

NOTES FROM THE OWNER

Magic Morning

To Our Charter Guests,

Welcome aboard and thank you for chartering Magic Morning. Congratulations, you have made a great choice. All Selene Yachts are well known for their superior quality construction and high end amenities. Magic morning is loaded with options to guarantee a comfortable, enjoyable and easy to handle cruise. You will love her spacious floor plan, large galley, standing room berths with private heads and separate showers. We hope you find Magic Morning as comfortable, easy and joyful to cruise the San Juan and Gulf Islands as we have. It is a pleasure to share her with you.

Let us know about your experience cruising Magic Morning and any comments or suggestions you may have to make your experience more enjoyable. Feel free to contact me via my email address below, or if you prefer, San Juan Yachts.

We wish you fair weather and hope you build wonderful memories. Thank you for being our guests.



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Specification:

2006 Selene 47 Pilot House

LOA: 51 ft 10 in
LWL: 44 ft 3 in
Beam: 15 ft 7 in
Bridge Clearance: 26 ft 3 in
Minimum Draft: 5 ft 6 in

Engine: Single 330 HP Cummins
Cruise: 8-9 Knots. Top Speed 11 Knots

Number Of Cabins 2: Both Standing Head Room
Number Of Heads 2: Both Separate Enclosed Showers and Doors
Galley: Refrigerator/Freezer, Trash Compactor, Granite Counter Tops,
Gas Oven, Gas Range, Full Size Microwave, Lynx BBQ
Commissary: Deep Freezer, Pantry, Wine Rack, Extra storage
Washer and Dryer: Bosch, separate units

Fuel Tank: 1100 Gal
Fresh Water Tank: 300 Gal
Holding Tank: 65 Gal
Electrical Circuit: 120V 30A and 230V 50A
Winless: Electric Muir Cheetah
Dingy and Davit: 11' hard body Bullfrog, Furuno GPS plotter/sounder, steering
column, 30HP Honda and a Steelhead hydraulic davit system

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First Aid Kit: Located in the Master Head

Flares: Located in the Pilot House foot locker white mesh bag

Auto Inflation PFDs: (4) Located in the Flybridge bench seat and or Dinghy

PFDs: (5) Located in the starboard side Portuguese seat locker

Bilge Pump: Manual pump and handle in cabinet left side on stairs to berths

Sump Pumps: Auto operating but can be switched to manual in an emergency

Fire Extinguishers: 5- fire extinguishers located in M. Berth, main hall, Pilot House and Salon(2)

Life Sling: located on the railing port side of Flybridge

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2. Anchors:

The Primary anchor is a 40 KG plow type Bruce Lewmar with 300 ft of 3/8" chain. The anchor chain is marked with a 10' yellow paint mark at 100' and a 5' yellow paint mark every 50' thereafter. The spare anchor has 200' of 3/8" chain and is not marked. There is a 300' stern tie line on a reel in the Lazarette at the stern of the boat and other miscellaneous lines and Caribbean fasteners in the port side bow anchor lockers. Please do not cut these line.

The windless circuit breaker(#19) is located on the DC power electric panel in Pilot House. There is a second breaker located on the AC Power Supply on the starboard side of the electric panel and both must be turned on to operate the windless. Use the windless and deploy the anchor while the engine is running. The Deck Wash Pump breaker (#23) is located on the DC 12V electric panel. While using the Deck Wash Pump (sea water) to wash the anchor and chain when returning them to the boat we suggest using the boat hook to knock off large chunks of clay and mud before attempting to wash the anchor. Leaving the anchor breaker on at all times aids in quick deployment in case of an engine failure or other emergency.

The typical PNW scope for anchoring in the San Juan and Gulf Islands is 4-to-1. After deploying the suitable amount of rode using the foot pedals the anchor can be set by placing the boat in reverse, at idle speed, for a few seconds to test the hold.

After setting the anchor the snubber line is hooked on the chain at all times. The snubber line is located in the left bow anchor locker. The snubber has loops to hook each bow cleat so there is no need to tie off each end of the snubber line. The hook on the snubber line where attached to the anchor chain should be set a foot above the water level.

Check your tide tables to determine your current level of tide, and how much it will drop overnight from its current level, so you don't ground during the night in an ebbing tide. The Depth Finder is set to read from the water line. The draft of the boat is 5.6 feet. So take care to do the proper math calculations to determine your keel-to-bottom distance.

Example: depth reads 20' and the draft of the boat is 5.6' ($20' - 5.6' = 14.4'$) you will have a clearance from keel to bottom of 14.4'. If you are in a 9' high tide you will only have 5.4' clearance at low tide.

When retrieving the anchor use the boat's power to move forward to the anchor and use the windless only to take up the slack in the chain and lift the anchor.

Note: For more anchoring information including the use of the anchor light at night, please review the detailed notes of the anchoring guidelines in the Skipper's Handbook you received from San Juan Yachts.

3. A/C- Cruisair Air Conditioning:

To operate the A/C the Main 50 AMP breaker and circuit breakers(#2,3,4) all located on the 230V power electrical panel must be on. The A/C operates on 230V and can only be run when connected to 230V 50A shore power or when the generator is running. The controls for the A/C are located in the Pilot House, Salon, Master and Guest berth.



4. Barbecue:

The propane tank and valve is located in the left side door of the BBQ cabinet. After opening the valve if the BBQ igniter does not click while turning on and pressing the gas control knob you can use the BBQ lighter located in the front drawer where all the BBQ utensils are also located. Turn off the tank valve to the BBQ after use and please use the wire brush to clean the grill and wipe down the BBQ. Thank you!

5. Batteries Charger/Inverter:

There are 11- batteries on this boat:

- 1-200 amp hour *engine* start battery located in the engine room
- 1-100 amp hour *generator* start battery located in the engine room
- 2-200 amp hour *bow* thruster batteries located in the bow
- 2-200 amp hour *stern* thruster batteries located in the stern lazarette
- 5-200 amp hour *house* batteries located in the stern lazarette on the port side

The Magnum battery controller charging and inverting buttons both need to be on all at times. The battery charging breaker(#17) labeled "Battery Charger I- 30A" is located on the AC 120V power electric panel and should *always* be left on during normal operations. The breaker(#18) labeled "Battery Charger II- 80A" needs to be switched *off* at all times.

A volt meter for the battery monitoring is located on the top left side of the electric panel (see diagram #10. Electric Panel) and should be monitored at anchor to manage proper power consumption. There is also a Magnum battery controller located above the Electric Panel and should be monitored at all times to ensure proper battery charging.



Inverter: When at anchor or not plugged into shore power, AC power is made available only when the inverter breaker is on and the *inverter* button on the Magnum battery controller (located above the electrical panel) is on. The inverter breaker(#22) is located on the AC 120 volt electric panel and should always be left on.

While at anchor, careful monitoring of battery amp usage is important and necessary. While at anchor and inverting If the house batteries standing voltage at anytime drops below 11.5 the Magnum battery controller will fault and stop inverting. You will have to start the generator or plug into shore power to recharge the batteries to resume inverting and restore AC power. ***Note: at no point should the batteries be allowed to drop below 11.5 minimum resting voltage while at anchor to prevent damaging batteries.***

While at anchor and not connected to shore power the use of the M/W oven, the toaster, a hair dryers or plug-in electric heater, may cause the house panel breakers to pop. These appliances draw too much amperage to operate when not running the generator or plugged into power and should be avoided.

While at anchor or not connected to shore power and battery resting voltage drops below 11.8 resting voltage, start the generator to charge batteries to their full capacity (this can take several hours). Check voltage amp hour and battery status each night before retiring.

Note: The five 200 amp hour house batteries are isolated from the engine start battery. In the event your engine start battery loses its charge you can start the engine by using the houses batteries. A switch for this is located under the settee seat in the salon.



6. Berths:

There are 6- possible berths on Magic Morning:

- 2- berths in the Master Cabin
- 2- berths in the quest Cabin
- 1- berth in the Pilot House
- 1- large convertible berth in the Salon Settee

Each berth has a duvet comforter.

Converting the Salon Settee into a berth requires sliding the dining table out away from the settee. It is easiest to first fold up the ends of the dining table, then reach under the front of the settee cushion along the rail and pull it all the way out. There are two drop down legs on hinges that fold down. The extra cushion is usually stored on the Pilot House berth.

7. Bilge Pumps:

There are 4- bilge pumps located in the bow, mid, engine room and the commissary (stern) of the boat. The bilge pump breakers are located above the electrical panel at eye level and should always be left in the *auto* position. The pumps may be turned on with the manually position as required but must always be left on auto. At no time should the bilge pumps be left in the off position.



There is an emergency hand operated bilge pump and handle for the engine room bulge located in the cabinet on the starboard side of the stair case going down to the cabin berths.

8. Canvas, Seat Cushions and Pilot House Window Coverings:

Canvas coverings for the, 1) Dinghy control panel and seat, 2) the Flybridge Navigation and Electronics and, 3) the 2- Captain's seats, are all stored in the Flybridge Seat lockers when not in use. The 5-Pilot House canvas window covers are stored in the Portuguese port side cabinet lockers when not in use.

Seat cushions for the Flybridge settee and bench seats are stored in the Pilot house bunk, the Portuguese storage cabinets and settee seat lockers when not in use.

The seat cushions for the Portuguese bridge are stored in the Portuguese cabinet lockers when not in use.

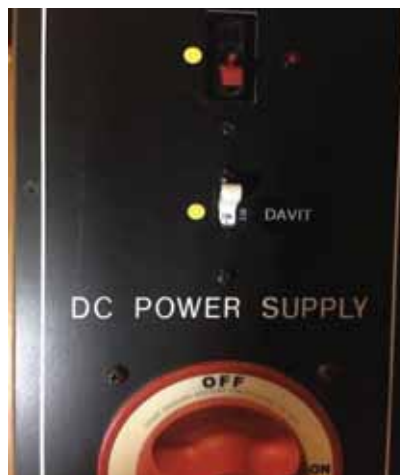
9. Commissary, Deep Freezer and Storage:

There is a large Commissary containing a pantry, wine rack, deep freezer (AC 120 volt breaker(#5) and cabinet storage located at the stern end of the Salon beneath the floor. Lift the trap door in front of the stern entry door to access the Commissary. This is a great place to stow suit cases, bottled water, extra food items and anything else you may want to keep frozen, out of the way and out of sight.

Note: While underway, the deep freezer operates only when plugged into 120V shore power or the generator is running. At temperature control setting #5 it will cool the freezer to 0 degrees Fahrenheit. While the freezer is turned off the temperature will rise 10-15 degrees every 24 hours. When at anchor to keep your stores frozen it will be necessary to run the generator to operate the freezer at least every 48 hours. While anchoring you will normally run the generator to charge the batteries at least every two days anyway.

10. Dinghy and Davit:

The dinghy is an 11' hard body Bullfrog that seats four people. It's equipped with a 30 HP Honda, a Furuno GPS plotter and sounder. The key to the dinghy is kept in the top port drawer in the Pilot House. To deploy the dinghy use the 1000 Steelhead Davit system, not the winches (the winch can be used in an emergency if there is a problem with the Steelhead Davit system). The breaker for the davit system is on the AC Power Supply located to the Starboard side of the electric panel.



Use this switch on the electric panel to operate the Davit System

The keys for the Dinghy are in the top port side pilot house drawer. The cord control for the Davit system will need to be attached and is located in the bench seat on the starboard side of the flybridge in front of the davit. Also in the bench seat is a battery charger, oil, spare spark plug and prop for the dinghy (a spare stern hull plug is in the mesh bag in the dinghy).

****Before deploying the dinghy, first insert the stern plug in the hull and insert the keys****

Note: The Steelhead davit boom is always left in the horizontal position to ensure correct lubrication.

Position the boom and attach the hook to the dinghy ring and straps made for this purpose. Undo the 3- buckle straps securing the dinghy to the boat deck and lift the dinghy. Use the davit controller to raise and lower the dinghy taking care to press only *one* function at a time on the controller. While lowering the dinghy into the water take care not to bang and damage the side of the boat with the dinghy. Remember to turn off the Davit system power. **Note:** never leave the Davit system power on when not in use.

To start and operate the dinghy motor you will need to turn on the battery switch located on top of the dinghy battery and have the key inserted. Ensure the “kill” engine clip is inserted into its retainer hold and the gas tank vent is open. The gas tank is located under the dinghy seat. Only tow the dinghy for short distances, at low speeds, with the motor raised and resting on its support tab.

To bring the dinghy back to its cradle on the boat, first raise the motor on the dinghy and secure the motor on its rest support tab.

(Note: if the motor is not raised and resting on its support tab before returning the dinghy to the boat, the keel of the motor will make contact with the flybridge deck first and damage the deck).



While lowering the dinghy to its cradle, watch that the paddles on the 4- stands supporting the dinghy are flat, line up with the dinghy hull and centered in the proper positions. For the proper location of the dinghy on the support pads the stern support paddles need to line up with the rear wall of the dinghy (see photos above). Finally, refasten the 3- buckle straps securing the dinghy to the boat. Return the Davit system to the horizontal position next to the dinghy to ensure proper lubrication of the boom.

****Remember to remove the hull plug and turn off the battery switch****

Note: When returning to Bellingham at the end of your cruise, If you have used the dinghy, don't forget to top off the dinghy gas tank while refueling the boat.

11. Electrical Panel and Power Cord:



When not connected to shore power or running the generator, the AC power and outlets will only function if the *inverter* button on the Magnum battery controller is on (see: 5. Batteries Charger/Inverter). The battery charging breaker(#17) located on the AC Power 120 Volt electric panel should always be left on.

The "House Power" switch should be used to select the correct source of the power you are using, either (1) FWD Shore power, (2) AFT shore Power, or (3) the generator. The "Air Con. Power" switch is left on *House* position all the time. The red and white "DC Power Supply" switch should always be left on.



For your convenience all breakers on the electrical panel have been color coded with green, yellow and red dots.

- Green:** **On**- *always* while on board
- Yellow:** **On**- *while underway* or as needed
- Red:** **Off**- *always off*

Main House Power Breakers:

There are two main House Power breakers located both aft in the Lazarette and forward in the Master Berth upper starboard cabinet. They will occasionally pop and you will need to locate and reset them. *This can happen if you are using a hair dryer, MW oven, or toaster while at anchor. It is best to not use these items while at anchor as they draw too many amps to operate and will drain your battery power in a hurry.*



Aft: Lazarette Main House breaker



Forward: Master Berth Main House breaker

The Power Cord:

The power Cord is a 30A/50A power cord and is connected only to the *AFT* or *FWD* "**SHORE**" Power and not the *AFT* or *FWD* "**AIR**" Shore Power. See picture below.



- **IMPORTANT NOTE:** There is a toggle switch labeled **120V 30AMP** and **230V 50AMP** located on the starboard side of the electric panel that is labeled:

AC POWER SUPPLY



THIS TOGGLE SWITCH MUST BE SET TO THE PROPER VOLTAGE YOU ARE CONNECTING TO AT THE DOCK, EITHER 120V OR 230V, (BEFORE YOU FLIP ON POWER WITH THE BREAKER). FAILER TO SET THE TOGGLE SWITCH FROM 230V TO 120V WHEN PLUGGING INTO A 120V 30A POWER SOURCE WILL FRY THE 30A RELAY.

**If you do this you will only be able to plug into a 230V 50AMP power supply because the 120V 30AMP power supply will no longer function.*

12. Electronics and Navigation:

There are two 12" Raymarine plotter screens in the pilot house and an 8" plotter screen on the Flybridge. The starboard Pilot House 12" plotter is the Master (*please do not change the Master plotter screen setup and settings*). The AIS is coupled to the 8" plotter on the flybridge and must be on to share and display AIS information on any plotter screen. (*However, the AIS will always broadcast your boat's ID information even if the 8' screen in the Flybridge is off*).

- FloScan (KNTS/RPM/GPH)
- VHF- ICOM DSC VHS Radios
- Depth Finder- Raymarine ST70

- Wind Speed and Direction- Raymarine ST70
- Auto Pilot- Raymarine ST70
- Radar- Raymarine E-120
- Plotter- Raymarine E-120
- GPS- Raymarine
- Compass- Danforth 4.5
- 3- AC 120V USB port charging locations in the Salon, Pilot House and Master Birth, and a DC 12V USB charging port located in the Pilot House
- Wipers, washers and windshield defroster controls in Pilot House.



- TV, AM/FM, CD, DVD Sony Player- Bose Surround System with integrated and separate remote controls for Master Berth, Guest Berth, Pilot House, Salon and Flybridge.

13. Emergency Equipment:

First Aid Kit: Located in the Master Head

Flares: Located in the Pilot House foot locker white mesh bag

Auto Inflation PFDs: (4) Located in the Flybridge seat locker and Dinghy

PFDs: (5) Located in the starboard Portuguese seat locker

Bilge Pump: Manual pump and handle in cabinet left side on stairs to berths

Sump Pumps: Auto operating but can be switched to manual

Fire Extinguishers: 5- fire extinguishers located in Master Berth(1), Main Hall(1), Pilot House(1) and Salon(2)

Life Sling: located on the railing port side of Flybridge

14. Engine and Starting:

Magic Morning is maintained by a Maintenance Mechanic Professional. The oil levels, coolant levels, sea water intake strainers, belts, etc., are all checked and monitored weekly. It is not normally necessary for you to monitor these parameters during your charter every time you start the engine. However, at the beginning of each day's cruise you should look around in the engine room for oil leaks, low reservoir coolant levels and any items or machinery that is out of place or appears to need maintenance. There is a paper towel holder next to the door inside the engine room for your convenience.

Things you can do: Check the diapers under the engine for signs of excessive oil leaking, coolant or water. A few drops of oil on the pads is normal. The correct coolant level is marked on both the engine coolant reservoir located on the forward engine room wall and the generator coolant reservoir located inside the generator box (you will need to remove the generator cover to inspect the generator coolant or oil levels). The coolant level in the reservoir will rise as the engine heats up. There is extra coolant located in the engine room.

There are very convenient sight gauges for both starboard and port fuel tanks in the engine room. A Wema gauge located in the Pilot House also shows fuel and water tank levels. The fuel tanks hold 1100 gallons (550 each) of diesel fuel and it is not possible for you to use enough fuel during a weeks cruising to have to monitor the fuel tanks.

The Wema gauge will give you an accurate reading for the level of the 300 gallon fresh water tank when you select #1 position from the selector knob. See picture below. Position #2 and # are for reading the port and starboard fuel levels. The Wema gauge works only when the Nautical Instrument Breaker #40 is on.



Note: the Wema gauge works only when the nautical instrument breaker #40 is on.

Fuel Tanks and Valves: On the forward engine room wall you will see an arrangement of fuel valves for the main engine and generator. These are the proper selected locations for the fuel valves and should not be changed.



Starting the Engine:

The Engine Ignition breaker(#12) and the Engine Room Blower breaker(#26) are located on the DC Power 12 Volt electric panel (both need to be on). Ensure the gearshift is set in neutral and the throttle at idle. After engaging the starter the engine should start in a few seconds. Step out the starboard Pilot House door and look to the stern to see if water is bubbling out the exhaust.

(Note: If no water is visible shut down the engine and check the raw sea water strainer).

The throttle *always* needs to be at idle when starting the engine or shifting gears, same as an automobile. Warm the engine up at 1000 RPM until you see the engine temperatures begin to rise on the temperature gauge. Normal engine operating temperature is 180*. Use this time while the engine warms up to prepare the boat, dock lines and fenders, for departure. Close all berth and head port windows below deck. Ensure the bow and stern thrusters are on and operating (see #26 “Thrusters”). For proper procedure docking and undocking refer to your SJY appointed Instructor and the SJY Pilot Handbook.

Economic Cruise Settings:

Economic cruise speeds are optimized at between **1400-1800 RPM**. We recommend these power settings. Listed are the fuel consumption and speed at different engine power cruise settings: (power settings may change with winds, tides and currents)

<u>RPM (floScan)</u>	<u>Speed Knots</u>	<u>Fuel Gal/Hour</u>
1500	7	1.5
1600	8	3.0
1800	9	4.0
2000	9	5.0
2200	9.6	7.5
2400	10.3	12.5
2600	11	16.0

When you are ready to shut down the engine allow a few minutes at idle speed to cool the engine. If you are mooring to a dock or preparing to anchor you have probably already accomplished this. The engine needs to be in neutral and at idle before turning off the engine.

Note: There are spare fuel filters, belts, oils, coolants, plugs, impellers (for the sea water strainer pumps) and other related spare items located in a marked clear Rubbermaid container inside the engine room.

Note: in the unlikely event you experience a high temperature alarm, shut down the engine immediately. It is most likely eelgrass plugging the raw water strainer and you will need to clean the strainer. If you are unfamiliar with this process you can call SJY for assistance and walk through. There are other reasons you may experience high temperatures or loss of oil pressure. Always shut down the engine immediately and call SJY for direction.

15. Entertainment System:

The breakers for the Stereo, TV, CD, DVD are located on the DC Power 12 Volt electric panel. Magic Morning is equipped with Verizon WIFI, Smart TV, Bose Surround integrated sound system with separate remote controls for the Salon, Pilot House, Flybridge, Master and Guest Berth. There are separate speakers at each location. Also on board is a Sony DVD, CD, AM/FM radio and a 23" Samsung Smart TV. *Note:* The boat's Verizon WIFI is only available if there is a Verizon phone signal in range, or any cell phone service provider using your phone or other device's hot spot.

16. Fuel Tanks and Fresh Water Tank:

The two fuel tanks hold 550 gallons each. The filler ports for both tanks are labeled and are located on both the port and starboard sides on the back deck. *You must fill both port and Starboard fuel tanks on your return to Bellingham, as well as the dinghy gas tank if used.*

Please clean up any drips or spills to prevent staining of the fiberglass or deck. Please place a pad below both fuel tank vents when filling the tanks to prevent staining the fiberglass deck. The vents are located at the Port and Starboard exterior stairs leading up to the Pilot House Doors.

The Wema gauge will give you an accurate reading for the level of the 300 gallon fresh water tank. The selector knob must be set to the 1 position to read the fresh water tank level as seen in the picture below. Set the selector knob to 2 or 3 to read the port and starboard fuel tank levels.



Note: the Wema gauge works only when the nautical instrument breaker #40 is on.

See (#14. Engine: Fuel Tanks and Valves) for more information about fuel tanks and the proper valve locations for normal operations.

17. Galley:

(Range, Oven, MW, Refrigerator, Ice Maker, Trash Compactor, Deep Freezer)

Breakers for all the galley appliances are all located on the AC Power 120 Volt electrical panel and are clearly marked. The Magnum battery controller inverter button must be on to operate any AC 120V appliances.

Range/oven: Operation of the range/oven is only possible by turning on the gas solenoid valve using the control located to the left of the range on the backsplash wall. This is to prevent a gas leak from contaminating the living spaces. Remember to turn off the first green pressure button on the left side of the control after you are finished cooking. The ignition source is a AA battery located under the range, accessible from the front. Spare batteries are located in the Pilot House foot lockers.



Solenoid Valve

MW Oven: The micro wave oven (or the toaster) should only be used when plugged into 120V AC shore power or the generator is operating. Operating these appliances while not plugged into shore power or running the generator will drain the house batteries quickly and may pop the main house breakers located both for and aft. For more information on the Main Breakers (See #11 Electrical Panel/Main House Breakers).

Refrigerator and Deep Freezer: The refrigerator is operated by AC power and DC power and will automatically switch to the correct power source. The Deep Freezer will only operate while plugged into shore power or the generator is running (See #9 Commissary and Deep Freezer for information about the Deep Freezer).

Trash Compactor: The trash compactor will only run if you are plugged into 120V AC power or the generator is operating. The trash compactor can compact and contain all your non-organic trash for a week before emptying. **Do not put organics into the trash compactor.** The trash compactor bags are located in the cabinet on the starboard side of the stairs leading to the lower berths.

The Ice Maker: the ice maker will only work if you are plugged into 120V AC power or the generator is operating. The ice maker will make ice from the fresh water tank and is located in the cabinet on the port side of the staircase leading up to the Pilot House.

Note: *water heater, ice maker, trash compactor, washer and dryer and A/C will not operate without shore power or generator.*

Note: When not plugged into 120V AC shore power or running the generator the microwave and toaster should not be used. When not plugged into shore power and using these appliances battery voltage drop dramatically and cause a Main House breaker to pop or the Magnum Inverter to fault (See #11 Electrical Panel/Main House Breakers). If the inverter faults, no AC power will be available until you run the generator or plug into 120V AC shore power. Do not let the batteries drop below 11.8

volts resting voltage. It will take the generator 2-3 hours to fully recharge the batteries after an inverter fault.

18. Generator:

The 12 KW Northern Lights Generator is located in the stern of the engine room and can run every appliance on the boat including the air conditioning, washer and dryer, water heater, ice maker and trash compactor.

To start the generator, first turn off the AC Power 120 Volt Main breaker on the electrical panel. Next, hold down the pre-heat switch for the generator located to the starboard side of the engine ignition key switch waist high. Hold the pre-heat switch for 10-15 seconds before starting the generator while continuing to hold the pre-heating switch at the same time. After the generator starts you can release the pre-heat switch after a few seconds. if the generator doesn't start repeat this procedure.



Generator Controller and Gauges



House Power Generator Switch

*Turn "House Power" switch on electric panel to the Generator. Turn on the AC Power 120 Volt Main breaker and check the DC power 12 volt meter to ensure the battery charger is charging the batteries. The DC 12 volt meter should be reading around 13-14 volts.

19. Heads, Holding Tank and Macerator:

The Tecma Heads are operated by first pushing the fill button to fill the bowl. After doing your business, press the flush button and wait a few seconds. There is a gauge above the Master Berth head that tells you if the tank is empty, low, mid or full.



Magic Morning has a 65 gallon holding tank. **Note: As a rule, do not put anything down the head that hasn't been eaten first. That includes of course, wet wipes or any feminine hygiene items. Use only the marine toilet paper supplied on the boat and not paper you bring from home, including tissue paper. Be judicious with the amount of toilet paper you use. Please inform all your guests of these rules.**

When the gauge is reading half-full it is a good idea to start thinking about looking for a pump-out station or using the macerator pump (see below) to empty the holding tank. Overflowing the holding tank will plug the vent and you will not be happy with the consequences.

The pump-out station for the holding tank is located on the deck just forward of the Pilot House starboard door. In the starboard Portuguese bench seat locate the 16" long by 2" wide clear plastic rubber pipe and latex gloves. Screw the treaded end of the pipe into the discharge port and attach the other end to the pump station handle. This takes two people as one person has to watch the tube and the other mans the pump switch on the dock. When the tank is empty, if possible, fill it with 5 gallons of fresh water and pump it out again.

Macerator Pump: You should only discharge the holding tank overboard using the macerator pump if you are in legal waters three miles off shore in the USA. To discharge overboard the discharge valve must be open. (**Caution: do not operate macerator pump with the discharge valve closed.**) The discharge valve is located in the trap door in the floor outside the guest head. Access this door and open the macerator valve before turning on the macerator pump (the valve is labeled). The *through hull* for the macerator pump is located in the floor under the guest vanity, is not easily accessible, and for this reason always open. Use the *macerator check* valve to open and close the macerator for discharge over board.

After ensuring the macerator check valve is open, turn on the macerator pump breaker (#21) located on the DC 12V electric panel. It is important to set the timer on your phone for 10 minutes, or use the MW oven timer. It will take about about 10 minutes to empty a full holding tank. **Note: Do not forget to turn off the macerator pump when holding tank is empty, be safe and use a timer.**

The rules for discharging over board are different for Canada and US. Canada allows discharging the holding tank over board outside of the harbors and the three mile rule does not necessarily apply. For more detail concerning this item please reference the SJY Pilot Handbook.

20. Heater:

The Hurricane Hydronic Heater is located at the stern in the lazarette on the Starboard side. Both the breaker #46 (it has a locking cover), located on the DC Power 12 Volt electric panel, and the on/off toggle control switch, located in the Pilot House port side, has to be on to operate the heater. The heater will initially draw about 12-15 amp to heat the fluid then drops to 3-4 amps there after. Monitoring the batteries is necessary while at anchor or not plugged into shore power.



Thermostat and Fan Speed Control



On/Off Toggle Control Switch

There is a thermostat and a two speed fan located in each berth, Salon and Pilot House. All thermostats operate independently for the room in which they are located (the head temperatures are controlled by the Master and Guest berth thermostats). When the room has reached the temperature set by the thermostat the heater will automatically turn off for that room. The heater will continue to run in standby mode until it is turned off at the Pilot House, so don't forget to switch off the heater when it is no longer required.

21. Inverter:

When at anchor and not plugged into shore power AC power is enabled only when the *inverter* button on the Magnum battery controller is on and the *inverter* breaker(#22) located on the AC power 120 volt electric panel is on.

The Inverter on the Magnum battery controller is never turned off. The Inverter will go into standby mode when it senses an AC power source. The Magnum Inverter allows the use of AC appliances while not connected to 120V shore power or operating the generator.



Magnum Battery Controller

A volt meter for battery monitoring is located on the top port side of the electric panel as well as the Magnum battery controller and both should to be monitored when at anchor and not connected to shore power, running the engine or the generator. At no point should the batteries be allowed to drop below 11.8 minimum resting voltage at which point charging is necessary to prevent damaging batteries. Fully charge batteries by running the generator for 2-3 hours.

Note: *At anytime the standing voltage on the house batteries drops below 11.5 Volts the inverter will fault and stop inverting. You will have to start the generator or plug into 120V AC power to recharge the batteries before the inverter will begin inverting again. It will take the generator 2-3 hours to fully charge the house batteries.*

22. Kayaks

Kayaks can be lowered using a line and the davit system. Attach the loops in the end of the line to each kayak handle and the winch hook to the center loop. Reference #9 “Dinghy and Davit System” for operation of the Davit system.

23. Lighting

All interior and exterior lighting including navigation lighting breakers are located on the DC Power 12 Volt electric panel and are clearly marked. Most all interior and exterior lighting is LED. Spare light bulbs and batteries are located in the Pilot House foot locker. If you are not familiar with correct procedure for running the navigation lights please reference your SJY Pilot Handbook.

24. Navigation: Refer No. 11. Electronics

25. San Juan Yachting:

Contact Numbers for help and assistance:

Owner, Bruce Georgen: (509) 216-2618

Check in Skipper, Lothar Taylor: (425) 260-7881

San Juan Yachting: 360.671.4300, 1-800.677.7245

26. Showers:

When not plugged into 120V AC shore power the water heater will operate only when the generator is running. The water heater breaker(#2) is located on the AC Power 120 Volt electric panel. The fresh water holding tank holds 300 gallons and a Wema gauge (see: Heads and Holding Tanks #18) in the Pilot House will read its level. When not at dock where fresh water is plentiful, it is advisable to limit shower times to save water in the fresh water tank. Get wet, turn the water off, lather up and rinse off. The shower discharge water is automatically pumped overboard. There is an outside hot and cold shower spray located on the lazarette deck at the stern of the boat.

27. Thrusters:

Magic morning has both bow and stern thrusters to assist you in maneuvering and docking the boat. The breaker(#24) for the thrusters is located on the DC Power 12 Volt electric panel. There is a push button on/off switch and joystick located to the starboard side of the engine ignition key. To turn on thrusters, push both on buttons simultaneously. The thrusters will automatically turn off after 5 minutes if not used and you will have to turn them on again.

Limit thruster use to short bursts of less than 5-10 seconds at a time. It is best not to depend on the thrusters to steer the boat but to use them as an assist to the rudder and engine while docking. Overheating the thrusters will cause the internal breaker to pop and a cooling off period to follow.

28. Tools and Spares:

There is a tool bag located in the Pilot House foot locker and another more complete tool box in the engine room port compartment. There are spare engine fuel filters, oil, coolant, belts, impellers for pumps, etc., in a marked clear Rubbermaid container in the engine room. Use the dead blow hammer located in the anchor bow locker to open the sea water strainer tops.

There are spare batteries, light bulbs, fuses, electrical tape, duct tape, zip ties, lubricants, etc., located in the Pilot House foot locker.

29. Washer and Dryer:

The washer and dryer will only operate if you are connected to 120V or 230V AC power or the generator is running. The W/D operate off the 230V 50A electric panel but when plugged into a 120V 30A power source the ISO transformer will step up the voltage to provide 230V to the Electric panel and operate all the 230V panel appliances including the W/D (although at 30A not 50A).

The breakers(#5,6) for the W/D are located on the AC Air Conditioning Power 230V 50AMP electric panel. The washing machine is located in the port side cabinet at the bottom of the staircase leading to the lower births. The dryer is located in the Guest berth floor to ceiling cabinet. Washing detergent is located in the cabinet below the washing machine along with the other cleaning supplies.

Note: *There is a hanging cloths line and pins located in the Master Berth shower and the Flybridge bench seat storage locker.*

30. Winches:

With the addition of the Steelhead Davit system the winches are not used to lower and raise the dinghy. In the unlikely event you should you experience a failure of the Steelhead davit system the winches may be used to lower and raise the dinghy. The breakers for the winch are located on the electric panel.

31. WIFI and Smart TV: (Verizon guest WIFI password **eb915e8a**)

NEW FOR 2018: WIFI and Smart TV, wherever there is a cell phone signal. The boat WIFI operates off Verizon signal but the Smart TV can use any cell carrier signal and hot spot created with your phone or other devise.