

Calafia

Catalina 42'

Orientation Guide

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1. ELECTRICAL SYSTEM

Calafia has four batteries. One is located aft of the mast under the cushion in the main salon this is your engine start battery. There are three twelve-volt batteries located beneath the port aft berth which are used for the house batteries as well as engine starting.

Master Battery Switches are located in the aft port cabin at the base of the berth. The engine batteries are separate from the house batteries. Adjacent to the *Master Battery Switch* is the **Electrical Panel Circuit Breaker**. Make sure this switch is pushed in.

Position #1	House batteries
Position #2	Engine start
Both	Both sets of batteries are used

Never turn selector to OFF while engine is running this will cause damage to the diodes in the alternator and guarantee a short trip plus your security deposit will be retained.

Recommended Switch Position is # 1 when at anchor. Put on “Both” for starting and when under power. Save Battery 2 for engine and windlass.

Leaving the boat: Leave the master switch on 1 or 2 and be sure all other switches, except the bilge pump, are off when you leave the boat. The bilge pump switch is located on the electrical panel beneath the electrical gauges and must be left in "auto" at all times.

The electrical panel is located on the port side above the ice box. It is divided into four sections. The top section is **Lights**, the next section is **Aux. Systems** (refrigerator, LPG etc.), the next section is **Nav/Com** and the last section is **Pumps**.

To use all the cabin lights you must turn on three switches. The **Port and Starboard Cabin Lights** and the **Aux Light Panel** which are located in the **Lights** section. Turn off all three switches in the morning to prevent battery drain.

SHORE POWER CORD is to be taken with you. DO NOT leave it on the dock because you may not return to the same slip. DO NOT DROP OR GET THE A/C SHORE POWER CORD WET. If this happens advise the Sailing Center.

OUTLETS: The shore power cord must be connected and power switch turned-on the electrical panel. If the outlets do not work, check the second circuit breaker switch in the port lazarette located just under the lid. **OUTLETS ONLY WORK DOCKSIDE WHEN AC/SHORE POWER CORD IS CONNECTED.**

Ground Fault Interrupter (GFI)

The AC outlets are equipped with GFI, which protects against electrocution. If the GFI system detects a condition that could indicate that a person is receiving an electrical shock, it shuts off the power extremely rapidly. The system is highly sensitive, and therefore can be triggered by the moisture present in the boat.

If an AC outlet has no power, verify that the AC control panel has power and that the OUTLET breaker is on. Then check for an AC outlet that has a griggered GFI (a small button that has popped out). The GFI may be on the dead outlet or on another outlet. (A GFI-equipped outlet can protect a string of outlets). Push the button back in and power is restored to all outlets in the string.

2. ENGINE OPERATION

Calafia is equipped with a 50 HP Yanmar four cylinder diesel, fresh water cooled. Fuel consumption is approximately half a gallon per hour at the **recommended cruising RPM of 2600**, The fuel capacity is 45 gallons with a range of about 350 nautical miles. Fuel gauge is at the binnacle.

ENGINE CHECKS:

The light for the engine room is the silver knob on the port side of the stairs. You must have “Port Cabin Lights” on for it to work.

Oil: Check daily. Release the side latches and pull the stairs forward. The dip stick is on the starboard side of the engine and yellow in color. Pull firmly to lift the stick. Remove it carefully, do not drop oil at the base of engine or on the deck. **ONLY ADD OIL IF LESS THAN HALFWAY BETWEEN THE MARKS ON THE DIPSTICK AND DO NOT OVERFILL.** Overfilling oil causes engine damage.

Oil Fill Access is the yellow cap on top of the engine.

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Coolant: There is a plastic container mounted to port of the engine. If below the “LOW” line please advise the dock staff. **DO NOT REMOVE THE GRAY ENGINE COOLANT CAP ON TOP OF THE ENGINE. YOU WILL DRAIN ALL COOLANT FROM RESERVOIR AND CREATE A MAJOR MESS.**

Raw Water Engine Intake Strainer: This is located in the aft port stateroom under the large main cushion. Tip the cushion back, lift the forward board with the finger hole in it. The strainer is large black round container with a clear lid with a black knob. Close the thru-hull, located directly below the strainer. Carefully unscrew the black knob and lift the clear plastic cover. Suction may make it difficult, but lift carefully and steady. Lift the round basket and remove the debris. Return the basket and cover. The cover may seal best with the tabs athwartships.

REMEMBER TO OPEN INTAKE THRU-HULL AND CHECK FOR LEAKS.

To start the engine:

1. Set master battery switch to BOTH and engine power switch to ON.
2. Put gear shift lever on the port side of binnacle in neutral and throttle down to idle.
3. Turn key to on and the oil pressure alarm will sound. Turn the key more like a car to start. The alarm and light will go out after starting.
4. Alarm should stop when engine starts. If not, stop engine immediately using red engine kill button.
5. After engine has started, check that water is coming out of exhaust. (Underneath stern.) If not, shut down engine.

To stop the engine reduce throttle, put in neutral, **let idle for at least one minute to cool down.** **After cool down,** PUSH RED ENGINE KILL BUTTON. Turn off ignition key and put battery master switch on one battery. **NEVER TURN OFF IGNITION KEY BEFORE STOPPING ENGINE.**

WHEN SAILING PLACE ENGINE IN REVERSE TO PREVENT UNNECESSARY TRANSMISSION WEAR.

CAUTION

- * Do not press starter for more than 10 seconds without pausing. This will cause engine damage.
- * Never close engine saltwater intake seacock except when cleaning intake screen with engine off.
- * ENGINE OPERATING TEMPERATURE WILL BE BETWEEN 165-195 DEGREES AND SHOULD BE TURNED OFF IMMEDIATELY AT 200 DEGREES. There is a red alarm light

on the engine panel that will sound if the engine overheats. If the engine overheats, check the coolant level and the raw water strainer.

* When under sail, put the gear lever in reverse to stop the prop from turning.

* WATCH THE IGNITION KEY AND KEEP IT IN THE “ON” POSITION WHEN ENGINE IS RUNNING.

THIS VESSEL BACKS TO PORT.

DO NOT LET GO OF THE WHEEL WHEN BACKING.

3. SAILS AND RIGGING

The mainsail is rigged with in-mast roller furling. **DO NOT OPEN THE MAIN HALYARD CLUTCH.** When furling or unfurling the mainsail the boom must be as close to perpendicular with the mast as possible, an excessive angle will cause the sail to fold and bind inside the mast. To unfurl, open the Main Reefing line clutch on the port side and pull the Main Outhaul line on the port side. Close the Reefing clutch when the desired amount of sail is unfurled. To furl, open the Outhaul clutch and maintain a little tension on the Outhaul line while pulling the Reefing line. This tension is to keep the sail wrapped tightly and prevents binding. Leave about a foot and a half of sail out of the mast to prevent binding.

The mainsheet is led to the cockpit on the starboard side. It is secured in a rope clutch marked “Main Sheet”.

The genny halyard is led to the cockpit through a rope clutch on the port side. Visually check the halyard tension after unfurling the genoa. If the luff has wrinkles, hoist it up tight. **DO NOT OPEN THE HALYARD CLUTCH.**

A spare jib halyard is secured on the port side and led aft to a rope clutch on the port side.

The jib roller furling line is secured on the port side of the cockpit. The jib can be furled and unfurled with this line. In light winds, the genny sheet may be needed to unfurl the sail. To reef the headsail, pull on the furling line and secure it on the port aft cleat. Do not furl or unfurl the sail when head to wind. A close reach is best so the UV cloth is not destroyed on the shrouds.

There are two winch handles in the chart table.

4. DOCK LINES AND FENDERS

Upon your return, be sure the fenders and docklines are set prior to docking. Fenders should be set at the beam and hang as close to the waterline as possible without dragging in the water.

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Docklines should be led outside of the pulpits and lifelines. While sailing, fenders may be firmly secured to the stern rail. Make sure they do not interfere with the stern anchor and hawse pipe.

ALWAYS TAKE YOUR DOCK LINES AND FENDERS WITH YOU - NEVER LEAVE THEM ON THE DOCK.

5. SAFETY AND EMERGENCY EQUIPMENT

Calafia has eleven PFD's (lifejackets). They are located in the aft lazarette. There is a throwable flotation cushion in the same lazarette.

Fire extinguishers are located in the starboard aft cabin closet, the forward locker in the galley (marked) and the port aft lazarette.

Man-overboard "Lifesling" is mounted on the stern rail.

Orange toolbox, spare oil, oil and fuel filters are located in the starboard aft cabin closet. Spare belt, flare kit, first aid kit, air horn, spare canister and wood plugs are in the cabinet forward of the electrical panel.

Emergency Tiller is located in the aft lazarette in a red bag. This inserts into the rudder head by removing the plate in the stern of the cockpit. The key for the plate is in the red bag.

6. NAVIGATION EQUIPMENT

GPS (Global Positioning System) can be switched on with the "Chart Plotter" switch on the Electrical Panel. Directions for the GPS are in a binder located in the cabinet above the electrical panel. **DO NOT FILL THE GPS WITH PERSONAL WAYPOINTS.** Many popular destinations are already programmed into the GPS. Take the time to review the books in the chart table. A help sheet is available to simplify use.

VHF radio can be turned on with the "VHF" switch. The Sailing Center monitors Channel 16 (the International hailing and distress frequency) and switches to Channel 66 (US) for conversations. Please use boat's name when calling.

DEPTH & KNOT LOG switch is marked on the electrical panel as instruments.

RADAR can be turned on with the "Chart Plotter" switch. It is a 16nm radar. GPS must be turned on first in order to have navigation information feed to the radar. Manual is in the orientation guide.

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7. GROUND TACKLE & WINDLASS

NOTE – A SNUBBER MUST BE USED WHEN ANCHORING. After the anchor is set, hook the snubber to the chain. This way the snubber will take shock load and not the anchor. The switch for the windlass is located below the mast on the side of seat near the sole across from the galley sink. Push the switch in for “ON” pull for “OFF”. **ONLY OPERATE WITH ENGINE RUNNING.**

Bow anchor has 300 feet chain. The space between the bow roller and the drum of the roller furling is limited. Bring anchor up slowly. Secure the anchor locker open with the hook to give you easy access to the chain and anchor. Use the aluminium bar to ease the clutch so the cathead will run free when the anchor is deployed. Gently tighten the clutch to engage the cathead to raise the anchor. Be sure to check that anchors are well secured but can be easily untied. **Care must be exercised when using the windlass.** Do not push the button on deck adjacent to the anchor when the anchor is stored. This will bend the safety pin and possibly move the roller assembly and jam the anchor in the stored position.

Stern anchor: 40 feet of chain and 300 feet 5/8" double braid nylon. The lid on the hawse pipe cover can be held open by sliding it outboard. Slide back to close lid.

8. BILGE PUMPS

The electric bilge pump switch is beneath the electrical gauges on the electrical panel. Switch is to be left on “Auto” at all times. If there is a pump failure, inform the Sailing Center

The manual bilge pump is located in the cockpit on the port side near the wheel. The handle is in the orange tool box.

9. FORWARD AND AFT HEADS (TOILET)

Both heads have the choice of pumping into the holding tanks or directly overboard. Check the Y-valve and seacocks before using the head to prevent discharge into the harbor and possible damage to the marine sanitation device. The long arms of the Y-valve handle determine the path of flow, either to the holding tank or directly overboard. Open the “Head Inlet” thru-hull to use the head as this allows water into the head and aids in flushing.

FORWARD HEAD: All thru-hulls are located in the hallway beneath the cabin sole. The Y-valve is located in the port berth and is mounted to the side of the lower bunk. The macerator switch is located in the head. The breaker on the control panel must be on first and the thru hull opened prior to operating macerator.

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AFT HEAD: Y-valve and thru-hulls are located in the starboard aft cabin under the small cushion next to the closet. The macerator switch is mounted next to the thru-hull compartment in the same cabin. The sink drain thru-hull is under the main cabin sole just forward of the

companionway stairs and outboard from the bilge. The macerator switch is located in the head. The breaker on the control panel must be on first and the thru hull opened prior to operating macerator.

The head is plumbed for direct overboard discharge or holding tank. **DO NOT USE THE HEAD IN THE HARBOR.**

To use the head: Open the “Marine Head Inlet” located *under the sink*. Check to make sure the head discharge is open. This thru-hull is located under the midships part of the starboard cushion in the dinette area. The large black valve should be turned perpendicular to the hull.

The grey Y-valve is located on the base of the starboard dining settee. The long arms of this valve determine the direction of flow. The holding tank is located under the aft starboard dinette cushion

PLEASE PUMP HOLDING TANKS AT LEAST 3 MILES FROM ANY COASTLINE

NO PAPER PRODUCTS ARE TO BE PUT IN THE TOILETS PLEASE USE THE WASTEPAPER BASKETS

* Never pump head with seacocks closed: you may break a seal.

The thru hull for the sink drain is located *under the sink*.

SHOWER: The showers are located in the heads. Pull the black nozzle (wand) straight up. The pin at the base of the nozzle will stop the water flow so you don't have to set it again and waste water. The lever on the shower head changes the flow from stream to shower.

SINK DRAINS: Should always be closed when not in use. When underway, especially sailing, keep the forward head valves closed to prevent water from back siphoning. If sea conditions are rough close all through-hulls.

SHOWER SUMP PUMP: The power switch is located in the pump section of the Electrical Panel. The shower sump operates on a float switch after the main breaker is turned on. No other switches are needed.

10. GALLEY

Electrical refrigeration is to be used **ONLY** when the engine is running or while connected to

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dockside power with the battery charger on.

The ice box (fridge) drain outlet is under the floor grate at the base of the stairs.

The thru-hull for the galley sink is under the sink.

The stove and oven operate on propane. The propane tank is located in the starboard aft locker in the cockpit. First open the valve at the tank. Turn on the 'LPG Solenoid' switch on the electrical panel prior to lighting the burners or oven. After use, turn off LPG solenoid switch at electrical panel and then close valve at tank to prevent leakage.

To light a burner use matches or lighter. Keeping knob depressed turn to IGN and light burner. Hold knob depressed for 10 seconds so burner will remain lit.

To light oven, turn temperature knob to 'Pilot On' while pushing the "Oven Safety" button. Light pilot light with a match or lighter and hold oven safety button for at least 10 seconds until thermo-couple is heated, which will enable pilot light to remain lit, then set to desired temperature.

The thru hull for the galley sink is underneath the galley sink.

The dry storage compartment is ONLY for dry products. DO NOT try to make it a cooler - there is no drain in the bottom.

11. FRESHWATER SYSTEM

Calafia has water capacity of 121 gallons. The tanks are located aft port (23 gal), 2 subsole (27 gal ea.), forward (50 gal) and water heater (11). To activate water pressure pump, turn on switch on electrical panel. Leave this switch "off" when sailing and/or not using water. There are 4 water tanks on Calafia and the valves are located (and marked) in the port aft stateroom under bed cushion. Only use ONE tank at a time. When a tank is empty, turn off the empty tank and turn on the new tank. You may need to bleed the air out of the system to stop the pressure pump from running. Open the sink faucets and the air/water combination will "spit" out. When the "tone" of the pressure pump deepens, the system will pressurize and pump will stop. Hot water is available after the engine is run for 30-45 minutes. It lasts for 3 - 4 hours after the engine is turned off.

12. INFLATABLE DINGHY

A pump for the dinghy is in the port lazarette. DO NOT TOW DINGHY the tow rings are not

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designed for the conditions of the Santa Barbara Channel. PULL THE DINGHY UP ON DECK OR DEFLATE. Also, please keep it on deck at night.

13. MISCELLANEOUS EQUIPMENT

LEGS TO MAKE TABLE INTO BUNK are located under the seat aft of the mast.

COCKPIT CUSHIONS: Please stand them on end with the zippers down on the deck in the main salon. Please do not put them on any cushion or mattress. If they are wet please leave in the cockpit.

COCKPIT SHOWER is located on the stern swim platform. Water pressure must be on.

BBQ is attached to the stern rail. DO NOT REMOVE FROM STERN RAIL.

WINCH HANDLES (2) are located above the electrical panel in the cupboard.

BUCKET with rope is in the aft lazarette.