

OPERATION MANUAL

for Selene 36

KAIROS

Welcome Aboard!

We are happy you have chosen "KAIROS" for your vacation cruise in the islands of the Pacific Northwest, and trust this Manual will help you become familiar with the systems and operation of this yacht.

Specifications

LOA	41' 8"
LOD	36' 6"
LWL	34' 11"
Beam	14' 6"
Draft	4' 8"
Displacement	35,700 lbs
Clearance	17' 6"
Engine	Cummins QSBT5.9 - 230HP
Cruising Speed	7 to 9 knots
Cruising RPM	1300-2000 rpm
Fuel Consumption	2.5 to 4 gallons per hour
Fuel Capacity	500 gallons
Water Capacity	250 gallons
Holding Tank	55 gallons
Amp Hours/House Battery	600 amp hours

Important Information

Transmission Oil	Delo 100 30w
Engine Oil	Delo 400 15w-40
Fuel Filter	Racor 1000
Hull Identification Number	XJE36008A505
Document Number	1169231
Hailing Port	Anacortes, WA

Please No Smoking On Board

Crown Yacht Charters, Anacortes, WA 98221
800.426.2313 CrownYachtCharters.com
800.426.2314

INTRODUCTION

This Manual is intended to introduce you to the basic systems on “KAIROS” and assist you in the proper operation of the yacht, but is not intended to provide a complete description or understanding of the operation of all the yacht systems. The Manual cannot answer every question or provide information to solve every problem that may arise, and does not replace the requirements for the Skipper to be competent in seamanship, navigation and boat handling skills. You are expected to have a background and knowledge of the operation of basic yacht systems obtained through other training, seminars, reading and (most importantly) experience. If you have a question regarding the operation of any of the yacht systems or need a better understanding these systems, ask your check-out skipper or contact the Crown Yacht Charter office.

BOAT OPERATION

Engine Inspection

Remember to do a “**COBBS**” check: **C**oolant, **O**il, **B**elts, **B**ilges and **S**ea Strainer.

Check the level of COOLANT in the coolant recovery/expansion tank mounted on the front of the engine. Check the level of OIL in the engine by checking the dipstick located port side of engine. Look at the each mark on the dipstick that indicates the proper oil level. (Please use a paper towel or oil rag, not a dish towel.) Only add oil if the oil level is below the half-way mark. **DO NOT OVERFILL OIL!** Check the general condition of the belts, hoses and fuel lines.

Check the engine RAW WATER THRU-HULL valve (located in front of the engine on the port side) to ensure that it is in the ‘open’ position (lever in-line with valve), and check the glass of the RAW WATER STRAINER for debris. If necessary, close the valve on thru-hull, open the strainer cover, clean the strainer, and reassemble. Remember to reopen the thru-hull valve.

Repeat these same checks for the DC generator.

Engine Start-Up

Before starting the engine, do a “COBBS” inspection. The engine should be started from the lower helm station. Turn the “Engine Ignition” breaker-switch on the DC Electrical Panel to the “on” position. Ensure that the Transmission Gearshift is in the neutral position (or the engine cannot be started because of the “neutral lockout”), and that the Throttle is in the idle position. Insert the key into the Ignition Switch, turn the key clockwise to the start position, and press the black “Start” button. If the starter does not engage when the button is pushed, move the gearshift lever slightly until you find neutral and try again.

If the engine cranks slowly or fails to turn over, check the condition of the starting battery on the DC Electrical Panel voltmeter. If the starting battery is low, try changing to the House Battery Bank with the Emergency Cross-Over Switch located on the forward wall of the Engine Room. The Cross-Over Switch is normally set to the “1” position (Engine Start Battery). The “2” position connects the engine to the House Battery Bank, and the “Both” position connects both battery banks together. Return the Emergency Cross-Over Switch back to the “1” position when finished to keep the battery banks isolated.

After the engine starts, confirm that there is water flow out of the stern exhaust, and monitor the engine operation on the SmartCraft instrument located above the main helm station and on the right side of the FlyBridge panel. Confirm proper oil pressure (55 PSI at idle) and engine temperature (slowly rising to 175 degrees). Warm the engine for a few minutes before engaging the transmission, and be sure to throttle back to idle before engaging the transmission. .

Note -- If there is no water expelled in the exhaust, or if oil pressure is low or water temperature is high, shut engine down immediately, and inspect engine to determine the cause. Recheck oil levels, ensure that the raw-water valve is 'open' (handle in-line with valve), and that raw water strainer is clean. Restart engine and re-check water flow from the exhaust, oil pressure and water temperature. If water is not flowing properly, the Raw Water Impeller or the Raw Water Pump may need to be serviced. Seek help.

Getting Underway

Confirm that the main fuse-breaker switch for the Bow Thruster Motor is switched on (red "Clown Nose" push-pull switch inside the cabinet to the right of the Lower Helm steering wheel).

Switch on the breakers in the DC Electrical Panel for the navigation and electronic instruments (Bow Thruster, Chart Plotter, VHF Radio, Horn, Exhaust Temp Alarm, etc), and power on the individual instruments as needed.

Disconnect the Shore Power Cord. Close all portholes, windows and hatches, lower the counter-top down over the propane stove, and secure all items from the counters/tables. Assign crew members appropriate positions for handling lines and fending off. All docking and close-quarter maneuvering should be done from the FlyBridge Helm for greater visibility. Confirm that the Bow Thruster Control ("joy-stick" unit) is turned on by pressing both "on" buttons simultaneously to illuminate the yellow "on" light. The Bow Thruster Control has a built-in timer and will automatically turn off if not used. Push the Thruster Joy Stick in the direction you want the Bow to go. Use the Thruster only in short bursts of no more than 15 seconds, with a pause between bursts.

Once outside the marina, idle the engines while the crew brings in fenders and lines.

Crusing

An engine speed between 1350 to 1500 rpms will produce in a cruising speed of 7 to 8 knots and an economical fuel consumption of about 2 gallons of diesel per hour. Your speed will vary depending upon the weight and load and weather conditions.

Note – Engine speeds higher than 1800 rpms will result in substantially higher fuel consumption and may cause higher engine temperatures. Monitor engine temperature carefully at increased rpms. DO NOT EXCEED 2200 rpms for any extended time.

Docking

Use the FlyBridge Helm for docking for greater visibility. Switch on the Bow Thruster breaker in the DC Electrical Panel and turn on the Thruster Control by pushing both of the ON buttons at the same time. Deploy Fenders and assign crew to positions with lines ready and clear instructions on how you will be docking. Always have the crew secure STERN LINE FIRST. Sometimes one crew member will need to step off from the swim step with the stern line, and another crew member will need to be at the bow or mid-ships to hand over the next lines.

Engine Shut Down

Before shutting down, allow the engine to idle for a few minutes to cool gradually. The time engaged in docking the yacht is usually sufficient. Ensure that the Transmission Gearshift is in the neutral position and the Throttle is in the idle position. Turn off the engine by pushing the red "Off" button.

Fueling

The yacht has two 250 gallon fuel tanks. One tank is located on starboard side and one on the port side of the Engine Room. Each tank has a Fill Tube with a Cap marked "DIESEL" - - one located on each side of the pilot house; you do not need a deck key. A fuel Cross-Over Line is located on the aft Engine Room wall that can be opened to allow fuel from one tank to cross-over to the other tank and equalize the fuel level in both tanks. The cross-over fuel flow is much slower than the flow from a station pump, so you will need to fill both tanks separately even with the Cross-Over valve open.

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

Before pumping fuel, have an oil/fuel sorbs handy to soak any fuel that may spill. You should have a rough idea of the number of gallons you will need by checking the fuel gauge at the lower helm station. You can also assign someone to monitor the fuel gauge at the lower helm station to check the status of the fuel tanks during the refueling process. Place the Diesel nozzle into the fill tube opening, PUMP SLOWLY, and note the sound of the fuel flow. Each fuel tank has a Tank Vent located on the outside of the pilot house near the Deck Fill Cap. Pumping too fast may not allow enough time for air to vent from the tank as fuel is pumped in, and result in spouting from the Tank Vent. As the tank fills, the sound will rise in pitch or gurgle, and indicates 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, so be sure to clean up and splatter or spillage immediately. Replace Deck Fill Caps when finished.

ELECTRICAL SYSTEMS

There are two separate electrical systems: 110-volt AC and 12-volt DC. Both systems are controlled from the Electrical Panel located in the cabinet to the left of the lower helm station, and include an AC Panel, a DC Panel (just below the AC Panel), and a Battery Switch (just below the DC Panel). Each of the breaker-switches in the Electrical Panel are labeled to show their respective function. When not connected to shore power, the batteries provide all the power on the yacht. Therefore, monitor the use of onboard electricity carefully, and turn off electrical devices that are not needed.

AC Shore Power

Shore power will support all AC equipment and receptacles on board, as well as the battery chargers. The yacht is setup with a 50 amp shore power receptacle, but most marinas provide a maximum of 30 amp shore power service. The yacht has an Adapter Cord with a 50 amp plug (to connect to the yacht), a short piece of cord, and a 30 amp receptacle (to connect to the 30 power cord). To connect to shore power, plug the Adapter Cord into the yacht, and plug the 30 amp Power Cord into the Adapter Cord and into the dock power service. Note: Confirm that the Breaker Switch in the dock power service is "Off" before connecting the yacht power cord. **DO NOT TURN ON DOCK POWER until AFTER all power cords are securely connected (and DO NOT DISCONNECT any power cords until AFTER the DOCK POWER SWITCH is OFF).** The power cord should be kept out of the water and off the deck, and can be wrapped loosely around the ss railing.

After connecting to Shore Power, check the AC Panel to confirm AC power, and check the "Reverse Polarity" to confirm proper polarity. Then turn on appropriate breakers for battery charger, inverter charger, refrigeration, water heater and other AC loads. Monitor the AC loads so you do not exceed the amperage allowed by the breakers. Excess amps will trip a breaker. If this occurs, turn off one or more loads (i.e. water heater). If an AC outlet fails to work, check to see if the GFI in the plug (or an in-line plug on the same circuit) has been tripped and needs to be reset.

AC Inverter Power

The INVERTER is mounted in the Engine Room on the forward portion of the starboard sidewall above the Thruster Battery. The Inverter is controlled by the remote CONTROL PANEL located at the lower power but only for selected SMALL LOADS . The inverter does NOT provide power to the hot water heater, the battery charger or other high demand loads. The Inverter is turned on and off at the helm Inverter Control Panel

The only source for the 110-volt AC power produced by the Inverter is from the 12-volt DC power stored in the House Battery Bank. Running an electric space heater, hair dryer, toaster, or other high load appliances will quickly discharge the House Battery Bank and disable the Inverter. Use the AC power from the Inverter VERY SPARINGLY, and monitor the use of all AC and DC power carefully.

When connected to shore power, the inverter automatically becomes a battery charger for the 12-volt DC House Battery Bank. Should you detect that the inverter is failing to charge the House Battery Bank fully, check the Inverter circuit breaker in the AC Electrical Panel, the Inverter Control Panel, and the circuit breaker located on top of the Inverter box.

DC Battery Power

There are three separate 12-volt DC battery systems: (1) The Engine Start Battery; (2) The House Battery Bank; and (3) The Bow Thruster Battery. The DC voltmeter on the DC Panel can be switched between the three battery systems to give a rough indication of the state of charge of each system.

Battery State of Charge

12.65 volts =	100%
12.47 volts =	75%
12.25 volts =	50%
11.95 volts =	25%
11.70 volts =	0%

Each of the three battery systems are set up to be isolated from each other and can only be used to provide power for its dedicated purpose. (The Engine Start Battery cannot be used to provide power to the Bow Thruster or for House use). The three systems, however, are automatically connected together for CHARGING purposes by the electronic PATHMAKER (discussed below). Each of the three battery systems are charged by the engine alternator when the engine is running and the PathMaker has connected the three systems together. When connected to shore power, the Battery Charger is setup to charge the Engine Start Battery and Bow Thruster Battery, and the Inverter is setup to charge the House Battery Bank (but will also charge all three battery systems through the PathMaker). Be sure to confirm that the circuit breaker switches for the Battery Charger and the Inverter on the AC panel are turned ON.

House Battery Bank

The House Battery Bank provides power for all DC systems except the engine start and the bow thruster. When disconnected from shore power, all electrical devices (both DC and AC) will drain the House Battery Bank. Use devices as needed.

Emergency Cross-Over Switch

There is a dedicated Engine Start Battery to provide starting power. However, should the engine battery be insufficiently charged to start its engine, the House Battery Bank can be momentarily connected to provide a boost. The Emergency Cross-Over Switch is located on the forward wall of the Engine Room. This Switch is normally set to the "1" position (Start Battery). Setting the Switch

to the “2” position connects the engine to the House Battery Bank, and setting the Switch to the “Both” position connects the engine to both the Start Battery and the House Battery Bank. Reset the Cross-Over Switch to the normal “1” position after the engines starts up.

DC Gen Set

A high-output DC alternator is currently being installed, but that installation is not yet completed.

SANITATION SYSTEM

Marine Toilet

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

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

To use the toilet, push the BEFORE USE button. The toilet will fill with water. Afterwards, push the AFTER USE button and the toilet will flush and pump itself dry. Clean the toilet as necessary. The toilets use fresh water, and each time it is used fresh water is consumed and the holding tank is filled.

Holding Tank

The sanitation HOLDING TANK holds approximately 55 gallons. Be aware of the rate of waste production. (about 1 gallon per flush) If you overfilled the holding 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.

The HOLDING TANK is located under the floor in the forward state room. Some may be subject to a visual check with a flashlight or the “watermelon” test by thumping it. There is a tank watch warning light located to the right of the steering wheel, but do not rely upon this as they often get clogged. The holding tank is emptied in one of two ways:

(1).At a Marine Pump-Out Station, remove the WASTE CAP located forward of the starboard door on the pilot house. 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 water into tank. Then repump to leave the tank rinsed for the next charter. This also eliminates head odors.

(2).The tank’s contents can be discharged with the MACERATOR, but that is not allowed in US waters or in areas of Canadian waters. To operate the macerator, open the through hull for the pump (blue handle) and open the valve at the tank (red handle) turn on the MACERATOR SWITCH on the DC electrical panel. Listen to the macerator’s sound. When the pitch becomes higher, the tank is empty. Discharge may be observed on the port side. It should only take a few minutes to empty the tank

Y-Valve

The Y-VALVE directs waste effluent into the sanitation-holding tank or flushes the effluent 'directly overboard'. The Y-VALVE is located under the sink in each head. A plastic strap keeps the handle pointed to the holding tank – the normal 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.*

FRESH WATER SYSTEM

Water Tank

The WATER TANK holds 250 gallons. Observe the water level by the gauge at the lower helm station. Waste water from the sinks and showers drains overboard through various thru-hulls usually located under the sinks.

To refill the tank, remove the WATER CAP located starboard side aft end of the pilot house. Avoid flushing debris from the deck into the tank opening. DO NOT fill water and diesel at the same time!

Water Pressure Pump

The WATER PRESSURE PUMP is located in the engine room on the port side next to the fuel tank. 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 has a 12 gallon capacity tank and 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 heater if the water tank level is very low. The water tank is located engine room at aft port side.

Shower

The aft Master Stateroom has a dedicated SHOWER STALL on the starboard side, and a shower wand is included in the forward head. Before taking a SHOWER, make sure water pressure and shower sump 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. Ensure that the faucets and nozzle are completely off after use.

An outside fresh water shower head is located in the shower-box built into the storage locker at the aft end on the cabin. To activate, flip the DECK WASH SWITCH (#21) located main DC 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.

GALLEY

Stove/Oven

The stove and oven are propane, and are activated by the following steps:

- (1) Confirm that the valve is open on the propane tank (located in the forward locker on the port side flybridge);
- (2) Turn on the breaker-switch in the DC Electrical Panel labeled "GAS ALARM";
- (3) Turn on the gas solenoid switch located on the wall above the stove/oven;
- (4) Press in and turn the gas burner knob at the stove, and light burner with the propane BBQ lighter. You might need to hold knob in for a few seconds while the thermo-coupler warms up. The same process applies to lighting the oven.

When finished cooking turn off the switches and the propane tank.

Refrigerator

The refrigerator is dual voltage and can operate on either 12-volt DC or 110-volt AC power. It will automatically use 110-volt AC power when 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 below the front door. It can be turned down to the lowest position when anchored or moored or turned off when turning in for the night.

ELECTRONICS

All electronic manuals are located in the lower closet in the aft stateroom. Also there are quick reference cards in the chart drawer under the port side dash.

ChartPlotter and Radar

An electronic CHARTPLOTTER and RADAR monitor is located in both the lower helm and FlyBridge helm stations. The switch for the CHARTPLOTTER/RADAR circuit breaker on the DC Panel must be turned on to provide power to the Chart-Plotter and Radar instruments. Each chart Plotter/Radar monitor also has a "power" button to turn the unit on. To turn the unit off, press and hold POWER button about 3 seconds. The Chart Plotter is a complex instrument with numerous functions. Unless you have received special TRAINING and CERTIFICATION, the Chart Plotter can ONLY be used to display electronic charts with a GPS reference of the yacht's location, heading and speed. The Chart Plotter CANNOT be used for waypoint or auto-pilot navigation. Also remember, you are not allowed to travel in FOG or other restricted visibility or serious wind conditions.

VHF Radio

There are 2 VHF radios: (1) The main radio is located at the lower helm station and (2) a wireless remote is located on the FlyBridge helm. The switch for the VHF Radio circuit breaker on the DC Panel must be turned on to provide power to the radios. Each radio also has a red "power" button that must be depressed to turn the unit on (the power button on the FlyBridge wireless radio must be depressed for several seconds to activate) Always monitor channel 16 while underway.

Depth Sounder

There are two displays for water depth. One is on the electronic Chart-Plotter and the other is on the TriData Instrument. Both of these displays are located at the lower helm and at the FlyBridge helm

stations. The switch for the NATICAL INSTRUMENTS circuit breaker on the DC Panel must be turned on to provide power to the TriData Instruments. Each TriData Instrument also has a “power” button to turn the unit on. There are many options available for selecting the data to be displayed on the TriData Instrument. See the Simrad IS15 Manual for information on the options. A Depth reading on the Tridata Instrument that is blinking indicates the reading is not reliable (due to underwater cross-currents, debris, schools of fish, etc), and a reading that is blank indicates a depth greater than units sounder depth (around 250 feet). *Remember to **ALWAYS** consult your charts for depth!*

Autopilot

An AUTOPILOT control is located at both the lower helm and the FlyBridge helm stations. The switch for the AUTO PILOT circuit breaker on the DC Panel must be turned on to provide power to the Auto Pilot instruments. Each instrument also has a “power” button to turn the unit on. Each Auto Pilot has a “Standby” and an “AutoPilot” button. Press the “Auto Pilot” button to engage the auto pilot AT THAT HELM STATION. Engaging the Auto Pilot at one helm station will automatically DISABLE all wheel steering and the auto pilot at the other helm station. To transfer control to the other helm, press the “Auto Pilot” button and that station. To turn of the auto pilot function, press the “Standby” button. Unless you have received special TRAINING and CERTIFICATION, the Auto Pilot can ONLY be used to maintain a heading while you are personally at the helm and actively engaged in the navigation of the yacht. The Auto Pilot CANNOT be used for waypoint or auto-pilot navigation.

ANCHORING

The primary WORKING ANCHOR is a Lewmar Claw 44lb and is attached to 200ft chain and 100ft nylon line passed through the deck from the ANCHOR LOCKER. The locker can be accessed through the door on the port side of the deck. The WINDLASS POWER SWITCH is located to the right of the lower steering wheel. Also turn on the breaker labeled WINDLASS (#14). At the bow, tap gently on the ‘down’ foot control to lower the anchor located on the left of the Samson post. 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 every 25feet 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. **ALWAYS** use the anchor bridal when anchoring. The bridal is located in the port locker next to the windlass. Place the SS plate over a link of the chain below the bow pulpit. Take each line to the hawse hole and secure them as if you were tying a dock line. Let out enough chain so that the lines are bearing the pull from the anchor, there should be a loop of slack chain. Try to keep the SS plate out of the water. **REMEMBER** to remove the SS plate before you start raising the anchor. Failure to do so will result in damage to the system.

Before raising the anchor, ALWAYS start the engines as it uses large amounts of power. Turn ‘on’ the WINDLASS SWITCH 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. Wash it down with the wash down pump before it goes into anchor locker.

Close the plastic covers on the FOOT PEDAL CONTROLS. Turn ‘off’ the WINDLASS POWER SWITCH.

A SPARE FORTRESS ANCHOR is normally stowed AFT LAZERETTE. The 200ft SPARE ANCHOR

RODE is located in AFT LAZERETTE. Attach the rode securely to the chain shackle.

Mooring Buoys

The State Park Sticker on your vessel allows you to pick up the MOORING BOUYS in the parks for free. You only need to register at the kiosk usually located at the heads of the docks. Mooring Buoys have a metal triangle at the top which holds a metal ring that is attached to the Buoy anchor chain. This chain VERY HEAVY and a strong member of your crew should be used to pick up the Buoy ring and chain.

Approach the Buoy into the wind as you would for anchoring. Have crew members on the bow, one with a boat hook and one with a mooring line. As you approach the buoy, the crew holding the boat hook should point at the buoy with the hook so the skipper always knows where the buoy is. Hook the buoy ring and raise it up to allow the second crew to pass the mooring line through the ring. Keep both ends of the mooring line (led through the ring), release the boat hook from the ring, lead both ends of the mooring line through the empty anchor roller, and secure the line to the anchor post and/or cleat. Leave only a small amount of slack in the mooring line to prevent the buoy from drifting up bouncing against the hull of the yacht.

BARBECUE

The BARBECUE is mounted on the aft rail and the BBQ PROPANE BOTTLE is stored in the outside locker at the aft of the cabin. Attach a PROPANE BOTTLE to the REGULATOR on the right side of the barbecue. Carefully light the unit, preferably with long-stem butane lighter. The barbecue generates a lot of heat and cooks hot and fast.

Note: Be sure that no gasoline or other flammable materials are located near the BBQ. 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 the bottles in the cockpit cabinet. Ensure gasoline and flammable materials are not near the barbecue.

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 work the best for a nice neat way to bait the ring. After 15-20 minutes, retrieve the crab line and ring quickly. Measure the crabs using the CRAB MEASURING GAUGE normally located in the lazette. 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.

BILDGE 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 you lifejackets are stowed under the flying bridge console on the right side. A few should always be out and ready. Your flares

and safety equipment are located under the first step leading to the aft cabin.

The yacht is equipped with 5 AUTOMATIC BILGE PUMPS. 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.

An AUXILIARY HAND OPERATED BILGE PUMP is operated in the forward cabin using the handle provided for that purpose is located in the lowest step next to the pump cover. This is used only in emergency situations.

HELPFUL OPERATION TIPS

Saving on Battery Power

When you are away from the dock and shore power Trickster has two systems for providing AC power to run items like the microwave and outlets. Either the generator has to be running or the inverter is turned on to provide the power from the batteries. Clearly using the inverter for this use consumes battery power quickly, so consider running the generator for long periods of use. Also it helps conserve battery power to turn the inverter off when not needed. You can do this by pushing the lower left button on the inverter remote located above the chart table in the overhead console. If you have used the batteries, charge them by running the generator and monitor the inverter remote for when it shows bulk charging is complete. Note: if you can time the generator runs while you are moving it will help keep the anchorages quieter.

Maximizing the Holding Tank Capacity

The holding tank is approximately 50 gallons. Figure about .6 gallons per flush and about 5 flushes per day or 20 flushes for a party of 4 per day, so the holding tank should be very full in four days. So planning to pump out or empty the holding tank every 3 to 4 days. Please check on the local regulations for where discharging is allowed (this is your responsibility), NOT allowed in the US and only in channels in Canada. Canada does have no discharge zones, please check and plan ahead. Manage the holding tank capacity by using shore facilities whenever possible and by monitoring the level of the tank.

The Tank Watch holding tank indicator (breaker#) has four indicators, "Empty", "Low", "Mid" and "Full". The Empty indicator is near the bottom of the tank and reflects about as low as can normally be pumped out. The Low indicator will come on after a relatively moderate amount of use. The Mid indicator is above the halfway point (rough estimate is about 40 gallons). When the Mid indicator comes on, start planning on pumping out in a day or so (the urgency depends on how quickly Mid was reached). You should never see the Full indicator! If you do, the tank is truly full. Do NOT flush even once. Overfilling the tank results in raw liquid sewage working its way back down the forward bilge and contaminating the Sanigard odor filter on the holding tank vent.