

OPERATION MANUAL

POWER BOAT "RODI"

Welcome aboard !

We are happy that you have chosen Ship Harbor Yacht Charters and the vessel Rodi for your vacation. We hope you enjoy your cruising experience in the lovely islands of the Pacific Northwest.

The name Rodi is the nickname for the First Mate whose name is really Rodica. It means Sundance. She was born in Romania and lived the good life there until the Communists took over when she was 8. After that she survived till 1986, when she escaped and met Captain Jim.

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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BOAT OPERATION

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 at the sides of the engines and generator. Look at the etch mark on each dipstick that indicate proper levels. DO NOT OVERFILL! Only fill if the oil levels are below the ½ mark. Check the general condition of the hoses and belts. Check the generator as well.

Ensure the valve on each RAW WATER THRU-HULL are OPEN! (Lever in line with valve). Look inside the sea strainers 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 lower helm station. Check to be sure the fuel valves are one vertical and one horizontal.

Ensure that the gearshifts are in neutral. Put your throttles in idle position. Insert both keys into the ignition and turn the keys, starting from the starboard engine.

Turn the key clockwise until the engine starts. The main engines do not have glow plugs so there is no need to wait. If the batteries aren't strong enough to start the engine, try to start the generator and charge the batteries with it. See the section on the generator.

After the engine starts, warm it up for about 5 minutes at idle. Observe the oil pressure and coolant temperature readings. Oil pressure should be about 60 psi and coolant about 180 degrees after the engine is fully warmed up.

Note: If coolant temperature is high or oil pressure low, SHUT DOWN THE ENGINE and look for the problem. Was there a lack of water exiting with the exhaust? Are thru-hulls open and debris cleared from the sea strainer? If the problem keeps occurring, call SHYC service.

Shut down

Before shutting down, let the engines idle for about 5 minutes to let them cool. Ensure that each gearshift is in neutral and throttles at idle. Turn off the engines by the stop buttons. Shut off the “ignition” key AFTER the engine stops.

Getting Underway

Disconnect the shore power cord. Close hatches and windows. Turn on VHF and electronics. Once outside the marina, have crew members bring in fenders and put lines away.

Cruising

All close quarter maneuvering should take place at the upper helm. Make sure the throttles are at idle and engage the gearshifts. Slowly come up to a cruising speed of 1300RPM. At 1300rpm you will cruise at approximately 10 knots using approximately 5 gallons of diesel/ hour. It won't hurt the engines to cruise at up to 1800 RPM but fuel consumption will be more. Your speed may vary depending on weight and weather conditions. You can get your speed over the bottom from either of the two GPS units.

Docking

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

While moving slowly towards the dock, keep the throttles at idle, center the wheel and use the gears to maneuver.

Fueling Up

Open the filler caps on your preferred side of the vessel. Use the deck fitting key located in the top drawer across the aisle from the refrigerator. Both tanks can be filled from either side. **MAKE SURE YOU HAVE DIESEL.** Make sure it is going into the correct 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 the 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 and turn on the engine room blowers for a few minutes. Clean up any spatter and wash hands thoroughly.

Do not risk running out of fuel. It is a disaster.

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 to the right of the lower helm and the battery switches located on the aft side of the bed in the aft cabin.

When not connected to shore power or running the engines or the generator, the batteries provide all your electric 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, or the generator, support all AC equipment and receptacles on board as well as the battery charger.

To connect shore power, plug the power cord from either side of the boat into the dock receptacle. Your plug is 30 amp, 120 volt. If the dock plug is different, try to borrow an adapter from the marina. Secure the cord around the shore power receptacle and around something on your boat. Then turn on the breaker and select the cord side you are using. Then turn on the switches for whatever you want to use. If the load exceeds the current capacity, the breaker will blow, and you will have to turn something off, for example the hot water heater.

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 main power panel by the lower steering station and on top of the generator in the engine room. If the main engines have been running for at least 30 seconds, the generator can be started by the START switch on the main power panel. The oil pressure should come up in a few seconds, indicating that the engine is running. It is possible but not advisable to do a cold start that way but it operates the starter motor for about 30 seconds, consuming a lot of current. . The better way is to use the control on the black box on top of the generator. The generator has a glow plug which must be heated for 30 seconds before the generator will start. Hold the pre-heat switch in the pre-heat position for 30 seconds and then hold it in start 'till the generator starts.

To shut down the generator, turn the main power switch to select off or one of the shore power positions. Then hold the generator switch in the off position till the oil pressure goes away, indicating that it has stopped.

If the generator is running but nothing shows on the AC voltmeter, reset the breaker on the generator or select the generator on the main power panel.

House 12 volt System

Four battery banks support the 12 volt system. On the left is a house battery. Next is the starting battery, and the two on the right are house batteries. Your battery switches are located on the aft side of the bed in the aft state room. Normally you will leave them on. Do not change them with the engine running as damage will result.

The main power panel shows all the switches for turning things on. Red switches are for 12 volt, and yellow are for 110 volt AC. The bilge pump is always on automatic and the switch will turn it on at any time if desired.

When disconnected from shore power with no engines running, the batteries may be discharged very quickly, depending on what is switched on. The worst is the anchor windlass even if it is not working, so be sure the button on the main power panel is pushed in and the light is off. Monitor your batteries very carefully. The dc voltmeter on the power panel can be switched between battery banks to measure battery voltage. Typically the batteries should read between 13.0 and 14.5 volts while being charged. All the batteries are charged while underway by the alternator and the generator as well, if it is on and connected to the charger. When on shore power the batteries are charged if the charger is switched on.

When at rest the battery voltage will be:

Voltage	Battery state of charge
12.65volts	100%
12.47	75
12.25	50
11.95	25
11.7	0

Sanitation System

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.

To use the toilet, move the switch to the left to get some water in the bowl. Then when you are done move the switch to the right to empty it. Repeat as necessary.

Holding tank

Your sanitation holding tank holds 30 gallons. Be aware of the rate of waste production (about 1 gallon per 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 one for you. Empty the tank at least every day to avoid any problems.

The holding tank is located under the deck accessed through a hatch in the aft cabin. If you hold a flashlight against the side of the tank and move it up and down, you should be able to see the level. The “watermelon” test (thumping) can also be used. Also, there is tank watch warning light near the lower helm. But do no rely on this as they are not always accurate.

The holding tank is emptied in one of two ways:

#1 At the pump-out station, remove the deck waste cap located on either side. 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 the lever on the handle and turn off the pump. Remove from the 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 next charterer. This also eliminates any head odors.

The tank's contents may also be discharged at sea by using the macerator pump. To operate, open the valve on the port side of the tank (handle in line with the hose), turn on the "holding tank" switch on the main power panel, and wait for the tank to empty. Discharge may be seen on the port side of the boat. Note: Overboard discharge is allowed only in Canadian waters. It is illegal to discharge in U.S. waters.

WATER SYSTEM

Fresh water tank/ Pump/ Hot water Heater

The fresh water tank holds 100 gallons and is accessed through a hatch in front of the refrigerator. A gauge by the lower helm tells how much you have. The tank can be filled from either side. Fill the tank, avoiding flushing debris into the tank. Do not fill water and diesel at the same time.

The water pressure pump may be turned on by a switch on the main power panel. If it continues to run you are either out of water or have an air lock which can be cured by opening a faucet. If you run out of water, shut off the pump and turn off the hot water heater on the main power panel. You can cause serious damage to the heating element.

The hot water heater has a capacity of 20 gallons. It is located beside the fresh water tank. It is heated from shore power or the generator with the switch at the main power panel "ON". Do not use the water heater if the water is low.

SHOWER

Before taking a shower, make sure the water pressure is "ON" and, if using the forward shower, the "shower pump" switch is on. Take short "boat" showers, turning off the water between soaping and rinsing. Please wipe down the shower stall and floor when finished to keep the 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 boat is equipped with a low pressure propane system for cooking. The propane tank is in the locker on the starboard side of the after deck, Open the tank valve, then turn on the propane solenoid switch in the galley. A few seconds may be needed for the propane to go from the tank to the stove. Push and turn the valve for the burner you want to use. Either use the piezo-electric lighter or a match. After the burner ignites, continue to push on the valve for a few seconds till the thermocouple warms up.

Refrigerator

The refrigerator is dual voltage (12v or 110v). It will automatically use 110v if it is available and both switches are on. The power switches are located on the main control panel.

Heat

The Hurricane diesel forced air heater provides heat much like your household furnace. It is located under the deck by the lower helm. Turn on the toggle switch near the wheel of the lower helm and set the desired temperature. Check the exhaust port on the port midships to make certain no obstruction such as a fender or line exists.

Electric heaters are also available when connected to shore power or using the generator. Make sure the appropriate ac breakers are on.

ELECTRONICS

All have instruction manuals located under the front end of the port couch in the main salon.

There is a vhf radio located overhead at the lower helm. Always monitor channel 16 while underway.

There is a depth sounder at the upper helm and another at the lower. The upper one turns on by pressing the power button and turns off by holding the button for 2 seconds.. The lower one is always on. The sounders are reliable at less then 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 depths carefully in cruising unknown waters that might have rocks or obstacles.

To operate the radar, press and hold the power button. To shut off, hold it for 2 seconds.

The chart plotter is located in the top middle drawer in the aft bedroom. It mounts on the bracket by the upper helm. The antenna can be beside the plotter.

ANCHORING

Your primary working anchor is a Danforth type attached to a chain. The chain is marked with yellow paint at 50 feet and red at 100 feet. Turn on the anchor windlass by the AC panel and raise or lower the anchor with the two buttons by the anchor. Be sure to have your engines running and do not forget to shut off the anchor windlass.

There is a short length of garden hose in the middle bottom drawer across from the bed in the aft stateroom. It plugs into faucet by the anchor. Use it to wash the mud off the anchor and chain as you raise the anchor.

In case the anchor gets caught on a rock, cut the chain with the hacksaw in the tool drawer across from the bed in the aft stateroom.

There is a spare anchor and 200 feet of rope plus some chain under the bed in the aft cabin.

BARBQUE

The barbeque and mounting bracket are stored in the engine room. Attach the propane bottle and regulator usually found in the propane locker. This Barbeque cooks fairly hot and fast so keep a good eye on your food. Store the Barbeque back in the propane locker when it has cooled. Please wipe it down with a rag or paper towel before storing. 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 checkout. Ensure that outboard gas or any other flammables are not near the Barbecue.

DINGHY AND OUTBOARD MOTOR

Your Avon dinghy has a capacity of 350 lbs or about 3 people and is equipped with a 6hp 4 cycle outboard motor. It does not require mixed oil and gas. To deploy the dinghy, disconnect all ropes holding it, except the one to the windlass. Disconnect the supporting rods, including the one supporting the motor to the swim board. A short lever on the windlass changes it from up to down. Crank the dinghy into the water. Swing the outboard motor down and install the fuel tank and hose. They are in the port deck locker. When the motor is in forward but not running, you can tilt it. The oars are under the bed in the aft stateroom. Please use extreme care in beaching your dinghy. Make sure the motor is tilted up a safe distance from shore so the prop does not hit bottom or shear the pin. Do not drag the boat up the beach. Please lift it up with your crew. Make sure it is secured as the tide comes in fast in these parts. Be sure there is plenty of air pressure in the dinghy. The pump is under the bed in the back bedroom.

When returning to the boat, leave your 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 above the refrigerator and in the hanging locker. A few should always be readily available. Flares and other safety equipment are stowed in the top drawer across from the refrigerator.

Always keep a sharp lookout for logs, deadheads, or other flotsam and jetsam. A log hitting your prop can ruin your vacation. As you are traveling you will notice that debris collects along tide rips. It is better to go around these “mine fields”.

Rodi is equipped with an automatic bilge pump that is always on. There is a switch labeled “bilge pump” that can be used to turn the bilge pump on manually. If you continually hear the bilge pump running, check your bilges. You may have a serious problem.

The engine spares are located in the aft drawer; second one down, in the aft stateroom. They include extra oil filters, impellers, etc. Extra oil and coolant are under the bed, plus crankcase oil for the outboard and transmission fluid for the main gearboxes.

Crabbing and fishing are fun but require 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 in the wind or current. You certainly don't want to be the person who has to dive over and cut the line from 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 cat food works as 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. Do not fish from the dinghy as it is licensed only as a tender.