

OPERATION MANUAL

Sweet Dreams

Welcome Aboard!

We are happy that you have chosen Ship Harbor Yacht Charters and the vessel Sweet Dreams for your vacation. We hope you enjoy your cruising experience in the lovely islands of the Pacific Northwest. We have enjoyed many vacations on Sweet Dreams. The reason we called it Sweet Dreams was because when we purchased the boat in 2002 it was a big purchase for us and we were losing a lot of sleep over it.

This manual will help you become more familiar with your boat. If you have any further questions, about the boat or your itinerary, please do not hesitate to ask the SHYC staff.

Remember our vessels are non-smoking boats. But please feel free to smoke out on deck.

Bon Voyage!

The Ship Harbor Yacht Charters Staff

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Engine Inspection

Remember your "WOBBS" every morning. (Water (Coolant), Oil, Bilges (Inspect and Pump-out), Belts, and Sea Strainer. Check the level of COOLANT in the expansion tanks. Check the level of your engine oil with the dipsticks. Your dipsticks are located in the engine room, one is very long and the other is short. Look at the etch mark on each dipstick that indicate proper levels. **DO NOT OVERFILL!** Only fill if oil levels are below the ½ mark. Check the general condition of the hoses and belts. Check the generator as well.

Ensure the valves on each RAW WATER THRU-HULL are OPEN! (Lever in-line with valve). Observe through the glass of each sea strainer for debris. If necessary, close the thru-hull, open the strainer lid, clean out debris, and reassemble. **REOPEN the Thru-hull!**

Start Up

Having finished your inspection, start your engines from the upper helm station. Ensure that Gearshifts are in **neutral** or the engines will not start (neutral lockout) Run your throttles up and bring back to just above the idle position. Inset both keys into the ignition and turn the key starting with the starboard engine.

Turn the key clockwise until the engine alarm sounds and pre-heat the engine. After 10-30 seconds turn key fully to engage the engine. If the engine does not turn over, move the gearshift slightly while turning the key until the engine engages. If the engine cranks slowly, check the condition of your batteries at the electrical panel. If it is low then turn on the generator and switch to generator power.

After the engine starts, let it warm up for about 5 minutes. Observe your gauge readings. Engine temperature should rise very slowly.

*Note: If water temp.is high or oil pressure low, **shut down engine** and look for problem. Was there a lack of water exiting with exhaust? Are thru-hulls open and debris cleared from sea-strainer? If problem keeps occurring, call SHYC Service.*

Shut Down

Before shutting down, let engines idle for about 5 minutes letting them cool. Ensure each gearshift is in the neutral position and each throttle is in idle. Turn off the engines by turning both keys.

Getting Underway

Disconnect the shore power cord (see AC Power next page). Close portholes, windows, and hatches. Turn on VHF and electronics. Assign crewmembers to their tasks. Once outside marina, have crew members bring in fenders and put lines away.

Cruising

All close quarter maneuvering should always take place at the upper helm. Slowly come up to cruising speed of 2250 rpms. If you run at 2250 rpms, you will cruise at approx. 17 knots, using only 25 gallons of diesel/hour. If you cruise at 1100 rpms

about 10 knots you save substantially on fuel costs. Your speed may vary depending on weight, load, and weather conditions. Trim Tabs can bring the bow down to the idle cruising position. Watch your speed on the GPS as you adjust.

Note: Avoid high engine speeds as it causes the engine to overheat causing damage as well as high fuel consumption.

Docking

During docking, use the upper helm for the best visibility. Give clear instructions to the crew on what you will expect of them i.e. with lines and fenders.

Ensure trim tabs are rocked back up for slow speed backing. While moving slowly towards the dock, center the wheel and use the gears and throttles to maneuver the vessel. Throttles should only be used in moderate to windy conditions. Otherwise, the use of the transmission should be sufficient.

Fueling Up

Open filler caps located mid ship with the deck-fitting key kept storage locker by entrance. **MAKE SURE YOU HAVE DIESEL** Make sure it is going into the right deck fill! **DOUBLE-CHECK!** Before pumping, have your oil/fuel sorb ready to soak up any spilled fuel. You should have a rough idea of how many gallons you will need, but have someone check the fuel gauge periodically by turning on the key.

Put **Diesel** nozzle into the deck fitting and pump slowly listening to the sound of the flow. Pumping too fast may not allow excess air to escape, which will lead to spillage out the vent. As the tank fills, the sound will rise in pitch or gurgle. Pay attention to the vent that it does not spill fuel into the water. Top off carefully, catching any spillage with your sorb.

Check your gauges. Replace the deck fill caps. Clean up any spatter and wash hands thoroughly.

BOAT ELECTRICAL

The electrical system is divided into two distribution systems: 110 volt or AC and 12 volt or DC. The systems are controlled from the electrical panel located by the entry in the salon and the battery switches located last step in the salon.

When not connected to shore power your batteries provide most of your electrical power. Therefore the use of onboard electricity needs to be monitored very carefully. **Turn off electrical devices** when they are not being used (lights, instruments, etc.)

110 Volt or AC (Alternating Current)

Shore Power supports all AC equipment and receptacles on board as well as the battery charger.

To connect to shore power, plug the power cord into the boat and then into the dock receptacle. Check your power rating/plug size of the dock receptacle (i.e. 30amp, 20 amp etc.) If necessary, add an adaptor located swim step storage locker. Secure the

cord around the shore power electrical receptacle and off the bow (i.e. wrap around bowline a few times) turn the dock power breaker on.

On the boat, turn the shore circuit breaker on at the electrical panel. Turn on appropriate breakers for battery charger, refrigeration, and water heater. Watch your voltmeter for load. If the load exceeds the voltage, it will pop the breaker. If this occurs, wait to turn on one of your systems (i.e. water heater) until the use of power decreases.

Battery Charger

When connected to shore power or on the Generator, the Battery Charger charges the 12-volt batteries. Should you detect the Charger failing to charge the batteries, check the circuit breaker on the AC panel and the panel to make certain that it is on. There is usually a circuit breaker located on the Charger itself that can get tripped during a surge of power.

Generator

To start your generator, first check that the fluids have been checked and the raw water thru-hull is open. The generator controls are located on the panel by the entry to the salon. Then, while pre-heating, turn the switch to start. Hold the switch in that position for about 5 seconds until the engine catches. Make sure your water and exhaust is exiting at the stern.

After the generator is running, turn your AC distribution switch to generator (or ship). Turn on your AC systems as you would as hooking up to shore power. If you have been anchored a while, turn on the battery charger first for 10 minutes. Too much load such as water heater, stove top 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. Last, kill the generator by holding switch in the off position until it dies.

House 12-volt System

Four battery banks support your 12 volt system: #1 Port Engine Start #2 Starboard Engine Start #3 House Battery Bank #4 Generator

Your battery switches are located entry to the salon. Normally you will leave the switches in the on position. *Note: Changing the position of the battery switches with the engine running will cause damage! Only change positions with the engine off!*

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

When disconnected from shore power, the 12-volt systems will drain the battery especially when at anchor. Monitor your batteries very carefully. The DC voltmeter on the DC panel can be switched between your 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, your voltage will drop as indicated in the figures below.

All your batteries are charged while underway by the alternator. The engine and house batteries are charged by the battery charger/inverter while connected to shore power. Ensure that the charger is on as well as the inverter charger. The generator will also charge the batteries.

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

SANITATION SYSTEM

Marine Toilet

It is imperative that every member of the crew be informed on the proper use of a marine head. The valves, openings, and pumps are small and will clog easily. If the head gets clogged, **it is your responsibility!** Always **pump the head for small children** so you can be certain of what is being flushed. *Note: Never put in paper towels, napkins, sanitary products, household T.P., or food into marine heads. **Use only marine T.P. provided by SHYC.***

The toilets on Sweet Dreams are Electric flush. Simply push and hold the button until the toilet is completely flushed.

Your toilet raw water intake is located in the engine room if you should need to shut off the water to the toilet.

Holding Tanks

Your sanitation holding tanks holds 35 gallons for each toilet. Be aware of the rate of waste production (about 1 gallon/flush). If you overfill your tank, you will break a hose, clog a vent, or burst the tank **which is an indescribable catastrophe!** And a very **expensive fix for you.** Empty the tank at least every other day to avoid any problems.

The holding tank is located underneath the aft stateroom bed, and the other tank is in the engine room. Some may be subject to a visual check with a flashlight or the "watermelon test" by thumping it.

The holding tank is emptied in one of two ways:

#1 At the pump-out station, remove the deck waste cap located mid ship. 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. Remove from deck fill.

If there is a fresh water hose on the dock, rinse the tank by adding water for 1-2 minutes. Then re-pump to leave the tank rinsed and clean for the benefit of the next charterer. This also eliminates any head odors.

#2 The tank's contents can also be discharged at sea by using the macerator (Sealand pump). To operate the macerator, open thru-hull located in the engine

room, and aft storage room, turn on breaker for pump out, located in salon panel, and pump until pitch becomes higher indicating an empty tank. This should take about 2 minutes. Discharge can be seen on the underneath of the boat. *Note: Overboard discharge is only allowed in Canadian waters. It is illegal to discharge overboard within U.S. waters.*

Y-Valve

WATER SYSTEM

Fresh Water Tank/ Pump/ Hot Water Heater

The fresh water tank(s) holds 90 gallons and is located engine room. Observe the water level by flashlight on the tank. To fill the tank, remove the deck water fill cap located on the bow strb side. Fill the tank avoiding flushing debris into the tank. **Do not fill water and diesel at the same time!** Waste water from the sinks and showers drains overboard through various thru-hulls usually located under the sinks

The water pressure pump is located underneath 3rd stateroom floor. Activate the pump by turning on the breaker at the DC panel. If when in use, the pump continues to run, you are either out of water or have an air lock which can be corrected by opening a faucet. If you run out of water, shut off pump and **turn off hot water heater** on AC panel. **You can cause serious damage** to the heating element.

The hot water heater has a 30 gallon capacity. It is heated when the AC breaker is on while connected to shore power or running the generator. Do not use the water heater if the water level is low. The water heater is located in the engine room.

Shower

Before taking a shower, make sure the water pressure and shower sump pump breakers are on. Take short "boat" showers by turning off the water between soaping and rinsing. Please wipe down the shower stall and floor when finished to keep shower tidy. Pick up any accumulation of hair in the drains as it clogs the hoses. Ensure that the faucets are tightly turned off after each shower to save water.

GALLEY

The galley has an electric hot plate. Be careful after using because the surface will remain hot for some time.

Refrigerator

The refrigerator is dual voltage (12 volt and 110). It will automatically use the 110 volt power when shore power is on and the AC breaker flipped on. Carefully monitor the use of the refrigerator when the engines are not charging the 12-volt system as

when you are at anchor. Use a cooler when possible for all your drinks to keep the refrigerator door closed as much as possible.

The power switch is located below the front door of the fridge. It can be turned down at night to conserve energy while anchored or moored.

HEAT

The heat works with the A/C system. There are two units, one is located in the aft stateroom, and the other is in the salon. There are breakers for both units in the salon breaker panel. Make sure the breaker is on. The thermostat unit for the salon is located on the starboard side next to the entrance to the salon. Use the thermostat to select either heat or cool and set the desired temperature. You have to be plugged into shore power or have the generator running.

Electric heaters are also available when connected to shore power or when using the generator. Make sure the appropriate AC breaker is on.

ELECTRONICS

There are 2 VHF radios located at each helm station. Make sure the breaker is on at the DC Panel. Always monitor Channel 16 while underway.

There are two depth sounders located on the upper and lower helm. To activate, ensure that the DC breaker is on. Turn on the depth sounder by flipping a switch which is located next to the upper helm unit, this powers both units.

The sounder is reliable in waters less than 200 feet and at slower speeds. If your reading is blinking, it might be a false reading due to excessive depths or strong currents! Watch your depth carefully in cruising unknown waters that might have rocks or obstacles.

To operate the radar press and hold the power button. To turn off, hold the power button for about 3 seconds. Remember you are not allowed to travel in fog or at night.

ANCHORING

Your primary working anchor, a windless, is attached to 100ft of chain.

Turn on the anchor windlass on the AC panel and proceed to raise and lower the anchor as needed. Be sure to always have your engines running. Windlass Instructions here. See page 9 in the White Binder for further anchoring instructions.

Turn off the breaker when finished.

A spare anchor is located swim step storage locker.

BARBEQUE

The Barbeque and mounting bracket are stored mounted on the port railing.

Attach the propane bottle and regulator usually found in locker next to the entrance to the salon.

Carefully light the unit. This Barbeque cooks fairly hot and fast so keep a good eye on your food. *Note: Propane bottles are not stocked by SHYC so you will need to purchase a bottle if one is not found on board during your check-out. Ensure that outboard gas or any other flammables are not near barbeque.*

DINGHY AND OUTBOARD MOTOR

Your 11'6 dinghy is equipped with a 4 hp outboard engine. It has a capacity of about 5 adults.

After the dinghy is in the water and readied to go (PFDs etc), open the vent in the fuel tank and choke the engine once while starting. Make sure outboard is in neutral. . *Note: Failure to use proper mix will damage outboard.*

Please use extreme care in beaching your dinghy. Make sure the engine gets tilted up a safe distance from shore so the prop does not hit the bottom or shear the pin. Do not drag the boat on the beach. Please lift it up with your crew. Make sure it is secured as the tide comes in fast in these here parts.

When returning to the boat, leave your shore shoes in the cockpit and slip on your deck shoes or slippers to keep the boat neat and tidy.

OTHER NOTES

Safety should be paramount to your daily cruising. A man overboard drill (person?) should be discussed and practiced with an unlucky PFD as the victim. (please rinse and dry afterward before stowing). Remember that your lifejackets are stowed aft storage locker. A few should always be readily available. Flares and other safety equipment are located storage locker at entrance to salon.

Always have a sharp lookout posted for logs, deadheads, or other flotsam and jetsam. A log hitting your prop can ruin your vacation. As you are traveling, the debris does seem to gather along current lines. It is sometimes best to go around these areas and miss the "mine fields".

Sweet Dreams is equipped with numerous automatic bilges pumps that can be activated on the DC panel. The switch should normally be left in the "Auto" position can be switched for a minute or so to "manual" to pump the bilge. If you continually hear the bilge pump running, **check your bilge!** You may have a serious problem!

The engine spares are located aft storage locker. They include extra oil filters, impellers, head pump, etc. Extra oil and coolant is located in the engine room.

Crabbing is fun but requires the correct license and season. Please be sure not to crab off the stern as the crab line can easily get tangled in your prop as you swing with wind or current. You certainly 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/ring away from the boat. A partially open can of seafood catfood works well as any other bait and is less messy. Please clean up any seaweed or crab shells afterwards to keep the boat neat and tidy.