

# Quick Start Procedures – Gray Pearl

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## **BEFORE STARTING ENGINE**

1. Fuel / Water: confirm fuel level is sufficient for the intended float plan. Top off water if needed.
2. Power panel: Green breakers ON; Yellow breakers ON as needed; Red breakers OFF.
3. Weather: check the marine weather and review the planned route with the crew.
4. Staterooms and Head: close all hatches and portholes, secure all loose gear.
5. Salon, Galley, Pilothouse, Cockpit, Fore Deck, Sun deck: secure all loose gear.
6. Dinghy and Crane: Dinghy straps secure, Crane locking pin in place.
7. BBQ: secure BBQ grill cover, yellow propane valve closed.
8. Window Coverings: open blinds and curtains for 360-degree visibility.
9. Shore Power: disconnect shore power; stow cord(s) in cockpit lazarette.
10. Pilothouse: stow the sun covers if used.
11. Engine Room: open the salon floor hatch(s) to gain access to the Engine Room. Caution the crew to be mindful of the open hatch. Conduct a visual check under and around the engine looking for any signs of abnormal fluid spotting. Confirm all equipment / gear / bins are secure.
12. Oil and Coolant: check oil and coolant levels in engine and generator weekly if the charter is longer than one week.
13. Seawater Strainers: confirm seacocks for the engine and genset are open and seawater strainers are clear. **Note:** The genset strainer through hull is located in the lazarette under the power cord storage wheel on port side.
14. Fuel Strainers: confirm fuel strainer bowels have clean fuel and no accumulation of water.
15. Engine Room: secure Engine Room hatch(s), turn OFF the Engine Room lights.

## **STARTING THE ENGINE:**

1. Salon Door: close the salon door.
2. Throttle / Shifter: ensure integrated throttle / shifter control is in the center detent position (neutral and idle speed).
3. Start: Turn the key to run and wait for Engine Monitor to start and say "OK"
4. Turn the key: to start and release when the engine 'catches', usually with just a short period of cranking. If the engine does not start easily, stop and investigate, something is amiss.
5. Warm-up: allow 2-3 minutes minimum to ensure a stable engine. Idle speed will stabilize at 600 RPM. You can increase the idle speed without engaging the transmission by depressing the Throttle Only button on the shifter control, then slowly advance the throttle past the idle detent. Do not advance engine speed above 900 RPM until engine temp is above 110 degrees.
6. Salon Door: keep salon door closed when engine is running to prevent diesel exhaust fumes from entering the interior of the ship.

## **AFTER ENGINE START:**

1. Chartplotters / Instruments / Autopilot: review selected plotter formats for appropriate settings for conditions including chart range, wind conditions, rudder position, display brightness.
2. VHF Radio: set volume and squelch, monitor channel 16.

3. Nav Lights: turn ON Navigation Lights if conditions warrant; ensure anchor light is OFF
4. Headsets: get Ear Tec Headsets turned on and provided to crew.

### **LEAVING THE DOCK:**

1. Rudder: Position the rudder appropriate for departure conditions. Prop walk is to starboard in reverse.
2. Thrusters: activate and momentarily test each thruster
3. Headsets: skipper and crew don the Eartec wireless headsets.
4. Skipper / Crew: discuss departure plan taking into account conditions and vessel position relative to other vessels / hazards.
5. Roving Fender: assign an available crew member to manage the roving fender(s).
6. Traffic: final check of conditions and traffic.
7. Mooring Lines: cast off and depart per plan, stow mooring lines.
8. Transom Door: close and latch.
9. Fenders: stow the fenders in the cockpit lazarette or the bow locker.

### **UNDERWAY:**

1. Headsets: shut off and stow.
2. Helm person: shall be "on watch" at all times. Be alert for logs or debris in water, it's out there with surprising regularity. Monitor the engine oil pressure and temperature, regularly validate your position and maintain awareness of water depth.
3. Engine Warm-up: keep RPMs under 1200 RPM until engine warms to 160 degrees.
4. Boat Wake: always keep effects of your wake in mind.
5. Cruise Speeds: Typical economical cruise is 1400rpm, 7.6 knts @ 3.2 gph. Refer to chart on 2<sup>nd</sup> page of owner's notes for details.

### **APPROACHING DOCK:**

1. Skipper / Crew: discuss plan to safely get to the dock.
2. Headsets: don the Eartec headsets
3. Fenders: put fenders on appropriate side, starboard side tie is preferred. (Whenever possible, place fenders on both sides for protection from an adjacent vessel with non-dock side fenders raised up high). Use roving fenders as needed.
4. Mooring Lines: setup lines (bow, stern, midship) to cleats; ensure Bow line runs OUTSIDE of stanchions and OUTSIDE of fender lines toward amidships; blouse the line over the rail for someone on the dock to easily grab it.
5. Thrusters: Enable the thrusters, tap momentarily to confirm operation.
6. Engine: use minimum safe speed for conditions, usually dead slow (Idle).
7. Crew: mate ready to step off swim step (No leaping across water to dock!) and secure Stern first (most circumstances), then Bow. In heavier crosswind conditions, best to secure mid-line first.

### **UPON ARRIVAL AT DOCK IN MARINA:**

1. Mooring Lines: secure all lines: Stern, Bow and Fwd / Aft Spring lines as a minimum.
2. If Bow-In: be sure anchor is not protruding over dock walkway.
3. Engine: Shut off with key.
4. Systems: turn OFF unnecessary systems at the breaker panel, replace sunscreen covers.

5. Shore Power: once connected, make certain there is at least 110 volts on the AC panel meter. (See Electrical section of Owner's Notes for details.)
6. Headsets: shut off and stow.

### **TYING UP TO A MOORING BUOY:**

1. Crew Stations: Skipper at the helm, 1st Mate on starboard side of cockpit with boathook and mooring line.
2. Mate: secure one end of dock line to stern cleat.
3. Skipper: Position the vessel with mooring ball adjacent to the starboard side of the cockpit, stern into the prevailing wind.
4. Mate: reach over the side of the cockpit, catch the buoy ring with boathook and thread bitter end of line twice thru the ring resulting is a single loop around the ring (single loop is best, it resists wandering but still allows slippage if wind / wave conditions dictate weathervane of the bow).
5. Mate: places boat hook in cockpit, releases line from stern cleat and holds both ends of dock line while walking up the side of vessel to the bow. Skipper maneuvers bow close to buoy while monitoring the mate's movement along the side of the ship.
6. Quick Release: With buoy close to bow, secure one end of line to each front bow cleat. This allows for "quick release" when you're ready to cruise: Simply release one end of line from bow cleat and pull through the buoy ring and you're free to go.
7. Secure 2nd line: as a safety if mooring overnight, either as a part of the above steps or after securing the primary line at the bow cleats. The procedure is to use a second dock line. Feed the second line thru the mooring ball ring without looping it around the ring. Secure the ends of the second line to the bow cleats keeping the line loose, ie, more slack than the primary line.

### **ANCHORING:**

1. Windlass: ensure the windlass breaker is ON. Release the safety tether that secures anchor. Make ready the bridle line from the bow locker.
2. Lower Anchor: Anchor is lowered with foot switches on the fore deck or from remote controls at the helm while boat is backed up slowly away from anchor. Be careful that anchor doesn't swing wildly and hit the bow. Lower the anchor slowly while feeding out a short burst of anchor rode.
3. Chain Out: Mate at bow to monitor length of chain going out and to troubleshoot if it gets tangled. Anchor chain is marked at every 25 ft increment with an 18" piece of yellow fabric woven into the chain. And at the 200 ft mark, there is an orange segment of nylon line woven into the chain.
4. Rode Length: The working rode is all chain up to 275 with a few feet of nylon rode that is attached to the ship in the anchor locker.
5. Scope: When the desired chain length is out, stop windlass. Target scope of at least 4:1 at high tide.
6. Bridle: Attach the bridle to the chain and let out enough additional chain until the bridle is tight, and the chain is not, to take the tension off the windlass.
7. Set Anchor: Skipper to reverse the engine at idle speed to test the set of the anchor.
8. Shut down: Once satisfied that the anchor is set, shut off engine by turning key to off. Turn Off unnecessary systems at the circuit breaker panels, replace sunscreen covers on the electronics.
9. Hauling anchor: See Owner's Notes for instructions on hauling anchor and saltwater washdown of the anchor chain.
10. Emergency Anchor Release: The nylon rode segment which is attached to a ring in the anchor locker serves a purpose, it would allow the skipper to fully deploy the chain and then cut it loose at

the nylon rode if emergency conditions warrant. Cut it loose only in an emergency (vessel or crew is in immediate danger) and whenever possible, attach several fenders to the bitter end for future recovery of the anchor. We hope you never encounter a situation that requires you to take this action.

### **DAILY (OVERNIGHT) IN MARINA:**

1. Shore Power: AC breaker ON for shore power.
2. Charger / Inverter: confirm system is charging and inverter is not enabled.
3. Systems: Turn Off unnecessary systems at the circuit breaker panels, replace sunscreen covers on the electronics, canvas covers on Pilothouse windows as appropriate.
4. Tank Levels: Keep an eye on water tank levels and holding tank level.
5. Salt Spray: If during the last passage, you experienced a lot of salt spray onto the topsides of the boat, take the opportunity to wash down the salt residue if permitted by the harbor / marina.

### **DAILY (OVERNIGHT) AT ANCHOR OR MOORING.**

1. Anchor light: ON during hours of darkness.
2. Systems: turn off unnecessary electrical items.
3. Engine: confirm engine is turned OFF.
4. Inverter: use inverter as needed and then disable to prevent unnecessary house battery drainage.
5. Tank Levels: keep an eye on water tank and holding tank levels.
6. Salt Spray: If during the cruise day you were experiencing a lot of salt spray onto the topsides of the boat, take the opportunity to wash down the salt residue from the front windows using large quantities of fresh water (flush the salt away, don't rub).

### **FIRST THING EACH DAY:**

1. Lights: if at anchor, turn OFF anchor light.
2. Charger / Inverter: check Magnum Charger control panel for current status. Check battery status on Vitron meter. Recharging if batteries drop below 60%, either with engine underway, shore power or genset power.
3. Tank Levels: Check water tank and holding tank levels. Discontinue use and empty the holding tank if at 75% level or above.

### **BEFORE LEAVING VESSEL:**

1. Electrical Panel: turn OFF unnecessary systems (Yellow circuit breakers).
2. Verify shore power is on: battery is charging (either bulk, absorb or floating will be displayed on the inverter).
3. Access Points: lock the pilothouse doors and the salon door.