

Dear Charter Guests,

I am pleased to offer Viva for your cruising vacation in the beautiful Puget Sound. Viva is a Beneteau 34 which is a product of the largest sailboat manufacturer in the world. Beneteau 's success is based on great performance under sail and power, excellent cruising accommodations, quality components and world class engineering. Being a smaller size you will find easy to operate and yet she provides excellent accommodations for two couples (or up to six using the main salon births) in fully enclosed standup cabins, has a wonderful main salon social area with seating port and starboard, and has a very complete head and galley.

After purchasing Viva which had standard cruising amenities; I worked with San Juan Sailing and my maintenance professional, Pacific Marine Electric, to add items that would make cruising in the Pacific Northwest convenient, comfortable and safe. These included a new dodger, dinghy, outboard, Webasto

heating system, electric head, improved generating and battery capacity, radar, windlass and ground tackle and whole host of smaller items.

I selected San Juan Sailing (SJS) after interviewing four charter companies for their commitment to high standards, location and quality of their team. Together our goal is to make Viva the finest sailing charter boat under 35 feet in the Pacific Northwest. We hope you have a great sailing vacation aboard Viva. If for any reason we fall short please let SJS know and will we attend to the issue. If per chance a small item is dropped overboard or brakes and you bring it to SJS's attention; I will waive the first \$100 of the repair or replacement so that the next guest can be assured that he has a complete boat ready for his enjoyment.

I want those who choose Viva to have a great time, be safe, use her as she was intended and respect her as if you were fortunate enough to own her.

Bon Voyage!

Karl Klokke
1-208-412-9411
Boise, Idaho
5 April 2017

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1. EMERGENCY EQUIPMENT: You are not likely to need these, but must know their location.

QUICK NOTES

- Extinguishers on all closets and under sink
- Plugs taped to all thru-hulls
- Emergency tiller in starboard cockpit locker
- Engine stops-check sea strainer, oil level, coolant level
- Flares/Horn/Tools in starboard cockpit locker
- Bilge Pump to manual mode = push DC panel breaker left side

DETAILS

Fire: There are 3, BC rated Fire Extinguishers aboard VIVA. These are good for liquids and electrical equipment fires:

- Outside the closet in the aft stateroom
- Under the sink in the galley
- Outside the closet in the forward cabin

Leaks: – First determine the source of the water, check the prop shaft first and then the thru-hulls. You can get to the shaft seal by lifting the shelf behind the engine space in the aft stateroom. Also, you should see water flowing out under the engine if the prop seal is damaged. There is a diagram showing the location of the through hulls in the notebook. Most of the thru-hulls are located under the galley sink, under the sink in the head and the aft portion of the starboard lazarette. There are wood plugs taped in each area where there are through hulls. There is a mallet under the galley sink to seat the wooden plugs. There are two bilge pumps. [Detailed information on them is in the **Bilge Pump paragraph 6**] The manual bilge pump is located on the starboard side of the cockpit, beside the helm [lift up the helm seat to locate]. The electric bilge pump has an automatic float switch, but the switch on the electrical panel can be used to power the main pump manually (this breaker is normally in the auto mode). Notify San Juan Sailing as soon as safely possible.

Steering Failure: There is an emergency tiller located in the starboard cockpit locker. In the event you should lose steering, remove the round cap under the helm seat with a winch handle and insert the emergency tiller over the top of the rudder post.

Engine Failure: If the engine quits, it is most likely due to overheating, low oil pressure, or a fouled propeller. If you are in a confined area where you cannot use your sails to keep clear, drop the anchor to keep the boat safe. See if the engine will start in neutral, if so a fouled prop is probably the problem.

Distress Equipment: Starboard cockpit locker:

Flares are on a shelf in the starboard cockpit locker.

Air Horn is there also.

Rubber Plug for unusual sized holes/cracks in the hulls there also.

Repair Tools are under the sink in the head. Additional tools are in the Lazarette under the furnace.

Spare Parts in an orange tote in the aft part of the starboard cockpit locker.

Technical Manuals If a mechanic needs this level of repair for an emergency, they are in a blue soft Beneteau briefcase in the aft part of the starboard cockpit locker.

2. BOAT SPECIFICS:

Year: 2011

Length Overall: 34 feet

Beam: 11' 8"

Draft: 6' 2" deep fin keel

Fuel: 34 gallons of Diesel

Water: 77 gallons (in two tanks)

Holding Tank: 21 gallons

Engine: 29HP Yanmar Diesel with folding Max Prop.

3. ANCHORS:

QUICK NOTES

- **190' chain, 60' nylon; marked at 100' w/ 10' yellow, 150' w/ 5' yellow, last 20' red.**
- **Secondary anchor in the Starboard cockpit locker in mesh bag.**
- **Stern line 600' stored in port settee.**
- **Secure anchor after retrieval.**
- **Turn ON the Anchor light if anchored overnight.**

DETAILS

The primary anchor is a 33 pound Lewmar claw, with 192 feet of 5/16th chain and 60 feet of 5/8ths nylon rode. This is great ground tackle and if set properly, should allow a good night's sleep. The chain is marked at 100' with 10' of yellow paint, 150' with 5' of yellow paint, and the last 20' of chain between 170' and 190' is solid red paint. The nylon section is not marked.

The secondary anchor is a 22 pound Delta, with 30 feet of chain and 150 feet of nylon rode. The entire secondary system is inside a mesh bag in the starboard cockpit locker.

The scope normally used in the islands is 4 to 1, definitely not 7 to 1 (unless conditions call for it, i.e. sustained winds over 25 knots). Most of the anchorages are well protected and popular, so you will likely have someone anchored nearby. Most coves are 20'- 40' deep; so expect to pay out about 100'-180' of chain. After you have paid out the suitable amount of chain, 1-2 minutes of idle reverse sets the anchor. Also, the tides can change water depth up to 15 feet in our waters so be aware of where you are in the cycle when choosing an anchorage and deciding how much chain to put out. Here is an easy formula for how much chain you need; add the water depth on sounder, plus any tide increase expected during the night, plus 5' (to account for the distance from sounder to roller on bow) and take that total and multiply by 4 for a 4:1 scope (typical example would be 25' of water + 6' of tide increase + 5' = 36' x 4 = 144').

The Stern Tie Line is 600 feet of poly line on a reel stored in the starboard cockpit locker. It is easily used by inserting the handle of the mop through then reel and placing it between the port and starboard

cockpit lockers after removing the helm seat. Please do not cut this line as the entire length is needed in some of the more difficult anchorages in Desolation sound.

Anchor Light: When anchored, not in a marina, turn ON the Anchor light breaker from dusk to dawn. Be sure to turn it OFF in the morning.

4. ANCHOR WINDLASS:

QUICK NOTES

- **Windlass controller is in the anchor locker.**
- **Have engine running when using windlass.**
- **Breaker on the battery panel in aft stateroom.**
- **Spread chain out in anchor locker when retrieving.**
- **If you are not totally comfortable anchoring, read the details.**

DETAILS

VIVA is equipped with an electric windlass that makes deployment and retrieval of the primary anchor very efficient. It is wired to the start battery. Have the engine running anytime you use the windlass so you don't deplete the start battery. The master breaker for the windlass is located on the panel with the large battery switches in the aft cabin below the hanging locker on the port side.



To turn the switch ON, push up the little lever that may be hanging at an angle out the bottom of the bar that is across the face of the switch. If there is no bar hanging down, the switch is already ON. To turn OFF the windlass breaker, push the little red button on the right hand side of the bar on the face of the switch. The electric control unit to operate the windlass is located in the anchor locker, please do not remove it.

Deploying the Anchor: With an electric windlass, it's important to deploy the anchor over the bow roller into the water by hand. Release the anchor securing line and put it aside for the time being. Pay out on the deck enough slack in the chain before you release the anchor so that you can lower the anchor into the water about one foot below the surface. (By having the anchor slightly in the water, the water will buffer that troublesome "pendulum" action that causes a partially deployed anchor to swing and ding the bow before you get it all the way into the water with a windlass controller that you're not familiar with.) Once the anchor is in the water, then use the electric windlass to lower the anchor to the bottom of the bay and deploy the desired amount of scope. Once you have set the anchor and are sure it's not dragging, slip the anchor securing line chain hook over a link of the anchor chain below the bow roller and secure

the other end around the cleat on the port side deck. Then let out a little slack in the anchor chain so that the anchoring load is carried by the deck cleat and not the windlass drive.

Retrieving the Anchor: When retrieving the anchor, we only move the boat towards the anchor when it's very breezy. The weight of the chain will pull the boat up to the anchor. Just pause in retrieval periodically to let the boat catch up. Also, when retrieving the anchor, only retrieve it up to where you can see the anchor about one foot below the water (again to buffer any possible "pendulum" action). Then, by hand, retrieve the anchor from just below the water onto the bow roller. We find this again prevents a pendulum action. Take your time; the anchor chain bunches up under the windlass and you will need to push it down to the bottom of the chain locker with your foot. Remember, please do not pull the anchor up onto the bow roller using the power of the windlass. Hand retrieval prevents damage.

Securing the Anchor. Use the anchor securing line to pull any slack out of the anchor chain and tie it to the port deck cleat so that the anchor cannot escape the bow roller and self-deploy or crash around if the weather is a little bouncy.

5. BARBECUE:

QUICK NOTES

- **Careful of heat.**
- **Clean grill when finished.**
- **Uses its own propane tank.**

DETAILS

The BBQ is mounted on the starboard stern rail. It uses its own tank which is hooked directly to the gas regulator. To use, open the tank valve and turn on the BBQ control. When finished, turn OFF the regulator and close the tank valve, (With the lid on, the BBQ tends to be hot and cook quickly, so tend meat often.) As a courtesy to the next guest, please use the wire brush attached to the BBQ to clean it after use.

6. BATTERIES AND CHARGING:

QUICK NOTES

- **Do not change the battery handles positions (leave vertical).**
- **Start battery isolated from House batteries.**
- **Charged by both engine operation and AC shore power.**
- **Do not get below 12.2v before charging.**
- **Push Charging Button on the Magnum panel to charge when on shore power.**
- **Keep AC cord positioned so that it doesn't drop in front of the furnace exhaust.**

DETAILS

There are two battery systems, one for the engine (start battery) and one for the boat (house batteries). The batteries themselves are located in the engine compartment and under the base of the aft cabin bed and under the port settee. They are AGM, maintained by the maintenance pro and should not need attention.

From the factory, each system is controlled by large red switches located on a panel under the hanging locker on the port side of the aft cabin. You do not need to change the positions of the battery switches as the banks are isolated automatically. But from left to right, the switches are:

- Red for the start battery
- Red for the house batteries
- Small black Windlass Breaker (may change this if you prefer).



Red Start Battery Switch: The engine will not start without this being ON (vertical position)

Red House Battery Switch: This should stay ON as the lights, instruments and LPG systems use these batteries. (leave in vertical position)

Windlass Breaker: See the section on Anchor Windlass.

Charging: The batteries are charged one of two ways; either by the engine alternator, or by the AC charger when on shore power. There is a gage on the electrical panel above the navigation table which shows state of charge of the batteries. If it says MAIN, then it's showing the house batteries; if it says ENGINE, then it's the start batteries. Just push the button on the gage to cycle through the two systems. There is also a Magnum RC 50 control panel by the nav station which has a "CHARGING" button that must be pushed when you are on AC shore power. The "INVERTING" button is not functional.

Shore Power: 120v AC is provided by the shore power cord attached at the dock and the AC receptacle on the starboard stern. Because the shore power receptacle on VIVA is just above the furnace exhaust, loop the cord around a stantion before plugging into the boat and keep it tensioned to not drop in front of the hot exhaust. The master AC breaker is in the starboard aft lazarette behind the engine instrument panel. There is also an ELCI breaker under the starboard aft settee seat. If you lose shore power and all the dock plugs and breakers are checked and are OK, a surge may have tripped the ECLI breaker or the master AC breaker. This is unlikely, but can be checked if everything else is correct.

Battery Monitor: There is a Blue Seas M2 State of Charge meter at the Nav station by the inverter panel that monitors both the house and start batteries, the % of charge available, and the discharge rate. The photo below shows the house batteries at 13.78 volts, the batteries at 100% charge, a float charge of 0.3 Amps going into the bank, and the Start battery at 13.72 volts. Low voltage alarms have been programed into the meter and a red LED light and a tone will warn of low battery voltage.



Blue Seas M2 battery state of charge gauge

7. BERTHS:

QUICK NOTES

- Sleeps 6, two fwd, two aft, one each side of salon.

DETAILS

VIVA will sleep 6 people. She has two berths in separate cabins. Forward is a V berth that sleeps two people well. It has a hanging locker for storage. At least two more can be in the port side aft cabin, which has a large athwartship berth measuring 7 feet long and 5.3 feet wide and also a hanging locker for storage. This is a huge area. Got 12 kids?, stuff them all in . In the Salon, each port and starboard settee can sleep a person comfortably.

8. BILGE PUMPS:

QUICK NOTES

- Leave bilge pump on AUTO, breaker pushed right; push left for manual operation.
- Emergency Bilge Pump under helm seat, handle attached.

DETAILS

The automatic bilge pump below the salon floor operates off a three way switch on the electrical panel. In the center position the pump is OFF, when tilted to the left, it starts the pump manually, when tilted to the right, the pump will operate automatically using a float switch to detect water and begin pumping. It is normally in the right side down position (automatic operation).

The Emergency Bilge Pump operates manually from a pump handle that is attached to the pump body located under the helmsman's seat on the starboard of the pass-way.

9. DINGHY AND OUTBOARD:

QUICK NOTES

- **Tow dinghy without motor, short painter, tie off twice, away from exhausts.**
- **Watch in high winds in case it flips being towed.**
- **Keep off rocks.**
- **Motor stored on port side stern rail.**
- **Honda outboard is four-stroke, do not add oil to gas.**

DETAILS

Dinghy: VIVA has a 10' Silver Marine , fiberglass floored dinghy. Tows with the least drag if brought close to the boat, about 3 feet off the stern. This lifts the dinghy bow, reduces drag, and guarantees that you won't accidentally wrap the painter around the propeller when you back up! Tie the painter off twice: aft cleat and the bitter end tied onto the stern rail. Others have lost the dinghy when their cleat knot slipped loose. so she will not interfere with the engine exhaust, BBQ, and Webasto heater vent. We would appreciate your special care when beaching the dinghy. Ours are not all gentle sandy beaches. Most often they are rocky, covered by barnacles equipped with extra sharp rubber cutters. Here's what works best: (see "Land Ashore Like a Pro" San Juan Sailing Handout) Just before touching shore: 1. Shift crew aft toward stern - this helps boat go further ashore, and avoids cuts in bottom from sharp rocks and barnacles. 2. Turn off outboard and raise it - this protects propeller from dings on rocks. With oars planted firmly in ground, have one person slowly move forward and put weight on the bow of the boat. You should be close enough to step ashore onto dry land. Do not jump or you will force the dingy backwards into the water. Then offload everyone over the bow. Now the team lifts the dinghy above barnacle height and deposits it gently on the beach. Secure the painter above high water level to a tree, log or rock. Don't forget...a rising tide can leave you high and dry and dinghy-less! Some beaches it is not possible to land a dinghy and keep your shoes dry. I would recommend wearing waterproof footwear and change into street shoes after the dinghy is secured.

Outboard: VIVA is equipped with a 4-stroke Honda 2 horsepower outboard positioned on the port stern rail. We have found this brand and size has proven to be a practical and very reliable dinghy outboard. As a courtesy we have additional gasoline in a red container tied into the dinghy. Warning - Gasoline fumes are explosive and a very dangerous fire hazard if stored on a boat. Never store the spare gasoline container in a locker, lazarette, or any other storage area on the vessel. Store it in the dingy only. Do not add any oil to the gasoline mixture – it uses just straight gasoline. The fill cap is located at the top of the engine. The outboard is easy to transfer from the stern rail outboard mount to the dinghy transom and vice versa. Attach the security line to the motor before moving it. Once attached to the dingy, secure the outboard further by tying the safety lanyard to the metal ring. Please do not cruise with the outboard on the dinghy. It will not work after saltwater gets into or even near the intake of the carburetor. We also recommend taking the outboard off the dinghy at night. We have had dinghies deflate in the cool of the night and had wind waves or powerboat wakes flip the dinghy over.

TO START THE OUTBOARD : Honda 2-hp, 4-stroke

1. Turn on fuel tank (lever on starboard aft quarter of engine). Push the fuel valve lever aft to open the fuel valve.
2. Pull out the choke switch (starboard forward corner of the outboard)..usually need it for the first start of the day. Push in after 5-10 seconds.
3. Unscrew (2-3 turns) tiny cap on top of fuel cap to vent the internal gasoline tank by turning counter-clockwise.

4. Make sure the U-shaped kill clip with the coiled red lanyard is clipped into the red shutoff knob, port forward corner of the outboard.
5. Twist the handle throttle ¼ turn to start position.
6. Pull the rip cord to start.

WHILE RUNNING

1. Push the choke back in shortly after engine starts – about 10 seconds.
2. There is no transmission – just throttle up to go forward and throttle down to stop. If you want to go in reverse, swivel the outboard around 180 degrees.

TO STOP:

1. Shut the outboard off by pushing in the red shut-off knob where the kill clip is located or just pop the clip off.
2. To avoid prop damage, shut the outboard off and raise it out of the water before you reach the shore. Pull the outboard forward and out of the water until it clicks and stays in place. To put the outboard shaft back in the water, release the stainless steel lever on the starboard side of the shaft.
3. Close the fuel lever and the air vent.

WHEN NOT IN USE:

1. Put the outboard back on the outboard mount on the stern rail and tighten both clamps.
2. Push the fuel valve lever forward to close (starboard aft corner of the outboard).
3. Close the air vent on top of the fuel cap by turning it clockwise.
4. Secure the outboard further by tying the safety lanyard to the stern rail.

10. DODGER:

QUICK NOTES

- **Can be opened.**
- **Not designed to be lowered.**
- **Protect the plastic windows.**

DETAILS

The Dodger, new in 2016, protects the crew from the weather when in the cockpit and also has stainless steel supports to grab for safety. The glass panels can be unzipped for increased ventilation, but please be aware that they are a tight fit and re-zipping may be difficult. The center front panel can be unzipped on the sides and folded back along the underside of the top and secured to the fittings there. The dodger is not designed to be lowered. The dodger's plastic "glass" is vulnerable to scratching from salt crystals, especially after sailing into a challenging breeze. The salt spray on the glass dries in the wind, leaving behind tiny salt deposits that obscure your vision. Please avoid directly touching the glass with a rag or sponge. Salt does dissolve in water, but not as fast as you might think. The salt crystals remain undissolved for several seconds. It's like rubbing the glass with sand paper! To clean, please use generous amounts of fresh water from a pan from the galley to "flood" the glass and dissolve the salt crystals away. (Better yet, wait until you're at a dock where you can hose off the salt crystals.) If the dodger glass is really clear, you can thank previous guests for their diligence. And we thank you too! Caution: Spray sun screens have been found to react chemically with the dodger glass, ruining it. So to protect your wallet along with your skin, please apply spray sunscreen in the head before coming on deck, or downwind of the dodger glass.

11. ELECTRICAL PANEL:

QUICK NOTES

- AC side on left, DC side on right.

DETAILS

The Electrical panel is divided into two sections, AC and DC. The AC is nominally 110v and the DC is 12v. The AC Master Breaker which controls electricity coming into the boat is in the lazarette, behind the engine instrument panel (white box). It should be left ON. The 30 Amp shore power cord is plugged into the boats AC receptacle **before** there is any power in the cord. The cord is stowed in the port cockpit locker. Please be sure to carefully thread the plastic collars in place. They cross-thread easily.



AC Panel: The left side of the electrical panel is the AC side and has three double pole switches [from top to bottom]: Battery Charger, Water Heater, and AC Outlets. Below that are two lights which indicate AC power is present, and a Reverse Polarity light which indicates that something is wrong with your shore power source and you should disconnect until the problem is corrected. **DC Panel:** The center and right side of the panel is the DC side.

DETAILS



Chart Plotter: A Raymarine Hybrid Touch, touch screen plotter is at the helm. Turn on the Navigation breaker, then the power button on the unit, hold for three seconds and release. When the Home screen appears, select Chart. I find that the Head Up chart orientation works best for me. If you want to change to North up, then push Menu, Presentation, View and Motion, Chart Orientation, and then select your preferred choice. To change the scale of the chart, use the Zoom buttons + is a closer view and – is a wider view. The scale is noted on the upper left of the screen. Additionally, I find the COG (Course-over-Ground) vector arrow to be particularly useful in cross currents and wind induced leeway. If it is not on the screen, go to Menu, Presentation, Vector, and turn On the COG.

If you want to look at some feature that does not yet appear on the chart screen, just slide your finger on the screen in the direction you want to go. Tap the screen to place the cursor on your feature and zoom in/out to see what you are looking for. To get back to where you actually are, press the little blue boat that has appeared on the mid left of the screen. To turn the plotter Off, push the power button and hold as you watch the count-down on the screen. Detailed instructions are in the red Raymarine bag behind the aft starboard settee back. Please ignore the button on the plotter labeled STANDBY/AUTO. Use the regular ST6002 Autopilot, and not this feature.

Radar: From the Home screen, push the Radar symbol then follow the instructions on the screen. I have also customized the screen so that you can use a split screen with Radar on one side and Plotter on the other. From Home, select the symbol showing both plotter and radar side by side. Push whichever side on which you want to change any settings. The Raymarine radar uses the plotter touch screen.

Depth/Speed/Wind: A Raymarine ST 60 Tridata indicates all three functions at the helm. Remember, the depth sounder is for shallow water only and the best depth sounder is your chart! Rocks can rise from the bottom in very short order and your best tactic is know where they are before looking for them with your sounder. Deep water often gives false readings so know you're in deep water when the sounder suddenly reads 3 feet!

Autopilot: The ST6002 Autopilot is on the Navigation breaker. To engage, pull up on the grey handle behind the helm wheel and then push Auto on the ST6002. Push Standby to regain control of the wheel.

Radio: The VHF radio is above the Nav table with a remote MIC for the helm. Plug in the remote before turning on the VHF. To turn On the VHF, you push the Power Button, and then push Clear to continue. Weather is accessed via the WX button; tune to the clearest weather station and listen for “Inland Waters of Washington State”. San Juan Sailing monitors channel 80.

Running and Steaming Lights: Please be advised that night passage making is not permitted under terms of your charter agreement with San Juan Sailing. Only use in cases of unexpected reduced visibility. **Anchor Light:** aka Masthead Light - Should be on all night in an anchorage. (It won't deplete the batteries.

Entertainment System: The iPod/AM/FM/XM Radio instructions are in the red Raymarine bag behind the starboard settee rear back cushion. Sound carries for long distances overwater and some folks enjoy their solitude; please be sensitive with the volume.

13. ENGINE:

QUICK NOTES

- Slight port prop walk, no key to start.
- Access is by lifting the steps into the salon.
- Sea Strainer is accessed from aft stateroom behind engine under removable shelf.
- Max RPM is 2900, fast cruise is 2600, efficient cruise is 2200 RPM.

DETAILS

VIVA has a 29HP Yanmar Diesel engine with a folding Max prop. It is very fuel efficient and easy starting. There is a slight port prop walk. The engine burns approximately $\frac{3}{4}$ gallon/hour, depending upon your RPMs.

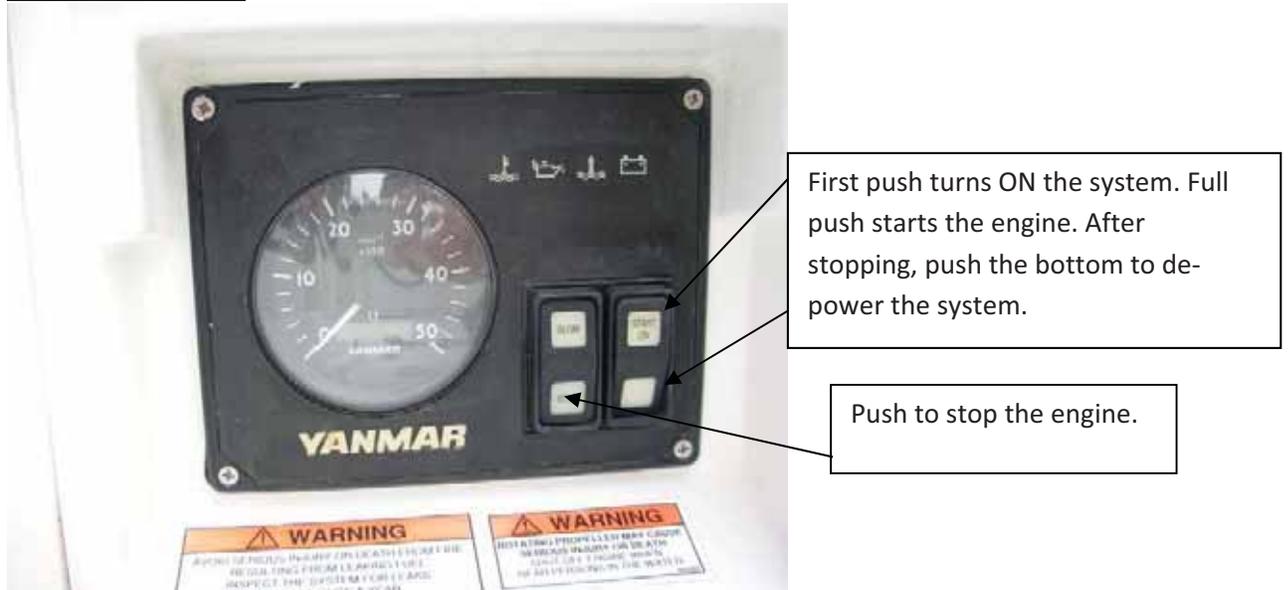
The **oil level** is checked by the maintenance Pro and you will not need to check it unless you are out for more than a week.



The **coolant level** is visible in the plastic reservoir at the rear of the engine on the port side.

The **sea strainer** is located centerline behind the engine. If necessary because of overheating, it is best accessed from the aft stateroom. Pull up the wooden shelf on the front bulkhead of the stateroom and it is directly underneath. The strainer is above waterline so the engine water intake seacock at the front of the engine does not have to be closed. Inspect the strainer visually and open it only if it is not passing water. Please be careful when replacing the top to not cross thread it. Avoiding clusters of Eel grass is the best preventative.

Starting the Engine:



- There is no key to start. (If there is no power at the helm, verify no one has turned the Start Battery switch out of vertical).
- Throttle is in neutral (straight up). If added RPM is needed to start the engine (not normally), then push in the red button at the base of the throttle handle. On the instrument panel on the side of the starboard cockpit locker by your right foot, push in the START/ON button to the first detent. A fan will start and red warning lights will illuminate.
- Push START/ON button fully to start the engine.
- Check for water out of the exhaust.

Running:

The engine runs well at any RPM, but the most efficient is around 2600. Please do not exceed 2800 as damage to the engine may occur. Be alert for any alarms that may sound (unusual) or excess smoke from the exhaust. Shut down the engine while you determine the cause. The low oil and overheat warning lights are on the instrument panel.

Stopping the Engine:

- Be sure the throttle handle is vertical and in the neutral position.
- Push the STOP button on the panel to stop the engine.
- Push the OFF button on the bottom of the START button, this will stop the fan.

14. FUEL TANK:

QUICK NOTES

- **Refuel at half full level.**
- **Wrench for the fuel cap is chrome one in the stb cockpit locker with 2 floats attached.**
- **Marine Fuel gauges are notoriously inaccurate, so know your usage.**

DETAILS

The diesel fuel tank holds 34 gallons and we recommend that you re-fuel at ½ tank. That precludes sucking anything from the bottom of the tank or sucking air into the fuel system; neither of which are any fun. As a general rule the engine uses ¾ gallon/hour and the furnace ½ gallon/hour.

The **fill pipe** is on the port aft deck just below the railing and next to the stern cleat. It takes a special Beneteau wrench to open, which is stored on the shelf in the forward part of the starboard cockpit locker. Be very careful when filling to avoid a spill which is illegal with a hefty fine. Use spill pads and listen to the fill sound to hear the gurgle as the fuel nears the top.

15. HEAD AND HOLDING TANK:

QUICK NOTES

- **Water pressure breaker ON to operate.**
- **Uses fresh water and has 3 flush options to save water.**
- **Only what has been eaten in the toilet.**
- **Toilet flushes into 21 gallon holding tank.**
- **Open macerator seacock under head sink before using macerator.**
- **Pump out cap amidships on starboard deck.**
- **To monitor holding tank levels; check by viewing top third of tank behind the forward mirror in the head**

DETAILS

Head: VIVA has a fresh water, electric toilet. As normal, do not put anything down the toilet that has not been eaten, including toilet paper, tissues, etc. There are three choices involved in flushing the toilet.

- Left switch is entire flush cycle.
- Right top is to add more water to the bowl
- Right bottom is to remove all water from the bowl



Because this system uses fresh water and you only have 77 gallons, be judicious in your full flushing. For example, if no solids are involved, then just removing the liquid is most efficient (right bottom). The water pressure breaker must be ON to operate the toilet. The master breaker for the toilet is inside the panel under the Nav table. It's inside on the aft side of the panel opening.



Holding Tank: The holding tank holds 21 gallons. There is a 'Y' valve under the sink in the head that directs the sewage to either the holding tank or directly overboard. Direct overboard discharge is against USCG regulations so the valve is set into the direction of the holding tank. Please leave it as set. San Juan Sailing will have addressed the issue of discharge in the Charters Briefing. There are two ways to empty the holding tank; pump out and the macerator.

Pump-Out: The deck fitting for the pump-out at a pump-out station is located on the starboard side about 6 feet forward of the cockpit.

Macerator: When in appropriate waters you can empty the tank by using the macerator:

- Be sure the macerator seacock is open. It is the middle seacock in the group under the head sink.



- The discharge switch is the round black rubber button on the face of the head sink.
- Listen for a change of pitch from the macerator motor which will indicate the tank is empty.



16. HEATER:

QUICK NOTES

- Diesel heat control on the side of the Nav table.
- Move button from OFF to HEAT.
- Takes a few minutes to warm up.
- Is not efficient to run it all night.
- Portable electric heater in head behind mirror.

DETAILS

Diesel Heat: VIVA has a Webasto Diesel furnace with warm, dry air circulation in the head, both staterooms and the salon. To operate, just slide the button on the control unit on the side of the Nav table from OFF to HEAT on the temperature control and set the desired temperature with the UP and DOWN buttons.



The heater outlets in all the rooms are controlled by baffles on the opening to regulate heat, except the salon which is regulated by the temperature set on the control unit.

The master breaker for the furnace is behind the battery switches in the aft cabin. Raise the lid above the switches and the breaker is on the fwd bulkhead on the outside nearest the hull.



The Northwest typical operation is to turn on in the evening, off all night while sleeping under the warm comforters, then on again in morning to take chill off and dry out cabins. Also, the heater uses considerable battery power so running all night MAY deplete batteries below minimum depending upon what battery power you have used during the evening.

Electric Heat: There is a small portable AC electric heater stored in the aft cabinet behind the mirror. You should use it only on shore power.

17. REFRIGERATOR:

QUICK NOTES

- Electric refer with additional cold box adjacent.
- Temp range from 0 to 5; coldest temperature is 5.

DETAILS

The refrigerator is a front opening electric refrigerator with a small freezer. The capacity of the refer is 4.6 cu ft or 133 liters. The freezer is about 5 quart size. The temperature is adjusted with a control wheel inside the refer. It is marked from 0 to 5 with the coldest temperature being 5. Additional cold storage is available in an ice box next to the stove of about 1.2 cu ft. [H=11', W=12", L=16"]. This may be alternatively used for dry goods storage. There is also a soft side cooler [1.5 cu ft] under the forward settee cushion on the port side. Run the refer at night only when hooked to shore power.

18. SAILS AND RIGGING:

QUICK NOTES

- Both Main and Headsail are furling sails.
- Deploy and Furl the Mainsail first and then the Jib.
- Running rigging adjusts from the cockpit.
- Mainsail and Jib Halyard clutches should not be released.
- Reef early to keep VIVA sailing efficiently.
- Keep pressure on opposing line when adjusting sails; tight wraps prevent jammed sails.
- Let boom free-float when adjusting sail area.
- Let wind help get a tight sail wrap by not luffing during furling.

DETAILS

VIVA is equipped with a very easy, yet efficient sail plan. Isn't that one of the main reasons you chartered a quality boat like VIVA? Let's explore the sails and their operation. And remember, furling, as the wind increases, reduces your heel angle and yet has little effect on your overall speed; and most important, it will reduce any possible crew anxiety.

Lines and Clutches: All running rigging that you will be adjusting run to the cockpit so no one has to go forward. Although both Jib and Main Halyards run to the cabin top clutches, under normal circumstances there is no need to adjust either Halyard. Here is the identity of the clutches and their associated functions: (moving from port to starboard)

Port Deck

Jib Furling: The furling line runs back through pad eyes on the rail stations to a clutch on the aft port deck.

Top of Cabin, left side of companionway

Jib Halyard: Black line on the first clutch (L to R) on the cabin top. Please **do not adjust** this line as there should be no reason to lower the jib.

Main Halyard: Black line on the second clutch. Please **do not adjust** this line as loss of tension can jam the sail. Both the main and jib halyards are stored in a mesh bag on the top of the cabin. Under normal operations please do not disturb this bag.

Main Sail Furling: White line with yellow and green stripes. Furls and retracts the main.

Boom Vang: Black line which adjusts the tension on the rigid boom vang.

Main Sail Outhaul: Line with red stripes. Pulls the main sail out of the mast.

Top of Cabin, right side of companionway

Main Sheet: White line. Positions the boom.

Asymmetrical Spinnaker Halyard: Red line with white spots. Use to lift dinghy onto foredeck if desired, and to hoist the Asymmetrical Spinnaker if you have coordinated with San Juan Sailing.

On the Mast

Topping Lift: Cleated on the mast. It adjusts the height of the boom when the main is furled.

Main Sail:

To deploy the main, loosen the vang and the main sheet just a bit to allow the boom to assume a free floating position. Running on a starboard tack (the mast to the left side of the boat) will ease the movement of the sail in and out as it provides a straighter angle to the furling mandrel. Keeping slight tension on the main sail furling line, pull out on the Main Sail Outhaul. [Tension on the opposing line when deploying or retracting a sail prevents fouling the furling drum (a 'birds nest') which should be avoided!] Use hand pressure on the outhaul until the last few inches when the winch may be necessary.

Tighten the vang and mainsheet to meet the wind conditions.

Furling and retracting the main: To reduce sail area or fully retract the main, loosen the vang and mainsheet slightly so the boom can free-float. Again, a slight alignment of the boom to the port side will help sail movement in and out. With a slight pressure on the outhaul, pull on the main sail furling line until the sail is where you want it. Once the furling line is cleated, minor adjustment of sail trim can be done with the outhaul. Because the final foot or so of the main has a sun cover sewn onto it, do not retract it into the mast as it could jam. Retighten the vang and mainsheet.

Topping Lift: If the topping lift is so tight that it interferes with main sail shape, it can be released at the mast while you sail. Although the rigid vang will support the boom, use the topping lift when you are done sailing for the day.

Head Sail:

Deploying the Jib is similar to the main. After uncleating and uncoiling the jib furling line, pull on the appropriate jib sheet to deploy, pull on the jib furling line to retract or furl. Again, slight pressure on the opposing line will reduce the chances of a drum wrap (birds nest). When fully retracting, wrap the jib sheets a couple of wraps around the furled sail to keep the wind from unrolling the jib.

Reefing: When reefing the jib, we have found that in heavier winds it may take two people to pull in the jib furling line. If two are not available, then moving up near the mast and pulling from there will make it easier to furl. Reefing the Main may require use of a winch on the furling line. Be sure that there is no hang-up in the system if the going gets really tough.

19. SHOWER AND SUMP:

QUICK NOTES

- **Sink faucet pulls out for a shower.**
- **Water can be VERY hot.**
- **Both engine and shore power heat water.**

- **Run the sump pump when showering to clear water off floor. Switch is on sink cabinet.**

DETAILS

Water is heated automatically when the engine is running under load. The hot water is stored in the insulated 6 gallon tank located in the lazarette under the port seat. It can also be heated electrically when on shore power. We use the sailors shower to conserve water when cruising: water on - wet down; water off - soap up; water on - rinse. The faucet spigot will become a shower spray when the nozzle is pulled out. The shower water drains into the sump pan located in the bilge. If the water rises onto the floor of the head, flip the switch around the cabinet from the macerator switch on the side of the sink cabinet.

There is also a shower on the stern. If you want to use it, be sure the water pressure breaker is ON. Many marinas have excellent onshore shower facilities, consider taking advantage of these when in port.

20. STOVE AND OVEN/MICROWAVE:

QUICK NOTES

- **Open LPG tank valve and then the LP GAS breaker.**
- **Lite burners with electric ignitor on stove.**
- **Turn off burner, then Turn OFF LP GAS breaker when finished.**
- **Push button alongside oven handle and lift up on handle to open oven.**
- **Lite oven with the electric ignitor.**
- **Check to be sure oven has flame.**
- **The Microwave operates only on shore power.**

DETAILS

Stove: The stove and oven, Force 10 LPG models are easy and convenient to use. They operate off of LPG tanks located in a closed and vented compartment under the port helm seat. Under normal usage the tank will last longer than the duration of your charter. To Operate:

- Open the valve on the top of the LPG tank.
- Turn on the LP Gas breaker on the electrical panel.
- Push in and turn desired burner knob while pushing the electric ignitor button. When lit keep knob pushed in for a few seconds for the thermocouple to warm up, then release and set desired temperature.
- To stop, turn flame off and turn the LP Gas breaker OFF.
- Close the valve on the LPG tank.

Oven:

- Follow the same procedure as above; turn on tank, flip breaker, then shift to the oven.
- To open the oven, push the chrome button next to the oven handle while lifting the handle.
- To light the oven, the procedure is the same as for the top burners: turn the oven temp knob while pushing the electric ignitor button.
- Check initially to be sure you have flame, and close the oven door slowly so you don't blow it out .

21. WATER:

QUICK NOTES

- **Water pressure breaker must be ON.**
- **Water tank manifold is under aft port settee cushion in salon.**
- **Water fills are on stb foredeck and port after deck. BE SURE IT SAYS "WATER".**
- **Star wrench for water fills in stb cockpit locker shelf w/one float attached.**

DETAILS

There is 77 gallons of fresh water aboard in two tanks. The Water Pressure breaker must be open to get any water flow. The manifold to change tanks is under the aft port settee cushion. The top valve controls the aft tank and the bottom valve controls the forward tank. It is not advisable to have both tanks open at the same time, as you have no reserve when you run out. Water is available throughout the Islands for re-filling. The fill fitting for the forward tank is on the starboard deck forward of the mast. The fitting for the aft tank is on the port aft deck. The special star wrench for the fills is on the shelf in the starboard cockpit locker and has one plastic float attached.