

# OPERATIONS MANUAL

## “Maritana”

### Welcome aboard!

We are happy you have chosen Maritana for your vacation. Enjoy cruising the beautiful waters of the Pacific Northwest. This Beneteau 331 Oceanis is a masthead sloop with raked bow, round bilges, Shoal keel, spade rudder and incorporates swim step.

We hope this manual will help you become familiar with the boat. Please remember this is a non-smoking vessel. Always smoke outside. If you have questions about the boat or about places to visit, please do not hesitate to ask the AYC staff.

|                   |                           |
|-------------------|---------------------------|
| Hull Type:        | Shoal Keel & spade rudder |
| Rigging Type:     | Masthead Sloop            |
| LOA:              | 33.92 ft                  |
| LWL:              | 30.50 ft                  |
| Approx Sail Area: | 500.00 ft <sup>2</sup>    |
| Beam:             | 11.33 ft                  |
| Displacement:     | 11,173.00 lb              |
| Ballast:          | 3,253.00 lb               |
| <b>Draft:</b>     | <b>5.00 ft*</b>           |
| Construction:     | FG                        |
| Built:            | 2004                      |

\*The Depth Transponder is 20” below waterline. Actual Draft is 4’8” Therefore, the boat is likely aground if the depth meter reads 3’. It is recommend that you maintain 5 Feet or greater depth as measured from the waterline at all times.

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# BOAT OPERATION

## Boat Draft

Actual Draft is 4'8" The Depth Transponder is 20" below waterline. Therefore, the boat is likely aground if the boat's depth meter reads 3'.

## Engine Inspection

Every morning, please remember to check the following;  
W.O.B.B.S AKA Water, Oil, Bilges, Belts, Strainer

- Sea & Fresh Water engine and prop shaft cooling
- Oil Level.
- Bilges
- Belts (forward engine access at the companion way hatch)
- Sea Strainer. (stern engine access at the stern stateroom)

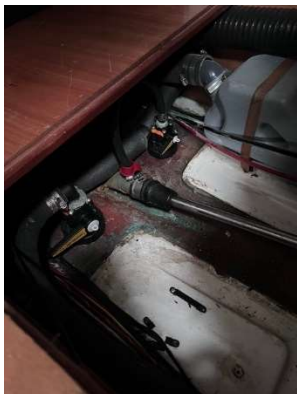
Please double check with your check-out skipper the location of all of these!

## ENGINE COOLANT

Check coolant expansion tank at forward port side of the engine compartment. Engine coolant is a mixture of 50% antifreeze and distilled water. For your convenience, there is a container of pre-mixed coolant stored in the cockpit lazarette with syphon hose.

## ENGINE and PROP THRU HULLS (seacock)

Ensure both thru hull valves for engine and prop shaft cooling are in the 'open' position (lever in-line with valve) whenever engine is operating. These valves are assessable under the stern stateroom bunk. These thru-hulls should be left open at all times during your cruise.



Check the RAW WATER STRAINER for debris. Located in the stern engine compartment. Access by removing the rear engine panel in the aft stateroom. If cleaning is necessary, close the seacock just AFT of the engine, starboard side. Open the strainer cover, clean the strainer, and reassemble. **Important:** Be careful to seat the O ring properly or you will have a leak and do not over-tighten the cap. **Important: Don't forget to reopen the thru-Hull when complete!**

## ENGINE OIL

Check the level of engine oil with the dipstick located on the starboard side of the engine. This can be accessed from the forward engine compartment. A pair of etch marks on the dipstick indicates the proper oil level. **Do not overfill!** Make sure the dipstick is firmly put back in! Check the oil with a paper towel or a rag. Engine Oil and syphon hose are provided under the galley sink if needed.

## BELTS, HOSES, and FUEL LINES

Check the general condition of the BELTS, HOSES, and FUEL LINES.

## Engine

Maritana has a 27 HP Westerbeke diesel engine, which drives a three bladed propeller through a reversible transmission. The combined shift lever and throttle control is on the starboard side of the helm/steering wheel. The engine stop is located near the ignition key above the starboard cockpit seat. The engine will propel the vessel to about 5 knots in calm water at 2000 RPM, 6 knots at 2500 rpm. Using higher throttle settings will produce very little increase in forward speed but will greatly increase fuel and oil consumption and wear on the engine. For this reason, we ask that you limit engine rpms to 2500 RPM barring real emergency situations.

This boat has a definite prop walk to the port in reverse with not much noticeable effect in forward. When in reverse, be careful to keep a firm grip on the wheel. Please use only low RPMs.





## Starting Engine

Start / House Battery: Turn one black and two red battery switches to on (vertical position) at the aft stateroom bulk head. **Never turn battery switches on or off while engine is running!**

**Thru-hull valves: Verify seacocks (thru-hull valves) (2 ea) are open to the sea to provide engine and prop cooling. Valves are under the stern bunk and behind the engine.**

To Start the Engine: Place the engine transmission in Neutral by positioning the shift lever straight up. If you would like to increase engine R.P.M. out of gear, push the red button in to engage transmission lockout and advance shift lever ahead slightly.



Start the engine by turning the key to on position. Press and hold the preheat button (left in photo) for 5-15 seconds then press the start button (right in photos) while continuing to press the preheat button. ENGINE WILL NOT START unless both buttons are pressed at the same time. Do not hold the start button for more than 15 seconds at a time. If the engine does not catch the first time WAIT about 15 seconds before trying again. **NEVER TURN OFF KEY WHILE ENGINE IS RUNNING.** You will do serious alternator damage. The key should remain on while the engine is running.

Check the transom for water and exhaust as an indication that your thru-hull is open and water is keeping your engine cool. You should see and hear the exhaust water splash on the starboard side of the transom.

## Engine Shutdown

Place the transmission in neutral and allow the engine to cool down for several minutes. Usually this is about the amount of time it takes to secure your lines and plug into shore power. Pull the black handle on the right side of the engine panel. This cuts off the fuel supply to the engine. **Never turn off the key while the engine is running.** Alarms will sound until the key is switched off. Switch off the key After the engine has completely stopped.

After engine is stopped, switch off the start battery switch in the aft stateroom. **Never turn battery switches on or off while engine is running!**

## Getting Underway

Prior to getting underway, disconnect the SHORE POWER CORD (See AC Power next page). Close the PORTHOLES, WINDOWS, and FORWARD HATCHES.

## Docking

Have your crew make ready the lines and fenders and give clear instructions on how you will be docking. Have bow, stern, and spring lines ready. Oftentimes it is best to lead them to the mid-section of the boat

(the fattest part) where your crew member can easily step off and secure lines. Pull the dinghy up tight and make sure no lines are in the water that could foul the prop.

As you are coming into the dock, have your best communicator mid ships to give you distances from the dock. It is often hard to judge how close the dock is. Calling out distances (i.e., 20 feet, 10 feet, 4 feet etc.) will add to a successful docking.

If you find you are too far off the dock, **BACK OFF** and do it again. No heroic jumping off the boat by any crew members, this is very dangerous!

## Fueling Up

The fuel tank holds 20 gallons of diesel fuel. Monitor fuel tank level using the fuel gauge at the engine panel in the cockpit only. Note: The tank monitoring panel below dc panel at the Nav station accurately monitors water and waste tank levels but is NOT connected for fuel tank monitoring.

You will need to fuel up before returning to your slip at the end of your charter. Before pumping, have oil/fuel sorbs handy to soak up spilled fuel. You should have a rough idea of the number of gallons you will need by the number of hours of engine time since departing on your charter. Maritana uses approximately 0.75 gal/hr plus any use of the diesel fueled hydronic heating system. Fuel consumption will be higher at higher average rpms.

The fuel deck cap is located on the AFT port deck, with the key located at the helm binnacle or hanging near the fueling port itself. **CHECK THAT YOU HAVE THE CORRECT DECK OPENING!** Use only **DIESEL – make sure that is what you are pumping!** Do not add water or pump-out at the same time you are fueling.

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 opposite 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.

*Caution -- Clean up splatter and spillage immediately for environmental and health reasons. Thoroughly wash hands with soap and water.*



## BOAT ELECTRICAL

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

The 120V systems are controlled from the AC ELECTRICAL PANEL located **below** the NAV station





The 12-volt DC panel is at the NAV station



## 12-volt DC System

Two batteries support 12-volt DC power:

- 1) Lead-Acid Engine Start Battery in engine compartment
- 2) Lithium-Ion House Battery under aft stateroom bed platform.

The 12-volt BATTERY SWITCHES are located behind the engine compartment in the aft stateroom.

Normally, set all three battery switches in the on (vertical) position at the aft stateroom bulkhead while running the motor. Master, House and Start switches. It is good practice to turn the start battery off AFTER shutting down the engine. Turn the start battery on again prior to running the engine.

**Note: Never turn battery switches on or off while engine is running! Changing the position of the battery switches with the engine running will cause damage! Only change positions with the engine off!**



Primary battery switches

When not connected to shore power, 12V batteries provide all of your electrical power. Therefore, monitor and manage the use of onboard electricity carefully. Turn off electrical devices when they are not being used (lights, instruments, etc.)

Your 12-Volt panel shows all the systems supported by your batteries. Primarily you will be turning on the breakers for your lights, refrigerator, water pressure, electronics, etc. Interior lights are also powered from a circuit breaker on this panel but many have individual switches at each fixture. The bilge pump operates automatically but may be operated manually via the labeled breaker on the 12V panel. Your propane breaker should always be turned off after every use.

## HOUSE BATTERY

A robust Lithium Ion Battery serves as the primary **HOUSE BATTERY** and provides power for all DC systems. When disconnected from shore power, all 12-volt devices drain the house battery.

The house battery energy level can be monitored from the aft cabin gauge. Press the plus button to cycle through the readings including voltage for house and start batteries and percent charge on the house battery.



Alternatively, the house battery can be monitored directly via a free phone app called My-BMS that connects directly to the lithium battery via bluetooth. Select the “12V-300Ah” device. Then select the control panel.

A full lithium battery when resting (not charging) measures 13.4V. A low battery when resting (not charging) will read < 12.8V.



The lithium house battery can be recharged via 1) Solar Panels 2) Engine Alternator 3) 120V outlet while on shore power.

Normal default charging is accomplished with two large solar panels located above the bimini. With sunny days and careful energy management, the house battery will recharge via solar panels alone. While cruising, the solar panel switch pictured below should be on (in the vertical location).



House Solar Switch pictured in the off position. For duration of your cruise, Turn 90 degrees to vertical to connect the lithium battery to solar panels for recharging.

If solar charging is insufficient to maintain the house battery charge day to day, the house battery can also be charged via the engine's alternator by turning the DC to DC switch to vertical. **Never turn switches while the engine is operating as electrical system damage may occur.**

Alternatively, the house battery can be recharged from 120V shore power. The charger plug needs to be run to the aft cabin 120V outlet while connected to shore power.



110V House battery charger can be plugged into shore power (110V outlet).

DC to DC switch in normally off position. Turn to on position (vertical) to charge house battery from the engine alternator. Use only if solar charging is insufficient to return the house battery to full charge at 13.4V.

## START BATTERY

A 12V lead acid battery located forward of the engine in the engine compartment provides start power to the engine and power to the anchor windlass. This battery is charged by the engine alternator (always on). There is also a small solar panel located above the bimini that is dedicated to the start battery (always on). Turn the start battery off at the aft cabin bulkhead when the engine / windlass are not in use. **Never turn battery switches on or off while engine is running!**

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### 12V Lead Acid Battery Voltage Charts

#### 12V Sealed Lead Acid Batteries (AGM & Gel)

| Voltage | Capacity |
|---------|----------|
| 12.89V  | 100%     |
| 12.78V  | 90%      |
| 12.65V  | 80%      |
| 12.51V  | 70%      |
| 12.41V  | 60%      |
| 12.23V  | 50%      |
| 12.11V  | 40%      |
| 11.96V  | 30%      |
| 11.81V  | 20%      |
| 11.70V  | 10%      |
| 11.63V  | 0%       |

916



**WITHROID** AN AFFORDABLE, BRAND-NAME  
Levothyroxine THYROID TREATMENT  
Sodium Tablets, USP [LEARN MORE](#)

See Warnings, Not for Children or Weight Loss. Toxicity may occur if daily hormonal requirement is exceeded. See full Prescribing Information at [DaktronRx.com](#) PP-ADIV-LINK-US-0308

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## 110-Volt AC System (Alternating Current)

SHORE POWER supports all AC equipment (microwave, elec water heater) and receptacles on board, as well as the battery charger. The Main 110 Volt Breaker is below the NAV Station.

To connect to shore power, plug the **POWER CORD** into the boat first (stern, port side), then the dock receptacle. Check the power rating/plug size of the nearest dock receptacle (that is 30-amp, 20 amp, or 15 amp). Secure the cord around the shore power electrical receptacle tower and off the bow. Turn the dock power on.

On the boat, at the AC ELECTRICAL PANEL **UNDER THE NAV STATION**, flip on the AC CIRCUIT BREAKER. If there is no AC power; there is a second circuit breaker to be checked. It is located in the cockpit locker where the shore power cord comes into the boat. Reset breaker if off. Check for reverse polarity – the warning light will show under the AC breaker on the AC panel. Then turn on appropriate breakers for the battery charger, water heater, outlets, etc. Watch your amp meter for load. If the load is exceeded, it will pop the breaker. If you are not getting power to your outlets, check to ensure one of your breakers has not been tripped. If this occurs, wait to turn on one of your systems (i.e., water heater) until the use of power decreases.

## SANITATION SYSTEM

### Marine Toilets (Jabsco)

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 RESPONSIBILITY!** 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 – and use it sparingly, flushing more than once if significant deposits are being made.*

To use the toilet, turn selector knob to wet and pump the handle to place water in the bowl. After using the toilet, discharge as needed then turn the selector to dry bowl. Flush sufficiently to move effluent in the hoses; heavy effluent may clog hoses. Clean the toilet as necessary.

The TOILET SEAWATER THRU-HULL is located under the sink in the head, if you need to shut off the water to the toilet.

## **Holding Tank**

The sanitation HOLDING TANK holds approximately 22 gallons. Be aware of the rate of waste production. (About ½ 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 an EXPENSIVE FIX to you.** Empty the tank every day to avoid this problem. Monitor Water tank level at the tank monitor panel below the dc panel at the nav station.

The holding tank is emptied in one of two ways:

#1 At the Marine Pump out Station, Remove the deck marked WASTE CAP located on the starboard deck above the head. Ensure the gray valve handle above the head is turned fully counter clock-wise (default position). Insert the pump-out nozzle into the waste opening. Double-check your deck fitting! Make sure you have the right deck opening! Turn on the pump and open the valve located on the handle of the hose. When pumping is finished, close the lever on the handle and turn off the 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 the tank. Then repump to leave the tank rinsed for the next charter. This also eliminates any head odors.

#2 The waste tank's contents can be discharged to sea. Note: Overboard discharge is only allowed in Canadian waters. **It is ILLEGAL to discharge overboard within U.S. waters.**

### **To discharge the waste tank to sea:**

**Switch on Macerator breaker at nav station**

**Open Y valve behind the head**

**Open thru-Hull waste discharge under the sink.**

**Operate macerator at switch below and right of the sink, left of the head**

### **Once the holding tank has been discharged,**

**close the thru-hull valve**

**close the Y valve behind the head**

**turn off macerator breaker at nav station**



Waste Discharge  
Y Valve

Macerator  
Switch

## WATER SYSTEMS

### Fresh Water Tank

There is one fresh water tank that hold about 45 gallons. It is located under the forward V-berth. Be mindful of the amount of water you use while washing dishes and taking showers, etc. Wastewater from the sinks and showers drain overboard through a thru-hull located under the galley sink. Monitor water tank level at the tank monitoring panel below the dc breaker panel at the nav station.



Monitor Tank Levels



To refill the tank, remove the **WATER CAP** located on Port fore deck. Attach the hose to the dock spigot and let run for a minute before inserting into deck fitting. Avoid flushing debris from the deck into the tank opening. **DO NOT** fill water and diesel at the same time!



## **Fresh Water Pressure Pump**

The WATER PRESSURE PUMP is located under the head sink.

Activate pump at the DC panel by turning on the Freshwater Pump breaker. If when in use, the water pump continues to run, you are either out of water or might have an air lock and need to bleed the system, which can be corrected by opening up a faucet. **If you run out of water, SHUT OFF the pump and turn off HOT WATER HEATER on the AC panel.** Serious damage can occur to the heating element!

## Hot Water Tank

The HOT WATER HEATER has a 6-gallon capacity tank and heats three ways : 1) when connected to shore power (appropriate 120V breakers are on) 2) off the heat exchanger when the engine is running or 3) when the in-cabin heating system is in operation (slow to heat but works well with patience). Do not use the water heater if the water tank level is very low. The water heater is located under the aft section of curved, starboard settee.

## Shower & Toilet

Before taking a SHOWER, make sure both the Freshwater Pump and Shower Pump breakers are on. To activate the hand-held wand, pull the hose out of the sink and attach it to the wall spray holder. 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. Flick the SHOWER DRAIN switch in the head, below the sink to the left to drain shower. Check for accumulation of hair in the shower and sink drains and pick up any accumulation, as it clogs the hoses. Ensure that the faucets and nozzle are completely off After use to save water.



Shower Switch location

## GALLEY

### Propane Stove

The boat is equipped with a low-pressure propane system for cooking. The propane tank is located in the port AFT cockpit locker. Your propane stove is activated by the following steps:

#1 Open the tank valve.

#2 Ensure breaker labeled Gas Valve at DC Panel is on. This is the power supply to the sniffer/solenoid.

#3 Turn on the gas at the stove (use a match or BBQ lighter in the kitchen utensil drawer) and light the burner. You might need to hold the knob in for a few seconds while the thermocouple warms up. When lighting for the first time, allow a few seconds for the gas to travel from the tank to the stove. If burners fail to light, use a BBQ lighter located in the galley drawer.

#4. When finished cooking, turn off the switches and **close valve at the bottle.**

**Please be very careful not to put the kettle, coffee percolator or any hot pans on the counter tops, they will burn the counter tops!**

### Microwave Oven only operates when on shore power

### Refrigeration /freezer

The REFRIGERATOR operates on 12-volt power. Carefully monitor the use of the refrigerator. There is both a breaker on the DC panel and a thermostat in the refrigerator /freezer. AYC will supplement you with 2 bags of ice. **The refrigerator should be turned OFF at night** when sleeping to minimize battery use. Use a cooler, when possible, for all your drinks to keep the refrigerator door closed as much as possible.

## **HEATING with DIESEL HEATER**

**NOTE TWO BREAKERS AT the NAV STATION INSTRUMENT PANEL MUST BE ON.**

**Never turn off the breaker if the heater is operating.**

### **Turning on**

1. Remove 2 ea exhaust caps on the port stern.
2. Switch on heater at thermostat forward facing bulkhead near NAV station and adjust temperature to desired level.
3. Turn on two switches marked “heater” at nav station.

### **Turning off**

1. Turn off the thermostat
2. Wait for the system to cycle off, 10 minutes should do.
3. Turn off two switches marked “heater” at nav station.
4. Replace caps at port stern.

## **ELECTRONICS**

TURN ON ELECTRONICS BREAKER AT 12V DISTRIBUTION PANEL. (See page 9)

All electronic manuals are located under the NAV Station table. Also turn on breaker marked 12V Ped. This breaker delivers 12v power to the boat’s horn and to the pedestal/helm’s 12v socket.

### **VHF Radio**

The Standard VHF radio is located at the portside of helm station. Make sure the breaker is located at the DC panel (electronics). Monitor channel 16 at all times. VHF operation is covered in detail in the Moorings Beneteau manual located under the NAV station/table.

### **Wind Instruments, Plotter, Autopilot and Radar**

Turning on the electronics and Navigation equipment should be very simple. Flip the switches on the NAV panel. Remove the helm canvas cover and protective covers to the instruments at the helm. When done, replace all covers.

### **Boat Horn**

The boat horn button is located at the right side of the helm above the engine throttle handle. **The 12V Ped / Boat Horn breaker must be on for the horn to operate!**

## ENTERTAINMENT SYSTEMS

### CD/Aux/AM/FM Stereo Radio

The AM/FM stereo radio unit is located at the NAV Station. It operates like a normal car radio. There are speakers (stereo) in the salon and on the deck. There is an auxiliary USB power at the NAV station, flip the 12V INT switch to use this power source for your iPhone, iPod or other devices.

## ANCHORING

The primary WORKING ANCHOR is a 35# CQR/Plow and is attached to chain and line. The rode is passed through the deck from the ANCHOR LOCKER.

MAKE SURE BREAKER IS TURNED ON AND HAVE THE ENGINE RUNNING TO USE THE WINDLASS!

Close the Windlass breaker at the Nav Station. By pressing the yellow lever up and clicking in.



Windlass Breaker pictured in the normally open-off position. Push yellow lever up until it clicks to closed-on position.

The anchor windlass is operated from the bow with Up/Down switches. Monitor deployment and uptake of anchor chain. Monitor chain deployment and uptake to ensure smooth operation. **CAUTION - Do not handle chain or rode while operating windlass!** Stop windlass operations if chain / rode adjustment is necessary.

Let out sufficient ANCHOR RODE (chain and line) before setting the anchor. 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.

Turn windlass breaker open-off when not in use.

Before raising the anchor, start the engine. as the boat moves toward the anchor **on engine power**, pressing the 'up' control to take up slack line as you move forward. Do not pull the line tight. When you are directly over the anchor, raise the anchor up with the windlass, giving the windlass short rests as you are pulling and raising the anchor. Place yourself in position to guide the anchor onto the roller. Reconnect the keeper line.

Coordinate the maneuver with the helmsperson to remain steady above the anchor as it is raised. As the anchor rises, be careful not to allow it to swing against the hull.

The SPARE ANCHOR and RODE is normally stowed IN THE AFT PORT LAZARETTE. Make sure that the Rode is securely attached to the boat before use.

## **Mooring Buoys**

Mooring buoys 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 BUOY into the wind as you would for anchoring. Have crewmembers 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 buoy, have the crew holding the boat hook point at the buoy with the hook so the skipper always knows where it is. Hook the buoy and bring the ring up to the boat to allow the second crew to thread the ring with the line. Release 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 buoy.

# SAILS AND RIGGING

## Jib

There is a Jib on a roller furler. The furling line runs on the starboard side to the cockpit. To unfurl the headsail, (a) uncleat the furling lines, (b) wrap the sheet around the appropriate winch, (c) pull the sheet AFT while maintaining tension on the furling line, (d) cleat when it is fully out or when to point of appropriate reef.

To furl the jib, apply slight tension on the jib sheet while pulling on the furling line until there are 2 wraps of the sheet around the sail. Jib sheets are led back to the cockpit to two winches. Adjust fairleads forward in heavy air, AFT in light wind.

## Mainsail

The mainsail is furled in the mast when not in use. Never loosen the main halyard. A loose main halyard will assure a JAMBED mainsail.

Unfurling: Head into the wind such that the sail is not powered by the wind. Loosen the main sheet to ensure the sail is de-powered. Tighten the boom vang to minimize boom lift. Utilize the red (port) outhaul line on the port side cabin top winch to pull/unfurl the main sail while keeping slight tension on the white (starboard) inhaul line as it coils into the mast. Once the unfurl has begun, a very slight starboard tack / slight power up of the main sail may assist with unfurling.

Un-jambing a furled main. Do not over pressure the outhaul or inhaul lines. A crew member at the mast can often ease the initial unfurling operation by simultaneously pulling the sail clew down and out while a crew member in the cockpit is working the inhaul/outhaul lines. Patiently working the main sail in and out can be helpful with a persistent jammed furled main jamb.

Furling: Head into the wind with a very slight starboard tack – very light power on the sail. Loosen the main sheet, tighten the boom vang. The goal is to furl the main sail into the mast, coiling it smoothly to avoid jams the next time you unfurl. Utilize the starboard cabin-top winch to pull on the white inhaul line, slowly coiling the main in. Keep some tension on the red outhaul line such that the sail wraps smoothly into the mast. Do not furl-in more than 90% of the sail. Leave approximately 2-3 feet of the foot of the sail exposed to prevent potential jams.

Reefing can be achieved by partially furling the main.

All Main and Jib sheets, halyards and traveler are all operated from the cockpit. There is no whisker pole, and no spinnaker setup.

## ***Troubleshooting:***

Sometimes, the furling line gets stuck part way through the furling process. This is usually due to not applying proper tension on lines during the furling and unfurling process. Try letting the sail in / out and repeating the process. Be sure you are headed into the wind to reduce pressure on the rig.

## BARBECUE

"The BARBECUE is stowed in the port lazarette. Operate the barbeque on the port side fold down seat.

Attach a PROPANE BOTTLE to the REGULATOR. Carefully light the unit, preferably with a long-stem butane lighter. The barbecue generates a lot of heat and cooks hot and fast. Do not cover the unit until it has cooled completely. Please wipe with a paper towel before storing to prevent grease and dirt soiling the boat.

*Note: Propane bottles are stocked in the AYC office. You will need to purchase one if extras are not found on board. (AFT port locker vicinity propane tank.)*

*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 in the propane locker. Ensure gasoline and flammable materials are not near the barbecue.***

## DINGHY

Lower dinghy from deployment system, make sure plug, oars and seat are in dinghy. Mount the electric Outboard from its storage location in the lazarette locker. Lock the outboard to the dingy utilizing the lock and cable provided on the dingy. **Never tow the dinghy with the engine mounted.**

**If towing a short distance**, make sure that a responsible individual is always keeping an eye on its tow rope when slowing down or stopping. Bring up all the slack to prevent a wrap around the prop.

After the dinghy is in the water and ready to go (PFDs etc.), operate the electric motor. A manual for the e-lite outboard is stored with the other boat manuals – quick guide in the storage netting above the sink. Motor operation is relatively straightforward. With quick release magnet in place, Press power button for two seconds to turn on and same to turn off. Install quick release wristband/magnet. Twist the throttle to apply thrust forward or back. If the wrist band is unavailable, the outboard will power up with a six second press of the power button. Outboard has an internal lithium battery, Please stop operating the motor at 5% to preserve the battery. Always bring oars for backup propulsion!



When done with the dingy/outboard, rinse off salt water and debris on the outboard with fresh water from the shower nozzle on the swim platform. Return the outboard to the lazarette as it was previously stored – including the quick release magnet wrist band.

**Recharging the Outboard:** The internal battery to the outboard will likely require recharging during your cruise. The outboard can be recharged from the 12V house battery with an inverter or from 120V shore power (if available). The provided inverter can only be powered at the 30A 12V socket that is installed at the aft cabin locker just below the 120V outlet. The outboard charger and inverter are both stowed on top of the aft stateroom locker for this purpose. The outboard motor should be recharged in the boat open cockpit by utilizing a 120V extension cord (stowed in the aft cabin locker or hung with starboard lines by the hatchway) - run cord through the aft cabin ceiling hatch. It takes approximately 4 hours to fully recharge a depleted outboard battery via 120V shore power or 12V house battery with the provided inverter. The charger will automatically stop charging when the outboard battery reaches 100% charge. It is suggested that you recharge the outboard at night while sleeping.

When heading to shore, use **EXTREME CAUTION**. Choose an area free of any large rocks that might cause damage in beaching. Make sure the engine gets tilted up a safe distance from shore so the prop does not hit the bottom or shear the pin. Lift up on the dinghy to bring it up to higher ground. Secure it when leaving as tides come up very quickly.

When returning to the boat, leave your shore shoes in the cockpit or on the swim platform and slip on your deck shoes or slippers to keep the boat neat and tidy. The swim platform shower nozzle can be used to rinse off shoes, boots, dingy and the outboard motor.

## **BILGE PUMPS**

Maritana is equipped with an AUTOMATIC BILGE PUMP that is hard wired to the battery. It can also be operated by switching on the bilge pump breaker on the DC panel. Normally, the switch will be left in the OFF position. You may occasionally hear the pump operate due to condensation and water from the shaft log accumulating in the bilge. If you continually hear the bilge pump running, check your bilge! You may have a serious problem!

ONE AUXILIARY HAND OPERATED BILGE PUMP is located aft of the port lazarette. A handle is located in the port lazarette. These are operated by an up and down motion with the handle. Use only in emergency situations.

The ENGINE SPARES / TOOLS are located under the curved settee, forward underseat locker. This includes oil filters, raw water impeller; fuel filters, belts, spare water pump and other small parts. Extra oil is stowed under the galley sink. Coolant are also located in port lazarette.

## CRABBING AND FISHING

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 dangled in your prop as you swing with wind or current. It is best to use the dinghy to set your crab pot/ring away from the boat. A partially open can of seafood or cat food 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.

## SAFETY EQUIPMENT

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 in the port lazarette. Two compact inflatable life jackets are stowed in the forward and or aft stateroom lockers. A few should always be out and readily available. Numerous flotation cushions are also available.

Your flares, first aid kit and other safety equipment is located under the NAV station seat.

There is a MOM flotation sling on the port AFT railing.

There is a throwable flotation device stowed on the aft railing.

A portable auxiliary swim ladder is stowed on the cockpit lazarette (next to the barbecue) for hanging from a deck cleat (in the case that the dingy is stowed and blocking the swim platform and ladder. For maximum safety it is recommended that you tow your dingy – leaving the swim platform available for emergency and other uses while underway.

Always keep a sharp lookout posted for logs, deadheads, or other flotsam and jetsam. A log hitting your prop can ruin your vacation. Likewise steer clear of floating debris that could clog the seawater intake under the boat that is essential for operating your engine.