

# NOTES FROM THE OWNERS

## OF

### “HULA KAI”

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*Welcome aboard HULA-KAI*

*She's a 2-stateroom 2005 Catalina Mark II. We bought her in Portland, Oregon, in 2008, and sailed her to Bellingham in 2010. We hope you'll enjoy sailing her and cruising the islands as much as we do.*

*HULA KAI is very well balanced and sails beautifully. She is fast in light air, and is very stable in heavy weather. It is not uncommon for the boat to reach hull speed in as little as 12 knots of wind. At the same time, she is heavy enough feel solid, comfortable, and safe in higher winds.*

*The following features distinguish Hula Kai:*

- ***AIS (Automatic Identification System).*** *If you have not experienced AIS, you are in for a treat. It automatically identifies commercial vessels (heading, speed, etc), and sends them data about Hula Ka as you sail.*
- ***Air Battens/In Mast Furling Mainsail.*** *Combining the best of both worlds: the ease of in-mast furling with the sail shape provided by a full-battened main.*
- ***Bow Thruster.*** *Worry-free docking at the push of a button!*
- ***Generator.*** *8 KW GENSET provides push-button recharging, allowing for liberal use of high energy appliances.*
- ***Electric Fresh-Water Heads.*** *2 stage automatic fresh water flushing heads will spoil you. No smells, no Y-valves, no hassle.*
- ***Dingy on davits.*** *The Walkerbay hard-bottom dingy is stored on davits. This 1) keeps the dingy pristine for use, 2) allows for convenient entry/egress and ease of engine mounting.*

*We sincerely hope you have a great adventure. If you have questions or feedback we would love to talk to you. You can reach us at 574-536-0485.*

*Happy Sailing!*

*Ed and Mary Bessinger, Owners*

Hula Kai's Spec's:

Year: 2005  
LOA: 43' 2"  
LWL: 36'  
Beam: 13'10"  
Draft: 6'  
Displacement: 28,000 lbs (loaded)  
Mast height above WL: 60' (with antenna)  
Fuel: 43 + 17 gal.  
Water: 100 gal. Hot water: 11 gal.  
Holding: Fwd, 30 gal. Aft, 22 gal.

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**1. Emergencies**

**Fire** – There are four ABC and one BC rated fire extinguishers on board. They are located 1) in aft berth, 2) forward berth, starboard side, 3) forward berth, above closet, 4) under galley stove, and 5) port side cockpit locker (bench seat). All are effective against

electrical, grease, wood, and fuel fires. If you have a fire at the stove turn off the gas solenoid switch at the electrical panel.

**Hitting a Rock, Log, or Running A Ground** – In case of striking a rock, log, or running aground, immediately check for leaks in the bilge and then check for cracks in the fore and aft sections of the bilge where the keel attaches to the hull. Once you are sure no water is entering the hull contact **San Juan Sailing at 800-677-7245** and proceed to the nearest harbor and have a professional diver check the hull, keel, prop, and rudder before proceeding on your vacation.

**Leaks** – First determine that the bilge pump is on at electric panel. Then determine the source of the water leak. Check the through hulls and the prop shaft in the engine room. Get the crew on deck and into life jackets. Call for help as needed (use a PAN PAN call if the situation does not appear life threatening and a MAYDAY if it is). There is an all-size (red) TRUPLUG and wood plugs under port aft bench cushion in main salon.

There are two bilge pumps. The manual WHALE bilge pump is located on the port side of the cockpit, adjacent the steering wheel. The handle to operate the WHALE is in the port aft cockpit locker just below the pump. The electric bilge pump has an automatic float switch but the switch on the electrical panel can be used to power the pump manually. The float switch and pump intakes are located under the salon sole about 6 feet aft of the mast, directly under the table.

**Steering Failure** – If the steering system fails there is an emergency tiller in the port cockpit locker. It is in a red bag, marked EMERGENCY TILLER. It fits on rudder post which is accessed through the stainless cap in the deck, directly behind the steering wheel (the cap is finger-tight; it spins off). You will want to reduce all sail or power when using the tiller since the rudder is large and the tiller is small.

**Emergency Equipment** – Flares are located in aft berth below bed, clearly marked. The air horn is in cockpit bench locker. A 406 EPIRB is adjacent to companion way ladder.

**First Aid Kit:** A comprehensive first aid kit with inventory and manual is in the aft head.

## 2. **Anchors and Windless**

**Anchors.** Hula Kai is equipped with two anchors, one primary (35 # Delta with 200' of 5/16 high test chain and 100' of rode) and a Fortress mounted on starboard aft arch. The primary chain is marked with red or yellow paint as follows:

One red:	50'
Two reds:	75'
One Yellow:	100'
Three Reds:	125'
Two Yellows:	150'
Four Reds:	175'

**Scope.** 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 90'-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 15 feet in the islands 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 (typical example would be 25' of water + 6' of tide increase + 5' = 36' x 4 = 144').**

**Windless.** The Maxwell 800 electric anchor windlass receives power from the house batteries. The circuit breaker for the windlass is located in the main salon 6" above the cabin sole, adjacent forward cabin door (directly across from NAV table). Leave the windless on all the time, so that the windless is always ready to use. Push in to turn on (a red light indicates windless is powered). **Only run the windlass with the engine running.**

### ***To Lower the Anchor:***

1. Make sure the circuit breaker is on, engine running.
2. Unpin the anchor.
3. Unhook the snubber.
4. Lower the anchor until the needed chain is paid out, while simultaneously idle reversing the boat until anchor sets. Set anchor hard by reversing at 1000 RPM for a few seconds.
5. Secure the chain with the snubber and run out enough chain to create slack. **DO NOT LEAVE THE LOAD ON THE DRUM/WINDLESS.**
6. Turn on the anchor light if appropriate.

### ***Raising the anchor:***

1. Start the engine.
2. Turn on the circuit breaker for the windlass and, if needed, turn off the anchor light.
3. Open wash down valve.
4. Take in enough slack to unhook the snubber.
5. When retrieving the anchor, never use the windlass to pull the boat; instead, slowly power toward the anchor while using the windlass to take up the slack. Also, if the anchor is really stuck in the mud (you will hear the windlass slow under the load), stop the windlass and drive the boat forward to free the anchor.
6. Use the wash down hose to rinse the anchor and chain as it is retrieved. This will keep the boat and anchor locker a lot cleaner.
7. The incoming chain will pile up against the aft end of the chain locker so the operator needs to reach in and push the pile of chain forward every 50 feet of chain.

8. Once the anchor is out of the water, please wash it down and retrieve it by hand. Please do not pull the anchor up onto the rollers using the power of the windlass. BE VERY CAREFUL THE LAST FEW FEET.
9. Secure the anchor by hooking the snubber onto the chain and tying it to the windlass drum (the chain over the drum should not be the only thing keeping the anchor onboard).

### ***Stern tie/Stern Anchor:***

The **stern tie line** is a 200 foot reel of line for stern ties mounted on starboard arch directly above a cleat.

The **secondary stern anchor** is a Fortress with 50 feet of chain and 150 feet of nylon rode. It is in the aft port locker in an orange 5 gallon bucket.

### **3. Barbecue.**

The propane BBQ is plumbed to the propane tank, located in dedicated propane tank locker. Make sure the valve on the tank is turned on, and the yellow auxiliary valve is on. Be sure solenoid at electric panel is on. *As a courtesy to the next guest, please use the wire brush attached to the BBQ to clean it after use.*

### **4. Batteries, Charging, and Inverting.**

The main battery selector switches, located aft of the galley at floor level next to the engine compartment hatch, should remain at (#-2)- at all times. You will never need to touch them.

#### **Generator:**

Hula Kai is equipped with a 8 KW GENSET. Occasionally, at anchor, power consumption will drain the house batteries below 12 volts. The generator will quickly reenergize the batteries. To turn it on:

1. Be sure through hole is open. This is located in engine room directly adjacent the engine through hole.
2. Slide open teak panel beneath electrical panel.
3. Press "ON."
4. Press "HEAT" for five seconds.
5. Turn on GENSET by pressing "START" button. The Panda will start immediately.

## **Inverter:**

At anchor, you may wish to use the TV, Microwave, or a household plugged-in appliance. The inverter will provide 120 volts to the household plugs located throughout the boat.

To use the inverter:

1. At the AC panel, turn on either starboard or port or both breakers to energize the appropriate side of the boat.
2. Slide open aft teak panel below electrical panel. Press "INVERTER" button on the inverter/charger. The inverter will immediately begin to "search" for 110 appliances to energize.

### ***SPECIAL CONCERNS ABOUT THE INVERTER:***

- Turn the inverter off after use! If inadvertently left on, it may continue to discharge the batteries.
- Do not use the microwave with the inverter unless the generator is running. Unlike most other household appliances (the TV/DVD, for example), the microwave drains the batteries quickly.

## **5. Berths.**

*Hula kai* is ideal for 4 people, but she'll sleep a maximum of 6 - two in the forward cabin, two in each of the aft cabins, two people on the dinette table (converts to a double berth).

**Converting the Dinette into a Double Bed.** Pull up on each side of the table, then remove long legs (they're attached by friction only). Insert the short legs found in the Port small cabinet under the glass rack. The cushions are stored in the forward cabin, Port side.

## **6. Dingy**

*Hula kai* has an inflatable hard-bottom Hypalon 9' dingy. It is generally kept up on davits to keep it clean and for the convenience of access. (It is also kept covered when not in use.) Be sure the drain plug is in place! Untie the painter (it is used to secure dingy to stern rail when dingy is up on davits). To lower the dingy, uncoil the lines attached to the stern rail, then snap the lines upward out of cam cleat. Use three-to-one

pulleys to lower the dingy to the water. Gently lower swim ladder onto dingy, using the line tied to the ladder. Step through onto swim platform and into the dingy, then the swim ladder can be pulled back into boat. Retie painter to secure dingy to the boat.

To start outboard, be sure to make sure the vent in fuel cap is cracked open. Follow the instructions in “Outboard” below if there are any problems getting it started.

If you decide to tow the dingy, please consider the following suggestions:

Towing works best when the dinghy is brought close to the boat – only have about 4 or 5 feet of painter line from the stern cleat to the bow of the dinghy. This lifts the bow slightly out of the water and reduces drag so you go faster, and lessens the chance of wrapping the painter around the propeller. Tie the painter off twice – once at a cleat with a standard cleat knot, then the bitter end to the stern rail. We’ve recovered dinghies “lost at sea” by others who relied on a single cleat hitch.

Please take special care when beaching the dinghy (refer to the dinghy beaching procedure in your charter guest book). Most of the beaches you will land at are strewn with barnacle-covered, bottom-slicing rocks. When approaching the shore, weight the dinghy aft by leaning or moving the crew toward the back of the dinghy. Then offload everyone over the bow. Lift the dinghy above barnacle height using the hand lines on either side, and set it down gently on the beach. Also remember to secure the painter under a rock or to a large driftwood log – we have very large tidal fluctuations (so your dinghy won’t float away).

## **7. Dodger & Bimini.**

Hula Kai has a completely enclosed cockpit, and unique, extra-large windows to view the mainsail from the helm. If you need to clean the glass, the following issues are of concern:

*The dodger’s plastic “glass” is vulnerable to scratching from salt crystals, especially after sailing into a challenging breeze. When salt spray on the glass dries in the wind, tiny salt deposits are left behind and tend to obscure your vision. Please avoid directly touching the glass with a damp rag or sponge. Salt does dissolve in water, but not as fast as you might think. The salt crystals remain un-dissolved 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 and “flood” the glass to 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!*

## **8. Electrical Panel.**

The switches at the panel board are self-explanatory, however the circuit breakers are color-coded for simplicity. As soon as you enter the boat, turn on all breakers marked with green dots; breakers with yellow dots should be turned on as needed, breakers with red dots should never be activated, and breakers with double green dots should never be turned off. The refrigerator (“refrig”) and the watermaker are “locked.” And please note that the switch on the A/C side of the panel labeled “SHORE POWER” is also linked with the generator and inverter, so it should ALWAYS BE ON.

**Leaving the dock/Switching from Shore Power to Ship Power.** As mentioned above, when switching from 120 AC (shore) to 12 volt DC (ship), leave the main breaker labeled SHORE POWER activated. Just below the electrical panel, behind the teak sliding door on the right, is the Charger/Inverter with a switch labeled “SHORE” and “SHIP”—this needs to be turned to SHIP when leaving the dock and “SHORE” after returning.

**Water Pressure/Water Tank Usage.** Hula Kai has three water tanks. The shut off valves are located under the sink, and are clearly labeled. The best practice is to work off one tank at a time (or, alternatively, use two tanks simultaneously, keeping one in reserve)—when one runs dry, it reminds you that you need to get water at your earliest opportunity. When the pressure pump “runs on” rather than building pressure and stopping immediately, you know it’s time to switch tanks. Hula Kai has lots of water, but it’s possible to use lots of water as well—remember that the toilets use fresh water, as does the anchor wash.

**Shore Power A/C Circuit Breaker.** This box is located in the starboard cockpit locker. It rarely trips, but if it does, just turn it back on.

**Running & 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 reduced visibility (like fog or on the rare days in the Pacific Northwest when there’s heavy overcast).

**Anchor Light.** Should be on all night in an anchorage. (It won’t deplete batteries.)

## **9. Electronics.**

Hula Kai has a complete suite of modern electronics suitable to cross oceans. The radar/chart plotter/GPS, AIS, depth sounder, wind instrument, and autopilot are all Raymarine products, and are tied together with SEATALK and NMEA. Turn on the navigation suite of instruments by activating the VHF, NAV/DATA, Autopilot, and Radar/Plotter breakers. (If you're a Ham you may, of course, operate the SSB as well).

**Cellular Telephones.** *Hula kai* is equipped with 2 cigarette lighter type outlets that may be used for recharging your cellular telephone. One is on the electrical panel face and the other is in the galley, next to the "coffee house" cupboard.

**VHF Radio/RAM.** The remote access microphone (RAM), when plugged into the outlet on the pedestal, controls all radio functions of the unit mounted above the nav station from the steering station. The VHF at the Nav station is turned on (after the VHF/Stereo breaker on the electrical panel is "on") on by holding down the volume knob (upper right corner) for 3 seconds. There is also a "PWR" switch on the RAM to turn on the system at the helm. We find this very convenient while entering and leaving moorings. There is also a hand-held VHF located next to the electrical panel.

## 10. Engine & Handling.

**Reverse.** *Hula Kai* "walks to port" in reverse.

**Docking.** *Hula Kai* carries momentum well, so your final approach and turn in toward your slip can usually be done with the shifter in neutral...you'll certainly need no more than "idle speed forward" (unless there are high winds). The usual practice is to use a bit of reverse in the final few seconds to stop the boat and move the stern to port.

**Bow Thruster.** To activate the bow thruster, push the button at the helm (just to the left of the chart plotter), then push it again. It is now activated. The arrows indicate the direction of the bow "thrust." **Use it!** It will spoil you, and make tricky docking situations much easier (and often less exciting!).

San Juan Sailing makes the following suggestions concerning returning to doc:

*When coming into our docks in high winds or if you'd just like a little assistance upon arrival, simply hail "San Juan Sailing" on VHF channel 80. We'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, especially in windy conditions or with an inexperienced crew, is a sign of prudent seamanship.*

**Starting the Engine.**

1. Check the oil level. The dipstick is accessed by releasing the latches on the companionway steps and pulling them forward. (There is a light switch for the engine compartment just aft of the galley on the bulkhead. "STBD CABIN" breaker must be on.) The dipstick is on the front starboard side of the engine. There is a wide gap on the dipstick between the full line and the fill line. **Do not overfill.** Do not add oil unless the level is below the lower fill line. Use the onboard spare oil (just in front of the engine) to add no more than a cup at a time. Then, after waiting about 2 minutes for the oil to trickle down to the pan, check the level again.
2. **BE CERTAIN THE THRU HOLE IS OPEN.** Access the engine compartment on the port side through the double doors. Because this is so important, and so easy to forget, we use a sign above the ladder "ENGINE AND GENERATOR THRU HOLE VALVES OPEN" and religiously turn it around when the thru holes are opened or closed.
3. Make sure the gearshift is in neutral, which is at about 1 o'clock.
4. Insert the key and turn it clockwise, to the first click. The alarm will begin to beep loudly.
5. Push the engine start button. The engine will start almost immediately, within 2-3 seconds. After the engine starts, check for water gurgling out the exhaust. Warm up the engine at 800 to 1000 RPM. To increase RPM without putting transmission into gear, push center of rubber button on throttle lever while increasing throttle. Please allow 5-10 minutes of warm up before placing a load on the engine.

#### **Proceeding in Forward / Reverse.**

Bring the throttle back to the neutral position (about 1 o'clock). Forward gear is forward on the throttle lever; reverse is aft on the throttle lever. The throttle lever is "stiff", so sometimes it is easier to "tap" the lever with the palm of your hand.

#### **Operation.**

The 56? HP Yanmar 4JH3BE series engine is extremely reliable. Cruising speed is 6.5 knots at 2400-2500 RPM. Fuel consumption is approximately .95 gallons/hour at cruising speed.

**Engine Shutdown. Remember--do not shut the ignition key off while the engine is running!** (This can damage the diodes on the alternator, and the batteries will no longer charge. If you accidentally do this, turn the key back to the "on" position as soon as possible.) Instead, first bring the engine to idle and the gearshift to neutral. Allow the engine 5 minutes to cool down. Then push the fuel cutoff button located next to the key. After the engine stops, turn the key to the "off" position (turn it counter-clockwise) and remove key.

## 11. Fuel Tank.

*Hula kai* has a 43-gallon fuel tank for the engine and a 17-gallon fuel tank for the heater. The fuel gauge is located at the helm and is activated by the key. **When filling the tank listen closely and stop as soon as you hear fuel coming up the fill pipe.** It will foam out the vent if you go much further. The deck fitting for filling is on the starboard aft side. The deck fitting for the heater is on the port aft side. Fuel gauge for the heater is in *The engine room, aft of the fuel filters.*

San Juan sailing makes the following suggestions about fueling up:

*Please be very careful when fueling. Never allow maximum flow from the filler hose. If you do, the fill tube will surge and diesel will spill from the vents onto the side and onto the deck. It takes only a few drops of diesel fuel in the water to create a sheen and subject you to a Coast Guard fine. Fill slowly and carefully. Check the side vent and, with dish washing soap, wipe up any excess fuel to avoid yellowing the hull and stern and polluting the water. Also be very careful of drips when removing the hose. Diesel and shoe bottoms are a very slippery and dangerous combination. After wiping, please use soapy water to scrub down any drips so it does not stain the fiberglass.*

*Put your ear down to the fill hole and listen to the diesel flow. When the pitch changes and gets higher and higher, the tank is likely full and you're now filling the hose between the tank and the fill hole. Avoid a fuel spill – STOP! Check the fuel gauge. If the gauge is not on "F", continue filling. When you think you're finished fueling, check the fuel gauge one last time to make sure it's reading "F". That way, San Juan Sailing will not charge you a \$50 fueling charge (plus the cost of fuel).*

*Note: Unlike automobile fuel gauges, fuel gauges on boats are notoriously inaccurate, especially on the low end. Therefore, whenever the fuel level drops below ½ full, you should refuel at your next opportunity. NEVER let the fuel level fall below ¼ full or you're in danger of running out of fuel. (Towing and the cost of a mechanic to bleed the air from the fuel lines is an expensive proposition for a charter guest.)*

## 12. Heads & Holding Tanks.

**Heads:** *Hula Kai* has 2 electric toilets. Each toilet has two stages, with self-explanatory push-button modes. Plastic bags are provided in each head in a drawer at your right elbow for all toilet paper or tissue. (PLEASE PUT ALL TOILET PAPER IN THE WASTE BASKET) THANK YOU.

## **Holding Tanks/Macerators:**

To empty the holding tanks at sea is a simple matter of opening the appropriate thru-hole and turning on the macerator for that tank until the tank is empty. It is a good practice to do this daily, but certainly BEFORE returning to dock at the end of your vacation.

Forward head/tank: 1) flip breaker “MACERATOR(S)” on; 2) open thru hole clearly labeled “MARINE HEAD OUTLET” under cabin floor hatch located just aft of forward bunk in forward cabin; 3) toggle ON/OFF switch located on port bulkhead next to the floor (just to the left of the bottom dresser drawer. Stand by the macerator switch until the tank is empty, which make take a few minutes. When the tank is empty, the pump makes a distinctly different sound—it is the change in pitch which lets you know the tank is empty. That’s it. Be sure to immediately close the thru hole.

Aft head/tank: 1) flip breaker “MACERATOR(S)” on; 2) open thru hole clearly labeled “MARINE HEAD OUTLET” behind the “flip down” door just forward of the bunk in the aft cabin; 3) toggle the ON/OFF switch located in the aft head. When the tank is empty, the pump makes a distinctly different sound—it is the change in pitch which lets you know the tank is empty. That’s it. Be sure to immediately close the thru hole. **SPECIAL HINT AT SEA UNDER POWER:** When the engine is running, it is nearly impossible to hear the aft macerator pump running. Use this technique: go into the aft cabin and place your hand on the open thru hole valve while the macerator pump is running. When the tank is empty, you will feel a distinct change in vibration which lets you know the tank is empty. (PLEASE TURN OFF THE MACERATOR BREAKER WHEN FINISHED)

San Juan Sailing makes the following suggestions regarding holding tanks:

*If you pump out the holding tank at a shore facility, please fill it with about 5 gallons of fresh water through the deck fitting to rinse, and then pump it out again.*

*Offshore sailors have a rule: “Never put anything down a marine toilet that hasn’t been eaten first.” And that, of course, includes feminine items. In fact, offshore sailors do not even put soiled toilet tissue down a marine head. They simply deposit soiled toilet tissue (and feminine items) in a receptacle such as a waste basket with a liner bag or a ziplock baggie, but not down the toilet. We and San Juan Sailing highly recommend you follow this rule. And since we’ve been recommending this, we’ve had almost no incidents of plugged heads!*

### **13. Heater.**

The diesel-fired Webasto cabin heater will make the interior “toasty” within 10-15 minutes. The heater control is located at the Navigation Station. The rocker switch to the right of the thermostat turns the system on or off, and the thermostat controls the temperature.

### **14. Keel Depth.**

Hula Kai drafts 7 feet at the water line. The depth sounder transducer is set to “tell the truth.” Thus, if the depth sounder reads 8 feet, you have 12” to spare!

*San Juan sailing strongly recommends that you always maintain a minimum of 10'-12' under the keel at all times, both underway and at low tide on anchor.*

### **15. Outboard.**

*Hula kai* is equipped with a 4-stroke Honda 2 horsepower outboard. This brand and size has proven to be a practical and VERY reliable dinghy outboard.

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.

*As a courtesy we have an additional red spare gasoline container tied into your dinghy.*

*WARNING – Gasoline fumes are explosive and a very dangerous fire hazard if stored on a boat. Keep the spare gasoline container in the dinghy and tied to the transom so it stays upright. NEVER store the spare gasoline container in a locker, lazarette, or any other storage area on your vessel.*

#### **To Start.**

1. Push the fuel valve lever (starboard aft corner of the outboard) aft to open the fuel valve.
2. Pull out the choke switch (starboard forward corner of the outboard).
3. Open the air vent on the top of the fuel cap (top of outboard) by turning counter-clockwise about 3 full turns.
4. Make sure the black U-shaped kill clip (with the red lanyard) is clipped into the red shut-off knob (port forward corner of the outboard).
5. Turn the handle throttle ¼ turn counter-clockwise.
6. Pull the rip cord until it starts. (You shouldn't have to pull it more than 5 times.)

**While Running.**

1. Push the choke back in shortly after the engine starts (after 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--just swivel the outboard around 180 degrees.

**To Shut Off.**

1. Shut the outboard off by pushing in the red shut-off knob (where the kill clip is clipped in). Or just pull the red lanyard until the clip pops 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 at stays in place.

To put the outboard shaft back in the water, release the stainless steel lever on the starboard side of the shaft.

**When Not in Use.**

1. Put the outboard back on the outboard mount on the stern rail and tighten both braces.
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 (top of outboard) by turning it clockwise.
4. Secure the outboard further by tying the safety lanyard with to the stern rail.

**Troubleshooting.**

If the engine won't start, review steps 1-6 above to make sure you've done all 6 steps. There is a spare spark plug and spark plug wrench in the tool box in case the engine won't start or is running rough. (A new spark plug solves myriad outboard problems. 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 outboard is running and you're heading toward shore, and the engine suddenly quits, it's usually that someone has forgotten to vent the fuel cap. If the engine is running fine but the propeller isn't moving, the shear pin is probably broken – just take the cotter pin out to remove the propeller and replace the broken shear pin (a spare pin is located forward of the shaft under the handle grip) and put the propeller and new pin back into place.

**16. Refrigerator/Freezer/“Supercold”.**

The refrigerator is left on at the the electrical panel at all times (it has a plastic breaker lock). We have found that by leaving it on, it stays cleaner and more hygienic. There is a small freezer compartment in the refrigerator (a dozen hot dogs max capacity).

To drain the water from the refrigerator for cleaning or in case of water build-up, pull the small plug in the lower left-hand bottom of the refrigerator. The manual pump is to the aft of the refrigerator, and pumps directly to the bilge.

Hula Kai has an additional “SuperCold” compressor added in anticipation of sailing to hotter climates. It is turned on and off with the starboard pull-out switch located beneath the aft bunk next to the fire extinguisher. (Its location there is so the crew sleeping in the aft cabin can turn it off at night, to avoid hearing it cycle on and off all night.) IF THE SUPER COLD IS ON, IT WILL TURN THE REFER INTO A FREEZER. Therefore, leave it off! Pulling the switch out turns it on, pushing it in turns it off.

## 17. Sails.

**Headsail.** The 135% genoa has roller furling for your convenience. Slight hand-over-hand tension on opposing lines – furling line and sheets – prevents problems such as a rat’s nest on the drum (should the wind catch the sail and unwrap it violently) or a baggy furled sail.

**Reefing the Headsail.** Getting the boat into the wind reduces the load on the sail. Simply ease the jib sheets (keeping control of them) while pulling in the jib reefing line until only the amount of sail you desire is deployed. You should not have to use the winch to furl the jib. If you cannot furl by hand, forcing it with the winch will only exacerbate the problem. Instead, investigate to see why it will not furl in naturally.

**Mainsail/Air Inflated Battens** You may want to turn the boat into the wind. Here are the procedures for furling and unfurling:

### 1. Unfurling:

Open “DOWN MAIN” and “MAIN OUTHAUL” line clutches and pull main out hand over hand. Pull by hand to start and if it is windy you may need to use the winch to fully deploy.

Next, fill air battens with compressor located in small locker on port cockpit bench. There are four battens, numbered 1-4 from the top down. Fill the battens by flipping the appropriate toggle switch on, then triggering the compressor with the switch. They will fill within a few seconds; look up at the sail to check their progress. When the batten looks plump like a sausage (or 5 pounds on the meter), it’s full.

### 2. Furling/Reefing

**You must deflate the battens to reef.** Flip the toggle on number one batten (the top batten) and turn the switch on the compressor to “deflate.” You will see the batten

visible deflate as you look aloft. Once it's deflated, you may reef. If you are furling the entire sail you must, of course, deflate all of the battens.

Otherwise, furling the main is straightforward. Pull in on "DOWN MAIN" and ease out "MAIN OUTHAUL"—keeping plenty of tension on the outhaul to get a nice tight wrap of the mainsail.

## **18. Shower, Hot Water & Shower Sump Pump.**

Hot water is stored in the insulated tank. It takes about 30 minutes of running the engine under load to get the water hot. When on shore power, you can heat your water electrically by turning the "water heater" switch on the A/C panel to the "on" position. It takes about an hour to heat the water electrically.

**CAUTION:** The engine heats water to scalding temperatures! So please BE CAREFUL!

After pushing the "sump pump" breaker to "on" at the electrical panel, the pump is controlled by a toggle switch located to the right of the washbasin.

## **19. Stove/Oven.**

The gimbaled propane stove has three burners and an oven. The procedure is as follows:

1. Turn the electric solenoid switch at the electrical panel.
2. Light a match or butane lighter, push in the stove control knob in and turn to the left to high. The burner should light immediately. Hold the knob in for 2-3 seconds (warming a thermal couple) and release. You may then operate the knob like a normal stove.
3. When finished with the stove, shut off the burner(s), then shut off the solenoid switch. (What little propane remains in the line from the tank to the galley is insignificant, and even if this tiny amount of propane were to leak into the cabin, it would not cause a problem.) No need to shut off the propane tank during the day.

To operate the oven:

1. As always, turn on the electric solenoid switch at the panel
2. Oddly, you have to turn on a stovetop burner first.
3. Turn oven valve to pilot or a little beyond.
4. Pushing down on red ignition button, ignite pilot with a butane torch (provided).

**20. Entertainment: DVD/TV/Stereo/I-Pod.**

The TV and DVD are one unit, and the remote control is located in a pouch mounted on the bulkhead next to the TV. The TV/DVD use household current, so you'll have to turn on the inverter at anchor. The CD player/Radio is above the SSB radio, and there is an MP3/I-Pod connection located there, as well. A rocker switch to the right of the stereo (around corner), triggers the speakers on the spreaders.