

OPERATION MANUAL

Goodlife

46' Grand Banks Europa Yacht Operating Manual



Welcome aboard!

We are happy you have chosen the Goodlife for your vacation. Goodlife is the coveted sedan model with covered walkaround and Bimini for sun protection and an extended salon, perfect for protection from the elements while cruising the San Juan's in sun or rain. We are sure you will enjoy cruising the lovely islands of the Pacific Northwest.

We trust 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.

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Quick Reference Guide and Check List

Important Vessel Numbers

Vessel Name:	Goodlife
Vessel Official Number:	1070065
Hull ID Number:	GNDFF0199L789
Grand Banks Model:	GB 46EU
Grand Banks Hull #:	199
MMSI #:	338394298
Capacities:	
Sleeps 4-6	2 in each stateroom, 2 in the salon.
Fuel:	600 Gallons in two 300-gallon tanks
Fresh water:	300 Gallons in three tanks
Holding Tank:	60 Gallons in 2 tanks
Engines:	Twin Caterpillar 3208 engines, 375 HP each
Dimensions:	
Length on deck LOA:	47 feet 2.5 inches
LWL:	44 feet 9.5 inches
Beam:	14 Feet 9 Inches
Draft:	4 Feet 5.5 inches
Displacement:	39,000 Pounds
Fluids:	
Motor Fuel:	HSD #2 Diesel
Motor Oil, mains:	15W-40 Chevron Delo Multigrade
Transmission Oil:	30-weight Chevron Delo Engine
Coolant:	50-50 mix, ethylene glycol & water; corrosion inhibitor added
Heating:	Webasto DBW2010 diesel fired hot water type heat, with fan forced air handlers
Batteries:	(3) 8D, (2) J185H-AC, (1) group 24 genset start, all wet cells, 12VDC systems

Operating Parameters (Estimated):

RPM	Speed	Fuel Consumption	Naut. Miles/Gallon
1600	8.0	5.5 GPH	1.45
1800	9	8.5 GPH	1.12
2000	10.0	15.0 GPH	.5

Operating Checklists-Goodlife

First Thing Each Day

- Check engine oil, coolant.
- Check under-engine oil pads. Okay?
- Check fuel tank levels (open valves on top/bottom of sight gauges to check them and close when finished)
- Check holding tank indicator. Need pumping?
- Turn off anchor light if illuminated.
- Check fresh water usage gauge in engine room.

Starting Engines

- All lines clear of propellers and on deck.
- Items running on AC evaluated vis-a-vis the Inverter and Generator.
- Throttles retarded to idle, shift levers in “neutral”.
- Stop solenoid breaker “On”.
- Engine power switches “On”, start engines in turn.

Leaving Dock (Only 3–4-minute engine warm-up required!]

- Shore power switch “Off”.
- Shore power cord removed, stowed on board.
- Step stool aboard, if used.
- Lines removed as appropriate.
- Fenders hauled aboard and stowed.
- Lines and other deck gear secure/stowed.
- Doors and hatches closed and secured as appropriate.
- All electronics and NAV computer powered up and ready.

Underway • Helms-person on watch at all times.

- RPM under 1400 until engines warm to 180°; RPM *NEVER to exceed 2000 RPM*.
- Wake effects always in mind.

Approaching Dock

- Fenders out on appropriate side.
- Bow line OUTSIDE stanchions and bloused around toward midships.
- Engines dead slow, wheel centered for engine-only maneuvering.
- Mate ready to secure stern first (in most circumstances).

Arriving at Dock in Marina

- Lines secure, including spring lines.
- Step stool out, if needed.
- Shore power cord connected, shore power switch “On” to appropriate power location.
- Shore power confirmed on meters, Inverter “Off”, Charger “On”.
- Electric use monitored for current capacity of shore facilities.

Arriving at Mooring Buoy

- Skipper puts starboard end of swim step, with mate on it, next to buoy.
- Mate loops 20’ or so line, such as bow line, through buoy ring.
- Mate holds two ends together, walks up side of boat to the bow.
- With buoy held close to bow, line secured to each bow cleat through hawsepipe.
- Generator running with Inverter “Off”, Charger “On” if generator is required for AC power.

Mooring at Anchor

- Anchor is lowered from pulpit while boat is backed up slowly away from anchor.
- When desired chain length out (5:1 scope or more), windlass is stopped.
- Engines reversed for “count of five” until chain pulls up virtually straight. Note: The boat is not held in reverse against a taught anchor chain!

Generator Starting/Stopping

- Starting: Be sure “generator” breaker is “On”
- Hold “Preheat” switch for 15 seconds, then release “Preheat” and hold “Start”.
- Check port side exhaust for water flow, be sure Charger is “Off”.
- After one minute for warmup, turn power selector from “Off” to “Gen”.
- Stopping: Turn power selector from “Gen” to “Off”, wait one minute for cool-down.
- Hold “Stop” switch until stopped.

Overnight Checklist in Marina

- Shore power “On”.
- Inverter “Off”, Charger “On”.

Overnight at Anchor or Buoy

- Anchor light “On”.
- DC electrical items all “Off” including radios, extra lights, etc.

Upon Arising

- Start generator if necessary for battery charging.
- Charger “On” if shore power available or generator running.

BOAT OPERATION

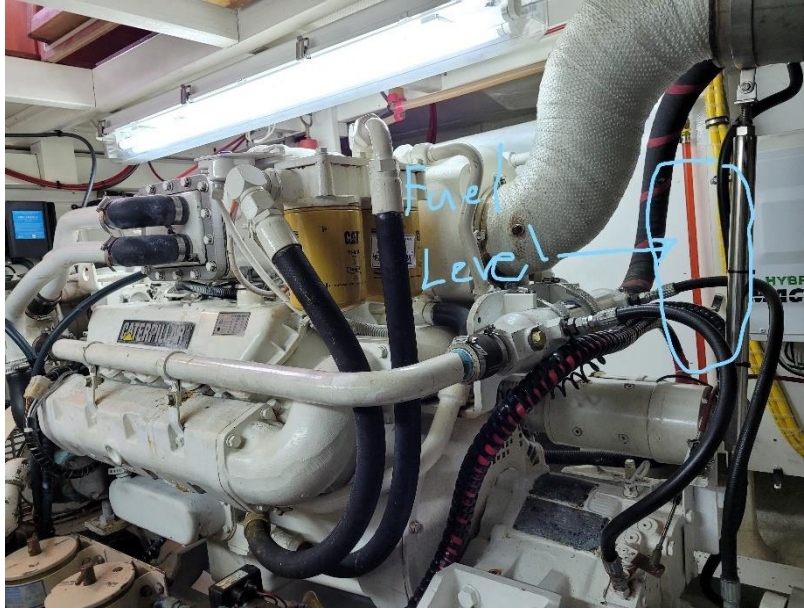
Before embarking on your adventure:

- Final weather and tide check, make sure conditions are suitable and safe.
- Review location and operation of all safety equipment. PFDs, flairs, life raft.
- Ensure radios are working properly, antennas are vertical.
- Leave a copy of your itinerary with a contact person.
- Check all navigation and anchor lights.
- Review emergency plan and procedure with crew.
- Review plan, charts, weather, crew roles for the day.
- Stow and secure all loose gear, latch all doors.
- Set up flybridge, remove and stow covers, set up flybridge helm station monitor, stow navigation and engine instrument covers, turn on monitor switch located near the radio (see image), place seat cushions if desired.
- Check fuel levels with site gages.
- Make sure fresh water tanks are topped off (note 300 gallons fresh water) and record water meter (see photo below) as a reference for water usage, note there are no fresh water sight gauges.



Fresh water meter located on the starboard side, aft of the battery bay. Record meter and use as a reference for water use during trip (note no sight gauges for fresh water).

- Check holding tanks are empty (see photo below), gauges are located in each head.
- Familiarize yourself with the navigation equipment. There is an addition Bluetooth GPS which can be used with Navionics and other personal navigational equipment, which can be plugged in to the 12-volt outlet on the starboard side of the helm. Navionics is highly recommended.



Fuel sight gauge starboard side (inspect both sides)



Flybridge, note location of radio, autopilot and toggle switch for monitor.



Holding tank gauge located in each head

Engine Inspection (see notes and images below)

- **Please only enter engine room from stern lazarette, do not enter from salon, note there is a 12 volt and 120-volt engine room light (120 when on shore power, using the generator or inverter).**
- Check engine lube and oil levels, do not overfill oil.
- Check engine coolant levels, refill if necessary (note the cold full level, use proper concentration of coolant).
- Inspect bilge for excess water.
- Visually inspect engine for any signs of loose or insecure cables, belts, fittings and hoses
- Confirm main battery switches are in the on position (these are not to be changed).
- Check fuel/water separators and drain them if necessary.
- Ensure seacock in raw water systems are wide open and strainers are clean (clean as needed, see page 39 “Thru Hull Locations”).
- Make sure battery water levels are appropriate and then make sure battery bays are closed and strapped with no loose equipment in engine room

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 forward engine room. Check the level of OIL in each engine by checking your dipsticks located at each engine (see image). 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. Please use a paper towel or oil rag, not the dish towels! Check the general condition of the BELTS, HOSES, and FUEL LINES.

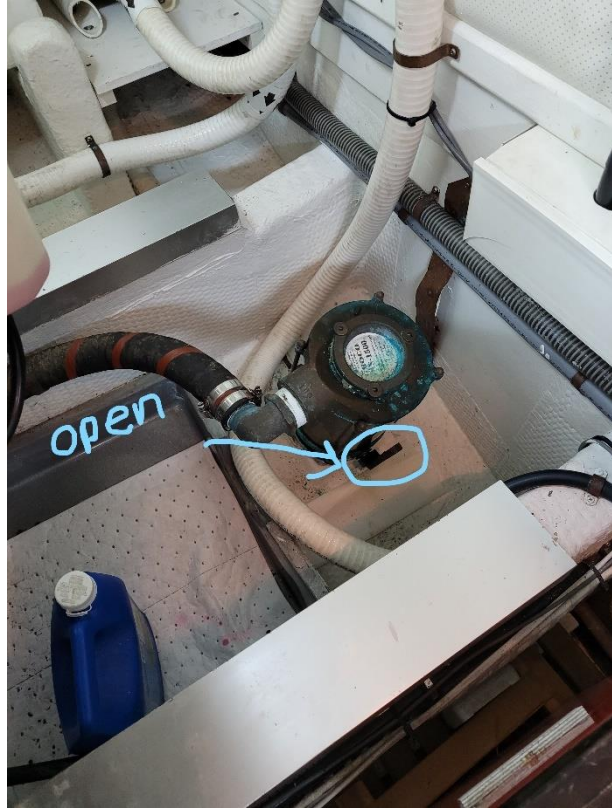
Ensure the valve on each RAW WATER THRU-HULL is in the ‘open’ position (lever in-line with valve – see page 39 “Thru Hull Locations”). Observe the glass of each RAW WATER STRAINER for debris. Shining a flashlight thru the strainer often helps see debris. If necessary, close the seacock, open the strainer cover, clean the strainer, and reassemble. Remember to reopen the seacock. Confirm water flow from exhaust(s) Check your generator fluids as well.



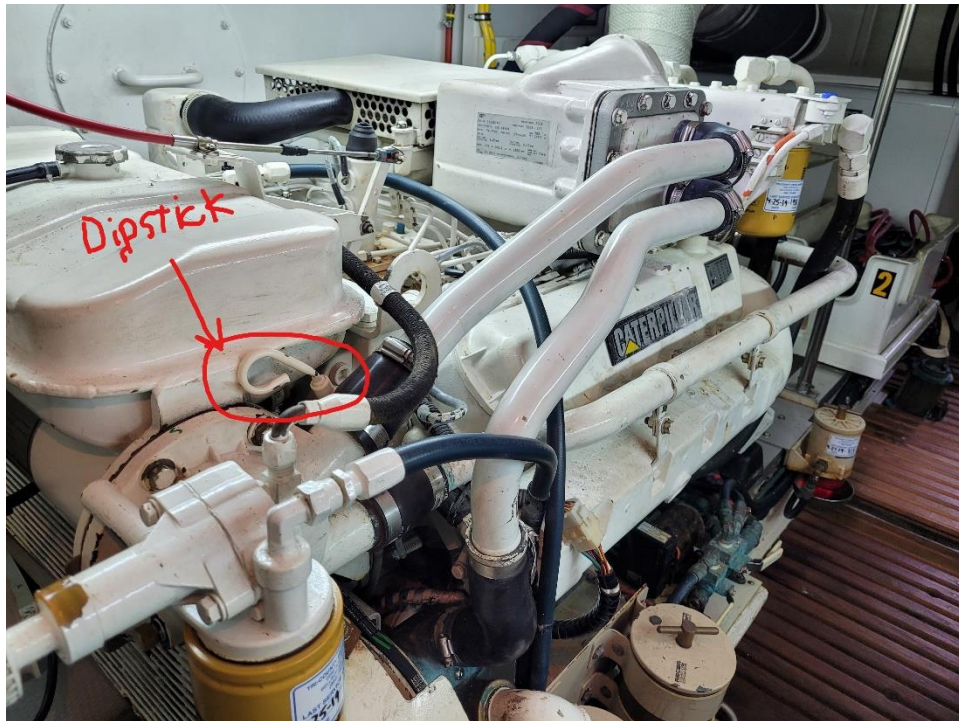
Engine room view aft to forward



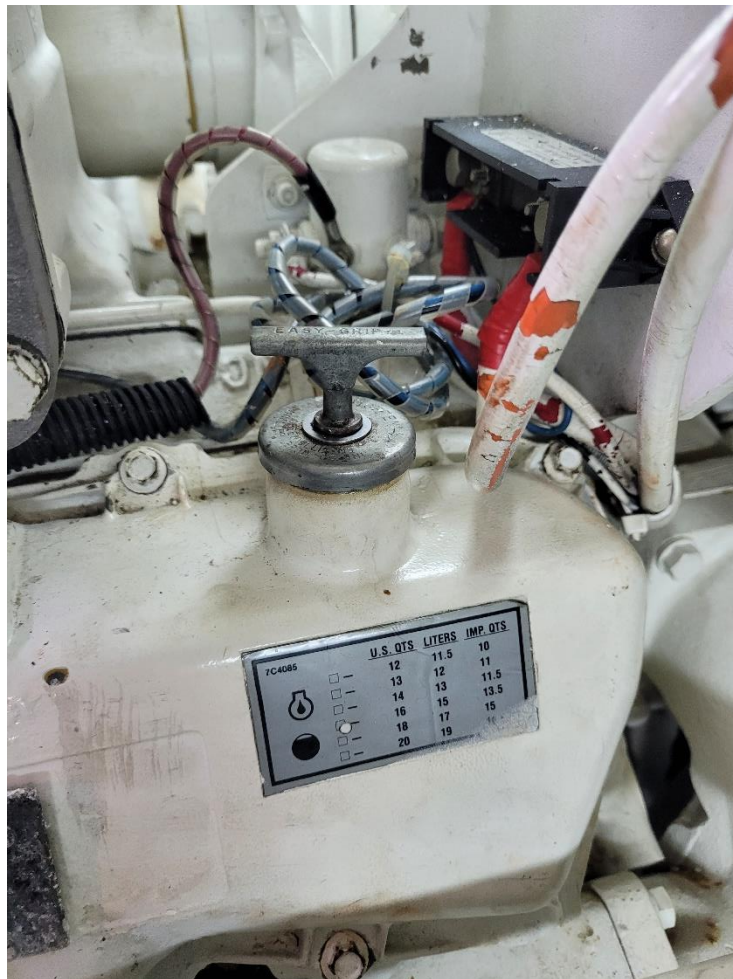
Starboard engine coolant reservoir
***Note:* FULL line when cold, do not fill above this.**



Starboard engine sea strainer



Starboard engine dipstick

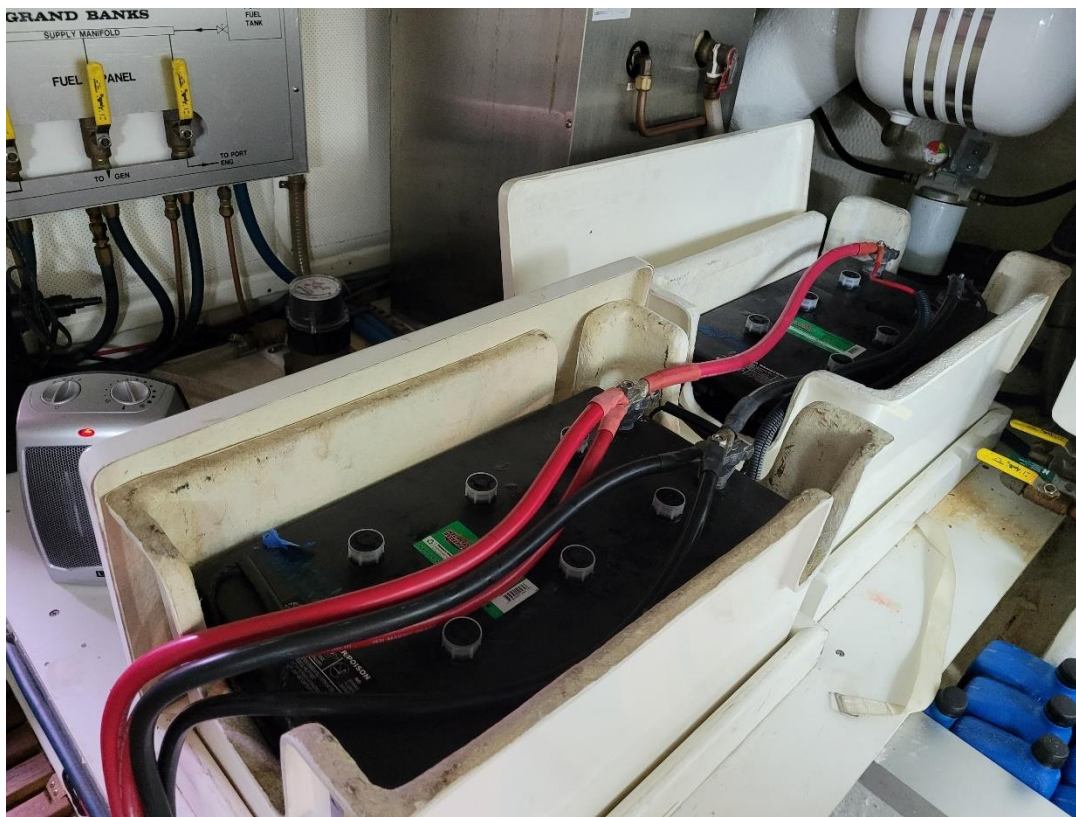


Oil Reservoir

Ensure plug is secure and tight when replaced before starting engine.



Fuel water separator



**Starboard battery bay, make sure water levels are full with DI water.
Make sure batter covers strapped before engine start.**

Start-Up

- Note, battery selector should not be on all, alternate between 1 and 2 and alternating days.
- Ensure the gear shift control lever is in neutral for both engines.
- Open throttle ¼ inch.
- One engine at a time, switch the engine circuit breaker on, and note alarm; press the starter button. When the engine starts, reduce throttle all the way. The alarm should stop as oil pressure comes up.
- If the alarm fails to stop within 10 seconds, shut off engine and investigate the cause of the persistent alarm.
- Turn on the stop solenoid circuit breaker; this will allow stopping the engine anytime with the stop button located at the lower helm and fly bridge.
- It is not necessary to run the engine blower while underway.
- After engine start, check exhaust outlets to make sure water and exhaust is flowing. Check around the boat, dock and surrounding water to be sure there are no loose lines in the water and it is safe to get underway.
- Check engine room to ensure that there are no oil or water leaks.
- Make sure to disconnect shore power before getting underway!
- While underway do not exceed 1400 RPMs until engine temperature reaches 180 degrees.
- Alarms: oil pressure alarm sounds when pressure drops below 15 psi; temperature alarm sounds when pressure reaches above 212 degrees F, bilge pump light turns on when bilge pump is activated.

Shut-Down

- Throttle back to idle speed, shift to neutral.
- Allow engine to idle for a few minutes to allow engine to disperse residual head and cool down.
- For each engine in turn, activate the stop device located on the electrical panel, alarm should sound before turning off the breaker.
- Turn on engine room blowers for about 10 minutes to help cool down.
- Switch battery selector appropriately for desired condition.

Getting Underway and Cruising

- Disconnect the shore power!
- Close portholes, windows and hatches.
- Make sure engine room door is closed and latched, and engine room is clear of loose objects.
- Turn on VHF and electronics as needed.
- Assign each crew member their respective roles
- While underway do not exceed 1400 RPMs until engine temperature reaches 180 degrees, oil pressure should be over 15 psi.
- MAXIMUM RPM 2000, cruise at 1400-1800 ideal.
- Make periodic checks of the engine room while underway, as well as before and after each outing.
- Always throttle back to idle before changing gear.

- Stow fenders after leaving harbor.
- Maintain a vigilant lookout all the time for dead heads, crab pots and debris.
- Goodlife is equipped with a Glendinning engine synchronizer system; however, preference is to not use it.
- The lower helm is equipped with a Robertson AP22 auto-pilot and AP21 on the flybridge which can be used to hold course and make course correction; preference is to not use these.
- Nobel Tec with AIS for GPS navigation, Furuno GPS on upper and lower helm for position and speed.
- VDO rudder indicators located at both upper and lower helm. Note true zero position.
- Close quarter maneuvers are best taken place at the upper helm for better visibility.
- Expect roughly 8-9 knot cruise at 1700 RPM with roughly 4 gallons per hour, speed will vary based on conditions. Trim tabs are not needed at these speeds. RPMs above 2000 discouraged, but can be used in emergencies.

Note -- Avoid higher engine speeds as it causes higher engine temperature, possible damage, and higher fuel consumption. In general, lower RPMs result in much improved fuel economy.

Docking

During docking, use the FLYBRIDGE HELM for greater visibility to the stern. Have your crew make ready the lines and fenders and give clear instructions on how you will be docking. Often times your crew will need to step off from the swim step with the stern line. Another crew member will need to be at the bow or mid-ships to hand over the next lines. If your boat has thrusters, these may be engaged in short bursts to hold the vessel while lines are put on the dock.

Prior to docking, rock TRIM TAB switches to the 'bow up' position (8 to 10 seconds) to make slow-speed backing and turning easier. While moving slowly to the dock or mooring location, center the WHEEL (e.g. rudders straight) and use only the GEARSHIFTS to maneuver the boat while in neutral, throttle is seldom needed and abrupt throttle change can cause in loss of control.

Fueling Up

- Ensure boat is securely moored to the float or the wharf.
- Ensure there are no fires (stove, BBQ etc...), turn off any electrical motors.
- Ensure portlights, windows and hatches are closed to avoid fumes.
- DO NOT CONFUSE FUEL DECK FILL WITH WATER OR WASTE. DOUBLE CHECK LABELS.
- OPEN FILLER CAP(S) located one at both the starboard and port side decks with a DECK FITTING KEY which is kept in the top drawer under the captain's chair.
- **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 sorbs handy to soak up spilled fuel. Locate fuel vents, if possible, to listen for tank becoming full and to know where sorbs may be needed. You should have a rough idea of the number of gallons you will need by the engine hour indicator. Also periodically have someone by the tank sight glasses to watch fueling progress.

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 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.*

Notes on fuel system. There are two 300-gallon tanks made of steel. Each tank has a deck fill, overboard vent, hand hole cleans out plate and sight gauge. At the base of each tank is a shutoff valve. Each tank is piped to a common manifold. Fuel supply to individual engines and generator set is taken from a Common manifold, a common manifold is also fitted for fuel return. Fuel between tanks is balanced by a link between tanks.

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 to port of the helm, and the BATTERY SWITCHES found in a panel to starboard of the helm. When not connected to shore power, batteries are providing all power. Therefore, monitor the use of battery levels carefully with your volt meter located to starboard of the pilothouse helm. How much electricity is being drawn from the batteries can be monitored on the ampere meter located at the right of the helm along with the inverter control. *Turn off electrical devices that are not needed.*

For the Goodlife, the battery selector switch does not need to be on to start the engines. When tying up or anchoring for the evening, the selector switch should be placed on 1 or 2 to prevent the batteries from being drained. When on an extended cruise or living on board without shore power a good system is to set the switch to 1 on odd days and 2 on even days when the engine is not in use. When leaving the boat, the selector valve can be on off, and note the bilge pump will continue to work. The battery selector switch does not affect the battery charger. Note, there is also a battery selector in the engine room, this should not be touched during charter.



12 Volt system, engine start, and battery selector

NOTE: There is a panel light at the center top with an on off switch to the right.

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 50-amp POWER CORD into the boat and then into the dock receptacle. Check the power rating/plug size of the nearest dock receptacle (that is 50-amp, 30-amp, 20 amp, or 15 amp). If necessary, add a CORD ADAPTER, and/or a 30-amp cable (located in the forward lazarette). Turn the dock power on. Cords coming off the bow can be wrapped loosely around the bow line or bow rail, or through the anchor.

At the ELECTRICAL PANEL, flip the AC SUPPLY breaker on. Check for reverse polarity. Then turn on appropriate breakers for battery charger, refrigeration, water heater, and the inverter. 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. The port GFI is located under the cupboard in the galley, and the starboard GFI at outlets behind the captain's chair.

Connecting to shore power:

- AC Supply breakers in the **off** selection.
- Power selector switch in the off position.
- Ensure shore power breaker at the shore pedestal is **OFF**.
- Connect boat side of cable, then shore power.
- Secure the cable in a safe manner.
- Turn on shore breaker, and check fuse indicator.
- Select shore power (fwd. or aft as appropriate) in the electrical panel and turn on "AC Supply" breaker and desired AC circuits.
- Make sure no reverse polarity. If there is none, can check to light indicator is working with the reverse polarity test indicator.
- ***NEVER ROTATE THE SHORE POWER SELECTOR UNDER LOAD!!!***

Disconnecting from shore power:

- Turn off AC breakers.
- Turn selector switch to off.
- Turn shore power breaker off (at the shore pedestal)
- Disconnect shore power cord.
- Secure shore power cord (can coil and stow in aft lazarette)



AC 110 Volt system, generator control and AC power selector.

Inverter Power

The INVERTER provides AC power to the 110-volt receptacle plugs (i.e., the microwave oven) when the boat is disconnected from shore power. ***The inverter does not provide power to the water heater or the battery charger.*** Your inverter panel is located to the right of the helm with an on/off switch, and a breaker switch in the main breaker panel. Make certain that it is on. The actual inverter is located in the engine room on the starboard-aft side.

The inverter's power source is the DC house/inverter batteries. The quantity of DC power is limited to the capacity of these batteries. Therefore, running hair dryers, toaster, coffeepots, space heater, etc. and will quickly discharge the house/inverter batteries. Use these items **VERY SPARINGLY!** Monitor your battery usage very carefully! If anticipated power usage is heavy, start your generator or engines to keep batteries charged.

When connected to shore power, the inverter automatically becomes a battery charger for the 12-volt HOUSE BATTERIES. Should you detect the inverter failing to charge the house batteries, check the circuit breaker in the AC Panel and the inverter control panel. Also, there is usually a circuit breaker located on top of the inverter box.



Inverter control and electrical gauges

Generator

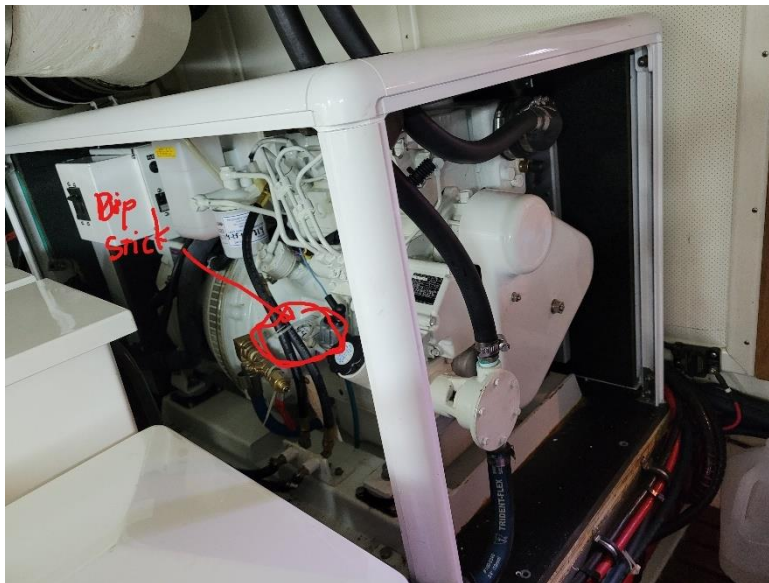
To start your GENERATOR, first check that your generator's fluids are topped off and the raw water intake is open. The generator controls are located at the main electrical panel. Turn off AC breakers. Prior to starting, make sure all individual AC breakers are turned off. **First** pre-heat the generator for about 20 seconds. **Then while still pre-heating turns the switch to start**. Hold the switch in that position while the generator catches. (About 5-10 seconds). Make sure water and exhaust is exiting on the starboard site.

After generator is running, let it run for 2 minutes before putting a load on it, then turn your AC distribution switch to generator (or ship). Then turn on AC systems as you would on shore power one system at a time.

To turn the generator OFF, first take off the load by turning off AC breakers. Then turn off main AC distribution switch. Allow the generator to run for about 2 minutes to "cool down" before you kill the generator by switching generator switch to "off" until it dies.



The location of the Northern Lights generator is aft engine room on the starboard side. Note sea strainer at bottom right of image.



The panel can be removed to access the oil reservoir and dip stick.



Generator local start and hour meter

House (12-volt) System

It is recommended to alternate from battery bay 1 to 2 and back each day of your trip. Regardless of the batter selection, all batteries will be charged while running the generator or on shore power. 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 on; macerator should always be OFF. *Your breakers such as propane 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 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.

Engine 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 and Inverter circuit breakers at the electrical panel are ON.

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%

SANITATION SYSTEM

Marine Toilet

The head system on the Goodlife is reliable, straightforward, and easy-to-use. First, a note about discharge of sewage:

It is forbidden to discharge untreated sewage in inland US. waters, an area that includes all US. waters in which this boat operates. The boat holding tank must only be emptied at proper pump-out stations if it is in US. waters. (This rule does not apply in certain Canadian waters. However, in Canada, courteous practice dictates that the holding tank be dumped only when outside confined marinas.)

The boat is equipped with two Vacu-Flush Marine heads. These heads each have a separate vacuum pump which macerates waste and puts it into a holding tank. The holding tank is emptied either of two ways: by operating an overboard macerator pump controlled at the DC power panel, or by pumping it using a shore side pump out station through the boat's side-deck pump out fitting.

The Vacu-Flush Heads

These premium heads are easy to use, odor free, and very reliable. They work with a separate vacuum pump and vacuum accumulator tank for each head. A vacuum is maintained in the tank until the head is used, when the waste matter in the bowl is sucked out of the head by the vacuum, then it is pumped through the system by the head pump, which then also pumps up a vacuum again. Note that it is this rush of the head's contents caused by the accumulated vacuum that is important to the head's operation! This sudden rush causes any solid material in the waste stream to be shattered as it passes through the specially- shaped orifice in the bottom of the head. For this reason, proper head operation requires that the head pedal not be held down for long periods of time.

These heads use about a half pint of fresh water from the ship's supply with each flush. Each head is operated by a pedal to the left of the head base (as you face the head), and operation is as follows:

- Before using the head if the waste will be solid, lift the pedal to add water to the bowl;
- Use the head;
- Step on the pedal just long enough to hear the "whoosh" as the head is evacuated and a small amount of water rinses the bowl - - - about 3 seconds!
- Releasing the pedal, if you wish to flush again, wait at least twenty seconds or so (until you hear the head pump stop) before flushing again.
- Please minimize toilet paper waste, only use marine grade toilet paper. Put any other waste or excess toilette paper into a trash bag.

As the pedal is released, the ball-valve at the bottom of the head seals the head so that the vacuum can be pumped up, then the pump will stop, and the head is again ready for use.

Only things which were eaten or drunk or the toilet paper supplied with the boat should be put in the heads! Facial tissues, tampons, and other foreign matter will clog the system. If these heads are used properly, they are very reliable. Failures are virtually always due to misuse!

Head Problems

The only likely head problem is easy to diagnose, for you will hear the head pump run frequently or not stop, and you will see that no water remains in the bowl. This indicates that the ball valve is not sealing the bottom of the head properly! Most often this is due to “wimpy” operation of the head pedal: press and release it with prompt foot motions so that the seal is completely closed after use. If re-flushing does not make the seal perform properly, then, while holding the pedal down, run your finger around the inside of the seal opening to be sure no grit or other foreign matter has become imbedded in the seal; if it has, remove it, and try the seal again (to avoid injury, do not release the pedal until your hand is clear). Remember, the two head systems are completely separate: If you have trouble, turn off the faulty head and use just the other head; call AYC for assistance. *Note there are spare parts for the system in the forward lazarette.*

The TOILET THRU-HULL is located in the engine room if you need to shut off the water to the toilet. Clean the toilet as necessary.

Holding Tank

The HOLDING TANKS hold approximately 60 gallons in 2 tanks. Be aware of the rate of waste production. (about 1 gallon per flush) With an overfilled tank, it is possible to break a hose, clog a vent, or burst the tank. The result will be 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 eliminate odors.

The HOLDING TANKS are located beneath the heads on both side of the vessel. There is a tank watch warning light located at each head but do not rely upon this only as they often get clogged. Paying attention to 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 at both the port and starboard deck. Insert the pump-out nozzle into the waste opening. Hold nozzle firmly against the deck fitting to ensure a tight seal. Turn on pump and open valve located on handle. When pumping is finished, close lever on handle and turn off pump. Remove from deck fitting.

If there is a fresh water hose on the dock, rinse the tank by adding 2 minutes of water into tank. Then re-pump to leave the tank rinsed for the next charter. This also eliminates head odors. (Note: Only use the shore’s water hose NOT the white freshwater hose belonging to the boat!)

#2 The tank’s contents can be discharged with the MACERATOR only in Canadian waters.

To operate the macerator, OPEN the overboard thru-hulls first, do not turn on the switches at the DC panel without opening them! The port side macerator thru-hull is located under the floorboard in the Port head. The starboard macerator thru-hull is located under the floorboard starboard washer/dryer room. One at a time on the DC electrical panel, turn on the respective tank’s macerator pump breaker switch. Listen to the macerator’s sound. When the pitch becomes higher, the tank is empty. Discharge may be observed on both side. It should only take a few minutes to empty the tank. Repeat the process on the alternate holding tank. Close both thru-hulls after pumping out. (pumps and thru-hull pictures next page)



Y-Valve

The Y-VALVE's direct waste effluent into the sanitation-holding tank or flushes the effluent 'directly overboard'. The Y-VALVE's are located in the forward portion of the engine room and either side. Port side is for the Port side Master head, starboard is for the starboard hallway head. A plastic strap keeps the long shaft of the handle pointed to the holding tank – the normal position. To pump directly overboard, turn the handle so the long shaft points up, and open the thru-hull directly behind you on the bilge floor on either side to the vertical position.

Y-valves are usually wire-tied to the holding tank position in respect to Coast Guard regulations. Please leave it "as is" unless there is an emergency. Be familiar with the applicable laws concerning dumping sewage directly overboard.

Pictured Below: Y-valve + Thru Hull Valve on the port side. Identical on the starboard side.



"Y- Valve" (Picture shown is "To the Holding Tank")

"Thru Hull Port Side"(Closed Position)



WATER SYSTEM

Fresh Water Tanks

The FRESH WATER TANKS hold 300 gallons between 3 tanks. All three tanks are filled from deck plates on forward port deck. Observe the water level by the water meter described on page 8. Waste water from the sinks and showers drains overboard through various thru-hulls usually located under the sinks.

To refill the 3 tanks, remove the WATER CAP(S) located on the deck. Avoid flushing debris from the deck into the tank opening. DO NOT fill water and diesel at the same time!

Fresh Water Pressure Pump

The WATER PRESSURE PUMP is located in the aft port section of the engine room near the water meter described above. Activate pump at the DC panel by turning on the breaker labeled “F.W. Pump”. If the water pump continues to run, you are either out of water or might have an air lock and need to bleed the system by opening up a faucet. If you run out of water SHUT OFF YOUR HOT WATER HEATER on the AC panel. Serious damage can occur!

Fresh Water Filter

The Goodlife is equipped with a UV-reverse osmosis filter feeding into the filtered water dispenser in the galley. It is recommended to run the water for a minute if it has not been run in a while.

Hot Water Tank

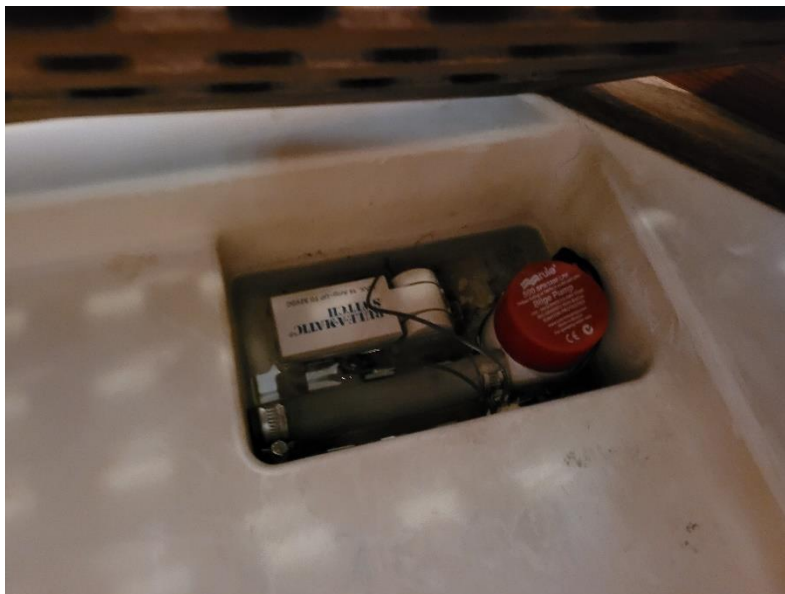
The HOT WATER HEATER is available when connected to shore power or via a heat exchanger underway. To use on shore power, flip on the water heater circuit breaker on the AC electrical panel. Do not use the water level is very low. The water heater is located in the aft port section of the engine room

Shower

Before taking a SHOWER, make sure water pressure (“F.W. Pump”) and shower sump (“Drain 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 near the swim step, and the shower nozzle is located in the salon in the bottom drawer. Ensure that the faucets and nozzle are completely off after use.



Turn on drain pump before shower, and off after water has drained.



Beneath the shower floor is the drain pump that can be actuated manually if there is an air-lock by lifting the white float

A pressured RAW WATER WASHDOWN is available from a hose spigot at the stern and bow of the boat. To activate, flip the PUMP BREAKER at the electrical panel. After use, turn the switch off to prevent pump burn out, and ensure no object leans on the switch to turn it on accidentally.

Washer and Dryer:

The Goodlife is equipped with a Whirlpool washer and dryer system which can be used under shore power or with the generator. Waste water is discarded through a thru hull. Ensure that the “F.W. Pump”, “Washer” and “Dryer” breakers are on before use.

GALLEY

Stove/oven

The Goodlife is equipped with a propane stove and convection microwave oven. Turn on the “Gas Stove” breaker on the AC panel, and the propane solenoid and kitchen vent as well. The propane tank is located under the aft bench on the port side on the upper deck. The propane needs to be turned on prior to use, and shut off after.

Lighting a burner is easy and only takes five to ten seconds:

1. Be sure the propane valve circuit breaker “Gas Stove” in the DC panel is on.
2. Turn on the solenoid valve on the fly bridge by turning on the over-the-stove “Propane” switch (when you do this, the pilot light on the switch panel will light, and you will see the red area on the switch).
3. Turn the knob for your selected burner to “light”, holding it in, and press the red igniter button on the left of the stove several times until the burner lights. Sometimes you may need to turn the knob a little further toward “high”, or, if the tank has been changed, keep trying for a few seconds before fuel reaches the stove after purging air from the pipe.
4. After the burner lights, continue to hold the knob in for a few seconds while the thermocouple heats up before adjusting the flame to the desired intensity



Refrigerator

Refrigeration on the Goodlife consists of an under-counter cold-plate refrigerator in the galley and a chest freezer in the galley as well. The refrigerator runs off of compressors that are sea water cooled in the engine room, port side forward on the shelf. Their controls are within the actual cooling compartments, like a household unit. Hint: Your refrigeration will work better if you keep the cabinets full; many boaters fill used plastic containers with galley water and use these as “cold sinks” in their refrigerators; that way, when the door has been opened and closed, the cold has been saved! Also, be careful not to put perishables (such as lettuce) against the refrigerator cold plate as they will freeze.

HEATING SYSTEM

Diesel Heater (DC)

The DIESEL FORCED-AIR FURNACE is located in the forward lazarette and provides heat in the same way as a household furnace. Turn on the TOGGLE SWITCH located left of the helm. Set the THERMOSTAT to the desired temperature, and make sure the thermostat is switched on (note photo below, thermostat switch is hiding at the bottom!).

Check The furnace EXHAUST PORT located at the stern, starboard side for any obstruction such as fenders or lines. Do not block this opening when operating the furnace. Hot exhaust will damage fiberglass or rubber. Once it is on, allow it to run for at least 15 minutes before turning it off. Turn 'off' the furnace heater by turning switch back off.

The main salon, and each cabin have individual thermostats.



ELECTRONICS

All electronic manuals are located above the galley

VHF Radio

There are 2 VHF RADIOS. The first is located above the helm ICOM M127. Make sure the VHF breaker is on located at the panel above the helm. There is a second ICOM M59 VHF RADIO located at the flybridge (see photo above). Always monitor channel 16 while underway. There is also an ICOM M710 SSB radio NOT TO BE USED OR TURNED ON DURING CHARTER.



ICOM VHF radio, GPS, depth sounder and auto pilot



Goodlife electronics panel and weather station



ICOM SSB radio, PLEASE DO NOT TURN ON OR USE.

Depth Sounder

There are 3 DEPTH SOUNDERS, one at the helm, the fly bridge and the other in the main cabin. To activate the upper DEPTH SOUNDER, press the switch on the instrument panel. The sounder should provide reliable readings in shallow waters. If in doubt, switch it off, then turn it back on to reset sounder. If your reading is blinking, it is a FALSE reading. False readings can occur in depths of more than 200 feet or in areas of strong currents or tides.

*Remember to **ALWAYS** consult your charts for depth!*

Radar

To operate the FURNO 1932 48-mile RADAR press and hold the POWER button to turn the radar on. To turn off, press and hold POWER button about 3 seconds. Remember charterers are not covered by insurance in FOG or in serious wind conditions.

Global Positioning System (GPS)

The GPS is above the helm. Ascertain that your breaker located above the pilothouse helm is on and then press the red color 'on/off/light' button to activate. It provides location and speed.

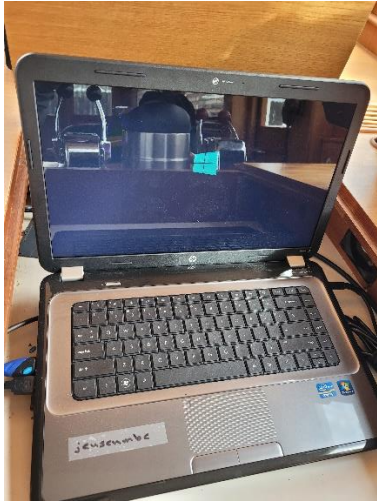
Nobeltec Time Zero Laptop with AIS

GPS Navigation with traffic by AIS is available on the Goodlife using Nobeltec Time Zero on the vessel laptop located at the pilothouse helm. The laptop is wired to two monitors, one at the pilothouse helm and one at the flybridge. Once the software is initialized, the laptop can be stowed (on) and the software can be manipulated with the wireless keyboard and mouse. Note, the mouse can be used at the upper helm as well.

- Make sure laptop breaker is on. Labeled "Computer" on the DC Panel
- Make sure AIS breaker is on at the panel over the helm
- Turn on laptop, once booted up, enter **PIN: 1524** and double click on Nobeltec icon.
- Select navigation
- The software is fairly intuitive, recommend reviewing the software during your initial checkout.
- To plan a route, using the planning function
- While enroute, recommend to use dual screen mode with one side zoomed in and one side zoomed out.

- Note, AIS may occasionally disconnect, often it is best to cycle the computer and AIS off and on again if it does not reconnect on its own.

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.



Laptop with Nobeltech software



Computer monitor wired to laptop.

ENTERTAINMENT SYSTEMS

AM/FM Stereo Radio

The Sony AM FM radio is located in the salon on the starboard side. It operates like a normal car radio. The XM radio and CD changer are inoperative. "Stereo" breaker on DC Panel

TV/DVD/Roku

A TV/DVD player with Roku are in the salon, and master stateroom. You can use the harbor internet or your own hot spot for Roku.

ANCHORING

The primary WORKING ANCHOR is a 60 lb. CQR and is attached to 300ft 5/16chain and passed through the deck from the ANCHOR LOCKER. The locker can be accessed through the forward cabin. If there is an anchor keeper, release it.

The Goodlife is equipped with a Lofrans Tigress windlass with controls at three stations, the pilothouse helm, fly bridge and at the bow. At the bow, tap gently on the 'down' foot control to provide a small amount of slack in the chain. Tip the anchor just over center and gently begin lowering the anchor. If necessary, guide the anchor over the anchor roller to prevent binding on the pulpit. Be careful of pinch points.

Let out sufficient 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 3 to 1 scope (60 feet for 20 feet of water), back the anchor in with a short burst from the engine. Then let out additional scope dependent upon conditions. Install anchor chain bridle from bow cleats to chain, slack a loop in the windlass side of the chain.

Before raising the anchor, ALWAYS start the engines as the windlass uses large amounts of power. Turn 'on' the WINDLASS SWITCH and take up slack to remove pressure on chain bridle. Remove the bridle from the chain. 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 then engines by placing briefly in gear to put slack in chain. 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. Wash it down using wash down pump (see page 29) before it goes into anchor locker.

Reconnect the keeper. Close the plastic covers on the FOOT PEDAL CONTROLS. Turn *OFF* the WINDLASS POWER SWITCH.

A SPARE 45 lbs. CQR ANCHOR is normally stowed at the bow.

Mooring Cans

Goodlife is equipped with an annual Washington State Parks Moorage Permit Decal. You only need to register at the kiosk usually located at the heads of the docks. It is recommended to take a photo of the decal or permit to reference the number when you get to the kiosk. 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. The strongest member of your crew should be picked for this job.

Come up to the CAN into the wind or current as you would for anchoring. Have crew members on the bow, one with a boat hook and one with a mooring line secured like a bow line. As you are coming slowly up to the can have the crew holding the boat hook point at the can with the hook so the skipper always knows where it is. Hook the can and bring the ring up to the boat to allow the second crew to thread the ring with the line. Release the hold with the boat hook. If your mooring line is led out the starboard chock bring the end of the line back through the port chock. You will essentially create a bridle with about 10 feet of slack from the chalk to the can.

BARBECUE

The BARBECUE and MOUNTING BRACKET are stored in the forward lazarette and used at the stern starboard side.

Attach a PROPANE BOTTLE to the REGULATOR found in the cockpit cabinet under the stans to the fly bridge. Carefully light the unit, preferably with a long-stem butane lighter. The barbecue generates a lot of heat and cooks hot and fast. Cover the BBQ when not in use. Please wipe with a paper towel before securing to prevent grease and dirt soiling the boat..

*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 cockpit cabinet.** Ensure gasoline and flammable materials are not near the barbecue.*

DINGHY & OUTBOARD MOTOR

The Goodlife is equipped with an 11-foot Zodiac tender with a 25 hp Mercury outboard located at the upper helm. **MAKE SURE TO INSERT DRAIN PLUGS AT TRANSOM!!!**



Davit controls, note left is boom up and right is boom down.

To deploy the dinghy, first make sure the Davit breaker is on, and recover the Davit control in the bottom drawer in the salon (see photo). Connect the davit control to the davit. Detach the davit hook from its secure station. Raise the davit boom by depressing “Left” until as seen in the picture below. Lower the winch and connect the hook to the dinghy making sure all three points are attached securely. Detach dinghy from the flybridge tie downs and slowly raise the dinghy to the starboard side of the boat, with the engine facing the bow of the Goodlife. Secure the bow line of the dinghy. First lower the boom by depressing “right” to clear the dinghy from the Goodlife, then lower the dinghy by depressing “down”. **MAKE SURE NO ONE IS UNDER THE DINGHY AS THE CABLE CAN FAIL.** As the dinghy is lowered pass the dock line to a crew below.

Tilt the engine down prior to starting it. The ignition key for the dinghy should be store in the lower drawer in the salon. To start the dinghy, turn on the battery. Make sure there is adequate fuel. Pump fuel with the squeeze bulb until firm. Engage starter while pressing key in for choke. Can use lever (see photo) in increase RPM while in neutral. Reduce RPM before putting into gear. Shut down and stow dinghy in reverse order, make sure to tilt engine up. Note dinghy GPS is inoperable. Foot pump located in starboard-aft settee upper helm.

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.



Boom position when maneuvering dinghy at upper helm.



Location of davit control in bottom drawer in salon.



Dinghy Controls



STORE DAVIT LIKE THIS AFTER launching dingy.
**Note: the weight is clipped onto a holding ring

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 backs work the best for a nice neat way to bait the ring. After 15-20 minutes, retrieve the crab line and ring quickly. Be certain of water depth before lowering crab rings or pots; make certain the buoy line is long enough for the depth. Measure the crabs using the CRAB MEASURING GAUGE normally located bottom drawer, salon. Keep the male crabs of proper size (usually 6 ¼ inches across the carapace). Boil crabs about 12 minutes to cook.

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

OTHER: Safety & Bilge Pumps

SAFETY should be paramount in your daily cruising. A MAN OVERBOARD DRILL should be discussed and perhaps even practiced with a life jacket. Remember your lifejackets are stowed in the settee in the upper deck. A few should always be out and ready. Your flares and safety equipment are located in the drawers in the salon aft of the settee.

Goodlife is equipped with an AUTOMATIC BILGE PUMP. The master switch is located on the electrical panel. Normally, the switch will be left in the AUTO position. You may occasionally hear the pump operate due to condensation and water from the shaft log accumulating in the bilge.

A hand bilge pump is located in the engine room on the starboard side.

Emergency tiller is located in the aft lazarette.

A Viking 6-person emergency survival raft is located on the flybridge on the port side and is self-activating when submerged.

The ENGINE SPARES BOX (plastic blue color) is stowed in the engine room with additional spare parts in the forward lazarette. This includes oil filter, raw water impeller, pump parts, injectors, and other small parts.

THRU-HULL LOCATIONS

The sea strainers on this boat are secure and reliable. They protect the engine, generator and refrigeration cooling systems from water-borne debris which might block internal equipment passages. If a sea strainer needs cleaning here is the procedure:

- Look at the base of the strainer near the hull. On one side is a valve lever with a relatively long handle; on the other side is a “T”-shaped knob. Loosen the T-knob two turns. The valve itself may begin to “weep” sea water, do not be alarmed.
- Turn the longer valve lever so it is perpendicular to the sea strainer (parallel to the hull).
- Tighten the T-handle; the weeping will stop.
- Using the same spanner, you use for the fuel and water tank deck caps, unscrew the top of the sea strainer. Then remove the strainer by pulling it out the top of the assembly. Rinse the strainer thoroughly and, if necessary, remove any debris from the glass housing. Reinsert the strainer, tighten the top cover with the spanner, **AND TURN THE VALVE BACK ON C failure to do so will overheat the engine. BE SURE TO TIGHTEN THE T-KNOB ON THE VALVE SO IT IS SECURE.**

This entire operation will take 5-10 minutes at most, and will assure you of cool engines.

Thru Hull Locations:

- Raw water washdown under the berth in the main cabin
- 4 X1.5-inch graywater discharge seacocks: 1) guest cabin, laundry room, and two in the engine rooms, starboard and port.
- Intake seacocks straining in the forward lazarette.
- 10 additional thru hulls are located 5 on each side of the boat
- Each engine and the generator have a corresponding seacock