

Operation Manual

Welcome aboard GAIL LEE!

We are happy you have chosen the Gail Lee for your vacation. She is a Leopard 384 catamaran built in South Africa in 2010 by Robertson and Caine. The boat balances performance, accommodation, safety and practicality.

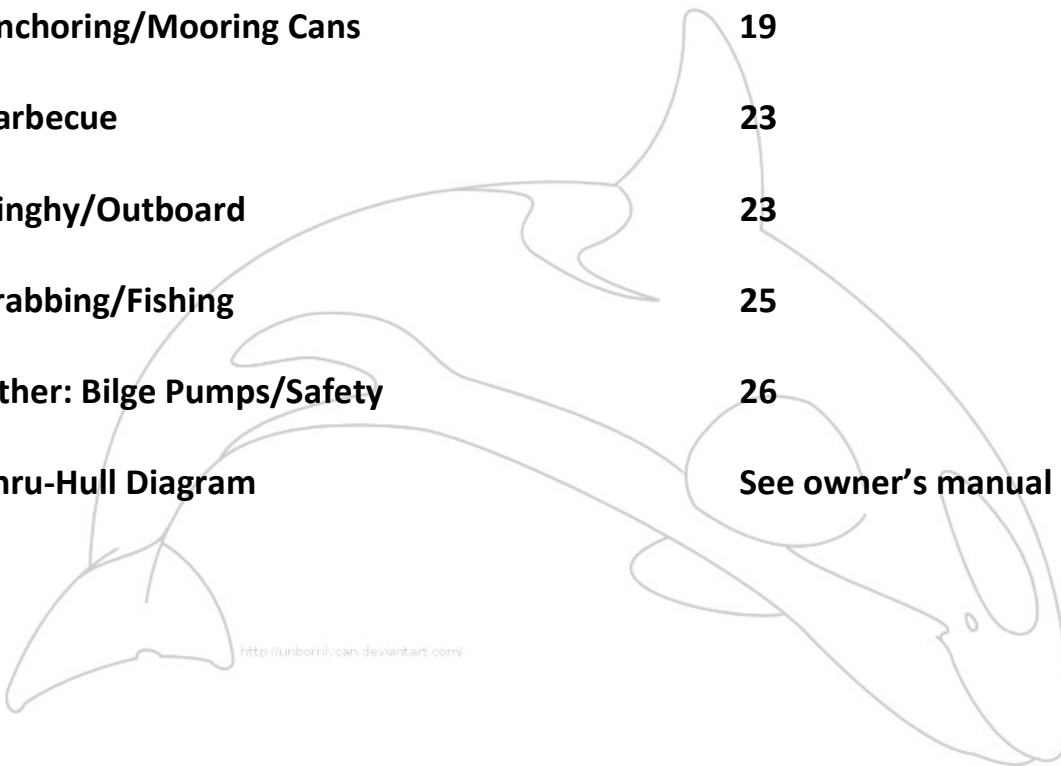
This manual will help you become familiar with the boat. If you have questions about the boat or about places to visit, please do not hesitate to ask the AYC staff.

<http://unbornican.deviantart.com/>

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BOAT OPERATION

Engine Inspection

Remember your “**WOBBS**” every morning: **W**ater (Coolant), **O**il, **B**ilges (Inspect and Pump-out), **B**elts and **S**ea Strainer.

Check the level of COOLANT in the expansion tanks located in the engine rooms.



Figure 1-Raw Water Filter, Fuel Filter, Coolant Reservoir

Check the level of OIL in each engine by checking your dipsticks. Look at the etch marks on each dipstick that indicate the proper oil level. **DO NOT OVERFILL OIL!** Only fill if oil levels are below the ½ way mark. Ask your fleet captain at checkout if you have any questions about the markings on dipsticks. Check the general condition of the BELTS, HOSES, and FUEL LINES.

Observe the glass of each RAW WATER STRAINER for debris. Shining a flashlight thru the strainer often helps see debris. If necessary, close the seacock (where engine connects to stern drive at base of engine), it looks like this:



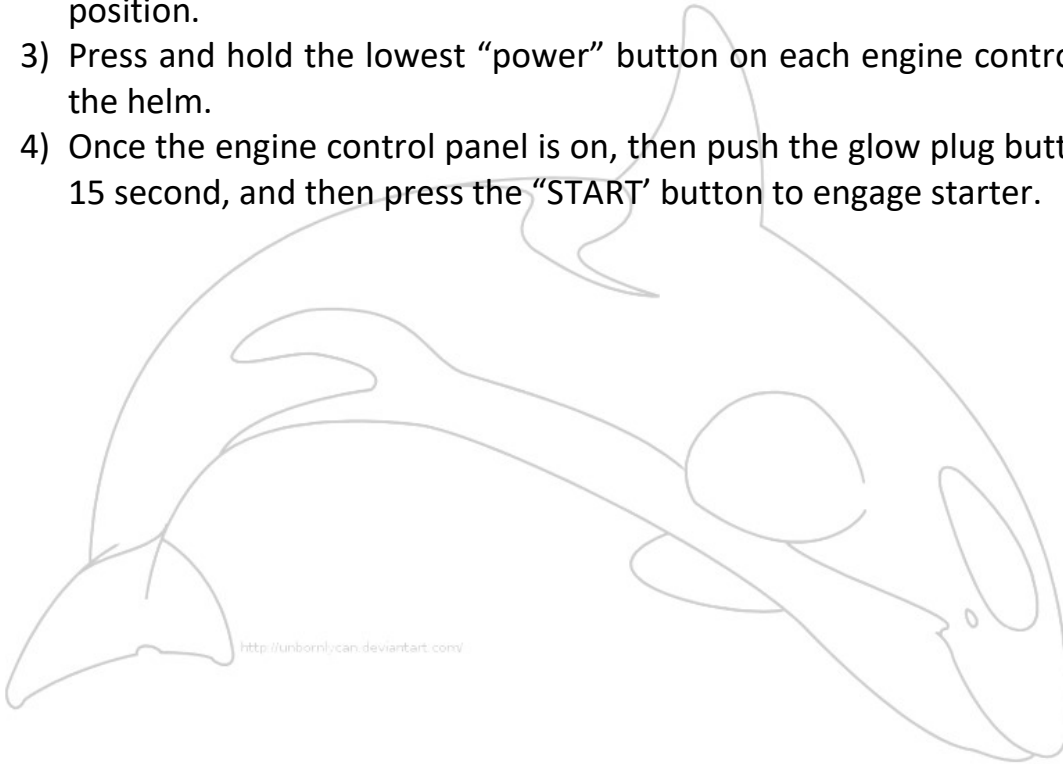
Figure 2 - Seacock for raw water

open the strainer cover, clean the strainer, and reassemble. Remember to reopen the seacock. **Confirm water flow from exhaust(s).**

Engine Start-Up

Before starting the engines, do your inspection.

- 1) Start each engine separately. (one at a time)
- 2) Ensure GEARSHIFTS are in 'neutral' as indicated with labels. THROTTLES should be run up and down and then brought almost back to the idle position.
- 3) Press and hold the lowest "power" button on each engine control panel at the helm.
- 4) Once the engine control panel is on, then push the glow plug button for 10-15 second, and then press the "START" button to engage starter.



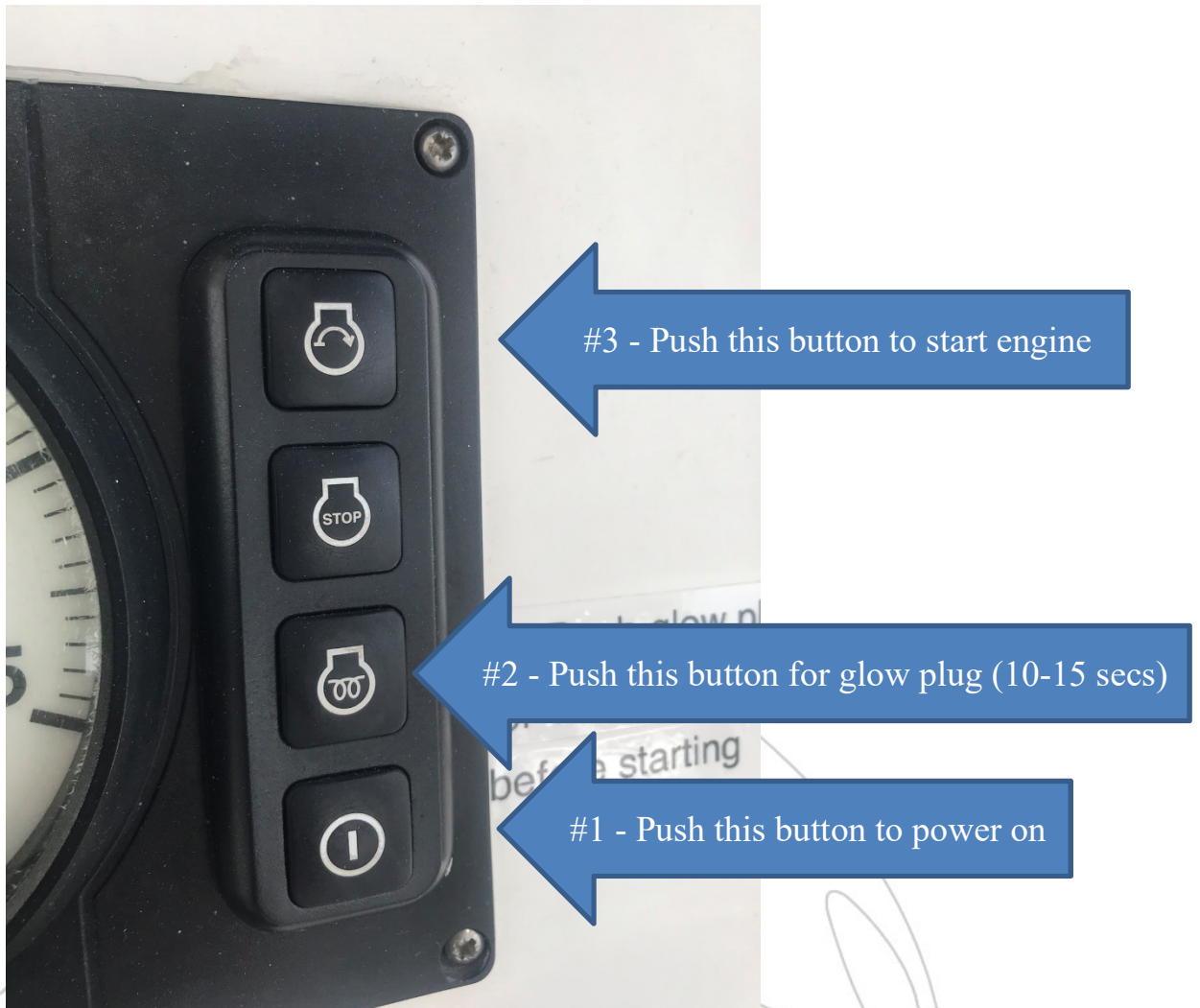


Figure 3 - Engine control panel

- 5) Engines will be on and alarm will sound. Pull throttle handles laterally out to put throttles into neutral. This requires two hands per handle. Bring throttle up to 1500RPM on the TACHOMETER until alarm turns off.
- 6) Warm the engine for about 5 minutes before engaging transmission. Observe the readings of the gauges.
- 7) Check to make sure raw water is being expelled. If not, stop engine immediately by pushing "stop" button, recheck the raw water-cooling system to ensure the seacock is 'open' (handle in-line with valve). Next, check the raw water strainer for debris. Remove the strainer, clean, re-assemble, and reopen the raw water intake valve (seacock). Restart the engine and re-check water flow from the exhaust. If water is not flowing

properly, the RAW WATER PUMP may need to be primed¹. See footnote or seek help.

Shut-Down

Before shutting down, allow the engines to 'idle' for about 5 minutes to cool them gradually and uniformly. The time engaged in preparing to dock the boat is usually enough.

- 1) Ensure each GEARSHIFT is in the 'neutral' position and each THROTTLE is in the 'idle' position.
- 2) Turn off engines by holding the "Stop" button.
- 3) Lastly, hold the power button for 2-3 seconds.

Getting Underway

DISCONNECT the shore power cord (see 110-Volt next page). Close the PORTHOLES, WINDOWS, and FORWARD HATCH. Turn on your VHF and electronics. ASSIGN crew members their various positions. Once outside the marina, idle the engines while crew brings in fenders and lines.

Cruising

Ensure the throttles are in the 'idle' position before engaging the gearshifts to avoid transmission damage. **Cruising speed is a maximum of about 2200 – 2300 RPMS.** If you run at 2200 RPMS you will cruise at 6 knots and use only 1 gallons of diesel per hour. Your speed will vary depending upon the weight and load and weather conditions. **Running the engines at over 2400 will cause higher engine temperature, possible damage, and higher fuel consumption. It will also cause the belts to slip and shred and you will get very little extra speed.**

Fueling Up

OPEN FILLER CAP(S) located next to the engine hatches with a winch handle.

¹ Priming requires you to shut the raw water seacock, open and fill the raw water strainer with tap or sea water, close and hand-tighten the cap, then reopen the seacock as the engine is started (best to do this with two people – start engine first, and reopen seacock 2-3 seconds later) The water you added to the raw water strainer will prime the pump. **Double check that seawater is flowing out with the exhaust.**

MAKE SURE YOU HAVE THE RIGHT FUEL! DIESEL! DIESEL! DIESEL! MAKE SURE IT IS GOING INTO THE RIGHT DECK FILL! DOUBLE-CHECK!

Before pumping, have an oil/fuel absorbent pads (found in aft table storage) handy to soak up spilled fuel. Locate fuel vents if possible to listen for tank becoming full and to know when to be ready to absorb spilled fuel. You should have a rough idea of the number of gallons you will need by the engine hour indicator. Each tank holds approximately **45 gallons** of fuel.

Place the DIESEL nozzle into the tank opening, pump slowly and evenly, and note the sound of the fuel flow. Pumping too fast may not allow enough time for air to escape, which may result in spouting from the tank opening. As the tank fills, the sound will rise in pitch or gurgle. Pay attention to the TANK OVERFLOW VENT on the outside of the hull near the tank opening. The sound may indicate that the tank is nearly full. Top off slowly, and carefully, and be prepared to catch spilled fuel. Spillage may result in a nasty fine from law enforcement.

Replace each tank cap. Turn on blower before starting engines. *Caution -- Clean up splatter and spillage immediately for environmental and health reasons. Wash hands with soap and water thoroughly.*

BOAT ELECTRICAL

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

The systems are controlled from the AC ELECTRICAL PANEL and DC AUXILIARY PANEL located in the main cabin.



Figure 4 - AC Panel

BATTERY SWITCHES FOUND

- Each engine battery switch is located under the berth for the respective engine it services.
- **House battery** switch along with the **windlass** and **davit breakers** are behind the garbage can in the galley.
- When not connected to shore power, batteries are providing all power. Therefore, monitor the use of battery levels carefully with your volt meter

located on the panel. How much electricity is being drawn from the batteries can be monitored on the ampere meter.

- **Turn off all electrical devices that are not needed.**

Most breakers are labeled by colored dots.

Green signifies “usually on”.

Red is “usually off”

Blue dots are water pressure or water-related like pumps.

Yellow signifies electronics or items to use cautiously.

No dots are breakers signify irregular use or use with discretion.

110-Volt AC System

SHORE POWER supports all AC equipment and receptacles on board, as well as the battery chargers.

To connect to shore power, plug the **30 amp** POWER CORD found in the aft table storage into the dock receptacle. The cord is permanently wired into a fuse box.



Check the power rating/plug size of the nearest dock receptacle (that is 50 amp, 30 amp, 20 amp, or 15 amp). Turn the dock power on. Cords coming off the bow can be wrapped loosely around the bow line or bow rail.

At the ELECTRICAL PANEL, flip the SHORE CIRCUIT BREAKER on. Check for reverse polarity. Then turn on appropriate breakers for battery charger, refrigeration, and fresh water pump. Watch your amp meter for load. **If the load exceeds amperage, you will pop your breaker.** If this occurs, turn off some items

(e.g. water heater) and wait to turn on one of your systems until your use of electricity drops.

If your outlets fail to work, check your GFIs to make sure that they have not been tripped. Be aware that one GFI breaker may supply plug-ins in several areas.

Inverter Power and Generator: This boat is not equipped with an inverter or generator.

House (12-volt) System

3 battery banks support 12-volt DC power: 1) port engine battery 2) starboard engine battery 3) house battery bank

The house BATTERY SWITCHES are located behind the garbage can. Normally, leave the ENGINE and HOUSE SWITCHES in the 'ON' position. *You should not really ever have to turn them off. If for some reason you do, please change positions with the engines off.*

Your 12-volt panel shows all the systems supported by your batteries. Primarily you will be turning on the breakers for your lights, water pressure, electronics, etc. **Bilge pumps should always be left off (hence the red dot). You will burn them out if you leave them on.** They are connected directly to the battery if the float switch activates them. Your breakers such as gas/propane, shower pump, etc. should always be turned off after every use.

House Battery Bank & Switch

The HOUSE BATTERY BANK provides power for all DC systems, except the engines and 4 automatic bilge pumps. When disconnected from shore power, all 12-volt devices drain the house battery. Use devices as needed. The DC voltmeter on the DC panel can be switched between Port, Starboard, and House Battery banks to measure charging or resting battery voltages.

When a battery bank is being charged, the voltage will read from about 13.1 volts to 14.4 volts depending upon state-of-charge of the battery bank. When the battery bank is at rest, (that is, not being charged), the voltmeter can give a rough indication of the state-of-charge of the battery bank.

All the batteries are charged by the engine ALTERNATORS while underway. The engine/house batteries are charged by the BATTERY CHARGER when connected to shore power. Ensure the Battery Charger circuit breakers at the electrical panel are ON when plugged into shore power.

Voltage (Wet Cell Battery)	Battery State
12.65 volts	100%
12.47 volts	75%
12.25 volts	50%
11.95 volts	25%
11.70 volts	0%

Battery Parallel Switch

Not available

<http://unbornican.deviantart.com/>

SANITATION SYSTEM

Marine Toilet

It is important that every member of the crew be informed on the proper use of the MARINE TOILET. The valves, openings, and pumps are small and may clog easily. If the toilet clogs, it is YOUR RESONSIBILITY!

Always pump the head for children, so you can make sure nothing foreign is being flushed. The starboard head has an electric marine toilet. The port head is manual.

Caution – Never put paper towels, tampons, Kleenex, sanitary napkins, household toilet paper, or food into the marine toilet. Use only the special dissolving marine toilet tissue provided by AYC.

To use the manual toilet on the port side: move the SELECTOR SWITCH to the 'left' (wet bowl). Lift the PUMP HANDLE 3 to 5 times to wet the bowl. After using the toilet, lift the PUMP HANDLE to wet the bowl again. Then, move the PUMP LEVER to the 'right' (dry bowl). Pump to remove water from the bowl. Flush sufficiently to move effluent in the hoses; heavy effluent may clog hoses. Clean the toilet as necessary.

The TOILET THRU-HULL is located **under the floor panel in the hallway of each hull**. Clean the toilet as necessary. If the toilet-pump handle squeaks or sticks, squirt 'pump lube' into the toilet and pump the toilet slowly to draw the lube into the pump unit. The 'pump lube' is located behind the mirrored cabinet.

To use the electric toilet on the starboard side: First check that the switch for the electric toilet on the DC panel is **on**. Then use the push button panel and let each cycle run through. The normal flush cycle will flush several times.



Figure 5 - Toilet Flush Control

Holding Tank

The sanitation HOLDING TANK holds approximately **15 gallons**. Be aware of the rate of waste production. (about 1 gallon per normal flush with the electric head) With an overfilled tank, it is possible to break a hose, clog a vent, or burst the tank. The result will be indescribable catastrophe and an EXPENSIVE FIX to you. **Empty the tank EVERY OTHER DAY to avoid this problem.** Flushing a few ounces of AYC provided deodorizer will help control odors.

The HOLDING TANK is located in each bathroom behind a wall panel. There is a tank watch warning light located at the tank on the wall, but do not rely upon this only as they can get clogged. Monitoring the general number of flushes is best.

The holding tank is emptied in one of two ways:

#1 At the Marine Pump-Out Station, remove the WASTE CAP located on the side deck above the tank. Turn on pump and prime with seawater. Insert the pump-out nozzle into the waste opening. Hold nozzle firmly against the deck fitting to ensure a tight seal and open valve located on handle. Rinse with approximately 5 gallons of fresh water from hose provided by the pump (2-3 minutes flow). Then re-pump to leave the tank rinsed until your next pump out or the next charter. This helps eliminate head odors. When pumping is finished, close lever on handle and turn off pump. Remove from deck fitting. Clean up surrounding area of waste cap with soap and water.

#2 The tank's contents can be discharged with the discharge valve under the floorboard in the hallway only in Canadian waters². It's the large black plastic valve to the forward portion of the space under the floorboard.

² the new regs allow no sewage discharge of any kind in any waters within one mile of any shore. Discharge of raw sewage in salt water is permitted if the vessel is greater than three miles from any shore. This allows overboard discharge, for example, into the middle of the Strait of Georgia. But most boaters do much of their boating close to shorelines so are caught by these new regulations.

For vessels in restricted **Canadian** waters where there is not sufficient distance between shores, and where there is no pump-out alternative, an exemption allows overboard discharge, as long as it is on an ebb tide, the vessel is in the deepest possible water and it is making its maximum cruising speed in

WATER SYSTEM

Fresh Water Tank(s)

The FRESH WATER TANK(S) holds 264 gallons and located in the bow lockers. Observe the water level by opening the caps. Waste water from the sinks and showers drains overboard through various thru-hulls.

To refill the tank, remove the WATER CAP(S) and use a clean hose reserved for potable water (available in dock locker at AYC). **DO NOT USE hose provided at Pump Out Stations.** Please be VERY careful to avoid flushing debris from the deck into the tank opening. And DO NOT fill water and diesel at the same time!

Fresh Water Pressure Pump

The WATER PRESSURE PUMP is located **behind the starboard back cushion in the main cabin.** Activate pump at the DC panel by turning on the breaker. If the water pump continues to run, you are most likely out of water. If you run out of water SHUT OFF YOUR HOT WATER HEATER on the AC panel if that happens to be on. Serious damage can occur! Then close valve to empty tank and open another. Valves are also **behind the starboard back cushion in the main cabin.**

Hot Water Tank

- 1) It's best to take showers right after or while the engines are running. This provides the best heat. Be careful as it get really hot. If you are anchored and not on shore power this is a good time to charge your batteries by running the engines and take your showers.
- 2) The HOT WATER HEATER has a 12-gallon capacity tank is available when connected to shore power. To use on shore power, flip on the water heater circuit breaker on the AC electrical panel. **Please give shore powered water heater up to 30 minutes** to heat water in both 12-gallon tanks. It

excess of four knots. Overriding this exemption is the caveat that no solid waste can be found on a shoreline, nor can there be any surface sheen resulting from such a discharge.

seems to take a long time. Again, you'll have better results running the engines and have steaming hot water in about 5 minutes.

Shower

Before taking a SHOWER, make sure **water pressure** and **shower sump pump** breakers are on. Take only very short "boat" showers (turning off water between soaping up and rinsing). To keep shower tidy wipe down the shower stall and floor. Check for accumulation of hair in the shower and sink drains. An additional FRESH WATER SHOWER is located port transom platform. Ensure that the faucets and nozzle are completely off after use.

GALLEY

Stove/oven

The stove and oven is fueled by propane tanks.

Your propane stove is activated by the following steps:

- #1 Open the propane tank valve located in lazarette behind helm.
- #2 Switch DC breaker labeled "gas" to on position
- #3 Open gas valve at the stove (Press in knob) and light burner. You will need to hold knob in for a few seconds while the thermo coupler warms up. The same applies to lighting the oven. When finished cooking turn off the switch and close the tank valve.

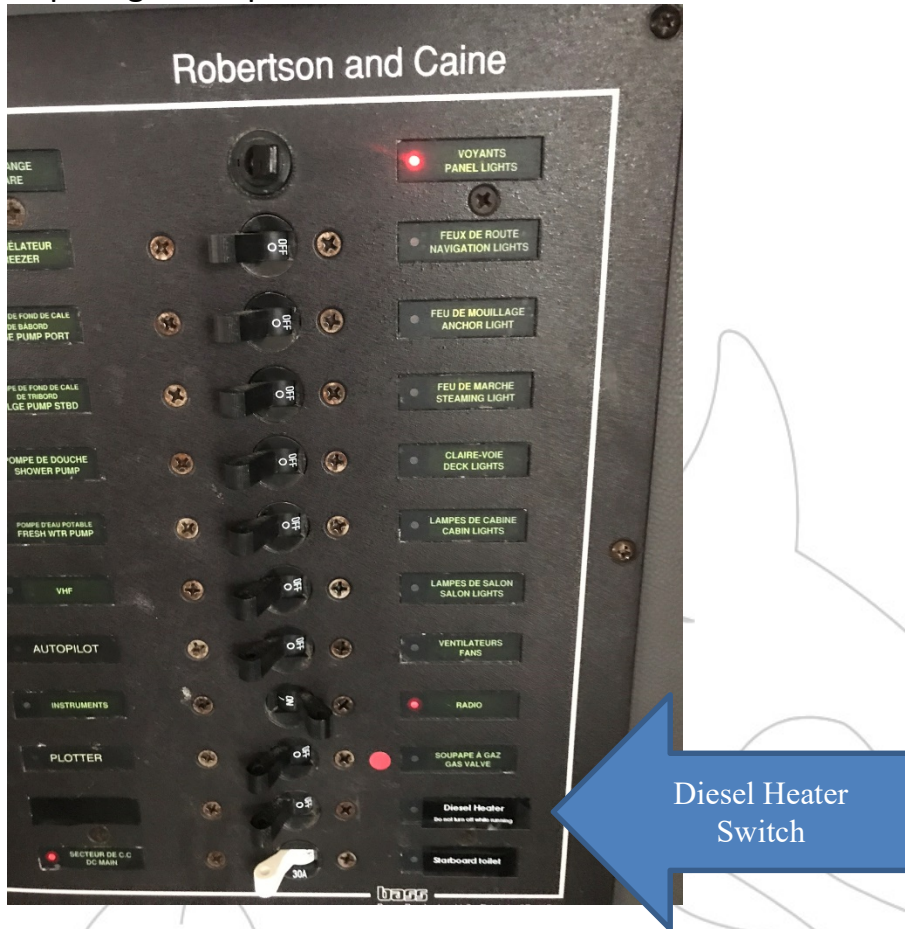
Refrigerator

The REFRIGERATOR is dual voltage (12-volt and 110-volt power). It will automatically use 110-volt power when the shore power is connected; otherwise, it will operate on 12-volt power. Monitor the use of the refrigerator when the engines are not charging the 12-volt battery system. Minimizing openings helps a lot! Freezer is above and fridge below.

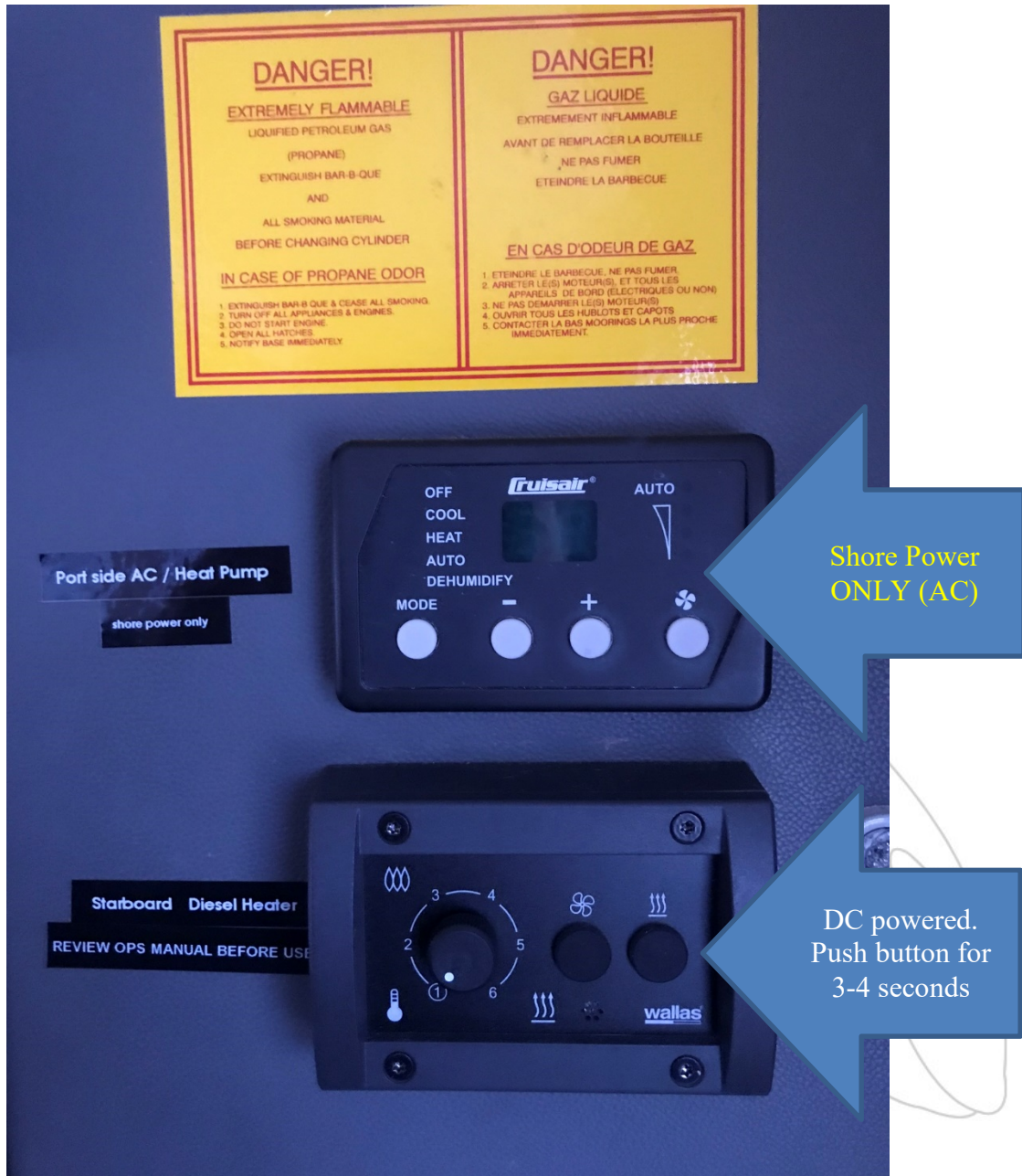
HEATING SYSTEM

Diesel Heater (DC):

The Gail Lee is equipped with a Wallas30GB Diesel heater blowing heat into the main salon and the starboard cabins only. This heater can be operated **without** requiring shore power. First switch the diesel heater breaker on the DC panel.



Then push start button on diesel heater for 3-4 seconds. This is also the button you'll need to push to switch it off. The fan button cycles through several levels of air volume pushed by the heater. The control knob sets the temperature. Note: The ambient temp will be measured at the control panel and not in the cabins.



Built-in Cabin Heat (AC)

The Gail Lee is also equipped with an AC system available when **connected to shore power only**. Check the heater breaker on the AC panel is on for this heat/cool source.

Space Heaters: Two space heaters are provided aboard and typically found on the floor of the forward berths. **Only available using standard outlets and when connected to shore power**. Please leave them plugged in at the end of your charter at the lowest heat position available.

ELECTRONICS

All electronic manuals are located in a black binder on a lower shelf of the aft starboard cabin.

VHF Radio

There is one (1) VHF RADIO located above the electrical panel. Remove cover. Make sure the VHF breaker located on the DC electrical panel is on. Monitor channel 16 while underway.

Depth Sounder

There is a DEPTH SOUNDER. Select the instrument switch on the electrical panel.

MFD

The multifunctional display connects the Radar, Charts, GPS, AIS, Wind, Boat Speed and Depth. It is not integrated with the autopilot. **Electronic Charts included in the MFD are Insight. Insight charts integrate tide and current tables. Please use them to plan your trip, save you time and help you get around. Select the "C" on the charts for currents and "T" for tides. There are also other labels and important information included on the charts.**

Radar

To operate the RADAR go to the main menu of the MFD. Select RADAR. Click menu and then select "Transmit". You can then go Back to the charts and overlay the radar onto the charts. **Remember you are not allowed to travel in FOG or in serious wind conditions.**

Global Positioning System (GPS)

Turns on automatically with MFD. The Gail Lee is equipped with Type B AIS transmitter.

***Note** -- GPS is considered a navigation aid. Do not rely on it. Compasses, charts, and dividers are the tools to plot position, course, and speed.*

ENTERTAINMENT SYSTEMS

AM/FM + CD (remember those?) + wired aux cord

The radio is located on the electrical panel. It operates like a normal car radio. There are 2 speakers (stereo) in the salon and two (stereo) on the bridge. The **FADER** controls the distribution of the salon and bridge speakers. Select "enter" on the bottom button under the main volume knob. Keep selecting until you see FAD and BAL. The **BALANCE** controls the sound distribution in the left and right speakers.

Aux cord: Plug in your aux cord (USB) into the outlet to the right of the radio. Note: if you are using an iphone, you'll need at least one itunes song on your phone for the radio to detect your device. Go figure!

CD Changer

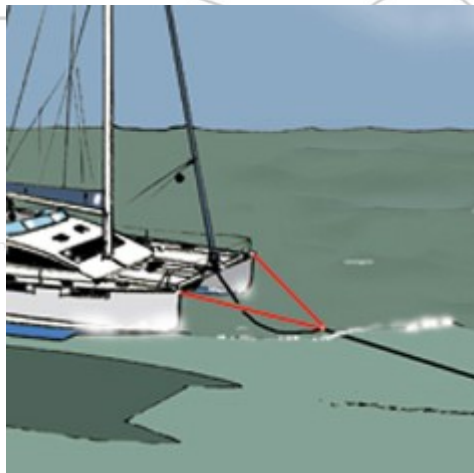
- Located by removing the face of the radio display.

ANCHORING

The primary WORKING ANCHOR is a **Delta 45LBS** and is attached to 150ft chain and 50ft nylon line passed through to the deck from the ANCHOR LOCKER. The locker can be accessed through the bow locker, if needed.

Deploying Anchor: Check the WINDLASS BREAKER SWITCH located behind the main galley garbage can is 'on'. At the bow, look for the remote tucked into a holder by the foot of the mast. Tap gently on the 'down' remote control located at the base of the mast to provide a small amount of slack in the chain. Remove the anchor chain keeper by lifting it up and out of the way. Let out a little more chain and tip the anchor just over center and gently begin lowering the anchor. Be careful of pinch points.

Let out enough ANCHOR RODE (chain and nylon line) before setting the anchor. Colored markers are placed every 50 feet on the chain and nylon rode, indicated amount of rode. If the anchorage is crowded put down at least a 6 to 1 scope (120 feet for 20 feet of water), back the anchor in with a short burst from both engines. Then let out additional scope dependent upon conditions. Install anchor chain bridle to chain and release the bridle retrieval line from the cleat as the bridle extends out into the water (you want enough slack to avoid strain on this very thin line!), slack enough chain from the windlass to ensure that the bridle is taking on the full load of the boat at anchor. See diagram below and review with fleet captain.



Check your position against a few landmarks to ensure your anchor is set and you are not dragging. REMEMBER TO SWITCH ON THE ANCHOR LIGHT ON THE DC PANEL.



Retrieving the anchor: Before raising the anchor, **ALWAYS start the engines** as the windlass uses significant amounts of power. Slowly motor towards anchor and power 'on' the WINDLASS using the remote control to take up chain slack and remove pressure on chain bridle. Pull up bridle with retrieval line. Move line safely out of way of chain and windlass. Remove the bridle from the chain and reattach to cleat. As the boat moves toward the anchor, press the 'up' control to take up slack line. Give the windlass short rests as you are pulling it up. If necessary, idle the boat forward with the engines by placing briefly in gear to put slack in chain. **PLEASE DO NOT PULL THE CATAMARAN TO THE ANCHOR USING THE WINDLASS.** Motor to it to avoid straining the windlass. Place yourself in position to guide the anchor onto the roller. As the anchor rises, be careful not to allow it to swing against the hull. If you are strong enough, pull up anchor slightly out of the water and back down to wash most mud before bringing it up fully with windlass.

Readjust the anchor chain keeper between the anchor and windlass to secure anchor. Turn 'off' the WINDLASS breaker behind when finished.

A SPARE BRITTANY ANCHOR and 50' rode is stowed in the port bow locker. If you need to deploy the spare anchor, be sure to attach the rode securely to the chain shackle.

Mooring Cans

<http://unbornlcan.deviantart.com/>

The State Park Sticker on your vessel allows you to pick up the MOORING CANS in the parks for free. You only need to register at the kiosk usually located at the heads of the docks. Mooring cans have a metal triangle at the top upon which is a metal ring. The metal ring is attached to the chain which secures your boat. IT IS VERY HEAVY.

Wear PFDs. When approaching mooring field, start engines, then drop sails. The key to a safe and easy mooring is to establish with your crew how the boat will approach the mooring ball before you get there. Confirm what hand signals to use for "turn left," "turn right," "stop," "slow down," and "reverse." Have this discussion after you drop/furl the sails. Don't wait until you are on "final

approach” to the selected mooring ball. Drive through mooring field once slowly to identify your potential mooring ball, as well as wind and current effect.

An ideal approach with a catamaran is to drift backwards to the mooring ball so it levels with the starboard swim step. This allows the helmsperson to see the ball and steer with the engines if needed. It also allows the crew to thread two stout and long mooring lines through the ring without hanging over the edge (mooring buoys deployed by WA State DOR are too heavy to lift). This requires a little preparation.

Procedure:

1. Prepare crew to thread two (2) boat mooring lines through the mooring ring of the buoy from a position on the starboard swim step at the rear of the catamaran.
2. To do so, steer catamaran slowly forward upwind or up current of the ball, whichever has more impact on boat control. Helmsperson should control the catamaran to drift backwards gently and center the ball to the starboard edge of the swim step. Instruct crew to pass lines through mooring ring, and not pick up mooring ball anchor rode that runs underneath ball.
3. Run both mooring lines through ring and back and let out enough slack to ‘walk’ the mooring lines forward alongside the starboard hull by letting catamaran slowly drift backwards under control. **If you run over the ball or it goes in the middle, release lines immediately, pull out of the water, motor out, reposition catamaran and try again.**
4. Once you have ‘walked’ the mooring lines alongside the starboard hull to the bow, you should let out enough line and cleat one line to the starboard mooring cleat. Then allow the helmsperson to pivot the catamaran to starboard as the crew brings the other line across the front of the cat and cleat the other line to the port mooring cleat (do NOT USE any other cleat!)
5. When boat and crew are settled, pay out line evenly between both mooring lines until catamaran rides comfortably. Double check cleat hitches for

correct “locking loop.” Hitch should look like a “figure 8,” with one line running perpendicular over the other two. Safety First

For early arrivers at the mooring field, watching boaters attempt to tie up to a mooring ball has provided many afternoons of entertainment. If you understand and follow these basic steps, you won’t be the entertainment.

BARBECUE

- **First, plug the drain valve of the dinghy and lower the dinghy into the water. Catamaran engines need to be running when lowering or raising dinghy.**

The PROPANE BOTTLE is in a blue bag hanging from the rear stanchion and the REGULATOR is stored on the first shelf of the gear cabinet left of fridge/freezer. Propane bottle snaps in by twisting the bottle upside down while placing valve into BBQ. Carefully light the unit, preferably with a long-stem butane lighter. The barbecue generates a lot of heat and cooks hot and fast. Please wipe BBQ down with a soapy paper towel and clean grease drip collector tray periodically if you are using it daily.

Note: Propane bottles are provided by AYC. If you anticipate needing an additional bottle, please ask AYC staff. Caution -- For safety reasons, do not store an opened propane bottle within the salon or engine compartment. Chances are these will leak slightly once opened and propane gas could settle into low spaces. Store these bottles in the bag provided. Ensure gasoline and flammable materials are not near the barbecue.

DINGHY & OUTBOARD MOTOR

The AB 11.5 foot AB inflatable DINGHY is equipped with a 9.9hp Lehr engine. **Never place any people or extra weight into the dinghy while it is attached to the davits whether lowering it or raising it.** The davits only have a 300 lbs capacity which is completely taken up by the dinghy and outboard.

To deploy the dinghy, follow these steps:

- 1) Replace both plugs. inside (red) and outside (white).

- 2) Press switch on ceiling near davit to unwind the winch.
- 3) Continue until yellow hanging straps are limp
- 4) Detach hanging straps and hook them back together to the top of the bar to prevent them from swaying and hitting anyone in the face.



- 5) Flick engine tilt lock lever down, pull back towards you, and push engine gently into water. Check that latch has caught to secure engine.
- 6) Deploy throttle arm, connect gas line carefully to avoid damaging thread. Turn gas on. Insert red kill switch and key (found in gear cabinet left of fridge/freezer)
- 7) To start engine electrically, turn key clockwise and release. If electric start fails, you can add a little throttle and use the pull cord to start. If the engine is cold, you can increase throttle to 1/8 to 1/4 throttle position
- 8) To switch off, either turn key to counter clockwise or push red kill switch button.
- 9) Dinghy engine must be lifted out of the water with handle retracted and yellow hanging straps on both sides (see image above). **Always lift dinghy with engine to the port side of the catamaran.** The black spreader bar keeps the straps from snaring the engine and causing potential breakage with the throttle arm and the gear lever.

Retrieving the dinghy:

- 1) Start engines as winch consumes vast amount of battery power.

- 2) Reverse process: Remove gas tank and line, flick tilt lock lever up, lift engine out of water until tilt lever catches, push back throttle arm, and replace hanging straps as shown above, lift only dinghy + engine.
- 3) Remember to remove plugs and drain water as needed after each use. Reset grey cinch straps around the davits and bimini posts when the davits are fully retracted. **WARNING:** Observe winding of dinghy winch line as it can bunch up to port side and jump off the spool. Yes, this will stop the fun in a hurry! It comes from prior experience... We've found that using the red broom head to hook the line and guide it towards the starboard side helps when line begins to bunch up towards port side.

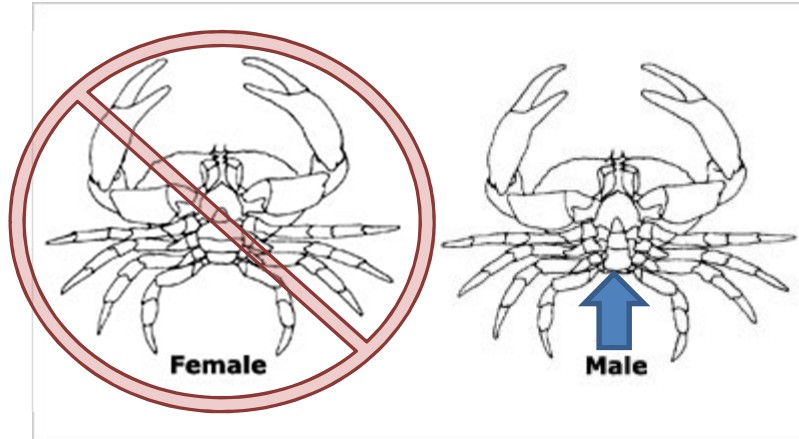
Outboard Motor: The 9.9hp Lehr outboard motor is equipped with an electric start, a forward and reverse gear. More detailed info found in this binder.

Coast Guard regulations state that any child 14 and under must wear a life jacket in a dinghy. It is a good idea for EVERYONE to follow this rule.

CRABBING & FISHING

Always check the fishing and crabbing requirements before you leave on your cruise. You will need a license. Many areas are CLOSED to crabbing and fishing on certain months.

CRAB AWAY FROM THE BOAT! Lines can get wrapped around props. Fish-flavored cat food with the pop-up ringed lids or frozen chicken work best for a nice neat way to bait the pots. After 15-20 minutes, retrieve the crab line and pots quickly. Be certain of water depth before lowering crab pots; make certain the buoy line is long enough for the depth. Measure the crabs using the CRAB MEASURING GAUGE located in gear cabinet left of fridge/freezer. Keep ONLY the male crabs of proper size (usually 6 ¼ inches across the carapace). Check for narrow abdominal flap.



Boil crabs 1.5-2.5 lbs crabs 15 minutes, 3-lbs crabs about 20 minutes in sea water. Drain crabs; to be able to handle quickly, rinse briefly with cool water.

After using, wash all equipment thoroughly with fresh water (available from the cockpit shower faucet). *Note -- Please do not store wet gear inside the boat.*

OTHER: Safety & Bilge Pumps

SAFETY should be paramount in your daily cruising. A MAN OVERBOARD DRILL should be discussed and practiced with a boat fender. Remember your lifejackets are stowed in each cabin. A few should always be out and ready.³ Your electronic flare and safety equipment are located under port seat cushion in main cabin.

The Gail Lee is equipped with 4 AUTOMATIC BILGE PUMPS. The master switch is located on the electrical panel. **The switch should be left in the OFF position.** You may occasionally hear the pump operate due to condensation and water from the shaft log accumulating in the bilge.

An AUXILIARY HAND OPERATED BILGE PUMP is operated in each hallway in the cockpit using the handle provided for that purpose This is used only in emergency situations.

³ If the label says the PFD is "approved only when worn" the PFD must be worn, except for persons in enclosed spaces and used in accordance with the approval label, to meet carriage requirements.

The ENGINE SPARES BOX (oil filter, raw water impeller, pump parts, injectors, and other small parts) and engine fluids (engine oil, gear oil and coolant) are stowed in the port engine compartment.

THRU-HULL LOCATIONS

See Owner's Manual

