

## BLUE MOON OPERATIONS MANUAL



Welcome aboard!

We are happy you have chosen “BLUE MOON” for your vacation. We are sure you will enjoy cruising the lovely islands of the Pacific Northwest.

Sabreline’s introduction of the Sabre 47 in October 1996 re-defined the “Downeast” style motoryacht. At one time, a “Downeast Motoryacht” described a modified version of a workboat, converted for use as a private yacht. These designs included many famous fishing trawlers and lobster boat hulls. In the 1980s several Maine yards began redesigning the traditional Downeaster. In the end, only a hint of the workboat lines remained. These new yachts looked more like pleasure craft versions of such famous military vessels as the World War II PT boats. Their flat shear lines and flaring bows introduced the handsome, conservative and rugged look which has become the new “Downeast Style.” Designed for comfort in rough, offshore conditions, yet capable of smooth running at top speeds of over twenty knots, these modified deep-vee hulls quickly gained popularity as they earned a reputation for reliability and seaworthiness.

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## BOAT OPERATION

This Vessel has Twin 660 Horsepower Cat Diesels. They are very powerful and **YOU MUST** always use low idle mode when maneuvering the vessel.

### Engine Inspection

Remember your “WOBBS” every morning: Water (Coolant), Oil, Bilges (Inspect and Pump-out), Belts and Sea Strainer.

Check the level of COOLANT in the expansion tanks

Check the level of OIL in each engine by checking your dipsticks located inboard of each engine. 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). Observe the glass of each RAW WATER STRAINER for debris. Shining a flashlight through 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 STARTUP

- First item of business is to make sure there is power to the Micro Commander controls. In the panel, find three switches marked Engine Control and make sure all three are switched to the ON position. The top switch is for the Micro Commander Controls, then one each for the Port and starboard Engine.
- Be sure the Micro Commander controls are in the Neutral Position at both stations. TAKE CONTROL OF THE STATION BY PUSHING SMALL BUTTON BOTTOM LEFT SIDE OF CONTROLLER. THAT WILL SILENCE THE ALARM.
- Turn each ignition key to the Start position and the engines should start without much delay.
- Do Not crank engines for longer than 5-8 seconds. If the engine does not start within that time, allow about 30 seconds for the starter motor to cool down. If you find that the engine is cranking slowly, you should stop and go to the panel and run the engine start batteries in parallel. (Location of this switch is found just above the main electrical panel. You must depress the red button to activate).
- Vessel has **DRY EXHAUSTS!** You will **not** see water exiting the exhaust pipes at the stern. Small bubbles may be present mid-ships, port and starboard, when engines are running. THIS IS YOUR UNDERWATER DISCHARGE.
- Once the engines have started, you may find it wise to warm up each engine by slowly increasing 700 RPMs. This can be done by pressing and holding the CONTROL button on the front of the Port Micro Commander control and slowly moving the control arm forward. The light on the control will be blinking. Once you have moved the control arm forward you may let go of the CONTROL button and the engine RPMs can be increased without engaging the transmission. When the control arm is brought back to Neutral, this function is no longer in effect.

**NOTE: THE STARBOARD ENGINE MUST BE RUNNING FOR THIS FUNCTION TO BE OPERATIONAL.**

\*NOTE: Blue Moon also has a designated SLOW ENGINE switch that slows the engine RPMs to about 75% of normal idle. By engaging this toggle switch when underway in close quarters, you will find that the boat does not “jump” in and out of gear and makes for smoother shifting. Once away from the dock and out of the marina, turn this toggle switch to the Off position by shifting to neutral, turn the toggle switch OFF and then move forward.

Move the THROTTLE to raise the engine speed to 700 rpm on the TACHOMETER. Warm the engine for about 5 minutes before engaging the transmissions. Observe the readings of the gauges. The oil pressure will register about 45 PSI when the engine is cold. The engine temperature should rise slowly. Max at 180 degrees FH

NOTE: If oil pressure is low, shut down the engine, and inspect the engine compartment and look for possible causes (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 seacock is ‘open’ (handle in-line with valve). Next, check the raw water strainer for debris.

## ENGINE SHUTDOWN

Prior to shutting down each engine, allow for approximately 5 minutes of slower to idle running to allow each engine to cool down slowly. Usually, the close quarters maneuvering within a marina or approaching a mooring buoy will be sufficient.

\*NOTE: To properly shut off each engine, Depress the STOP switch found just above the ignition switch, DO NOT simply turn the ignition switch to the Off position. When properly shut off, the engines will stop after a short delay at which time you then should turn the ignition switch to the Off position.

## GETTING UNDER WAY

DISCONNECT the shore power cord (see 110-Volt next page). Make sure the Cable master breaker on the DC panel is on to coil shore power cable. Toggle switch is under stern coming

Make sure you exercise the shifters briefly at idle to make certain you have control at the helm you are using. Remember there is a slight delay so be patient and do not add more throttle than 1st detent on shifter

Confirm low Idle mode is on with red lights at helm by keys. Close the PORTHOLES, WINDOWS, and FORWARD HATCH. Turn on your VHF and GARMIN MFD electronics at both stations.

ASSIGN crew members their various positions. Once outside the marina, idle the engines while the crew brings in fenders and lines.

Turn on both bow and stern thrusters by pressing the two white "ON" buttons at the same time. A yellow light will appear between to show the unit is on. Be aware that these units will time out after 5 minutes of inactivity. They must not be used for more than 5-7 second bursts or they can shut down if too much use.



## CRUISING

All close quarters maneuvering should always take place at the upper helm using low idle mode.

Engage the GEAR SHIFTS. Ensure the throttles are in the 'idle' position before engaging the gear shifts to avoid transmission damage.

NOTE Cruising speed is a maximum of 1800 RPMS = 20.5 knots @17.8 GPH. per engine

If you run at 1400 RPMS you will cruise at 13 knots and use only 9.7 gallons of diesel per hour per engine.

Your speed will vary depending upon the weight and load and weather conditions. TRIM TABS can be adjusted for comfort and visibility by putting in the "bow down" position.

***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!***

## ENGINE SYNCHRONIZERS

Blue Moon's engines can be synchronized when underway to allow for the best fuel economy and to harmonize the engines drone while underway. When out of synch, the engines tend to make a much more unpleasant sound.

To sync the engines is quite a simple process. You will find a switch marked SYNCH at each helm station. At the lower helm it is on a panel next to the wheel. The switch has three positions:

- When the switch is in the center position, each engine is working independent of the other. When depressed in the top, the Port Engine is the "Master",
- When depressed in the bottom, the Starboard Engine is the "Master".
- Whichever engine is the "Master", that Micro Commander Control arm is adjusting both engine RPMs until the switch is returned to the Neutral Position.

To properly disengage, both controls should be moved to the Neutral Position then turn off the switch. The Synch will NOT disengage until both controls closely match positions.



## CHANGING HELM STATIONS

- Always put engine controls in the Neutral Position when changing stations. If either the Synch or Low Speed Switch is On, turn those OFF at the helm station you are leaving, otherwise you will not be able to make those changes from the new helm station.
- Move to the other station and push the Control button. A red light should then let you know that the controls have been changed to that particular station and you can get underway and make any helm changes at that time.

## 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. Oftentimes 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.

- Bow and stern thrusters 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 GEAR SHIFTS and THROTTLES to maneuver the boat.

- Don't forget to use the low idle system by engaging this toggle switch when underway in close quarters, you will find that the boat does not "jump" in and out of gear and makes for smoother shifting.

## FUELING

OPEN FILLER CAP(S) located on port side with a DECK FITTING KEY which is kept in the drawer under the lower pilot seat.

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

Blue Moon has two fuel tanks. To make fueling the easiest, approaching the fuel dock Portside to is ideal since both fuel fills can then be easily accessed.

Tank One holds 200 gallons of DIESEL fuel that can be determined by a fuel gauge mounted below the lower helm, top gauge. The Fuel Fill for this tank is located on the Port Side of Blue Moon, mid-ship. It is found right next to a Waste Cap, be careful to not fill the waste tank with Fuel!

Tank Two holds 400 gallons of DIESEL fuel that can be found on a fuel gauge mounted below the helm, lower gauge. The Fuel Fill for this tank is located midship in the aft of the Blue Moon.

To switch from Tank One to Tank Two you must access the engine room. The valve can be found adjacent to each engine and by swinging the handle from position one to position two, the tanks will be switched. You must make sure to have both handles in similar positions so that fuel is always being drawn from the same tank.

If taking on several hundred gallons of fuel, have someone check the fuel gauge from time to time so you are aware of how close you are getting too full. As you approach Full, slow the fill speed to allow for air to escape and to listen for a change in gurgle/pitch. Be aware of the Overflow Vent and top off carefully. Catch any overflow before it has a chance to get into the water.

### BLUE MOON APPROXIMATE NUMBERS

#### Fuel Burns per Engine

GPH	RPM	KNTS
3.7	1000	9.0
5.8	1200	11.0
9.7	1400	13.0
13.1	1600	16.6
17.8	1800	20.5
21.9	2000	24.2
24.9	2100	25.7
27.9	2200	26.7
33.4	2330	29.0

# BLUE MOON ELECTRICAL PANEL



## BLUE MOON ELECTRICAL PANEL



## ELECTRICAL SYSTEM

### 110 VOLT SYSTEM

Blue Moon has both 110-volt AC power (Shore Power or off the Generator) and 12-volt DC power from the ship's batteries.

The 110 panel is found in the companionway, Port Side, while the DC panel is found to the Starboard.

### THE DOT SYSTEM

Anacortes Yacht Charters uses a colored dot system to identify those breakers on each panel that are usually ON, OFF or used intermittently.

**GREEN DOT** signifies **ON** or usually **ON**

**RED DOT** signifies **OFF** or usually **OFF**

**BLUE DOT** signifies items like water pumps that should be switched **ON only when being used**.

**YELLOW DOT** signifies electronics or items to be used with caution **NO DOTS** signifies those breakers for no use.

## **SHORE POWER**

Generator or the Inverter supply the 110-V system aboard Blue Moon. This also supplies power to all outlets and will charge all the batteries aboard.

Blue Moon's 50-foot Shore Power Cord found in the aft cockpit, Port side.

To POWER UP the shore power cablemaster, the CABLEMASTER switch on the 110 electrical panel must be in the ON position. This will allow for the cable to be extended or retrieved by a toggle switch located below the rail adjacent to the power cord.

When plugging into shore power, or disconnecting from shore power, TURN OFF the breaker at the point of connection. Hopefully you have a 50 AMP shore power supply and you will simply plug into that service.

Be sure the AC Panel has Circuit Breaker in the SHORE position. Turn ON appropriate breakers for Yellow Dot items like water pumps, shower sump pumps, etc. that may be used that evening.

If only 30 AMP service is available, you will find adapters, pigtails, etc. in a tote box next to the rail mounted BBQ. If you have only 30 AMP service available (or sometimes even 20 AMP service) you must be very cautious regarding which circuits to power up at one time. If you "POP" breakers, turn off certain items that are drawing high amperage. Pick and choose wisely what to have ON at any one time. Water Heaters take a high draw for example.

## **INVERTER**

Blue Moon is equipped with an inverter that can, for a limited period, provide 110-volt power by converting 12-volt DC power (from ships batteries) to 110-volt power. This is a finite amount of power and does deplete the ships batteries over time. The inverter does NOT provide power to the water heater or battery charger.

To turn ON the inverter, go to the AC panel and move the selector switch to INV. This will power up the AC circuits except for those noted earlier. Use this power sparingly! Hair dryers, toasters, coffee pots will draw down power very quickly.

Inverters are best used for short periods of time when at a quiet anchorage and using the generator would become a noisy nuisance.

## GENERATOR

Blue Moon also has a Generator that can run all the AC circuits, charge batteries and send power to the hot water heater.

The generator itself is located aft of the engines.

**Prior to Generator Start, CHECK THE OIL AND COOLANT AS WELL AS SEA STRAINER FOR DEBRIS.**

Turn off all AC circuits so that there is no load on the AC system.

To Start the Gen Set, at the lower helm in the small panel forward of the wheel you will find the Generator Start controls.

First, above the DC Panel you will find a series of battery selector switches. Find the switch marker GEN, slide the bar down and depress the red button. It will light up. Then depress the Pre-Heat switch for approximately 20 seconds, while still holding the pre-heat switch in, depress the start switch. Hold that until the generator catches, usually within 20 seconds. Do a quick check to make sure the generator is pumping raw water from its exhaust.

Once running you can then go back to the 110 Volt panel and turn on the breakers which you would have had on when connected to Shore Power.

When turning off the Generator, take the load off by turning off the AC breakers, turn off the main AC distribution switch and then turn the Generator switch to the Off position.

**PREHEAT & SHUTDOWN BYPASS**  
ON  
Hold ON during starting. Consult manual.

**GENERATOR CONTROL START**  
STOP

CAUTION: Overcranking engine with a water lift muffler can cause damage. See your manual.

01530  
HOURS 1/10

**NORTHERN LIGHTS**

**BILGE PUMP FWD**

rule  
GLoucester, MASSACHUSETTS

**BILGE PUMP MID**

rule  
GLoucester, MASSACHUSETTS

**BILGE PUMP AFT**

rule  
GLoucester, MASSACHUSETTS

**TANK TENDER..**

TANK 1 TANK 2 TANK 3 TANK 4 TANK 5

Push button in and hold, pump slowly. Do not test with deck to pipe full. Pressure over red line may damage gauge.

HART SYSTEMS, INC. Gig Harbor, Washington

FRESH WATER PUMP

**WINDLASS**

STEREO MEM

SHIP VOLTS

WINDLASS

On

CAUTION

**ISLAND**

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## 12 VOLT BATTERY SYSTEM

Blue Moon has multiple batteries for powering up various independent systems. The battery selector switches are located on a separate panel found immediately above the 12 Volt DC panel. These switches can be confusing: there is a slide bar that allows access to the various battery switches. The bar must be slid so that the switch can be depressed. Just sliding the bar does NOT activate the switch, so be sure to depress the switch, a red light should come on when the switch is properly activated.

Port Engine Start Battery  
 House Bank of Batteries  
 Dedicated Thruster Battery

Starboard Engine Start Battery  
 Generator Start Battery

When a battery bank is being charged, the voltage will read 13.1 to 14.4 volts. When the battery bank is at rest, the voltmeter can provide a rough idea of the level of charge in the



All of the batteries are under a charge by the engine alternators while underway, the engine/house batteries are charged by the inverter/ battery charger when connected to shore power. The battery charger and inverter circuit breakers should be “ON” at the electrical panel. Finally, operating the Generator will also provide a charge to the various banks of batteries.

### Level of Charge in a Battery

12.5 Volts	75%
12.25 Volts	50%
11.95 Volts	25%
11.70 Volts	0%



## MARINE HEADS

Blue Moon's heads are VacuFlush. They use freshwater to flush to black water tanks. This keeps smells down Vs saltwater Breakers must be on the DC Panel.

Simply depress the lever below each toilet bowl to evacuate the head. There is a Tank Tender that will APPROXIMATE the level of the holding tank, it is critical to be aware how close each tank is to being full.

The forward head has a 30-gallon holding tank, while the aft head has a 30-gallon holding tank. Overfilling either one can cause serious damage, clogging vent lines or worse. It is strongly recommended that you empty the holding tanks every other day.

Holding tanks can be emptied at a Marine Pump Out Station.

Remove the Waste Caps located on the port side of Blue Moon. One is adjacent to the fuel cap, the other just aft of there. Insert the pump-out nozzle into the waste opening and hold the nozzle firmly against the deck to allow for a tight seal. Marina staff will usually then turn on the pump-out system to empty the holding tank. Once emptied, replace the Waste Cap and move to the next tank.

**NOTE: If possible, when freshwater and time permits, rinse each tank by running fresh water into the tank for about two minutes, then repump. This helps to eliminate head odor.**

Marine heads can become clogged/plugged quite easily. Each head will be operated at check-out and check-in to ensure proper operation and function.

**Plugged heads are YOUR RESPONSIBILITY**

The captain should take a few minutes at the outset of the cruise to have the entire crew be aware of proper head use.

EXAMPLES Never put paper towels, Kleenex, tampons, household toilet paper or any food into the marine head. Marine toilet paper should be the only type used during your trip.

**CLOGGED HEAD REPAIRS ARE \$150 PER HOUR PLUS PARTS.**



## **MACERATOR PUMP DISCHARGE**

An alternate method of discharge is by the use of a **macerator pump**.

**\*\*YOU MUST MAKE SURE THE THRU-HULLs ARE MOVED TO THE OPEN-POSITION before discharging, OR YOU WILL DAMAGE THE MACERATOR SYSTEM!!**

**\*\*\*THE OVERBOARD PUMPOUT METHOD CAN ONLY BE USED WHEN IN CANADIAN WATERS and even then not in any harbor or restricted areas.\***

### **To operate the macerator pump:**

- 1.) Open the thru hull valves located forward under steps. LIFT STEPS and open closed valve marked 'MACERATOR DISCHARGE'.
- 2.) Go to the small floor hatch in the master stateroom and open the valve from macerator to overboard discharge, then go to the 12V. DC panel. You will note that both Macerator Pump switches have red dots next to them, meaning to be used only by discretion. To activate each macerator, simply move the toggle switch to the "ON" position. Listen to the sound from the pump and when the pitch increases, the holding tank has been pumped out. It will take several minutes for these pumps to clean a full or nearly full holding tank.
- 3.) Close valves after use. They should always be closed in US waters.

## WATER SYSTEM

Blue Moon has three water tanks that are plumbed together. You can use them independently but must access the water manifold in the rear Lazarette, Starboard side to do so. Recommend leaving all as one tank.

Combined there is 300 gallons of fresh water for consumption. Fresh water (gray water) is drained overboard thru various thru-hulls located around the boats. Often the gray water will go to a sump and then be pumped overboard.

Fill the water tanks thru deck fittings found in the aft cockpit on the steps. 2 PORT 1 STBD  
The fresh water pressure pump is located in the engine room. To activate the pump simply switch on the Water Pump switch on the DC panel.



Should the pump continue to run you may be out of water or possibly have an air lock. Bleed the system by opening a faucet, typically at the highest point. If you do run out of water, be sure to **TURN OFF THE HOT WATER HEATER** on the AC panel to avoid serious damage. Blue Moon does have a 110-volt hot water heater with a capacity of 20 gallons.

The water is heated with shore power, generator power or via a heat exchanger when underway. When on shore power or generator, switch **ON** the water heater circuit in the AC electric panel. Be aware of your water levels and avoid turning the heater on when low on water.

## GALLEY

### Stove / Oven

Blue Moon has an electric stove and oven. The breaker on the AC panel must be ON for the stove/oven to work. Since this is 110 Volt electric, the power source is Shore Power or running the Generator. Operating the stove/oven off the inverter is not possible.



### Refrigerator

The refrigerator is dual voltage (12 volt and 110 Volt power). It will use 110 volts whenever possible and only switch over to 12 volts when 110 is not available. Monitor the use of 12-volt battery consumption when at anchor or moored away from shore power and consider switching OFF the refrigerator just before retiring for the night and back ON the next morning.

## ANCHORING

Blue Moon has a Main Anchor plus a spare for emergencies.

The main anchor breaker is in a small panel found just below the lower helm wheel, port side. This will power up the UP and Down switches for the winch at each station as well as the foot switches on the bow of Blue Moon.

The anchor chain is marked at 25 FOOT intervals to help determine the amount of chain that has been used. Under normal conditions you should plan on a 3 to 1 scope, or 75 feet of chain in 25 feet of water.

Drop the anchor by depressing the foot switch or windless switch at the helm station. Let out chain beyond the depth of your anchorage by 10 to 15 feet. “Kick” the boat in and out of reverse while still dropping the chain until the minimum scope has been reached. Increase the scope when you are in locations of heavy wind or current locations, heavy weather

To retrieve the anchor and chain, Blue Moon’s port and starboard engines should be started. The anchor windlass motor has a big draw on the electrical system. There is a hose and nozzle in the port anchor hatch that should now be attached to a fitting in the bow. A small cover can be swung out of the way and the hose can be attached by inserting the fitting and turning about a quarter turn to engage. At this time flip the wash down pump switch found toward the bottom of the DC panel. It is helpful for a crew member to be at the bow of the boat to direct the captain to position the boat so that the chain is being retrieved directly over the bow. Again, “kick” the boat slowly forward to retrieve the chain, DO NOT use the anchor windlass alone for this task. Once retrieved, disengage the hose and nozzle, switch off the wash down pump and switch off both windlass controls in the small panel below lower helm station.



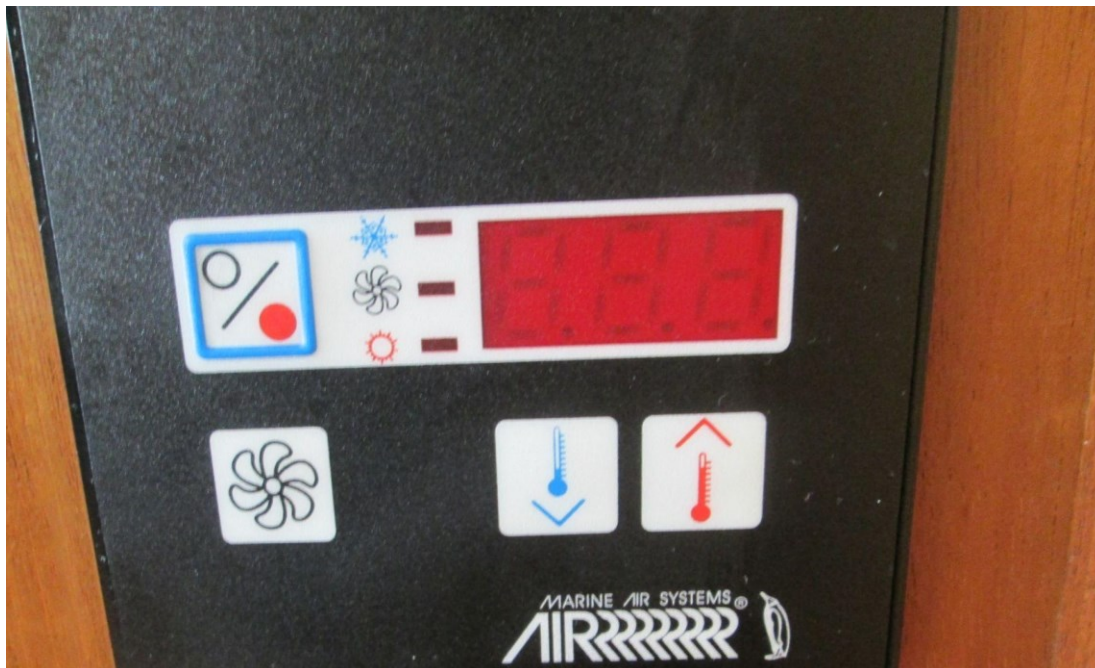


## HEAT AND AIR CONDITIONING

Blue moon uses a reverse cycle air conditioner and heating system. This operates while on shore power or ship's generator only. You must have a 50-amp power supply. The units have individual breakers on the 110v panel marked

- Air conditioning forward
- Air Conditioning aft
- Air conditioning salon
- Air Conditioning pump

**Note air conditioning pump must be turned on prior to turning on any of the unit's power: failure to do so will damage the entire system.**



Press the blue square to power on and to turn off, select heat or cool with red and blue temp adjustments. The 3 lights horizontally will indicate what mode the units are in. These take a significant amount of power so as with all aspects of boating, manage your power so you don't trip power breakers or worse.

## WASHER / DRYER

THESE ARE STANDARD HOUSEHOLD UNITS BUT BE ADVISED, THEY REQUIRE 50 AMP SERVICE SO SHORE POWER OR SHIPS GENERATOR.

They use quite a bit of water so recommend limited use unless water supply is available. Each wash can use as much as 30 gallons of fresh water and empty your hot water tank.





## DINGHY

To launch the dinghy, access the dinghy via the swim step through the transom door. You may be at first confused by this launching and retrieving system, but once tried you will find it fairly easy.

First, locate the two pins that are held together by a small cable. There should be little tension on the top pin, so remove that to begin the launching sequence. Towards the bottom of the mechanism, you will see a black knob, SLOWLY turn to release pressure and the dinghy will begin to drop towards the water. About halfway down, the second pin will be released from tension and can now be removed.

Finally, continue to release pressure until the dinghy is “floating” and a third pin can now be released as the motor mount engages with the transom of the dinghy. You may need to nudge the motor mount into place.

There is a screw type mechanism that must be firmly engaged to lock the motor mount onto the transom of the dinghy. Once engaged you can slip the swim step dinghy mounts forward to disengage the dinghy.

To retrieve the dinghy, engage the mounts on the swim step, unscrew the motor mount locking mechanism and insert the lower pin. At this time make sure the pressure relief knob is closed and drop down a foot pumping lever. Begin pumping this foot pump and when about half way up, engage one of the pins that is part of the two-pin cable, then continue to pump until it is possible to engage the third and final pin.

**NOTE:** The outboard fuel tank is located under the seat and secured in place with straps. Before retrieving the dinghy, be sure the outboard tank is secure. Also, close the air vent on the fuel tank so that no outboard fuel is lost when the dinghy is loaded on the swim step, but be sure to open that prior to using the dinghy.

## **BARBECUE**

The BARBECUE and MOUNTING BRACKET are on aft cabin railing.

Attach a PROPANE BOTTLE to the REGULATOR found in white deck box aft cabin.

Carefully light the unit, preferably with a long-stem butane lighter. The barbecue generates a lot of heat and cooks hot and fast.

Note: 2 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.

## **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 or 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 Keep the male crabs of proper size (usually 6 ¼ inches across the carapace). Boil crabs for 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.

## **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 under the flybridge settee and in the deck box in aft cabin. A few should always be out and ready.

Your flares and safety equipment are located under flybridge settee.

Blue Moon is equipped with 3 AUTOMATIC BILGE PUMPS. The master switches are located on the electrical panel just below the lower helm wheel.

Normally, switches 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. You can turn them off or direct manual override to bypass the float switch.

Fire extinguishers are located in all cabins and FireBoy automatic extinguishers are in the engine compartment. If this is activated you should shut down all engines / AUX and turn off bilge blowers if needed. You do not want to remove the halon gas via the engine intakes or the blowers venting the spaces.

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

# TANK TENDER GAUGE READINGS

		WATER										
		WATER SYSTEM MAIN SUPPLY LINE HAS THREE SHUTOFF VALVES FOR: 1) AFT CABIN TANK 2) PORT LAZZ. TANK 3) PORT LAZZ. TANK FOR GAUGE READINGS SHOWN BELOW, ALL OTHER SHUT-OFF VALVES MUST BE CLOSED										
% VOLUME	DIESEL					WATER						
	TANK 1 (ENGINE ROOM)		TANK 2 (AFT)			TANK 3 (AFT CABIN.)		TANK 4 (STBD. LAZZ. TANK)		TANK 5 (PORT LAZZ. TANK)		
	GALS	L	GAUGE READS IN INCHES	GALS.	L	GAUGE READS IN INCHES	GALS	L	GAUGE READS IN INCHES	GALS.	L	GAUGE READS IN INCHES
100%	205	776	14.2	400	1514	19.8	96	363	19	96	363	19
75%	154	583	10.7	300	1136	14.9	72	273	14.5	72	273	14.5
50%	102.5	388	7.1	200	757	9.9	48	182	10	48	182	10
25%	51	193	3.5	100	379	5.0	24	91	5	24	91	5
∅	∅	∅	∅	∅	∅	∅	∅	∅	∅	∅	∅	∅

**SABRELINE 47 OWNER'S MANUAL**

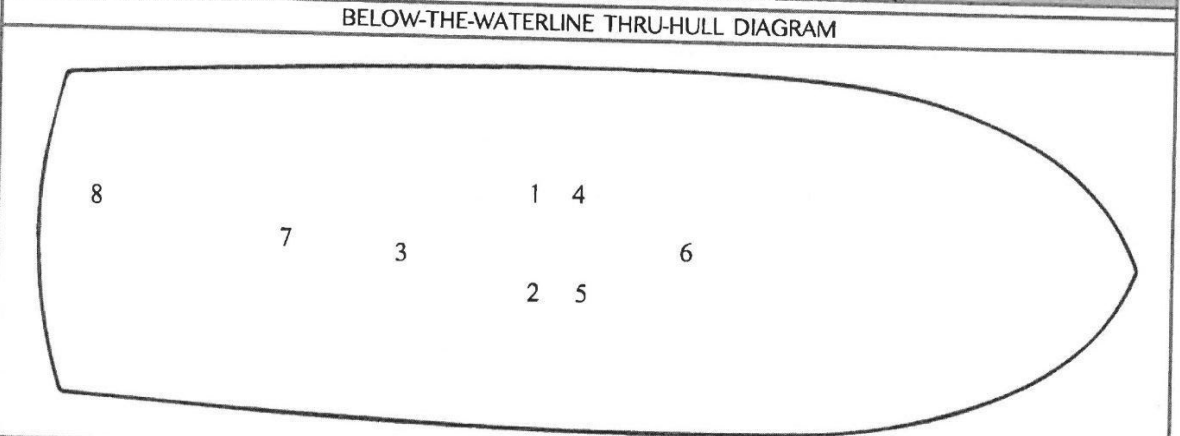
SABRELINE 47 026  
TANK TENDER  
GALLONS-TO-INCHES CONVERSION

**SABRE**      DATE 07/13/00  
DGN. FILE: 0260MAN.06N



SAFETY EQUIPMENT	
PERSONAL FLOATATION DEVICE	QTY 8 / USCG Approved Type III PFD / ADULT / ABOVE AVERAGE
THROWABLE PFD	QTY 4 / USCG Approved Type II PFD / ADULT / ABOVE AVERAGE
HANDHELD FIRE EXTINGUISHER	QTY 3 / USCG Approved Type IV Throwable PFD / ABOVE AVERAGE
AUTOMATIC FIRE EXTINGUISHER	QTY 5 / Type A B C Handheld Fire Extinguisher / Inspection Tags Dated 2021
SOUND SIGNALING DEVICE	QTY 1 / Automatic E/R Fire Suppression System / FIREBOY / Inspection Tags Dated 2021
	QTY 1 / Electric Horn / 12VDC / FUNCTIONAL
NAVIGATION LIGHTS	PORT SIDELIGHT / Color RED Fwd Facing / 12VDC / FUNCTIONAL STBD SIDELIGHT / Color GREEN Fwd Facing / 12VDC / FUNCTIONAL MASTHEAD LIGHT / Color WHITE Fwd Facing / 12VDC / FUNCTIONAL STERN LIGHT / Color WHITE Aft Facing / 12VDC / FUNCTIONAL ANCHOR LIGHT / Color WHITE All-Round / 12VDC / FUNCTIONAL
REBOARDING LADDER	QTY 1 / Swim Platform Mounted Reboarding Ladder System / FUNCTIONAL
HIGH BILGE WATER ALARM	QTY 1 / Mechanical Float Switch Triggered Audible Alarm / 12VDC / FUNCTIONAL

BELOW-WATERLINE THRU-HULLS	
THRU-HULL DESCRIPTION	Bronze Thru-Hull Fittings Equipped with Bronze Seacock Valves / SEE TABLE BELOW
SEA STRAINER	AVERAGE Condition / Normal Wear & Tear / Adequate for Intended Purpose
SEAWATER HOSES	AVERAGE Condition / Normal Wear & Tear / Adequate for Intended Purpose



THRU-HULL DESCRIPTION	CONDITION
1 PORT Engine Seawater Intake	FUNCTIONAL / ABOVE AVERAGE Condition / No Evident Defects
2 STBD Engine Seawater Intake	FUNCTIONAL / ABOVE AVERAGE Condition / No Evident Defects
3 GenSet Seawater Intake	FUNCTIONAL / ABOVE AVERAGE Condition / No Evident Defects
4 Deck Washdown Pump Seawater Intake	FUNCTIONAL / ABOVE AVERAGE Condition / No Evident Defects
5 HVAC Pump Seawater Intake	FUNCTIONAL / ABOVE AVERAGE Condition / No Evident Defects
6 Black Water Pump Overboard Discharge Fwd	FUNCTIONAL / ABOVE AVERAGE Condition / No Evident Defects
7 Black Water Pump Overboard Discharge Aft	FUNCTIONAL / ABOVE AVERAGE Condition / No Evident Defects
8 CLOSED & PLUGGED / Not Used	NOT TESTED / Valve in Closed Position

## BLUE MOON QUICK GUIDE ENGINE

### 1. START-STOP PROCEDURE:

USE KEY AT LOWER HELM FOR START/STOP: toggle switches at upper station can be used, but they will not turn off the fuel-cooled Electronic Monitoring Controls. If the computer is left on for a lengthy period of time after the engines are stopped, it can overheat and damage the entire system.

3 Circuit breakers on electric panel at lower helm (top is for Mathers Controls, next is stbd engine, then port)

Push Mathers Control button in: located at BASE of helm controls

Turn key on. RED light on controls = controls are engaged at that helm station.

When changing helms, push Control button in at new helm to take control.

Start engine

Start 2<sup>nd</sup> engine, using key

Note: Only 1 Red light will turn on at each control; inboard stbd light is unused

TO STOP: switches can be used, but ALWAYS turn OFF lower helm KEYS to avoid damaging the monitoring computer.

### CHECK TRANSMISSION OPERATION WHILE TIED TO DOCK

This builds pressure in transmission oil pump and helps reduce delay

### 2. USE SLOW SPEED SWITCHES FOR MOVING THROUGH CROWDED AREA

Toggle switch for each engine: UP is ON

Vessel must be moving very slowly when changing gears or engine will stall out

Turn off at each helm station before changing stations

### USE REGULAR SPEED IDLE (600 RPM) WHEN MANEUVERING

### 3. NOTE WHEN MANEUVERING: Transmissions have 2-3 second delay when shifting from Forward to Reverse while oil pump builds pressure

### NOTE: DISENGAGE SLOW SPEED AND SYNCHRONIZER SWITCHES AT EACH HELM WHEN CHANGING STATIONS

### 4. TO REV ENGINES IN NEUTRAL:

Control in neutral: shows steady red light

Hold Mathers button in

Advance throttle SLOWLY to first click; RED light begins to blink. Release button, then advance SLOWLY to desired RPM – blinking red light indicates NEUTRAL

Controls automatically revert to operational when pulled back to standard neutral position, and RED light becomes STEADY

More on page 2

5. SYNCHRONIZER: IS CATERPILLAR, NOT GLENDINNING

Circuit breaker on

NOTE: either engine can be the master, depending on which SYNCHRONIZER control is turned on. YELLOW light indicates which synchronizer is controlling.

Switches at both helm stations are set:

UP = PORT engine

DOWN = STARBOARD engine

MID = OFF

When engaged, the engine control acting as master will show the RED light

To engage or disengage, the safe practice is to move both controls to NEUTRAL, then turn off the switch.

SYNCHRONIZER will NOT disengage until controls closely match

6. CHANGING HELM STATIONS:

Always pull controls to IDLE/NEUTRAL before changing stations. Disengage SYNCHRONIZER by putting switch to MID/OFF position. Turn OFF Low Speed Switch at old helm, otherwise Low Speed Switch will remain engaged and cannot be changed at new helm controls.

Push in Mathers button on new controls to signal which set is being used. RED light will go on at new station, off at old station

7. BATTERIES:

Starboard Engine charges all START batteries

Port Engine charges all HOUSE batteries

NOTE: If batteries are drained, there is an EMERGENCY PARALLEL switch on port side of engine room, outboard that will link ALL batteries for emergency start.

8. FUEL SELECTION: ALL NEW SYSTEM

Fuel manifold in engine room, clearly labeled. NOTE: return MUST go to operating tank.

9. There is NO isolater in engine room.

10. INVERTER: in charging mode, this charges ALL batteries, including generator