# **OPERATIONS MANUAL**





#### Welcome aboard!

We are happy that you have chosen Anacortes Yacht Charters (AYC) and Magic\* for your vacation! We are sure you will enjoy your cruising experience among the beautiful islands of the Pacific Northwest.

This manual will help you become familiar with this vessel. If, after familiarizing yourself with it, you have any questions about the boat or about places to visit, please do not hesitate to ask any of the AYC staff.

Remember, AYC vessels are non-smoking boats, and we appreciate you taking care in having a fun, safe, and memorable time aboard!

# Happy cruising!

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#### **BOAT OPERATION**

## **Engine Inspection**

Remember your "WOBBS" every morning:  $\underline{\mathbf{W}}$  ater (Coolant),  $\underline{\mathbf{O}}$  il,  $\underline{\mathbf{B}}$  ilges (Inspect and Clean Excess),  $\underline{\mathbf{B}}$  elts and  $\underline{\mathbf{S}}$  ea Strainers.

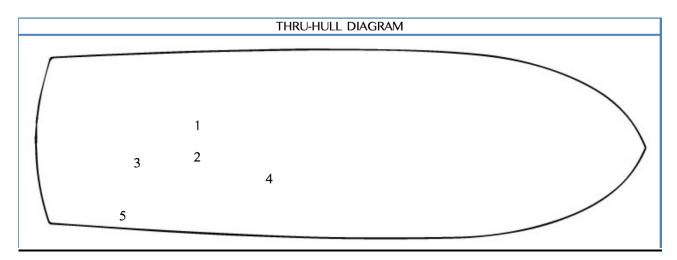
Check the level of COOLANT in the expansion tanks. Check the generator fluids as well.

Check the level of OIL in each engine by checking your dipsticks located inboard on each engine. Look at the etch marks on each dipstick that indicate the proper oil level. **DO NOT OVERFILL OIL; proper oil levels are below the full line (between half and three-quarters of the hash-area)!** Only fill if oil levels are below the ½-way mark. To fill, it will require you to remove the forward floor hatches to access the most forward valve cover where the filler cap is located. Please use blue shop towels (located in engine room) and the red funnel!

Check the general condition of the BELTS (new 2023); are covered so look for black dust), HOSES, and FUEL LINES.

Ensure the valve on each RAW WATER THRU-HULL is in the 'open' position (lever in-line with valve). Observe the glass of each (3) SEA/RAW WATER STRAINER for debris. If necessary, close the seacock, open the strainer cover, clean the strainer, and reassemble. Remember to reopen the seacock.

#### **Thru-Hull Locations**



- 1 PORT Engine Raw Water Intake
- 2 STARBOARD Engine Raw Water Intake
- 3 GenSet Raw Water Intake
- 4 Black Water Macerator Pump Discharge Overboard
- 5 GenSet Wet Exhaust Discharge Overboard

#### Startup

Before starting the engines, do your inspection. Check that Ignition Power switches, located on the DC side of the Electrical Panel at the top, for PORT and STBD are in the ON position. The engines should be started from the lower helm station. Ensure GEARSHIFTS are in 'neutral', or the engines cannot be started because of the "neutral lockout". THROTTLES should be run up and down and then brought back to the idle position. Both keys are in the IGNITION SWITCHES. Normally plan to start the starboard engine first; after each engine has started, check for water flow through the exhaust.

Turn the key partially clockwise until the ENGINE ALARM sounds and pre-heat the engine. Once the light turns green turn the key fully clockwise to engage the engine. If the starter does not engage when the key is turned, move the gearshift lever slightly until you find neutral and try again while turning key.

If the engine cranks slowly or fails to turn over, check the condition of the battery on the ELECTRICAL PANEL. If the battery is low try the BATTERY PARALLEL SWITCH, located to the right of the helm, to connect the other engine battery. Turn off after using.

Move the THROTTLE to raise the engine speed to 1000 rpm on the TACHOMETER. Warm the engine for about 5 minutes before engaging transmission. Observe the readings of the gauges. The oil pressure will register at or above 40 PSI. The engine temperature should rise slowly.

Note -- If oil pressure is low, shut down engine, and inspect engine compartment and look for possible cause (for example, loss of oil). Caution -- If an engine is overheating or there is lack of raw water expelled in the engine exhaust, stop the engine immediately. Recheck the raw water cooling system to ensure the raw water thru-hulls are '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 serviced. Seek help.

#### Shutdown

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 sufficient. Ensure each GEARSHIFT is in the 'neutral' position and each THROTTLE is in the 'idle' position. Turn off engines using the ignition keys.

## **Getting Underway**

DISCONNECT the shore power cords (see 110-Volt AC Systems, located under "Boat Electrical"). Close the PORTHOLES, SALON WINDOWS, and FORWARD HATCHES. Turn on the VHF RADIOS and ELECTRONICS. ASSIGN crew members their various positions. Once outside the marina, idle the engines while crew brings in and SECURES FENDERS and LINES.

## **Cruising**

All close-quarters maneuvering should always take place at the upper helm. Assure TRIM TABS are in full up position.

Cruising continued –

Engage the GEARSHIFTS ~ Ensure the THROTTLES are in the 'idle' position before engaging the gearshifts to avoid transmission damage. Your speed will vary depending upon vessel weight, load and weather conditions.

CRUISE SPEED / FUEL BURN / RANGE for the Cummins 330hp ~ All figures are approximate:

RPM	1000	1200	1400	1600	1800	2000	2200	2400
Speed (kts)	7.0	8.0	9.0	11.0	13.5	14.5	16.5	19.5
Fuel Consumption (gph)	1.65	3.25	4.65	6.60	8.85	9.80	11.65	13.65
Range (nm)	880	540	490	340	300	285	280	275

The TRIM TABS can be effective at bringing the bow to the ideal cruising attitude. Once established at cruise, make minor adjustments and then watch your speed on the GPS to see if it improves.

DO NOT EXCEED 2400rpm except for very brief intervals. However, as you can see from the above figures it may be more sensible to operate the vessel at lower cruising speeds (1200-1400rpm for more economical and quieter cruising).

Note -- Avoid higher engine speeds as it causes higher engine temperature, possible damage, and higher fuel consumption.

## **Docking**

During docking use the FLYBRIDGE HELM for greater visibility to the stern. Have your crew make ready the FENDERS and LINES 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-ship to hand-over the next line.

Confirm TRIM TABS are in the full '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 using the gauge on the dash of the lower helm) and use the GEARSHIFTS (and THROTTLES only if necessary) to maneuver the boat. A slight pause passing through neutral keeps wear on the transmissions at a minimum.

This vessel has a BOW TRUSTER. To engage, hold both ON SWITCHES down until light illuminates. Thruster should only be used in 3 to 5 second bursts; otherwise, if used continuously, it will overheat and/or drain its batteries quickly. To help alleviate this, run the generator while docking. Remember to turn thruster off after use.

## **Fueling**

OPEN FILLER CAP(S) located midship port and starboard with a DECK FITTING KEY which is kept in the Pilothouse drawer to the right of the helm.

# <u>DIESEL!</u> <u>DIESEL!</u> MAKE SURE YOU HAVE THE RIGHT FUEL! MAKE SURE IT IS GOING INTO THE CORRECT DECK FILL! **DOUBLE-CHECK!!**

#### Fueling continued –

Before pumping, have an oil/fuel absorbent or blue shop towels handy to soak up spilled fuel. You should have a rough idea of the number of gallons you will need by the engine hour indicator in combination with the fuel gauges. Also, periodically have someone turn on the key to watch the fuel gauge as fueling is in 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.

## **BOAT ELECTRICAL**

The systems are controlled from the ELECTRICAL PANEL located in the Pilothouse starboard-side cabinet; the DC AUXILIARY PANEL is co-located with the AC panel.

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



# 110-Volt AC Systems (Shore)

**Shore Power** supports all AC equipment, appliances and receptacles onboard, as well as the battery charger.

To connect to shore power, always plug the 2-30-amp SMART PLUG POWER CORDs into the boat first (starboard side) and then into the dock receptacle which then should be turned on.



Check the power rating/plug size of the nearest dock receptacle (i.e. 50-amp, 30-amp, 20-amp, or 15-amp). If necessary, add a CORD ADAPTER located in the engine room forward of the port engine. After plugging the cord into the receptacle, then turn the dock breaker on. If the cords are coming off the bow, use the Velcro on the cord sleeve to secure the shore power cords.

At the ELECTRICAL PANEL, flip the SHORE CIRCUIT BREAKER on. Check for reverse polarity on the electrical panel. Then turn on appropriate breakers for battery charger, refrigeration, water heater, etc. Watch the volt meter for load. If the load exceeds voltage, you will pop the breaker. If this occurs, wait to turn on one of your systems (i.e. water heater) until your use of volts drop.

- If your outlets fail to work, check the GFIs to make sure that they have not been tripped.
- GFI Locations: In Galley by the refrigerator, Pilothouse helm on port side and in forward head.

#### 12-Volt DC Systems

When not connected to shore power, batteries are providing all power. Therefore, monitor the use of onboard electricity carefully with the volt meter located also on the AC/DC panel, and turn off electrical devices that are not needed. We normally turn off the refrigerator at night when anchoring to save battery power.

There is one 2-battery battery-bank that supports 12-volt DC power in the aft port hold.

The BATTERY SWITCHES PANEL is located in the most aft port salon cabinet. Normally leave the ENGINE/GENERATOR and HOUSE SWITCHES in the 'ON' position. Note -- Do not change the position of the switches while the engines are running, or the alternator diodes will be damaged. Change positions with the engines off.

The 12-volt panel shows all the systems supported by the batteries. Primarily you will be turning on the breakers for your lights, heads, water pressure, electronics, etc. Bilge pumps should always be left on. The breakers for high draw items 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 3 automatic bilge pumps. When disconnected from shore power, all 12-volt devices drain the house battery. Use devices as needed. The DC volt meter on the DC panel in the Pilot House electrical cabinet can be switched between Port, Starboard, and House Battery Bank to measure charging or resting battery voltages. (not working)

When the 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 volt meter can give a rough indication of the state-of-charge of the battery bank.

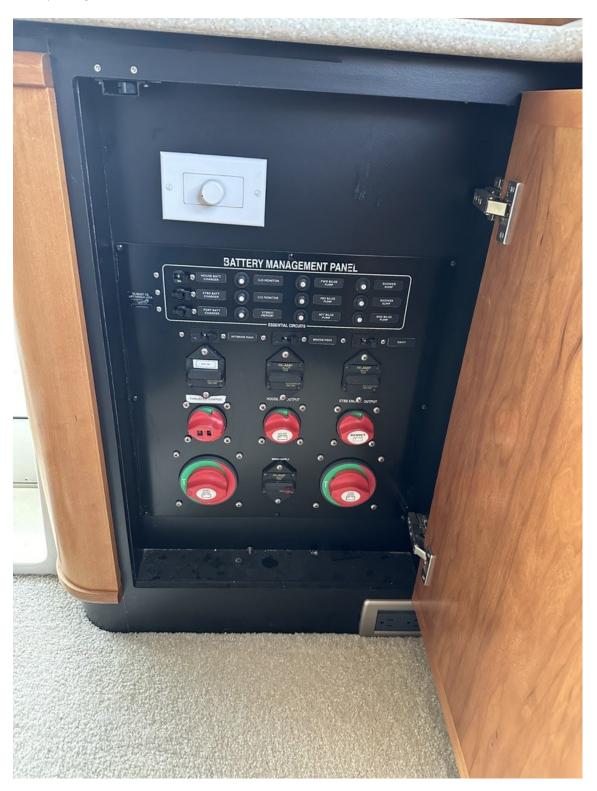
All batteries are charged by the engine ALTERNATORS while underway. The engine/house batteries are charged by the BATTERY CHARGER when connected to shore power. Ensure the Battery Charger Circuit Breaker at the electrical panel is ON. The GENERATOR will also charge the batteries.

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

## **Battery Parallel Switch**

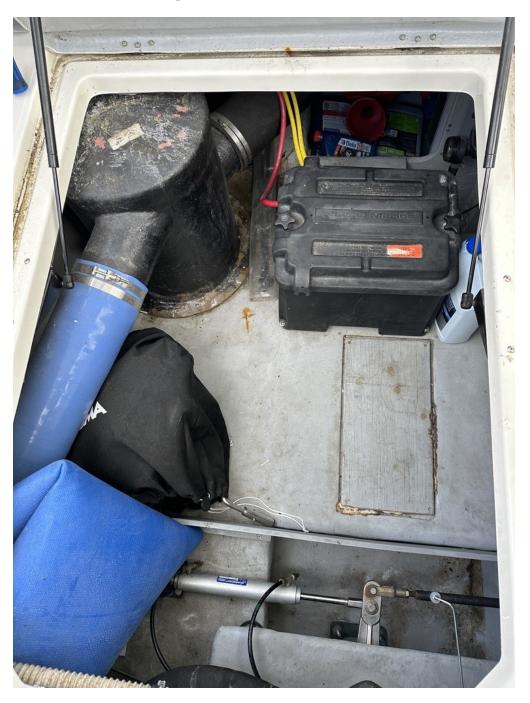
Each ENGINE BATTERY is connected to its corresponding engine. However, should one engine battery be insufficiently charged to start its engine, the other engine battery may be momentarily connected to provide a boost. Press the BATTERY PARALLEL SWITCH located at the helm. Turn off after engine start-up.

**The BATTERY SWITCHES PANEL** is found in the most aft salon port cabinet. This panel controls which batteries are charging and also some of the DC circuits including bilge and sump pumps, CO2 monitors and battery charger.



# **Battery Charger**

When connected to shore power, the battery charger automatically charges the 12-volt HOUSE BATTERIES which are located in the aft port hold.



#### **Generator** (Onan 9 KW)

First check that the Generator's fluids are topped off and the raw water intake is open.

To start the GENERATOR, go to the Pilot House helm electrical panel cabinet. First pre-heat the Generator by holding down the top of the rocker switch for 10 seconds. Hold the switch in that position while the Generator starts (about 5 seconds). Continue holding the pre-heat switch for an additional 5 seconds after the generator has started. If the Generator does not start after the second attempt, allow the starter to cool for 5 minutes. Water and exhaust will exit under the stern of the boat and can be viewed between the swim-step and the transom.

Allow the Generator to warm up for 2 minutes. Make sure the Generator breaker is turned on. Turn the Dock Side Master switches off and then raise the guard slide up displaying the Generator switches. Turn the generator switches on for each Line. (Line 1, Line 2 and Line 3) Then turn on AC systems as you would on shore power, one system at a time.

To turn the Generator off, turn off Dockside Master switches. Lastly, kill the Generator by pushing the rocker generator switch to "off" until it stops.

#### SANITATION SYSTEMS

#### VacuFlush Toilets

It is important that every member of your party be informed on the proper use of the marine toilets. The valves, openings, and pumps are small and could clog easily. If the toilet clogs, it is YOUR RESPONSIBILITY! Always flush the head for children so that you can make sure that nothing foreign is being flushed.

The ONLY things that should get flushed are #1, #2, and marine-grade toilet paper provided by AYC! **Caution** – **Never** put household toilet paper, Kleenex, tampons, sanitary napkins, paper towels, or food into the toilets. © Use only the special dissolving marine toilet paper provided by AYC.

There are odor control pods under the sink in the guest head. Use one after each time the holding tank is emptied. Breakers for toilets are located on the DC electrical panel. The bathroom fan breaker is labeled HEAD BLOWER on the breaker panel.

To use the toilet for #1, after use simply depress the foot pedal down for 3 seconds and release. To use the toilet for #2, first add a slight amount of additional water by lifting up with your foot underneath the foot pedal briefly and release. Afterwards, flush. Best practice is to release the pedal after 3 seconds but if this does not evacuate the bowl, after pressure builds (listen for the pressure pump to shut off), flush again for another 3 seconds.

When you need to CLEAN the toilets, first shut off the water pressure switch located on the electrical panel. Once cleaned, turn the water pressure switch back on.

## **Holding Tank**

The sanitation HOLDING TANK holds approximately 48 gallons. 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 an indescribable catastrophe and an EXPENSIVE FIX to you. EMPTY the tank EVERY OTHER DAY to avoid this problem.

The HOLDING TANK is located outboard of the starboard engine. You can do a visual check with a flashlight or the "watermelon" test by thumping it.

There is also a KUS monitor gauge located on the electrical panel, but do not rely on this alone as the sending





The holding tank is emptied in one of two ways:

1 - At a Marine Pump-Out Station, remove the WASTE CAP located starboard and open with a deck key. (The cap is not attached for sanitary reasons so be careful to not drop it overboard!) Insert the pump-out nozzle into the waste opening. Double-check your deck fitting! 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.

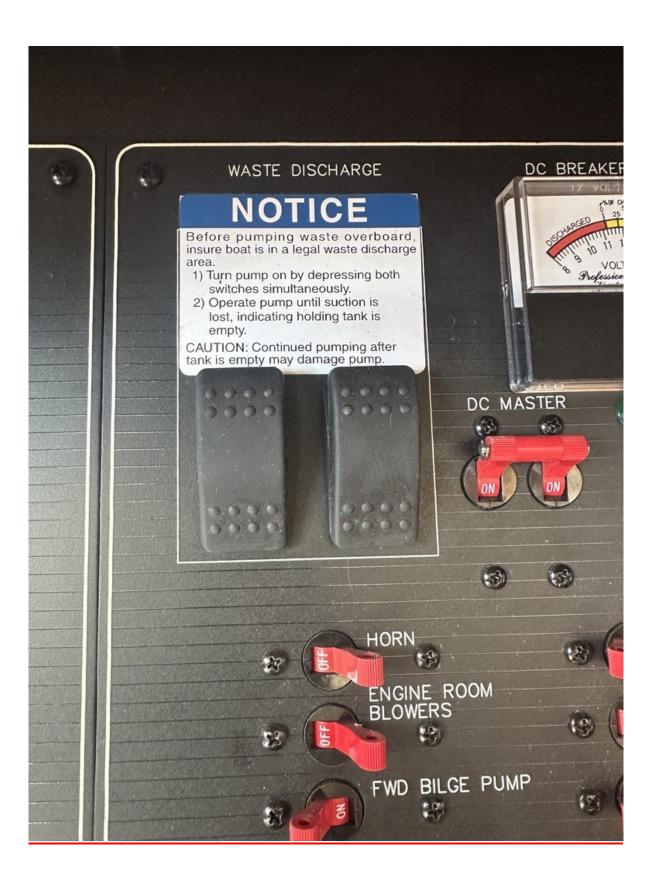
If there is a fresh water hose on the dock, RINSE the tank by adding 2 minutes of fresh water into tank. Then re-pump to leave the tank rinsed. This also eliminates head odors.

2 - The tank's contents can be discharged with the MACERATOR only in certain waters. Be sure to know the rules!

To operate the macerator, open the thru-hull located forward of the Starboard engine.



Turn the Holding Tank Discharge switch "on" on the DC electrical panel. Then depress the two toggle switches at the top of the breaker panel and hold. Listen to the macerator's sound. When the pitch becomes higher, the tank is empty. It should only take a few minutes to empty the tank.



#### WATER SYSTEMS

#### Fresh Water Tanks

The FRESH WATER TANKS (2) hold 110 gallons total. A tank selection must be made at the valves in the under-stair compartment (port side). Best practice is to use the forward tank first and reserve the aft tank. (35 Gallons)



Observe the water level by reading the gauges on the electrical panel (Tank#1 and Tank#2). Tank 1 is the main (forward) tank.

Tank Monitor Level readings on the Electric Panel – Steps to Operate:

- 1 Turn Tank Monitor breaker ON
- 2 Depress Tank#1: Shows current level of water in the main tank
- 3 Depress #2 Reserve tank monitor doesn't work

To refill the tanks, remove the WATER CAPS located on the bow's port side. Avoid flushing debris from the deck into the tank opening. DO NOT fill water and diesel at the same time! There are two hoses on board. One white (located in Port aft hold) and one black (located in a blue bag in aft Starboard lazarette.

## Fresh Water Pressure Pump

The FRESH WATER PRESSURE PUMP is located in the under stairs compartment. Activate pump at the DC panel by turning on the breaker. 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 THE HOT WATER HEATER on the AC panel. Serious damage can occur!



#### **Hot Water Tank**

The HOT WATER TANK / HEATER has a 20-gallon capacity tank and is available when connected to shore power, while the generator is on or via the engine heat exchanger while underway. To use on shore power, flip on the water heater circuit breaker on the AC electrical panel. Do not use the water heater if the water tank level is very low. The water heater is located forward starboard side under the companionway stairs.

#### **Showers**

Before taking a SHOWER make sure water pressure and shower sump breakers are ON. The guest shower has a toggle switch with a red light below the counter that controls the shower sump. To save water, take only very short "boat" showers (turning off water between soaping up and rinsing). After use, to keep shower tidy, wipe down the stall and floor. Check for and remove accumulation of hair in the shower (and sink) drains. There is Drano in the forward head if the drains happen to plug.

## Washer/Dryer

The washer works fine, the dryer is not very useful, best to hang dry after a complete cycle.

To use, there needs to be water in the tanks and 110 power turned on and the Breaker ON on Electrical Panel. To run, read page 14-15 of Splendide washer-dryer manual located in 3 ring binder with other manuals in the cupboard under the Electrical Panel.

With power off, turn the Selector knob to your desired setting, then push the Power button in, red lights should come on, wait 5 seconds for program to be accepted. Once it is accepted the washer will begin to fill with water.

There is usually laundry soap under the guest head sink.

#### Raw Water Wash-Down

A pressured RAW WATER WASH-DOWN is available from a hose spigot in the bow locker (starboard side). To activate, flip the Wash Down Pump Breaker located at the electrical panel. Turn valve at base of hose to allow water to flow. After use, turn the breaker off to prevent pump burn-out.

#### **GALLEY**

#### Stove/Oven

The stove and oven are electric. You must be hooked up to shore power or have the generator running to operate them because of their high electrical draw. Turn the ELECTRIC RANGE BREAKER on at the AC electrical panel and operate as a standard kitchen stove/oven. Caution: There is a cut off safety switch at the rear of the burners that the stove cover pushes down on when in the fully upright position. This switch can be temperamental at times, you can use a knife to push it down if needed. Allow burners to cool before lowering stove's cover.

- Note: 1. There is a toggle switch on the stove control panel that lets you choose stove or oven.
  - 2. If the Electric Range breaker trips while operating the stove/oven, turn off another high draw item (such as the water heater or room heaters) until you are done cooking.

#### Microwave

This unit is operated just like a home model. The operating manual is in the in the Handbook below the Pilothouse's electrical panel.

## Refrigerator-Freezer

The REFRIGERATOR is dual voltage (110-volt and 12-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. The local power switch is located above the freezer door. It can be turned down to the lowest position when anchored or moored, or turned off when turning in for the night.

## **Trash Compactor**

Needs to be at least half full before using to compact contents and breaker ON at Electrical Panel.

#### Ice Maker

Located on the starboard side across from the Galley to the left of the bar sink cabinet. Caution: It uses a lot of energy. It operates just like most home ice makers and will run off any AC source, including the Generator. It is important to make sure that the door is closed all the way and latched, except when getting ice.

#### **HEATING SYSTEMS**

#### **Electric Unit Heaters**

There are electric heaters for the berths and the salon, they operate on 110 v so the generator must be on or shore power hooked up. The thermostats are located in the salon (forward starboard), midship hallway (at the bottom of the stairs), in the forward master berth. (on the port wall under the rear porthole) and in the Pilot House (near the stairs to the bridge)

## **Engine Heat for Hot Water**

Once the engines are hot the hot water tank will begin being heated for hot tap water.

## **Engine Heat (DC)**

The PILOTHOUSE HEATER / DEFROST is available while underway only. The engines provide heat in the same way as a car heater. To operate, press the Rocker switch on the left of the dash at the helm, labeled "WINDSHEILD DEFROSTER".

Note: Heat will be available once engines have reached operating temperatures.

#### **ELECTRONICS**

The Garmin MFD manual is internally located in the unit under "User Manual". All other electronics manuals (paper format) are located in the cabinet below the Pilothouse's electrical panel.

Please use the Power Buttons located on the Individual Units (MFDs) to Shut Down Units.

#### VHF Radios

Two iComm M510 VHF radios installed at both helms (1 per each). Magic\* is equipped with AIS which is viewable on the MFD.

## **Depth Sounders**

Depth can be displayed on the MFD. There are 2 additional DEPTH SOUNDERS - one in the Pilothouse's upper valance and the other on the Bridge helm. To activate the LOWER and UPPER depth sounder, turn on the breaker on the electrical panel and turn the switch "on" on the Bridge helm. Set the scale, shallow alarm, and deep alarm as desired. The depth sounder should provide reliable READINGS in shallow waters. If in doubt, switch it off, then turn it back on to reset it. 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 Garmin RADAR, turn the POWER SWITCH on at the electrical panel. To turn off, press and hold the POWER button on the unit for about 3 seconds. Refer to the quick reference card in the manual. Remember, AYC rules do not allow charter travel in FOG or in serious WIND conditions.

## Navigation (Multi-Function Display [MFD])

One fixed-mounted Garmin GPSs/MFDs are located at each helm. Turn the BREAKER on at the electrical panel for power-up but please use the power buttons located on each unit for power-down prior to turning breakers off. Refer to the manual, normally found underneath the electrical panel (in the cabinet).

**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 Radio-Bluetooth**

There are two Kenwood receivers on board: Above the Pilot House captain's chair. It powers speakers in the pilot house and the salon. On the flying bridge under the black cover panel inside the port cabinet. Both of them are visible as Kenwood KMR-M3 on Bluetooth settings on your phone. They are independent of each other and control speakers throughout their location area.

## TV/DVD AM/FM Receiver

New Visio TV with Sony Blue Ray/DVD player with a Sony surround-sound receiver. Remotes located in TV cabinet to the left of the Sony player. Operating manual is in the Owners Reference Manual located below the Pilothouse's electrical panel.

#### **ANCHORING / MOORING CANS**

## **Anchoring**

The primary WORKING ANCHOR is a Delta and is attached to a 320 ft chain and 20 feet of nylon line passed through the deck from the ANCHOR LOCKER. The locker can be accessed through the Master Stateroom headboard.

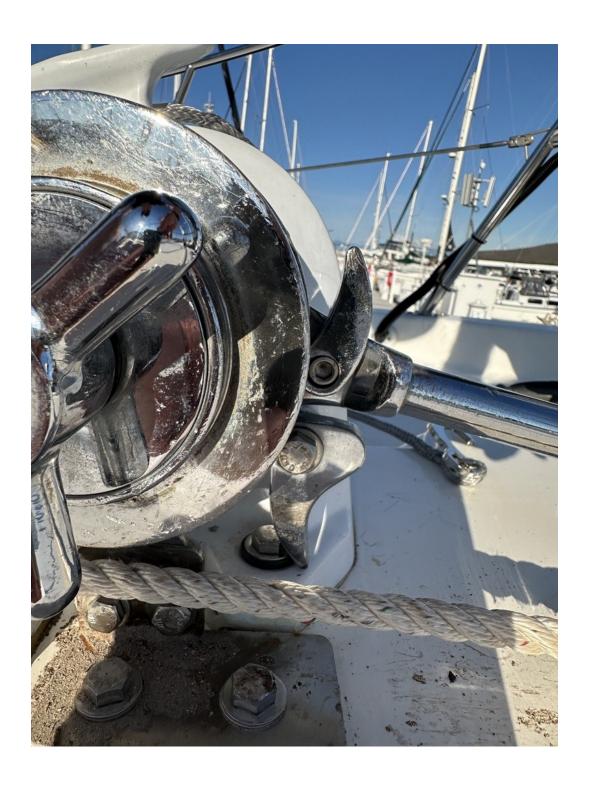
Leave engines running during the anchoring maneuver, for safety and because the anchor windlass is a high draw electrical item.

The WINDLASS POWER SWITCH is located on the DC breaker panel.

There is a locking system on top of the anchor that must be released prior to dropping the anchor. The knob on the port side has to be released fully to allow the locking mechanism to open.

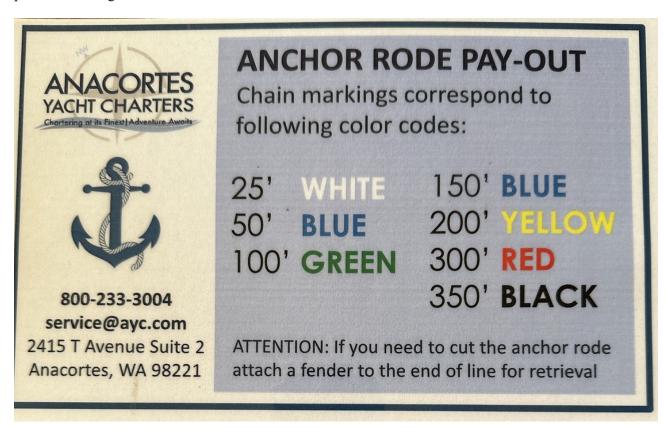


There are two anchor keeper dogs on the windlass cogs- release them prior to dropping the anchor. You may need to use a hammer to tap the lever that releases the dogs if it is tight.



At the bow's port side, tap gently on the 'down' FOOT PEDAL CONTROL (arrow pointed towards bow) to lower the anchor. If necessary, guide the anchor over the anchor roller to prevent binding on the pulpit.

Let out sufficient ANCHOR RODE (chain and nylon line) before setting the anchor. Colored markers are placed indicating the amount of rode.



If the anchorage is crowded, put down at least a 3 to 1 scope (60 feet for 20 feet of water). Set the anchor by reversing the engines. Then let out additional scope dependent upon conditions. After anchoring is complete, attach bridle to anchor rode and secure to port and starboard cleats. (Please use the Anchor Bridle, located in the starboard-side foredeck locker, at all times when at anchor it makes for a quieter and smoother experience.)

Before raising the anchor, ALWAYS start the engines as it uses large amounts of power. Turn 'on' the WINDLASS SWITCH. Put the drives in FORWARD and 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. 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. With the wash-down hose wash down the anchor and the chain as the anchor is being retrieved. You might want to have the boat hook at the ready to help remove seaweed and other debris.

If power is not available to raise the anchor, use the ANCHOR WINDLASS HANDLE (stored in the starboard foredeck locker) to manually retrieve.



Make sure the anchor chain locker hole cover is open prior to retrieving the anchor.

Reconnect the keepers to the Windlass and the anchor. Close the plastic covers on the foot pedal controls. Turn 'off' the WINDLASS POWER SWITCH and turn off the Washdown breaker.

A SPARE ANCHOR is normally stowed in the port side rear hold in a bag.

# **Mooring Cans**

This vessel is too large for mooring cans. Mooring cans are limited to boats 45' and under.

## **BARBECUE**

The BARBECUE is kept in its bag in the rear port hold. There is a mounting socket on the port cockpit step area. The REGULATOR (blue in color) and propane cans are kept separately in the salon's port side aft cabinet. The barbecue cooks fairly hot and fast so keep an eye on your food.

After each use, please wipe down the barbecue with paper towels and restow the regulator.



Caution: Do not leave the regulator attached to the barbecue; ALWAYS restow after use to keep it from rusting.

#### DINGHY & OUTBOARD MOTOR

The AB DINGHY with a 30 hp Honda engine is stored on the Bridge. It has the capacity of 530 pounds 5 persons (or fewer people and gear).

## Lowering

Remove dinghy cover and hook up the cable hoist to the midship eye with the carabiner. Have a crew member below aft deck, with a boat hook, to help guide the dinghy as it lowers and to secure it once it gets to the water. The davit control is located in the Pilothouse cabinet below the electrical panel. Insert the controller's 3-prong plug into the receptacle just forward of the davit arm on the port side of the radar arch.



Reel the cable out using the control and pulling on the cable to unravel the cable from the winch and release the hook from the eye ring.

The davit arm must be raised to the upper position if not already there. Do this by removing the large pin and reinserting after raising the arm. It is easier to do this if you first swing the arm out over the water to give yourself more room. Holding the dinghy and a bow line, detach the SAFETY CABLE and attach the davit arm cable to the hoisting cables attached at the stern and mid ship of the dinghy, lower the dinghy with the line into the water, noting that the dinghy gets heavier as it nears the water.



## **Operating**

Caution: This dinghy is rather fast. Please operate with care and it should be operated by adults only.

Lower the motor into the water.

Prime the fuel bulb in front of the motor and start the engine (The key is in the navigation table drawer). A "KILL CORD" must be connected to the red knob on the back of the throttle control and must be attached to the operator (Coast Guard fineable). A spare key is in the Pilothouse cabinet below the electrical panel.

There is a battery shut-off switch under the driver's seat that should be turned on prior to starting and shut off after each use. (You will always have a good battery that way)



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.

## Lifting

Lifting the dinghy back onto the boat is basically the reverse procedure with a few twists/techniques. Make sure the motor is tilted up or it will strike the boat. Start by having the dinghy facing aft. Raise the dinghy all the way up and then swing the bow towards the boat. It is easier to control the dinghy and not the davit arm. The dinghy will swivel around as you pull it in. Lower the dinghy onto the chocks. Once seated properly, secure with the forward line and re-cover with the black cover.

When the dingy is stored, the motor should be slightly tilted up and resting on a locking pin.

Towing

When towing the dinghy, always keep it tight to the boat any time that you slow down or stop. Assign one of your party members as the "dinghy" person to be responsible for taking up slack. You don't want to wrap a line around a propeller.

#### **CRABBING & FISHING**

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

Crab AWAY FROM THE BOAT! Lines can get wrapped around props. A crab pot with buoy and line is located in the port lazarette. Fish-flavored cat food with the pop-up ringed lid work the best for a nice neat way to bait the pot. After 30-90 minutes, retrieve the crab pot. Measure the crabs using the crab MEASURING GAUGE normally located inside the crab pot. Keep the male crabs of proper size (usually 6- 1/4 inches across the carapace or larger). Boil crabs about 12 minutes to cook.

After using the crab pot, wash equipment thoroughly with fresh water (a bucket can be filled in the kitchen sink). *Note -- Please do not store a wet pot and/or gear inside the boat.* 

#### **OTHER**

**SAFETY** should be paramount in your daily cruising. A MAN OVERBOARD DRILL should be discussed and perhaps even practiced with a life jacket. Remember the life jackets are stowed on the Bridge in the L-settee and starboard seat's compartments. A few should always be out and ready. Your flares and safety equipment are located in the Pilothouse drawer under the nav station on the starboard side of the helm.

A LIFE RING is mounted on the stern transom.

This vessel is equipped with 3 AUTOMATIC **BILGE PUMPS**. The master switches are located on the electrical panel. Normally the switches will be left in the ON position. You may occasionally hear the pump operate due to condensation and water from the shaft log accumulating in the bilge.

The **ENGINE SPARES** BOX (plastic grey tub) is stowed under the companionway stairs. This includes oil and fuel filters, belts, raw water impellers, a water pump, a macerator, and other small parts.

The **TOOL BOX** is located under the companionway stairs. After tool use in saltwater conditions please spray with WD40 and return to tool box with a slight wipe of WD40.

There is also a blue topped cream colored **Plano Box** under the stairway with electrical fittings and a meter.