

Mariah

QUICK REFERENCE FOR DEPARTURE

(updated 05/07/2011)

The Quick Reference for Departure is just that— condensed checklists and reminders. It assumes that the charter guest/operator is experienced and competent in the safe operation of a 36,000 pound, 42+ foot power boat, knowledgeable of boating rules and regulations, and has read the more detailed Mariah Owner's Notes. These notes do not attempt to anticipate every situation or occasion that may arise, and are not a substitute for reading the Owner's Manuals and other informational materials which are located on the boat, or for exercising reasonable care and good judgment in the handling and operation of the boat. No warranty is expressed or implied.

NOTE: Red lettering indicates safety items or key operational notes.

PREPARING FOR DEPARTURE

1. **ENGINE ROOM CHECKS should be performed daily, before cruising.**
 - a. At the office station, look for the D.C. electrical panel, (DC on the right, AC on the left) turn ON the "BILGE LIGHTS" CB for Engine Room Lighting.
 - b. Enter the engine room and complete the engine room checklist shown in the Owner's Notes and posted on the wall of the engine room.
 - c. When the engine room check is completed, **turn OFF the BILGE LIGHTS CB at the office station. Failure to do so may needlessly deplete the batteries.**

2. **DISCONNECT SHORE POWER**
 - a. At the office station breaker panel, turn OFF the SHORE POWER GANG AC breaker (at the top left side of the AC breaker panel.
 - b. On the dock, first turn OFF the shore power circuit breaker at the pedestal on the dock, then disconnect the yellow electrical cord from the dock power.
 - c. Disconnect the **yellow electrical cord** from the boat and store the cord coiled in the **blue cord bag** in the Lazarette. If you are planning to use shore power at your next stop you may leave the cord connected to the boat and coil the free end around the large T cleat aft of the windless **Always DISCONNECT first from the SHORE-END and ---CONNECT first to the BOAT-END---this way you avoid moving a LIVE cord!**
 - d. **IMPORTANT! Unplug all portable electric heaters. There are three, one in the salon and one in each stateroom. If they are not unplugged the inverter (when selected) would attempt to power a massive load and rapidly discharge and damage the batteries.**

3. **TURN ON DC/BATTERY POWER**

Review the power distribution on the *BATTERY POWER panel* to make sure you have the appropriate circuits in the ON position.

 - All DC breakers may be left on with the exception of the following three.
 - Oil change pump, Sea water washdown, and Bilge lights. **Turn these on when you want to use the system, then turn them off.**

4. **CLOSE ALL PORT HOLES AND HATCHES** which might permit water to enter the interior, except those deliberately left open for ventilation.

5. **CHECK AROUND THE BOAT**

Review the exterior area around the hull to confirm that there are no obstacles in the water or loose items that should be secured.

6. **HELM CHECKLIST**

- a. Check the fuel level at the “Tank Tender” gauge at the helm (key must be on to power the gauge) and/or the sight tubes on the fuel tanks. Fuel should be full from previous user.
- b. Check that all Breakers are on at the helm station except the following,
*5 SPARES and the WINDLESS. Keep the windless CB off for safety,turn it on only when you are going to use it.
- c. Turn on the RayMarine Radar, Chart Plotter and Depth Sounder
- d. Turn on the VHF radios.
 - Check the weather channel. 1-10
 - Turn on Channel 16 (general call channel and coast guard safety broadcasts) Monitor Channel 16 when underway.

GETTING UNDERWAY

1. Make sure that the shift lever is in the neutral position.
2. Turn the ignition key ON. An alarm will sound (low oil press). Wait for the engine’s air heater to preheat the air. Watch the voltmeter to drop below 12 volts (about 15 seconds). When the voltage rises toward 12 volts the preheat cycle is complete. (The oil light may come on, but should go out once you start the engine.)
3. When preheating is complete, push the START button while the key is in the ON position to start the engine. *Note: Cummins engine company states “Do not crank engine for more than 30 seconds, wait 2 minutes to allow the starter motor to cool down before restart attempt.”*
4. Check that cooling water is coming out the engine exhaust. (starboard aft side of the swim platform.) If no water flow is visible, check in the engine room to see that the seawater intake seacock is open!
5. Let the engine idle for about 5 minutes or until the engine coolant temperature gauge reads above 100. *Note: During warm-up at idle, the volt meter will register about 12 volts. The temperature indicator will not show any indication of heat until the engine has been running for several minutes. Keep the engine below 1000 RPMs for five minutes, as the preheater cycles on and off as needed during this time period. RPMs over 1000 block the preheating function.*
6. Turn on the bow and stern thrusters by pushing the two ON buttons simultaneously. The amber light between the buttons will come on. Toggle the joy sticks momentarily in both directions to ascertain that the thrusters are functioning properly.
 - The thrusters are used primarily in maneuvering at or near the dock. In open water while underway, they are not effective.
 - The thrusters will turn off automatically after a period of non-use. Restart in the same manner.
 - The thrusters may overheat and stop after 3 minutes of continuous running. After a brief cool-down period, they will reset.

7. Check wind and current directions.
8. Use the thrusters to control the movement of the bow and stern while operating the throttle in short applications of forward or reverse, pausing in neutral, as you maneuver in the marina. **Note: when using reverse, the *STERN WALKS TO STARBOARD*.**

CRUISING

1. When clear of the marina, make sure all mooring lines, fenders and anything loose are stowed. Operate the engine at 1000 rpm for warm up. (5 min.)
2. After 5 min. warm up operate the engine no faster than 1400 rpm until the coolant temperature reaches 140 degrees.
3. Monitor the engine instruments at the helm station while cruising.
 - Volts should read between 13 and 14 at normal cruising.
 - Water temperature should be between 160 to 165 degrees.
 - Oil pressure should range between 30 and 100 depending on RPMs.
 - Vacuum gauge for the RACOR fuel filters should read below 7 while cruising.
4. To use the auto pilot you must select "AUTO" on the overhead panel at the helm. With auto selected the autopilot engages with the present heading as the desired course, the wheel no longer steers the boat. You must select the desired change in heading by pushing the (-1) for 1 degree left or (-10) for 10 degrees left. The (+1) and (+10) are for turns to the right.
5. To use the remote, push the "C" button to turn the unit on, it will search for a signal you must then press and hold the pilot button until you hear a beep. Push the < or > buttons for left or right turns. Push for one beep to turn one degree. Push and hold for two beeps and you will turn 10 degrees. **A low battery message and continuous beeping will come from the remote indicating you must plug it into the cord below the starboard 12 volt outlet to charge the battery. The autopilot breaker must be on to charge the remote.**
6. **Caution: If using the remote outside of the pilot house, please attach the lanyard and wear it around your neck. The remote costs over \$400 to replace if lost overboard.**
7. **After turning the autopilot off with the breaker or to standby on the overhead panel remember to turn the remote off by pushing and holding the "C" button for the shutdown count of three seconds, if you forget, it will beep at you when it no longer has a valid signal.**

RETURNING TO DOCK

1. Fenders out and
 - a. On docking side of the boat port side preferred.
 - b. At appropriate level for the dock
2. The engine cool down period (the last 5 minutes) should be at slow speeds to allow the engine to cool down before shut off.
3. Once docked and the *mooring lines are secure*, turn off the engine.
4. Shut down RayMarine multifunctional displays and the chart plotter by *pressing* the power buttons in the lower left corner of each unit *and holding* for the countdown on the screen. Please re-place the screen covers over the screens.
5. At the D/C POWER breaker panel next to the helm station
 - a. Turn OFF the top 5 breakers in the upper right panel. They are placarded as follows, VHF, GPS, RADAR, DEPTH/SPEED, AUTOPILOT
 - b. Autopilot breaker must be on if you need to charge the remote.

CONNECTING TO SHORE POWER

1. At the office station electrical distribution panel, make sure the gang circuit breaker marked SHORE POWER is in the OFF position.
2. Take the bright yellow electrical cord located in the Lazarette or coiled on the bow, and connect it to the receptacle located forward of the starboard helm door. Line up the prongs, insert the plug, turn, and tighten.
3. Locate the power supply on the dock, making sure that the breaker on the dock is in the OFF position. Mariah has a 30 amp shore power cord. Check the amps for the shore power pedestal on the dock, and use an appropriate adapter if necessary, (20 amp and 15 amp adaptors are in the blue cord bag. Connect the electrical cord to the dock power source, matching prongs, twisting, and tightening. Then turn the dock power source ON.
4. Return to the boat and turn the SHORE POWER circuit breaker to the ON position.
5. Verify that you have power to the main electrical distribution panel by looking at the AC voltage gauge on the SHORE POWER OR GENERATOR distribution panel. (should read 110-120 volts)
6. All AC circuit breakers should be on, if not turn them on.
7. NOTE: 30amp power may not be sufficient to run all the ship systems, the battery charger, and the hot water heater at the same time. If the power kicks off try turning the hot water heater and electric heaters off and let the batteries charge several hours before turning the various heaters back on. You may also check the Xantrex Inverter panel and select a lower amp setting on the far right "power share" indicator. This is the amperage selected to charge the batteries. You should select 5-15 amps so the remaining available power can be used for other systems. Note: If you are charging the batteries with the generator you can select the 50 amp setting for a quicker charge. The generator has the capacity to run all the boat's systems at the same time.
8. Ensure that "INVERT" is NOT selected on the Xantrex inverter panel when plugged into shore power. The GREEN LED should NOT be illuminated. This will prevent rapid battery discharge and damage if shore power failed and any A/C appliances were on and thus by default would be powered by the inverter through battery power.

CLOSING THE BOAT

1. Close all windows and hatches. Pull the sun shades down in the pilot house and both sides of the boat to prevent sun damage.
2. On the DC POWER distribution panel at the office station,
 - a. Turn OFF all breakers marked with a red indication.
 - b. Leave ON the guarded DC POWER circuit breakers and all others on the DC panel.
3. On the AC panel turn off the red flagged breakers.
4. On the forward Xantrex Inverter panel ensure that the green "INVERT" LED light is OFF. If the green light is illuminated push the invert button to turn it off. (This is to prevent discharging of the batteries by the inverter if AC power is interrupted.)
5. Lock the doors.
6. On the dock, check the position of all fenders and see that mooring lines are secure.

SEVEN KEY ITEMS TO REMEMBER

The following points are derived from lessons learned through experience either on Mariah or other similar boats. Please comply with these directions.

- 1) **REMEMBER TO PROPERLY SEAT ALL OIL DIP STICKS.** (keeps oil from spraying out)
- 2) **ENSURE THE THREE TIE DOWN STRAPS ARE SECURE WHEN RETURNING THE TENDER TO THE DAVIT SYSTEM.** (High sea states could lift the tender off it's mount if not strapped down)
- 3) **TURN THE ICE MAKER OFF WHEN ANCHORED.** (Saves the batteries)
- 4) **DESELECT "INVERT" ON THE XANTREX PANEL WHEN SHORE POWER IS CONNECTED.** (prevents battery discharge if shore power is lost)
- 5) **ENSURE ALL THREE PORTABLE ELECTRIC HEATERS ARE UNPLUGGED BEFORE YOU DISCONNECT SHORE POWER.** (Prevents the inverter from attempting to power the heaters and rapidly discharge the batteries)
- 6) **WHEN RAISING AND LOWERING THE SHADES USE TWO HANDS, PULLING IN OPPOSITE DIRECTIONS SO AS TO RELIEVE STRESS ON THE CLUTCH AND MOUNTING ASSEMBLY.** (Less likely to pull the shade off it's mounting clips)
- 7) **DO NOT STORE ANY METALIC ITEMS UNDER OR IN FRONT OF THE OFFICE STATION SEAT.** (The ships autopilot receives it's magnetic compass input from an electronic compass located in the storage area under the seat)