller.

Washington state law and Coast Guard regulations state that any child 12 and under must wear a life jacket in a dinghy. It is a good idea for EVERYONE to follow this rule and connect the safety line to your jacket or persons.

When beaching the dinghy, use the RED bungee-style anchor line attached to the anchor. Clip it to the aft tie down and toss it in, away from the prop, when you are approximately 30 ft from shore. Raise the outdrive as you approach shore to avoid striking the prop. Remember to shut off to avoid damage to the cooling system, but keep the key in the ON position, otherwise the trim/tilt is unavailable. Use the 50 ft line attached to the bow cleat and attach to a rock or driftwood on shore. Give the dinghy a shove so that it is pulled back out by the bungee line and kept off the rocks. This will make it so that you don't have to manage the dinghy relative to the waves and tides and will minimize damage to the hull. DO NOT LEAVE OVERNIGHT.

When ready to return to the dinghy, pull in the line, load up, and disconnect the 50 ft line. The bungee will pull you back out. Lower the outdrive and start it. Do not engage the prop until AFTER the anchor is recovered to avoid fowling. Store in the bow storage locker.

To raise the dinghy, the process is generally the reverse of lowering. First, **remove the seatback**, otherwise it will be damaged by the davit when raising. Lower the davit and connect the rigging (note the color coding, green to the starboard tie downs, red to the port tie downs). Tilt the motor up slightly – no more than about 50%. Fully tilting the motor to the 'beached' positions will cause the motor/davit arm to come in contact. Turn off the ignition, remove the key, store in main vessel electrical cabinet. Before raising, if this is the last time the dinghy will be used, it's easier to partially install the cover on the starboard side prior to raising. Install cover on motor. Raise dinghy with davit remote until safety clips can be installed. Lower davit back down onto safety lines, taking strain off davit winch. Leave enough slack in davit winch line to facilitate getting the cover fully installed. Verify davit arm and outboard are not contacting. Re-install black tie downs, with ratchets installed closest to davit arms and protective covers installed under the ratchets. Snug up dinghy (not to tight). Finish installing cover securely and **remove drain plug**. Store drain plug and key in electrical cabinet with davit remote.

Spare parts such as oil, spark plugs, and patch kit are located in the lazarette, in an orange bucket.

CRABBING & FISHING

Always check the fishing and crabbing requirements before you leave on your cruise. You will need a license. Many areas are CLOSED to crabbing and fishing on certain months.

CRAB AWAY FROM THE BOAT! Lines can get wrapped around props. Fish-flavored cat food with the pop-up ringed lids work the best for a nice neat way to bait the ring. After 15-20 minutes, retrieve the crab line and ring quickly. Measure the crabs using the CRAB MEASURING GAUGE normally located with the crab pot in the lazarette. Remove the gauge before deploying the pot. Keep the male crabs of proper size (usually 6 ¼ inches across the carapace). Boil crabs about 12 minutes to cook, using the pot located in the lazarette, next to the generator.

After using, wash equipment thoroughly with fresh water (available from the cockpit shower faucet). *Note -- Please do not store wet rings and gear inside the boat.*

OTHER: Safety & Bilge Pumps

SAFETY should be paramount in your daily cruising. A MAN OVERBOARD DRILL should be discussed and perhaps even practiced with a life jacket. Remember your lifejackets are stowed on the flybridge, under the center aft seat. A few should always be out and ready. Your flares and safety equipment are located under the starboard access door to the helm.

Three CO Detectors are installed in the vessel – Salon, Forward Stateroom, and Port Stateroom. Take action and leave the cabin area if any of these detectors are going off.

Three smoke detectors, similar to your home, are installed in the Salon, Forward Stateroom, and Port Stateroom. If these are alarming, locate the source of the smoke and extinguish immediately.

Two portable 110 ABC fire extinguishers are located on the vessel. One in the salon, starboard of the sliding door. The second is on the flybridge, on the starboard side of the main bench seat. A third, smaller type ABC extinguisher is also located in the center storage console of the dinghy.

The vessel is equipped with an automatic Halon 1301 Engine Room Fire Suppression System. The system will automatically activate in the event of an engine room fire. The control is to the starboard side of the helm, down low. The control should remain in the 'NORMAL' position with the green light lit at all times. There is a manual discharge adjacent to the control that is secured with an inspection tag. Do not activate unless you are sure of an engine room fire. Please keep little kids away from this switch.

The vessel is also equipped with a Safe-T-Alert monitoring system, with a monitor and alarm located in the salon and at the flybridge helm. Generally these units should be left ON at all times. These units provide an audible alert in the event that a fire or fumes are detected in the engine room or there is a high water level, measured at the mid bilge (in the engine room, forward). If either monitor is alarming, take action based on the alarm.

Finally, the vessel is equipped with three AUTOMATIC BILGE PUMPS. The master switch is located on the electrical panel. Normally, the switch will be left in the AUTO position. You may occasionally hear the pump operate due to condensation and water from the shaft log accumulating in the bilge.

An AUXILIARY HAND OPERATED BILGE PUMP is located in the lazarette. This is used only in emergency situations.

The ENGINE SPARES BLACK MILK CARTONS are stowed aft of the port engine. This includes oil filters, raw water impellers, fresh water pump, wood plugs, and other small parts.

OTHER: THRU-HULL LOCATIONS

- **Port and Starboard Main Engine Raw Water – Engine Room Forward**
- **Generator Raw Water – Lazarett, below Center Access Hatch**
- **Macerator Discharge – Access Hatch between mid-stateroom and head**
- **Reverse Cycle Heat & A/C – Engine Room, below access hatch aft of port engine**

OTHER: FLYBRIDGE ENCLOSURE

The flybridge tends to get very warm even on the mildest of days when the sun is out if you do not open it up to vent it. The best way to vent the flybridge is to first open the two side panels at the gates/doors to the bow and slide those forward. Then, open the vertical zippers to the side of the windshield. Open about $\frac{3}{4}$ of the way, but not all the way and do not disengage the zippers. Finally, open the rear panel by unzipping the two sides and the two bottom zippers. Fold it down and then back toward you. Use the loops on the zippers to hook up so that the panel is up and out of the way. This should provide adequate ventilation while underway.

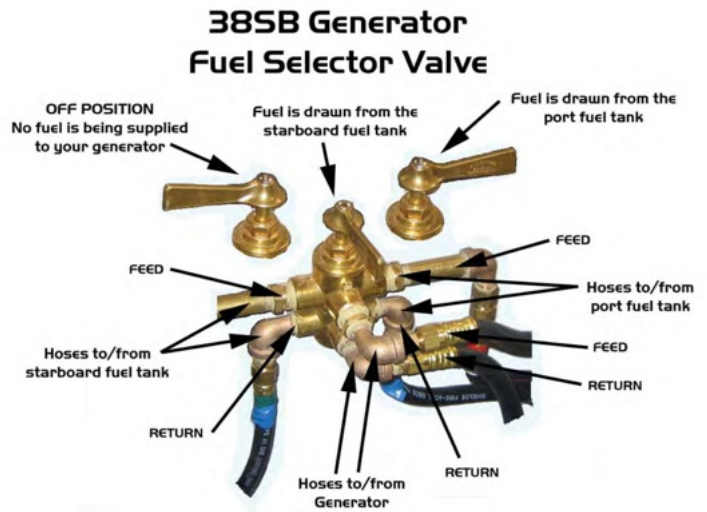
When docking, ensure both of the side panels are open to minimize the amount of ‘sail area’ for the wind to push the boat around.

Do not attempt to further disassemble or open up the enclosure as you could damage it. Do not climb on the eyebrow – directly above the glass, below the flybridge – to further open the enclosure as you could damage both the fiberglass and the enclosure.

APPENDIX

Generator Fuel Tank Selector

If directed by AYC, the generator fuel source can be changed to either the port or starboard fuel tanks. The selector valve is located in the lazarette, to the starboard side. A diagram is provided at the fuel selector valve and below for reference. The positions are also labeled at the valve - point black arrow on valve handle to desired fuel selection.



Electrical System Diagram

Silverton 38
 6/20/2012 modification made by Emerald Harbor Marine inc.
 (206) 285-3632

This drawing represents the major components of the D.C. electrical system. This is not a complete drawing but represents major changes made to the D.C. system 06/2012.
 (revised 01/2019)
 Revised 7/22/24

