Notes from the Owners of No Ties

2017 Jeanneau Sun Odyssey 389



Dear Friends,

Welcome aboard No Ties!

We have just placed *No Ties* in charter with San Juan Sailing for the 2022 season. We know San Juan Sailing and their superb charter guests will take good care of her! We think the SO 389 is one of the best all-around designs for a 39'. And the sailing is fantastic!

Why is she named *No Ties*? Well, 2021 was an interesting year for us; we sold our small business we have had for over 20 years, and with no children in the house, we found ourselves wanting some adventure. So, with nothing specific *Tying* us to stay in one location, we bought our Jeanneau 389 hoping to go on some lengthy adventures – hence *No Ties*!

There are lots of goodies on *No Ties*, which we hope enhance your charter experience including an optional Code Zero Spinnaker, New Electronics, Lithium Ion batteries, bbq grille, and our favorite feature: the large fold-down swim platform!

We've made many wonderful cruising memories in the San Juan Islands and points north...our hope is that you enjoy *No Ties* as much as we do. If something comes up, please feel free to give us a call at 206.571.1009.

If you can think of anything...anything at all...that would make her more enjoyable for you, please let us know through San Juan Sailing. We've tried not to overlook any detail in our effort to make her our ultimate sailboat.

We wish you fair winds and wonderful memories. Thank you for being our guests!

Sincerely,

Josh & Tonia Feinstein No Ties info@clovercharters.com 206.571.1009

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1. Specifications and Vessel Information

Vessel Information:

Washington State Parks Annual Permit Decal – Located on the cabin exterior, port side aft.

U.S. Customs Re-Entry Decal – Located on the aft side of the helm binnacle.

Vessel Official Number - 1321151 (same number as shown on the Coast Guard Certificate of Documentation found in Section 5 Documentation of the Charter Guest Reference Manual (white binder). No Ties number is located on the inside of the engine hatch/stairs. Look for 3" high black characters.

Coast Guard Boarding Document – Refer to the Charter Guest Reference Manual (white binder), Section 5 Documentation. Explains what to expect if you are boarded by the Coast Guard and where to find the information/equipment they may ask to see as part of their safety inspection.

Specifications:

Year:	2017	Engine:	Yanmar 3YM30AW
Make/Model:	Jeanneau Sun Oddysey	Fuel:	39 US Gal
	389		
LOA:	38' 7"	Water:	87 US Gal (2 Tanks)
Beam:	12' 4"	Holding:	21.1 US Gal
Draft:	6' 6"	Heads:	(1) Electric
Displacement:	15,256. (Dry)	Electronics:	Raymarine

Staterooms:	Aft King, Forward V Double
Aft Stateroom:	Headroom: 6"-3", Berth Dimensions: 80"w x 105"d
Stateroom 2:	Headroom: 5' 11", Berth Dimensions: 82"w x 106"d
Salon Headrm:	6' 3"

2. Nuances

There are a few things about No Ties that are not 'typical'. These are the things that may require special attention or where it may be best to deviate from customary operating procedures. We have listed some here because we believe they will help you plan your charter.

- 1. Please keep engine under 2500 RPM. This will give you ~6.5kts under power
- 2. House Battery system is a new LiFePO4 Lithium setup which is a bit different to operate than standard Flooded/AGM batteries. Full Charge is ****, Can discharge to ~40% remaining. A buzzer will sound if the house batteries are going to be cutoff by the Battery Monitoring System. This will give you approximately 5 minutes before losing House Battery power. See Battery section.
- 3. There are **two water tanks** which much be switched between to use all available water. **See Water section.**
- **4.** The Waste Tank level is indicated by the lower right tank icon on the Tecma flush switch. Red means full. The meter goes from Green to Red, no middle level is indicated.
- 5. Please be very careful lowering the swim platform it is heavy! Use the attached line with knots to lower. See swim platform section.

3. Emergency/Safety Equipment

You are not likely to need these, but must know their location.

Bilge Pump (Manual) and Handle. Pump Located on the port side bench cockpit helm side. Handle clips to underside of port side bench cockpit seat. Note: if water rises above floorboards, can use shower sump pumps also in emergency.

Carbon Monoxide Detectors. Above Nav Desk, Forward & Aft Cabins.

Cockpit Cushions. In case of COB, throw anything that floats, quickly.

Emergency Tiller. Long curved pipe in port cockpit locker.

Fire Extinguishers (3): storage locker by charger, aft cabin inside locker, forward cabin inside locker.

Fire Extinguisher (Engine Access): The engine compartment has a port that makes it possible to discharge the extinguishing product inside without opening the usual access hatches.

First Aid Kit. In salon head vanity cabinet.





Flares (Pyrotechnic - 3). In orange mesh bag in cabinet above nav desk.

Flashlights. Above navigation desk mounted to wall; in forward cabin on window ledge; in aft cabin on window ledge.

Horn, handheld. In orange mesh bag in cabinet above navigation desk.

Lifesling, Port stern pulpit. Please review the cartoons on the face of the case for procedures. The lanyard is secured to the boat so that tossing the floating harness allows it to tow behind the boat like a ski tow rope. Circling the person overboard will draw the recovery line near them.

PFDs – Inflatables (4). Located in the stateroom hanging lockers. NSO: please check for "green" visible at bottom of clear canister before each cruise. That verifies the auto-inflate function when immersed. We wear these at all times when working the deck and often in the cockpit.

PFDs - Foam Vests (2). Located in the salon locker next to nav desk.

Propane Detector. The Trident propane detector and solenoid switch control panel is located in the salon on the forward side of the AC/DC panel at the nav station.

Radar Reflector (tube style). Port shroud above first spreader.

Steering – Emergency Tiller. Access port located aft of the cockpit center table. Emergency Tiller located in main port storage locker.





Tapered Plug, Universal Foam Orange StaPlug. In orange mesh bag in cabinet above nav station seat.

Tools and Spares. Port storage locker – access through rear of shower.

VHF Radios. Channel 16. VHF base unit at nav station and handheld at helm.

Windlass Clutch Release/Tighten tool (a winch handle). Cockpit center table storage.

4. Anchors and Windlass <u>Highlights</u>

- Windlass controller is in the anchor locker.
- Windlass only works while the engine is running.

CHAIN LENGTH MARKING

2' lengths of line woven into chain:

- 1 piece every 25'
- 2 pieces at 100' + 200'

- Chain length markings: 150' of chain marked with 1 piece of yellow line at 25' intervals and 2 pieces of yellow line side by side at 100'. At 150 feet of chain, it will switch to a 6 foot nylon line that connects to the boat for safety. The placard show on the right is glued to the inside of the anchor locker door as a reminder.
- Windlass clutch release/tighten tool (a winch handle) is located inside the bow anchor locker. If the windlass slips when raising the anchor the clutch may need to be tightened. In an emergency, if the anchor needs to be lowered quickly the clutch can be loosened. Keep enough tension on the clutch so the chain pays out at a controlled rate keep an eye on the chain pile and be prepared to tighten the clutch if a knot of chain is pulled up.
- <u>The windlass gypsy is not designed to hold the boat while anchored</u>, so please use the bridle with chain hook to hold the chain while anchored.
- Please avoid chipping the bow with the anchor by raising/lowering the anchor past the anchor roller by hand when it is out of the water.
- Turn ON the Anchor light overnight. Breaker switch is labeled and located on the DC panel at the nav station.
- Secondary/Spare anchor is stowed in center aft storage area between cockpit seats.

<u>Details</u>

<u>Main anchor</u> – 33# Rocna Vulcan mounted on the bow, with 260' 3/8" chain marked with 10' yellow paint at 100', and 5' yellow at 150' and 200'.

<u>Snubber</u> - We use light snubber employed in photo for both nested anchor underway and for overnight if light predicted breeze. If winds forecast, we use 10' heavy snubber shown coiled.

<u>Secondary</u> – Heavy duty but light weight 13# Guardian anchor stowed in the port cockpit locker under the seat, with 50' 5/16" chain and 200' rode in separate bag.

To Deploy Anchor:

- 1) The windlass only works while the engine is running.
- 2) We check tide tables to determine current water level and amount of drop while anchored.
- 3) Weather (ch 4, "Northern Inland Waters" or ch 7) helps select a safe anchorage.
- 4) The windlass remote is in the anchor storage locker.
- 5) Normal for the islands is a 4 to 1 scope, bow to bottom (add 5 feet to depthsounder reading: 4' freeboard and 1' for transducer below waterline). In San Juans, anchorages are often about 25' bow to bottom, so we often deploy about 100' chain—hence the 10' marker at 100'.
- 6) To avoid hitting the hull when initially lowering the anchor, we do the following to prevent the anchor from swinging as it travels over the roller: Push the anchor forward keeping the shank *level* before gradually allowing the shank to rise as we ease it forward slowly into the hanging position (no swing!).

- 7) Lower the anchor to approximately the number of feet on the depthsounder so the anchor is on the bottom, either by easing the brake or depressing the down switch on the remote. To loosen, pull aft, then use a pulsing motion to moderate gravity descent.
- 8) A signal to the helmsman prompts reverse at idle speed while deploying rode to the desired scope.
- 9) We then allow the anchor to set and to stop the boat while it continues in reverse, idle speed. We then line up objects on shore to determine if we are holding, staying in reverse at idle for about one minute.
- 10) Finally, we reset the anchor bridle. The loops go over the bow cleats and then lower until chain is sufficiently slack.
- 11) Then ease the windlass so it is not under strain.
- 12) If stronger winds are forecast, we test with RPM at half the projected windspeed (1,000 rpm for winds to 20 knots; 1,500 rpm for 30 knots, etc), *after* setting snubber. (We check movement shoreside, not the significant prop current going by the chain.)
- 13) In storm conditions (or storm forecast), you can increase scope if there is adequate room to leeward.
- 14) The secondary anchor is available for additional holding power if a storm is anticipated, but best if set before the storm hits.
- 15) If anchored in a small cove, you may wish to deploy a line ashore. 600' floating polypropylene on a reel resides in a cockpit locker. Open transom doors; use the mop handle as an axle through the reel; set mop handle on helm seats. Deploy the line with the dinghy while the spool unwinds. If sufficient length, bring the line around a secure shore object and back to the boat to a transom cleat for ease of retrieval.

To retrieve the anchor:

- 1) Start the engine, the windlass only works while the engine is running.
- 2) Depress "up" switch on the windlass remote, always assuring the chain is vertical during retrieval—this avoids either towing the boat or dragging the chain against the hull. Into a breeze, we engage forward gear as needed, but exercise care that we don't overstand and drag the chain against the hull.
- 3) Push down the mountain of chain that will typically pile up on the sloped shelf in the locker with the boat hook. A mountain on chain under the windlass can jam it and in rare cases cause a wild gravity runout of rode. If that happens, stand clear for safety. We can avoid that chain "mountain" by "lifting" the chain forward in the well as it is retrieved, using the boat hook. We grab the chain with the boat hook and pull it forward as another crew feeds it by pressing the "up" switch, 2'-3' at a time. Important for the initial chain retrieved. Last 50' can stack under windlass ok.
- 4) As the length of rode remaining approaches the water depth, the sound of the windlass laboring alerts us to immediately stop. Sometimes a brief pause will cause the anchor to break free, given the 90 degree angle of pull. A brief tap on the button, if laboring, says to break out the anchor with the engine in idle forward, not with the windlass.

- 5) To nest the anchor without chipping the hull, the anchor may need to be swiveled. We use the windlass to bring the anchor shank up and over the bow roller in one continuous motion, then nest the anchor by hand.
- 6) After nesting, with a slight *slack in the chain*; we secure the anchor once again with the light snubber attached to the bow pulpit rail. As noted, the chain is only "unsnubbed" when it is moving in or out.
- 7) Reminder: replace the remote in its holder before closing the anchor locker door.

5. Barbecue

<u>Highlights</u>

• Please close the shut-off valve and clean grill when finished cooking.

Details

To operate:

- Turn propane solenoid switch to ON (located in the galley lower cabinet face under sink).
- Turn on valve marked BBQ in the propane storage locker under the starboard helm seat.
- Check for leaks prior to use.
- Open lid \ Depress knob & rotate counter-clockwise to the "HIGH" position.
- Push Electronic Pulse Igniter & Visually confirm ignition.
- Turn knob to adjust flame.
 - If grill does not light, ensure that a burner electrode spark cap is directly above electrode.
- MATCH LIGHTING INSTRUCTIONS
 - Open lid during lighting.
 - Place flame up to burner through the match light hole.
 - Depress valve and turn counter-clockwise to the "High" position.
 - Visually confirm ignition.
- Always turn off valve and remove from grill prior when finished.

6. Batteries, Charging and Inverter

<u>Important</u> No Ties uses a new LiFePO4 Lithium Battery System. Lithium provides more useable power than traditional lead acid (Flooded, AGM, etc.) and some slightly different care is required. LifePO4 batteries also have different charge/discharge characteristics. Please see below.

<u>Notes</u>

- Please keep batteries above 13v at all times. 13.5v is what the batteries will show on float charge (with all loads turned OFF including the fridge and when not charging).
- When charging, battery voltage will read between 14-14.5v when Absorb charging.
- An Alarm will sound before the Lithium Battery Management will shut off the house batteries to prevent over-discharge.

Highlights

- Ensure batteries are charging when connected to shore power see details below in Battery Charging section.
- When underway the engine is automatically charging all batteries.
- At anchor, there is no generator on board but the house battery bank is ample enough to handle normal DC loads including lights, the fridge, diesel cabin heater and entertainment systems.
- Caution is needed when inverting and using 120V power. Only low draw (wattage) items like phone charging or computers. High wattage items like microwave oven, hair dryers and electric heaters will kill the batteries.

<u>Details</u>

BATTERIES

No Ties has the following battery groups on board:

- Engine start (single Group 24 AGM battery)
- House (200AH LiFePO4 Lithium Battery provide roughly same usable AH as ~300AH of traditional)

All batteries are charged automatically when connected to shore power with BLUE DOT breakers ON and the Victron Controller Inverter is set to Charger Only or ON, or while the engine is running.

Battery disconnect switches

• The battery disconnect rotary dial switches are located on the forward face of the starboard aft berth.



- 1. Engine battery positive isolator switch
- 2. Common battery negative isolator switch
- 3. Service batteries positive isolator switch
- The switches should remain in the ON position except in the unlikely event that the engine start battery is depleted. To use the house batteries to start the engine, turn the house battery switch to the "COMBINED" position and try restarting the engine.
- After the engine starts, turn the house battery switch back to the "BOTH" position.
- After running the engine at cruise RPM for at least 1 hr, turn off the engine and try to restart. If it restarts using the start battery with no hesitation then you are good to go. If the engine won't start or the start battery is slow cranking then contact the SJS office.

CHARGING/INVERTING

Vessel name has been equipped with a state of the art Victron power management system which includes a charger and an inverter. The Victron control panel is shown in the photos below. It is located under the AC/DC panels above the Navigation Desk area.

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Confirming or Changing Inverter/Charger State

- 1. Tap the screen to turn on the screen.
- 2. Tap again to bring up the blue Menu bar (shown pic 1 on bottom of screen).
- 3. Tap Menu to bring up the Device List (pic 2).
- 4. Tap the Grey Button to the right of the MuliPlus Line (pic 2, shown as "Inverting")
- 5. Tap the Grey button to the right of Switch (pic 3, shown as "On")
- 6. Select Charger State (Typically ON or Charger Only.

The Scheiber AC/DC & Gauge panel also shows a voltage reading from the house and starter batteries.

Charging – Shore Power

- 1. Connect the 30Amp shore power cord to the SHORE 1 receptacle on the port side cockpit area.
- 2. Connect the power cord to the Shore Power Receptacle on the Dock.
- 3. Turn ON the Shore Power breaker at Dock.

- 4. Flip ON the Main Breaker located under the Port Side helm seat (See image to right).
- 5. Flip ON the BATTERY CHARGER breakers on the AC panel.
- Normally the Victron panel will automatically start charging (after a 20 second startup) and indicate Bulk, Float or Absorb charging. Push the rotary button to light up the display. If the display does not show charging, check the Inverter Charge State as described above.

Charging – Engine

• All batteries are automatically being charged when the engine is running.

- If 120V power is needed for low wattage devices when shore power is not available, the Inverter can be turned ON.
- The inverter powers the 120V outlets.
- Please see the Confirming or Changing Inverter/Charger State section above for how to turn on or off
- On the AC panel, flip ON the AC Outlet switch
- Please turn the inverter OFF when not in use.

7. Berths and Bedding

[insert photos if dinette conversion]

No Ties has two cabins and a convertible settee. A nearly King Size aft cabin and a forward cabin with an approximate queen size bed, both including hanging lockers and storage areas. There are ample sources of lighting in each berth, with individual controls located on the overhead lighting and for reading lights. All hatches come equipped with sliding pull-out covers and sliding pull-out screens. In the forward cabin, you'll find a grey round vent button on the hatch cover. Push this button up to help reduce condensation in the cabin when the hatch is closed.

The settee in the main salon converts into a full-size bed:

- 1. The bed conversion cushion is located in the Port Storage Locker
- 2. Drop the salon table leaves
- 3. Lift and lock the two side support brackets
- 4. Unfold the bed support panels (note: they are held in place by heavy-duty, you may have to pull a little hard to release to unfold)
- 5. Lay bed support panels on side brackets
- 6. Insert conversion cushion. Viola!

8. Bilge Pumps

<u>Highlights</u>

- Emergency Bilge Pump (manually operated): located at the starboard helm seat. The pump cover plate doubles as the pump handle.
- Electric Bilge Pump: Has an automatic float switch. The pump is located under the center floor panel adjacent to the desk area it has a latch for lifting. Check the strainer on the pump inlet for any clogging debris and remove if needed.
- Please visually inspect the bilge each day, which is accessed by lifting the floorboard in front of the main salon table. The refrigerator drains into the bilge, so most accumulated water is from melting ice and condensation. The intake tube is at the lowest point in the bilge.

Details

- 1. <u>Emergency Hand Bilge Pump</u> This hand operated pump is located at the port helm station. The bilge pump handle is clipped to the underside of the port cockpit seat/storage locker access hatch.
- <u>Electric Bilge Pump</u> Has an automatic float switch. The pump is located under the center floor panel adjacent to the desk area – it has a latch for lifting. Note: the circuit breaker labeled "Bilge pump" must be "on" at all times for the float switch to work (marked by "double green" dots). If pump fails to empty bilge, we check the strainer in case it may have become clogged with debris.

Note: in emergencies, the shower sump pumps can be turned on if water rises into the heads.

9. Dinghy and Outboard

<u>Highlights</u>

- 10' fiberglass hulled West Marine dinghy (2017), 2.3hp Honda outboard.
- Tow the dinghy 6' off stern using the starboard cleat (the side away from the diesel exhaust). Use a proper cleat hitch and for peace of mind tie off the painter's bitter end to base of the stern pulpit. In very rough conditions, towing the dinghy from the low side makes it unlikely the dinghy will flip in the wind and waves.
- Please don't tow with outboard attached to dinghy or leave on the dinghy overnight.
- Inflatable tube air pump located in the port storage locker.
- Inflatable tube patch kit located with the general spares in port storage locker.

- The 2.3hp Honda outboard is air cooled 4-stroke and takes straight gas.
- The spare 1-1/4 gal orange gas can is filled 2/3 full (for expansion in hot weather) by our staff. We will top it off when you return the boat, no charge. We stow it in the dinghy, tied to the transom. For safety, please *never* store gasoline in a compartment on board [vessel name].

<u>Details</u>

Towing the Dinghy

Always remove the outboard motor dinghy before towing. We leave the **red** spare gas can for the outboard engine in the dingy, tied off to the transom. Towing works best when the dinghy is brought close to the boat with 4-5 feet of painter line between the stern and the towing bridle of the dinghy. This lifts the bow out of the water and reduces drag. To keep the dinghy away from engine exhaust, tie the painter off at the starboard stern cleat with a standard cleat knot, then attach the bitter end to the stern rail using a rolling hitch or similar secure knot.

OPERATING TIP: Leave the self-bailing valve (located in the stern) open when towing to let any accumulated water drain out. Close it when ready to use the dinghy.

Preparing the Outboard

- 1. Unlock the outboard (combination is listed on your charter packet) and reattach the lock nearby on the stern rail.
- Carefully loosen the mounting screws on the outboard bracket keeping one hand on the outboard handle at all times or tie the motor off to a dock line attached to [vessel name]. We actually witnessed a crew member allowing an outboard to flip off the rail and quickly sink into 30 feet of water!
- 3. Transferring the outboard to the dinghy is best accomplished by having one crew member in the dinghy to receive the outboard from another crew member on deck, rather than a single crew member trying to get off the boat and onto the dinghy with outboard in hand. Although the outboard is relatively light, it should be handled carefully.

Starting the Outboard

1. Open the fuel valve by pushing the fuel valve lever (starboard aft corner of the outboard) aft to the ON position.

- 2. Pull the choke all the way out (starboard forward corner of the outboard).
- 3. Open the air vent on the top of the fuel cap (top of outboard) by turning the indicator half way between ON and OFF. We have discovered that turning the indicator all the way to ON will sometimes cause the valve to close.
- 4. Make sure the black U-shaped kill clip (attached to the red or gray lanyard) is clipped into the red shut-off knob (port forward corner of the outboard).
- 5. Turn the throttle handle to the start position. There is a friction thumb screw that can be tightened to hold the throttle in the start position.
- 6. NOTE: The motor has a centrifugal clutch (no gear shift) the propeller will spin when the RPM is above idle. Please make sure the dinghy is securely tied to [vessel name] as the dinghy will surge forward when the motor first starts up at the starting RPM then will stop when you turn the throttle back to idle RPM after warmed up (about 10 seconds).
- 7. Pull the starter cord quickly then repeat a few times if needed until the motor starts. (You shouldn't have to pull it more than 5 times.)

8. Slowly push the choke back in shortly after the engine starts (after about 5 or 10 seconds). If the motor starts to run rough then ease the choke back out for another 5 seconds and then try pushing back in. Turn the throttle back to idle.

While Outboard Is Running

- 1. Keep the red lanyard kill clip connected to your belt or PFD while operating.
- The motor has a centrifugal clutch (no gear shift) the propeller will spin when the RPM is above idle just throttle up to go forward and throttle down to stop. If you want to go in reverse just swivel the outboard around 180 degrees and throttle up.
- 3. Note that you will only have steerage when the propeller is driving the boat (throttle above idle RPM).

Arriving at the Beach

- 1. Before you hit the beach and while still in a few feet of water, stop the motor by pushing in the red shutoff knob (where the kill clip is clipped in) or just pull the red lanyard until the clip pops off. Close the fuel valve and vent lever (the motor will leak fuel when tilted if these are not closed. Also, the carburetor will be flooded making it hard to restart the motor).
- Tilt the motor out of the water by pulling the motor head forward until it stops you should here a "click" as the tilt support locks in place. Note that the motor is held is the lowered position by friction from large a rubber clip that grips the shaft. Very little force is needed to pull the motor shaft out of the clip.

- 3. To tilt the outboard back in the water, first pull on the motor head slightly to take the strain off the tilt lock then release the tilt lock by lifting up the black handled lever below the motor head on the starboard side of the shaft.
- 4. Please do not drag the dinghy up the beach over sharp rocks and barnacles.
- 5. Secure the painter to ensure the dinghy doesn't float away on a rising tide.

When The Outboard Is Not In Use

- 1. Put the outboard back on the outboard mount on *No Ties* stern rail and tighten both bracket screws.
- 2. Put the combination lock back on the bracket screws.
- 3. Close the fuel valve and fuel cap vent.
- 4. Put the blue Honda cover back on the motor head.

Outboard Troubleshooting

- If the motor won't start, review steps 1-8 above to make sure you've correctly done all 8 steps.
- A faulty Spark Plug is often the problem. There is a blue "Honda Outboard Tools" kit containing a spare spark plug and spark plug wrench in the "Engine Spares" box. If you use the spare spark plug, notify your check-in skipper upon your return so a new one can be placed aboard for future guests.
- If the motor is running fine and suddenly quits then it is often because the fuel cap vent is closed.
- If the motor is running fine but the propeller won't spin with the RPM above idle then the shear pin is probably broken. Put the motor back on the stern rail bracket, take the cotter pin out to remove the propeller and replace the broken shear pin. A spare pin is located the forward underside the motor head.

Inflating the Dinghy

If the dinghy needs inflation, the foot pump is in the port side storage locker. The dinghy has three (3) baffles, each with an inflation valve located on the inside of the boat, plus an inflatable keel. The keel's inflation valve is in an opening in the bow floor board. Use the **black** adapter to inflate the main baffles. Use the **grey** adapter to inflate the keel.

The foot pump is held closed with a locking clasp. Release the clasp, insert the appropriate inflation nozzle onto the valve and give a ¼ turn to lock it in place. Inflate the baffle or keel with the foot pump until it is firm. When done, carefully detach the inflation hose. If the valve is still open, press it once to close it.

If you need to make a repair, the repair kit and instructions can be found in in the tools and spare parts storage compartment located under the main salon seat.

10. Dodger and Bimini

<u>Highlights</u>

• Hint: if we get early morning dew fogging our dodger glass, or salt crystals from spray, we rinse off with a pan of fresh water from the galley (salt crystals may need a second splash). *Please avoid wiping*

the Dodger windows as they scratch easily. By the way, if you or your guests use aerosol sunscreen, please apply well away from the dodger. Sunscreen will destroy the glass. (San Juan Sailing replaced two panels destroyed by sunscreen.)

- To deploy the bimini, unclip the two aft legs and secure with pins. Then clip the adjustable straps onto the aft bar of the dodger and tension as desired.
- If you wish to use the rain "insert" between the bimini and the dodger (gives full coverage over the cockpit), zip the insert in *before* attaching the bimini's two aft legs or tensioning the straps. Here's the steps we use:
 - a) Remove bimini cover and bungie cord; stow in starboard locker.
 - b) Carefully pull the leading edge of the bimini forward.
 - c) If zipping in the "rain insert" now is the time. If not, go to step e:
 - d) Zip in the leading edge of the insert to the aft edge of the dodger. The insert should be rolled and is normally stowed on the starboard "ledge" or starboard hanging locker of the forward stateroom.
 - e) Zip the aft edge of the insert to the forward edge of the bimini.
 - f) Unclip the aft legs of the bimini. Secure them to the mounts on the stern rail, using the attached pins.
 - g) Finally, tension the bimini by clipping its two adjustable straps around the aft bar of the dodger and tension as desired.

Reverse the steps to stow the insert and bimini. Thanks for your good care.

11. Electrical

<u>Highlights</u>

- The AC and DC panel breakers use the color dot convention shown on right:
- Main AC breaker/switch is located on the DC panel in nav station.
- Primary shore power breaker is located under the port side helm seat.
- Main DC breaker located on the DC panel in nav station.
- The Outlets breakers on the left section of the AC panel are powered by either Shore Power or the Inverter.

Switches and Controls on the Electrical Panel

The electrical panel is in the main salon on the port side. Here are some things to note:

- Shore Power: All the AC controls are along the left side of the panel. There is no "master switch" to turn on AC power; when you connect and disconnect shore power, AC is simply ON or OFF. When the AC is ON, a red LED light is illuminated in the upper left-hand corner of the panel. Please ensure that the switches for the AC items (water heater, battery charger, AC plugs) are turned OFF before connecting or disconnecting shore power.
- Water Heater: Activate the electric hot water heater when you are on shore power if you need more hot water (when the engine is running it heats the water).
- Battery Charger: Turn ON the battery charger switch whenever you are connected to shore power. It <u>must</u> be "ON" to charge the batteries while on shore power.
- AC Plugs: Activate this switch to turn ON the AC electrical outlets located throughout the boat, run the microwave oven, operate the TV/DVD-Blu-ray entertainment system, etc. NOTE: there is a master switch for the AC outlets under the Nav table. Make sure it is "ON" for the outlets to work.

Electrical Panel – AC controls on the left, DC controls in the middle; toggle switch and LED on the right are used for checking battery charge and tank levels (fuel, water).

- **Bilge Pump**: Always leave the bilge pump setting in "Auto." Test the pump daily by switching to manual and listening for the pump to run, then return it to the "Auto" setting.
- Water Pump: If you don't hear the pump start when you turn it ON at the panel, it means that the system is at working pressure you should hear the pump start again after you use some fresh water. Note that the marine toilets use raw water and do not impact the fresh water supply. Showers and sinks in the heads use the fresh water supply, as does the cockpit shower.

OPERATING TIP: When underway and if no one is below decks, we turn the water pump OFF.

- **Cabin Lights**: This switch turns ON/OFF DC power to the LED lights located throughout the boat. It must be "ON" before you can turn on any lights on the boat.
- **Fridge Unit**: We usually leave the fridge switch "ON" whenever we're on the boat. If the house battery charge level drops to near 12V and you aren't planning to run the engine/ connect to shore power, turn the fridge off. Your provisions will stay cold overnight.
- **Navigation Instruments**: Turn this switch "ON" to activate the Raymarine electronics, instrumentation, and multi-function display in the cockpit. This switch also provides power for the radar, depth sounder and knotmeter.
- Anchor, Steaming and Deck Flood Lights: When anchored or mooring, turn on the <u>Anchor Light</u> at dusk (located at the top of the mast). When motoring at night, turn on the mast-mounted <u>Steaming Light</u>. Turn on the deck <u>Flood Light</u> if you must go forward on deck at night.

• **Circular toggle switch and LED display**: Cycle through this multi-function controller to display the fuel gauge, water gauges (Tank 1 - Aft and Tank 2 - Forward) and battery levels (Domestic and Engine) in the LED display panel. The accuracy of the fuel and water gauges can get questionable when they drop to ¼ full – at ¼ full it's time to find the fuel dock!

12. Electronics and Instruments

<u>Highlights</u>

No Ties is equipped with a Raymarine Axiom 9+ touchscreen MFD/Chart PI, an smaller A75 Multi-Function display, and P70 Autopilot display.

CHART PLOTTER/Primary MFD: Raymarine Axiom 9+ touchscreen MFD which shows charts, radar & ais information.

Basic Operation

- When turned on, click the OK button to go to the main menu. Push the "chart" button and the display will default to showing your position, course over ground, heading, ais locations of neighboring boats, speed over ground & depth.
- **Zoom in and out.** Push the +/- buttons on the main nav screen.
- Split screen. Click on the menu button to go to main menu. Choose display option desired.
- **COG/Heading**. and identify the color. Also, be sure this line/vector is always on by default.
- Return the screen to the vessel's current location (stop panning, clear cursor, etc.).
- Turn on the radar and get the radar data overlayed on the plotter or set up a split screen.
- Turn on AIS targets/overlay. This is on by default. Click on an AIS target to display vessel information.
- Clear pre-existing waypoints and tracks.
- Adjust the screen brightness.

<u>Radar</u>

• Note that the Radar has a separate switch located below the primary electrical panel to the left.

A.I.S. (Automatic Identification System):

<u>Highlights</u>

- No Ties transmits her position and data via an AIS signal as well as receives AIS signals from other vessels equipped with AIS transmitters (Commercial vessels are required to have AIS, recreational vessels are optional). No Ties is only transmitting her position when the VHF base unit radio is ON.
- On most vessels the VHF base unit radio and must be ON to send and receive AIS data. Some vessels will have a separate AIS unit installed and wired to the batteries for full-time transmitting. The chart plotter is tied to the VHF radio or AIS Unit and shows the positions of vessels with AIS as triangles. Make sure the AIS overlay is turned ON in the settings menu. Add details here about how to turn the AIS overlay ON/OFF.
- AIS information supplements marine radar, which continues to be the primary method of collision avoidance for water transport.
- AIS requires each vessel to have a 9 digit MMSI (Maritime Mobile Service Identity) number to transmit position and data. Vessel name's MMSI number is **368232640.**

Details

AIS vessels appear on the chart plotter screen as triangles (this is on by default). The triangle points in the direction that the vessel is moving and if you touch the screen over the triangle the system will give you additional information (such as name, size, speed, bearing, etc.) about the vessel. The system also transmits this same type of information about *Vessel name* to other vessels with AIS.

The AIS is an added safety feature which allows large commercial vessels to easily see you and your direction/speed. They may try to contact you via VHF channel 16 to verify your course intent. In addition AIS allows San Juan Sailing/Yachting to provide faster assistance in case of unplanned maintenance issues as well as alert San Juan Sailing/Yachting of *Vessel name*'s return approach. Vessels with AIS can be viewed in real-time through mobile device apps and websites like <u>www.marinetraffic.com</u> that will reveal vessel name, course, speed, track, and other information.

P70 AUTOPILOT: Display located on the starboard side cockpit. Highlights

- When the autopilot is first turned on it will display the current bearing.
- To engage the autopilot, press "AUTO" one time
- To disengage the autopilot, press "STBY"
- Use the +1/-1 Buttons to adjust the bearing by 1°
- Use the +10/-10 Buttons to adjust the bearing by 10°

\circ Please pay attention to the starboard helm when using the adjustment buttons.

A75 MFD: Located on the port side cockpit

Highlights

- The A75 displays wind and speed information through a variety of screens.z
- Push the to toggle though the various displays to show:
 - Aparent & Actual Wind Speed
 - Depth
 - Wind Direction
 - Speeds

VHF RADIOS:

Highlights

- Raymarine VHF base unit and wireless handheld.
- Turn on base unit first then handheld.
- Handheld VHF charges via a USB plug and is typically stored in the nav desk.
- See A.I.S. (Automatic Identification System) section above for detailed description of AIS.

13. Engine

<u>Highlights</u>

- Yanmar 29hp 3-cylinder diesel with sail drive that will provide many hours of cruising pleasure.
- The saildrive helps eliminate shaft vibration, noise, and alignment problems. Under engine power, you will find *Interlude* to be relatively quiet, balanced, maneuverable, and powerful.

• Maximum sustained RPM is 2550. Cruising RPM is 2000-2500. Idle is around 900 RPM. It's OK and in fact preferred to vary engine speed as you cruise. Please try not to exceed the cruising RPM range.

Details

Inspecting the Engine

Engine access is provided by lifting the companionway stairs, which operate on hydraulic lifts – there are no latches, just lift it up, push it down. Side access is provided via hatches in the aft cabins.

We recommend performing the following inspections each morning before getting underway:

- Lift the companionway steps to access the engine compartment. *Look around and below* the engine for any signs of oil or other fluid leaks.
- *Check the coolant level*. Remove the coolant cap and you should be able to see coolant near the top of the fill hole.
- Inspect the raw water strainer for debris. In case of an engine overheat alarm, check for eelgrass clogging the strainer. Unscrew the top of the strainer, clean out any debris, then replace it.
- *Check belt tightness* by deflecting the belt inward with your fingers; it should not depress more than an inch or so.

For longer charters (> 7 days), check the oil level once a week. The dipstick is on starboard side of the engine and can be accessed from the starboard cabin (look down and to your left). If you need to add oil, there is spare oil stored in the engine compartment. There are two (2) oil filler caps, one on top of the engine and one on the left side near the dipstick. Do not overfill, add no more than a cup at a time and re-check the oil level.

The fuel filter is on the left (starboard) side at the front of engine. On the right as you look at engine is the water pump and the blue water lines that pump water from the tanks to the sinks and showers.

Starting the Engine

This is a keyless start system. The main battery engine switch, located in the aft cabin, must be in the "ON" position to start the engine (this should already be in the ON position). When docked in a marina, or leaving the boat for an extended period, switch the engine battery switch to "OFF" to prevent drain.

1. Ensure that the throttle/gearshift is in neutral.

OPERATING TIP: In colder weather or when you want to run the engine at a higher idle speed (e.g., to charge batteries), depress the **red** button at the base of the throttle and push the throttle slightly forward. This disengages the transmission and allows the engine to run at a higher idle RPM. We recommend targeting 1000-1200 RPM for warm-up and battery charging.

- 2. Tap the bottom "POWER" button once to turn on the ignition do not hold the button or it will turn the ignition off. Red lights will illuminate on the tachometer dial and an alarm will sound.
- 3. Press top "START" button, which will start the engine.
- 4. Listen/look for water discharging from the aft port end of the hull. If water is not in the exhaust immediately shut the engine down and contact SJS.

OPERATING TIP: Allow 5-10 minutes of warm up before placing a load on the engine. It stresses a diesel engine to be placed under load when cold. Conversely, allowing a diesel engine to idle too long will cause carbon build-up.

Running the Engine

- Engage forward or reverse gear by moving the transmission directly from Neutral to Idle-Forward or Idle-Reverse (the transmission will click into each setting), pause momentarily, then move the throttle forward/backward smoothly to your desired RPM setting. Engaging the transmission in jerky incremental steps can slip the clutch, causing damage over time.
- To keep the transmission "healthy" when shifting from forward to reverse and vice-versa, pause ~2 seconds in the 12 o'clock neutral position (say "one and two and") before shifting gears.
- An economical cruising speed of 5-7 knots is achieved at 2000-2500 RPM, which uses about 0.5 gallon
 of diesel per hour. <u>Please do not exceed 2600 RPM</u>: it's hard on the engine and fuel consumption goes
 way up with very little increase in speed. We recommend keeping the engine speed under 2500 RPM
 for most operating conditions.
- To avoid sucking in air or sludge when the fuel level approaches ¼ of a tank, refuel when the fuel drops below ½ full and before it reaches ¼ full. The tank holds 39 gallons, so topping up at about 20 gallons is a reasonable exercise and doesn't take too long.

Shutting Down the Engine

- 1. Allow the engine to idle for a few minutes in neutral to cool down.
- 2. Press the middle "OFF" button, which will stop the engine.
- 3. After engine stops press the bottom "POWER" button and hold for a second until you no longer hear the ventilation fan in the engine compartment. The red lights on the tachometer will turn off. If the bottom power button is not turned off, an alarm will sound periodically.

SAFETY REMINDER – Never stop the engine by turning off the battery switch. Doing so will seriously damage the diodes on the alternator and the batteries will no longer charge.

Boat Handling with the Engine

No Ties has a large deep rudder and a deep 6' 6" keel, *No Ties* is keenly responsive and able to turn in a very narrow radius..

San Juan Sailing offers free handling instruction before you leave for your charter if you'd like to practice with *No Ties* or just bone up on your boat handling skills. Spending 30-60 minutes practicing getting in and out of the Bellingham marina can be a great experience.

Forward

Because the saildrive/propeller is almost directly below the engine, the wash from the prop takes a moment to reach the rudder; anticipate this delay when maneuvering in tight spaces. A short burst of throttle will direct water at the rudder, which if already turned, will result in a short, sharp turn with little forward movement – a strategy that can be handy when turning in confined spaces.

<u>Reverse</u>

Prop walk is minimal to starboard in reverse. Driving in reverse is a pleasure. Grip the wheel firmly wheel when in reverse: water pressure on the aft edge of the rudder can push the rudder over to one side, which is hard on the steering mechanism (and your arms).

Docking

Unless there are high winds, we typically motor in the marina in Idle-Forward, which will produce a boat speed of about 2 knots. About 4 slips from our target dock, we shift to neutral and glide in. Use the engine to stop the boat at the dock, and don't shut down the engine until the vessel is secured at the dock.

SAFETY REMINDER: It's difficult for people holding lines on the dock to stop the momentum of a heavy cruising sailboat. It's also a bad idea to use dock lines on a cleat to stop movement; this can result in a sudden swing of the boat and damage to cleats, boat, and/or dock. And please, no crew should jump to the dock. If you can't step off calmly, back-up and try again.

When coming into our docks in strong winds, or if you'd just like a little assistance on arrival, hail "San Juan Sailing" on **VHF Channel 80**. They'll be glad to offer some coaching and/or catch your lines. In fact, most marinas in the Islands will help you if you hail them and ask for assistance. Asking for docking assistance is a sign of smart seamanship.

SAFETY REMINDER – Whenever you are departing or arriving at the dock have a crew member designated as the "**roving fender**" team mate. If you are going to accidently "touch" a boat or other object, lower the fender to the point of contact.

Troubleshooting Engine Problems

Yanmar engines are incredibly durable and you shouldn't have any problems on your voyage. Nevertheless, there are a few things to watch out for.

Engine Overheating

If the engine overheat buzzer sounds while the engine is running, it's usually no more serious than eelgrass plugging up the raw water strainer. The solution to this problem is prevention – keep an eye out for eelgrass mats, especially along those "soapy" looking tide and eddy lines in the water, and don't run over it. When eelgrass gets sucked into the engine cooling water intake, it collects in the raw water strainer.

To clear eelgrass from the raw water strainer, stop the engine, twist off the clear screw-top and extract the eelgrass. Replace the lid and tighten by turning it clockwise until the lid is seated firmly on the rubber gasket. Don't over tighten as the lid can crack. Make sure the lid's threads are not crossed as this can give the appearance of a tightened lid but the gasket won't seal. Then restart the engine.

If after restarting the engine it overheats again, check the seal between the strainer, the rubber gasket, and the lid. If the strainer is drawing air, it won't draw water. If needed, open and then retighten the lid on the strainer and check to make sure the rubber gasket is in place in the lid (and not lying in the bilge.)

If the above steps fail to solve the problem, call San Juan Sailing for assistance.

Loss of Oil Pressure or Coolant

If the engine loses oil pressure, the warning buzzer will sound and the oil icon warning light on the tachometer will light up, so check which light is showing red. If it's the oil light, shut down the engine, check the oil level, and contact San Juan Sailing.

The alarm buzzer is more likely to indicate engine overheating, and the temperature icon light will light up. Before you shut down the engine, check for water gurgling out the exhaust. If you have a "wet exhaust," check the coolant level in the overflow reservoir bottle. If none is seen, add enough to reach the top-level line on the bottle. After the engine cools down, remove the cap on the engine block and add coolant. And check the bilge for a light green liquid (coolant). If coolant is found in the bilge, call San Juan Sailing immediately.

If the coolant reservoir bottle is full, check to see if the engine threw a belt. Without a belt on the raw water pump, the coolant won't circulate and cool the engine. Replacement belts are in the engine spares kit. One other possibility is that the impeller in the raw water pump has failed. While they are replaced each spring with a new one, it's still possible that a hard object may be drawn in and break off an impeller blade. A replacement impeller is found with the engine spares. Call San Juan Sailing if you suspect you have an impeller problem.

OPERATING TIP: Bottom line – you're on vacation! If the engine is giving you problems, call SJS for assistance. They have repair teams in the Islands to assist you.

14. Entertainment Systems

No Ties is equipped with a FUSION marine entertainment system for audio and a Samsung 1080p HD SMART television with DVD / Blu-ray player for watching movies and accessing streaming video services. Speakers for the FUSION system are in the main cabin and in the cockpit. Audio for the TV is provided by its own sound system. Highlights of the entertainment system include:

- **FUSION audio system**: AM/FM radio, wired and wireless (Bluetooth) connections for audio players (e.g., iPod), and VHF monitoring. Speakers are in the main cabin and in the cockpit. The audio system can be controlled from the FUSION unit at the navigation desk area.
- **TV**: Samsung 27" 1080p LED HD SMART TV with built-in Wi-Fi and Amazon Firestick for streaming services. Note to log out of services after your charter.
- **Remote controls**: Remote for the TV are stored in the nav station.
- Other video sources: Connect PC or other video source to TV with HDMI cable (provided).

FUSION Audio System

The FUSION unit is located next to the VHF radio near the Nav station. The system includes AM/FM radio, VHF audio (to monitor radio transmissions using the cabin and cockpit speakers) and wired (USB) and wireless (Bluetooth) connections for audio sources such as iPods.

OPERATING TIP: If using Bluetooth to connect an audio source, the FUSION unit will appear as **MS-205** in the list of available BT connections shown on your device.

To connect an iPod or other portable music player using the USB port, unscrew the cap from the USB connector to the right of the FUSION unit and plug in your device using your own cable. Use the menu on the front panel of the FUSION unit to select your audio source.

Volume: There are two zones, outside in the cockpit and below in the salon. To change volume in both zones, simply turn the volume knob. To control in an individual zone, press the volume knob and select zone 1 or 2, then turn knob to change volume in that zone.

<u>HD TV</u>

The Samsung 32-inch 1080p LED "SMART" TV gives access to online video services like NetFlix and Amazon Prime Video with a valid subscription. You'll need an internet connection to access online video services. We use a wireless hotspot from our cellular provider successfully in many places in the Islands, but coverage can be spotty. Wi-Fi is available in some of the marinas in the Islands (e.g., Bellingham, Roche Harbor, Deer Harbor). To connect the TV to a Wi-Fi hotspot:

- Activate your wireless hotspot.
- Turn on the TV with the Samsung remote.
- Press the Menu button on the remote.
- Select "Network" then select "Network Settings."
- Select "Network Type Wireless."
- Select your wireless hotspot device from the list of wireless networks.
- Enter your network passcode, if required (use the remote to interact with the onscreen keyboard; select "Done" when ready to complete passcode entry).
- From the TV Menu select "Smart Hub" then "Open Smart Hub" and choose your video source Netflix, Amazon, Hulu, etc. Login to the service with your credentials.

Other Video Sources

You can connect your own playback device to the TV using a standard HDMI cable. There is a HDMI port on the right-hand side of the TV. There is a 6 ft. HDMI cable onboard, which can be used to connect a PC to the TV, for example. We've left it plugged into the TV and draped over the top. It's connected to the **HDMI-1** port on the TV.

15. Fuel

<u>Highlights</u>

- The diesel fuel tank holds 39 gallons (147 liters).
- Fuel Gauge is located at the main electrical panel Circular toggle switch and LED display: Cycle through this multi-function controller to display the fuel gauge, water gauges (Tank 1 Aft and Tank 2 Forward) and battery levels (Domestic and Engine) in the LED display panel. The accuracy of the fuel and water gauges can get questionable when they drop to ¼ full at ¼ full it's time to find the fuel dock!

- Refuel when gauge reads ½ or greater.
- Fuel deck fill is on the port deck, near the stern.
- In nominal conditions, the engine consumes .75 gal/hr at 2500 rpm.
- A fuel cutoff valve is located on the fuel line on top of the fuel tank under the aft starboard berth. The access panel is labeled.

<u>Details</u>

Fueling:

Please fill very carefully because it is difficult to tell when the tank is

full. You need to put your ear to the tank, not fill "too fast", and be prepared to stop immediately when the pitch rises.

In the cockpit locker, we have rubber fueling gloves. The attendant will give you absorbent pads. Before fueling, we build a fuel absorbent dam fore and aft in case of overfill (reaching for the pads after the spill is too late).

16. Heads and Holding Tanks

<u>Highlights</u>

- Only what has been eaten goes in the toilet.
- The Waste Tank Level gauge is indicated by the tank symbol located shown below. GREEN means ok; RED means FULL.
- The salon toilet is electric macerating flush using fresh (potable) water piped from the water tanks.
- The toilet discharge hoses do NOT have Y-valves. When you flush the toilet, it goes directly into the holding tanks.
- Holding tank is 21.1 gal.
- The holding tank overboard discharge seacocks have large red "T" handles and are located inside the cabinet

Details

Please do not put anything in the toilet that has not been

eaten. Experienced sailors deposit toilet paper in a wastebasket in Ziploc baggies, not down the toilet because paper tends to clog the hoses. If you have four people on board and have 'normal' usage, the tanks will need to be emptied every day.

San Juan Sailing staff will discuss holding tanks and pump outs on your arrival. Our one plea is this: please don't over fill the holding tank as leaking sewage is most unpleasant! Thank you.

Tank Level Indicator

Please note that in U.S. waters it is illegal to discharge holding tanks overboard. While in Canadian waters outside of bays and harbors overboard discharge is allowed.

Salon Head:

- The salon toilet is electric macerating flush and uses DC electrical power from the House bank.
- The salon toilet uses freshwater from the freshwater tanks for flushing. The freshwater pump breaker/switch on the DC panel in the nav station must be ON.
- A macerator is integrated into the discharge of the salon toilet and delivers macerated solid waste to the holding tanks. Please use sufficient water to fully macerate the discharged solid waste.

Emptying the Holding Tanks

- 1. Deck Pumpout
- 2. Overboard Discharge (where legal)
 - 1. Deck Pumpout

The holding tanks can be pumped out via the labeled deck fill on the port side. After pumping out the holding tanks, please refill each tank with about 5 gallons of fresh water through the deck fitting to rinse, and then pumpout again. This will help keep the waste system smelling fresh! Thank you!

2. Overboard Discharge (where legal)

The holding tanks are gravity drain, there is no macerator pump. They will normally drain in less than a minute (you may hear them finish with a 'whoosh' if the engine is not running). Open the large red-handled seacocks (pic on right) located inside the cabinet of the head. Please make sure you close the seacock after the tank empties. If left open, then every time the toilet is flushed it will flow straight overboard!

17. Heaters (Cabin)

<u>Highlights</u>

- Webasto forced
 - not efficient to run all night, noise wakes light sleepers
- Auxiliary Caframo portable electric for use on shorepower is provided and stored in the port storage locker.

Details

The Webasto thermostatically controlled forced air heating system draws from the main diesel fuel tank. In our waters, we use the heater on cool evenings or to take the chill off in the morning.

The thermostat, black, is mounted to the side of the upper galley cabinet closest to the main seating area. **To Operate:**

1. QuickStart Method

- a. Simply press the POWER button on upper right side that's it!
 - i. Will set the temperature to 68 degrees and heat for (1) hour
- 2. Regular Method
 - a. Press the round Control Knob
 - b. Rotate Control Knob to Select the Heating mode (3 wavy up arrows) & Press Knob
 - c. Next Temperature will display rotate knob to select temperature desired & Press Knob
 - d. Next Time will display rotate knob to select run time (1-2 hours typically)
 - i. The Infinity symbol will make the heater run indefinitely. We suggest selecting a time period so as to not run the heater when not needed.
- 3. To Turn OFF at any time, press the Power Button in upper right side

We normally turn off the heater at night, both to sleep cool and to avoid the clicking sound of its electric fuel pump.

The Caframo electric heater is for marina use when on shore power. It is normally stowed under the port seat cushions.

18. Lighting

<u>Highlights</u>

- Flip on the CABIN LIGHTS breaker on the DC panel at the nav station.
- Lights are controlled by small switches on the individual lights
- The port side Storage Locker light is located to the right side of the access door in the shower area and is a white fixture mounted on the inside wall.

19. Refrigerator and Freezer

<u>Highlights</u>

- Ideal thermostat setting is no. 5 on the dial located at the top back of the fridge.
- Circuit breaker/switches are located on the DC panel in the nav station. They are always ON unless the house batteries do not have sufficient power.
- Check to be sure there is sufficient battery power to operate the refrigeration equipment all night. Usually there is.

20. Sails and Rigging

<u>Highlights</u>

- Full-battened main, 135% furling jib
- all lines led aft
- single line reefing from cockpit

Details

Mainsail: [Conventional Main with Stack Pack Description]

We have a "stack pack" zipped boom cover and lazy jack system. *No need to adjust the lazy jacks...*just unzip and hoist!

To hoist: The main halyard is normally stowed as a boom lift. After attaching halyard, we release the mainsheet, boom vang and downhaul.

Hint: we found this the easiest way to hoist the main is as follows (full hoist is when the black ring emerges from the aft end of the sheet stopper):

- a) After moving the halyard from the end of the boom to the head, assure that the main halyard leads *outside* the boom cover on the port side of the mast. Leave the boom cover zipped in front of the mast.
- b) With the boom cover top unzipped and the mainsail *directly* into the wind (any wind in the sail makes hoisting and lowering difficult!), crew at the mast pulls down on the main halyard while a second takes up slack through the closed sheet stopper in the cockpit. When hoisting gets hard, (normally about 80% up) crew #1 pulls the halyard horizontally out—like a bow string, with cockpit crew quickly taking up slack on each release. Do this repeatedly to raise as high as possible, normally about 95%.
- c) Tension with the cockpit halyard winch. Watch for the black circle to emerge from the aft end of the sheet stopper.

Reefing: [conventional main]

- a) Two large reefs are pre-rigged.
- b) Release the mainsail halyard and lower sufficiently to reef.
- c) Tension the single line reef moderately, then release the mainsheet and boom vang. Now fully tension the reef line until the new clew is close to the boom. Then re-tension the mainsheet and vang. (Using this method raises the boom sufficiently above the dodger.)
- d) Note: tuck the extra mainsail foot if you like, but please don't bother with reef ties, which in our experience easily tear sails.

<u>Genoa:</u>

Please do *not* adjust the luff tension. The primary sheet winches for the 130% genoa (Harken roller furling) are two speed Harken 53s.

The genoa fairleads are adjustable underway with the black control lines in the cockpit...very handy to move the fairlead forward when sailing off the wind.

Spinnaker:

If you are *well-experienced* in handling a cruising spinnaker, you are welcome to use this in appropriate conditions. It is a *very* large sail suitable for breezes under 15 knots.

It is stowed with its sheet and snatch block in the sail locker forward of the master stateroom, and accessed by the large foredeck hatch. The spinnaker is enclosed in a sock with a fiberglass "mouth" for ease of employment and dousing. To jibe, douse the sail, complete the jibe, carry the sheet around the forestay to the opposite side of the boat and open the sock.

As you may know, the spinnaker is the most vulnerable of sails. Thank you for your care!

21. Showers and Sumps

Highlights

- Separate shower stall in salon head.
- Transom shower.
- switches in showers on side of sink cabinet.

Details

The switch toggle operates the sump pump in the aft separate shower.

The aft shower is incorporated into the aft head.

The transom shower (right image) features both hot and cold water. To operate, pull the T handle toward you. That brings water to the shower head. Turn the T handle left or right to adjust temperature. Depress the spring loaded top of the shower head for spray.

Note: shower sumps can become emergency bilge pumps if water rises to that level.

22. Spares and Tools

Common spares: Location: under center starboard settee cushion Contents: oil absorbent pads, fuel filters, oil filter, impeller.

<u>Heavy Duty spares:</u> Location: under starboard side settee cushions.

Contents: spare float switch, spare electric bilge pump, spare domestic water pressure pump(s), spare engine starter, spare engine alternator, Yanmar tool set, battery jumper cables, bag with spare oil and fuel filters, light bulbs, outboard tools, toilet one-way check valves, spare shower drain pump.

<u>Tools</u>: In port storage locker located in orange plastic containers.

23. Storage

The amount of storage is one of the appealing factors of this model. See Interior Overview image at the front of this manual for an overview of where some primary items are stored.

In general, we found these of greatest use:

Food:

- a) Salon center settee. Located opposite the galley counter, the island settee storage is convenient. There is door access on the port side of the settee, as well as two flanking storage areas on each end accessed by lifting the cushion.
- b) Under forward settee cushion. Big storage compartment under the cushion.
- c) Behind settee cushions. There is some stowage under the U-shaped settees, but not a lot.
- d) Above galley counter cabinets. We store quite a bit of food in the cabinets above the refrigerator and freezer.

<u>Clothes:</u> Each stateroom has a hanging locker and drawers that we find more than adequate.

Tools: Under the nav seat.

Fenders: We store them tied to the lifeline railing.

<u>Dock Lines</u>: In the port cockpit locker.

<u>Cooking utensils</u>: In the galley under-counter drawers.

24. Stove & Oven

<u>Highlights</u>

- The stove/oven are propane-fired.
- The propane solenoid switch is located on the inboard face of the galley cabinet in front of the sink.
- There are two 2.5 gallon steel propane tanks in the cockpit propane locker, under the starboard helm seat. The locker is vented overboard for safety.
- The San Juan Sailing staff checks these tanks weekly to assure that you don't run out.
- For safety, we turn off the solenoid switch and the tank valves after stove use.
- Caution: propane is heavier than air. If leak is detected, extinguish all flames and open all hatches and doors.

Details

Lighting a Stove Burner:

• Make sure the propane tank hand valve is open and the solenoid valve switch is on.

- Make sure the gimbal lock at the bottom of the stove/oven is secured. That way, if someone leans on the stove or grabs the oven handle, it won't tip and spill pot/pans on the cooktop.
- Push the corresponding burner temperature knob in and turn to the "Light" (flame symbol) position.
- Press the ignition button on the right of the stove.
- Confirm burner has lit.
- Turn the knob to the desired heat level.

Lighting the Oven Burner:

- Make sure the propane tank hand valve is open and the solenoid valve switch is on.
- Make sure the gimbal lock at the bottom of the stove/oven is secured. That way, if someone leans on the stove or grabs the oven handle, it won't tip and spill pot/pans on the cooktop.
- Open the oven door and using a flashlight locate the burner pilot at the bottom right side of the oven.
- Push the oven temperature knob in and turn to 300 degrees.
- Press the ignition button on the right of the stove.
- Turn the knob to the desired heat level.

25. Swim Platform

<u>Highlights</u>

- The swim platform is one of our favorite features of No Ties!
- Please only use the swim platform when the boat is not in motion.
- The swim platform is heavy! Please make sure to lower carefully using the attached knotted rope. You can disconnect the rope using the carabiner from the connection point on the swim step after lowered.

Details

To use the Swim Platform:

- 1. Unlock the latch on the Port side.
- 2. Slowly begin to lower the platform using the attached knotted rope attached to the platform and cockpit seat.
- 3. You can then disconnect the rope using the carabiner from the connection point on the swim step after lowered to avoid tripping.

To Store the Platform, simply repeat these in reverse.

Water tank selection valves Location: Plumbing board

26. Water

<u>Highlights</u>

- Two water tanks totaling 87 gallons.
- Water pressure switch is on the electrical panel, port side of the salon.

1. Supply - Forward tank

2. Supply - Extra tank

- Tank level gauge is on the electrical panel.
- Water tank selection valves are located in the salon, behind the starboard dinette back cushion. See photo at right. Open only one tank at a time, starting with the Forward (F) tank.
- Deck fills are located above the tanks one near the bow and one near the port stern.
- Hot water is produced by two methods: 1. Shorepower, 2. Engine. See details below.

Details

Water Pressure Switch:

Please turn off the water pressure switch when the system is not being used (note: the water pressure needs to be on for the toilets to flush). If one of the water tanks runs dry the pump will run continuously and burn out. You will likely not hear the pump running over the sounds of motoring or sailing.

Water Level Gauge:

The water tank level gauge is located on the right side of the electrical panel in the salon. Press the black ring below the display and cycle through the displays until Tank 1 (forward tank) then Tank 2 (aft tank) show.

Hot Water Heater:

The hot water heater is located beneath the aft part of the starboard settee in the salon.

- It takes about 30 minutes of running the engine under load to get the water hot. CAUTION: Engine heated water may be scalding hot. Please BE CAREFUL!
- When on shore power, you can heat your water using electric coils by turning on the WATER HEATER switch on the AC panel.

State parks do not have pressurized water to refill tanks, but all points of civilization do.

We hope this information helps. Have a great time!!

Reference	Designation	Valve
1	Water tank vent	No
2	Blackwater tank vent (Toilet)	No
3	Additional water tank vent	No
4	Drainage of manual bilge pump	No
5	Engine exhaust	No
6	Electric bilge pump drainage	No
7	Fuel tank vent	No
8	Heating exhaust	No
9	Air conditioning drainage	Yes