



# ***RAVEN***

## ***Cruising Checklist***

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# Emergency Information

## **Pains Wessex Precision 406 MHz GPS EPRIB**

- The EPRIB is located in a wall bracket at the navigation station
- The EPRIB is an emergency device for use in only grave and imminent danger
- False alarms cost time and money. **DO NOT EVER REMOVE EPRIB FROM WALL BRACKET UNLESS IN GRAVE AND IMMINENT DANGER!**
- EPRIB activation and operating instructions are posted directly above the EPRIB
- EPRIB manual is located in the front of the Guest Charter Binder at the navigation station

## **LEAKS**

- The emergency bilge pump is located aft on the port side. The handle is in the port propane tank locker.
- Determine the source of the leak (first by smell, then by taste). Is it a saltwater leak, or is it coming from either the fresh water or holding tanks? Although fresh water and holding tank leaks are a cause for concern, they will not endanger the boat.
- Locate the source of the leak and try to plug or slow the flow of water. Softwood plugs are located in the top drawer on the left side of the navigation station and may be used to stop leaking through-hulls and other circular holes. Rags may be used to plug other leaks in a pinch, and duct tape wrapped with a rag and bound with rope will patch a leaking pipe.

## **ENGINE OVERHEAT**

- If the buzzer sounds while the engine is running, immediately check the oil pressure and temperature gauges. Also check to make sure that raw water is gurgling out with the exhaust.
- Shut off the engine.
- If water is not gurgling out with the exhaust, most likely the raw water strainer is clogged with eelgrass. The strainer is located beneath the aft port cabin berth directly under the front of the bed closest to the engine compartment. Remember to close the seacock before removing the strainer and to reopen seacock after clearing the strainer. If water is gurgling normally from the exhaust, check the engine's coolant levels and thermostat, check for leaking hoses, and check the tension on the belt for the water pump.

## **FIRE**

- There are three ABC rated fire extinguishers on board. They are located in the galley, aft starboard cabin, and in the aft port lazarette. An ABC rated extinguisher will put out electrical, grease, and wood or fiber fires.

## **HITTING A ROCK OR LOG**

- In case of a rock or log hit, immediately contact San Juan Sailing.
- Check for cracks at the forward and aft edge of the joint where the keel meets the hull.
- Proceed to the nearest harbor and have a dive performed to check the condition of the keel and the hull

# Getting Underway

## PREPARATION

1. Check dinghy secure (two cleats) – a cleat tie and the bitter end tied onto the stern rail
2. All movable items in cabin secure
3. Shore power disconnected and AC switch turned off.
4. Foredeck and cockpit clear
5. Sails & lines ready

## STARTING THE ENGINE

1. Check the oil level on the engine. Do Not Overfill!
2. Turn the battery switch to #1.
3. **Look over the stern for things that could foul the propeller (like the dinghy painter!).**
4. Check that the gearshift is in the neutral position.
5. Push the throttle about 1/3 open.
6. Turn the key to the "on" position on the engine panel and a buzzer should sound. This is the same warning buzzer you would hear if the engine overheats or if there is loss of oil pressure.
7. Push the starter button on the port side of the binnacle. The engine should start promptly (Do not continue to crank for more than 5 seconds).
8. After the engine starts, ease the throttle back to 1200RPM for warm-up and check for water gurgling out of the exhaust.
9. Allow at least 5 minutes of warm up before placing a load on the **engine**.
10. Please make sure you pause briefly in neutral before you shift; then shift smartly.
11. Accelerate enough to give yourself way and steerage, especially in wind.
12. Turn off the water pressure switch on the electrical panel.

## RAISING THE ANCHOR

1. Please read our "Owner's Notes" section on Anchoring.
2. Slowly motor forward (toward the anchor) while a crewmember at the bow takes up the slack in the anchor rode.
3. When the bow of the boat is positioned directly above the anchor, shift gear into neutral.
4. The crew at the bow will raise the anchor. Dunking the anchor into the water a few times before securing it will help to keep mud from drying onto your anchor and bow.

## CLEANING UP / SETTING SAILS

1. Set sails

## ENGINE SHUTDOWN

1. Check that the engine is at idle and gearshift in neutral.
2. Push and hold the red button by the key until the engine stops.
3. When the engine stops the warning buzzer will sound until the key is turned off,  
**IMPORTANT:** Never touch the key while the engine is running

## **ENGINE ACCESS AND OVERHEAT**

Access to the engine compartment is by releasing the rubber cam latches and removing the companionway stairs.

1. If the engine overheats, the water strainer is likely plugged with eelgrass. The strainer is located beneath the aft port cabin berth directly under the front of the bed closest to the engine compartment. Remember to close the seacock before removing the strainer and to reopen seacock after clearing the strainer.
2. Unscrew the strainer cover and remove the filter.
3. Clean out any eelgrass. Wash the filter and replace it in the cover
4. Open the seacock briefly to assure that it is not clogged. Close it again and screw the strainer cover back on.
5. Reopen the seacock. If the engine overheats again upon restarting, check that the seacock is open and check the strainer cover is sealed. If it draws air, it won't draw water.

## **Navigation**

### **KNOT METER: SPEED THROUGH THE WATER**

If the digital knot meter shows a reading of "0.00" while underway, the impeller is most likely clogged with a piece of eelgrass. The impeller is located under the access hatch located on the floor between the forward berth bed and the forward head.

### **DEPTH SOUNDER; DEPTH**

The digital depth sounder will not give accurate readings beyond 400'. It is designed for use in shallow waters. In deeper water, the sensitivity on the unit increases as the transducer tries to get some reading back. Consequently, you might receive false readings caused by currents, changes in water temperature, fish, and underwater seaweed. Use the depth sounder only as an aid to navigation in shallow water.

### **DGPS/WAAS COLOR CHART PLOTTER / RADAR: LOCATION, HEADING & TRUE SPEED**

To start Radar/Chart plotter, turn on the switches at the electrical panel labeled Nav Instruments, Radar, and Chart Plotter. Then, press and hold the power button at the lower left corner of the unit until it beeps and turns on the display. When prompted press the power switch again to toggle between Standby and Transmit. To save electricity, toggle the radar to standby and use the chart-plotter only mode. The unit will start up in its last pre-shutdown mode (radar only, chart only, or split screen). Use the display key located at the lower right corner of the unit to change modes. To turn the unit off, press and hold the power key for 3 seconds.

# Arrival / Docking

## **RESTART ENGINE (SEE GETTING UNDERWAY)**

## **LOWER SAILS**

## **ANCHORING**

The primary anchor is forward and equipped with 200' of chain rode. The secondary / stern anchor is a Fortress located in the forward bow anchor locker with 25' of chain and 200' of nylon rode located in the aft port lazarette. The backup primary anchor is a 44 lb Claw anchor and is located in the aft starboard lazarette.

Use a scope of 3 or 4 to 1. Most coves are 15'-30' deep, so expect to pay out about 50'-100' of rode. After you have paid out the suitable amount of rode, 30 seconds of idle reverse both sets the anchor and will test its holding power.

## **ENGINE SHUTDOWN (SEE GETTING UNDERWAY)**

## **GOING ASHORE**

The inflatable dinghy is light in weight, stable, rows very well, and tows with the least drag if brought close to the boat--about 2-5 feet off the stern.

When going ashore, here's what works best: launch a person off the dinghy bow as you approach shore, then offload everyone over the bow. Now lift the dinghy above barnacle height and deposit it gently on the beach. Secure the painter around a large rock or to a log.

## **USING SHORE POWER**

Raven is equipped for 110v shore power and cord with 30A fitting. (A 20A adaptor is stored in the Chart Table to adapt to the various electrical supplies encountered in marinas in Western Washington State and Canada.) We do suggest turning on the battery charger when connected to shore power especially when anticipating a lot of electrical use: lights, refrigeration and/or heater.

# Cooking

## **WATER SYSTEM:**

The water pressure switch is located on the electrical panel. We typically turn it off when not in use so the tanks cannot be pumped dry if a tap is left running.

## **PROPANE SYSTEM:**

One 10-lb propane tank is located in the aft port propane tank locker for the barbeque and another is located in the aft starboard propane tank locker for the stove/oven.

### **REFRIGERATOR/FREEZER:**

The thermostat is a rotary switch mounted just inside the front door of the refrigerator box on the left side. The "Off" position is the switch rotated fully to the left and rotating the switch to the right lowers the temperature. The best setting seems to be with the arrow pointing to the number "5".

### **BARBECUE:**

The stainless steel Force 10 propane barbecue sits on the stern rail. Use the hose in the aft port propane locker to connect the propane to the BBQ. Turn the valve on at the tank to provide propane to the BBQ. Please remember to turn off the valve to the BBQ after use. Also, as a courtesy to the next guest, please use the wire brush wired onto the BBQ to clean it after use. Thank you!

### **USING THE STOVE:**

1. Turn the aft starboard propane tank valve clockwise all the way open and then turn it back ¼ turn.
2. Make sure all stove controls are in the "off" position.
3. Turn on the solenoid valve switch at the main electrical panel. A red light will show on the panel.
4. Lift the front of the stove top up and slide it back at an angle to serve as a back splash. See photo below.



5. Turn the burner to high, hold it in and depress the ignition switch. If it fails to ignite after several attempts, turn off the burner wait a minute and light using the butane lighter behind the stove.
6. When finished with the stove, immediately turn the burner knob off and then turn off the solenoid switch at the panel. You may wish to turn off the gas valve on the tank if you are leaving the boat.

## **Using the Head & Shower**

### **USING THE HEAD**

Please do not put anything in the toilet that you didn't eat first. Deposit toilet paper (and feminine items) in the receptacle next to the toilet, not down the toilet. RAVEN has a 22 gallon holding tank for the aft head and a 30 gallon holding tank for the forward head. (SJS staff will discuss holding tanks & pump outs on your arrival.)

The toilets will only discharge into the holding tanks so please monitor them carefully! Monitor the newly installed holding tank level sensors. **The macerator CB needs to be “on” for the sensors to operate.** The forward head has a multi level sensor while the aft head only has a full indicator. Both the head the water pressure circuit breakers need to be on for the heads to operate properly. Exploding or leaking sewage is most unpleasant! Search out the problem and correct it.

Holding tanks can be pumped out dockside into a shore side pumpout facility. Deck plates are located on the port side forward and in the transom aft. Tanks are located under the forward berth and under the aft starboard berth.

OR

The macerator pumps are controlled by the main DC switches at the nav station. **MAKE SURE THRU HULL VALVES ARE OPEN PRIOR TO TURNING ON MACERATOR PUMP SWITCHES.**

**Note: Valves are open when the handle is inline with the hose and closed when the handle is perpendicular to hose.**



**Aft Head Macerator Thru Hull (Starboard aft cabin seat)**      **Fwd Head Macerator Thru Hull (Forward cabin sole)**

Run the pump only as long as necessary, usually 2-3 minutes. Pump will burn out if run dry. The macerator pump thru hull valves may be left in the open position since anti-siphon valves have been installed in the macerator pump lines.

**NOTE: IT IS ILLEGAL TO PUMP HOLDING TANKS OVERBOARD IN U.S. INLAND WATERS.**

If you have persistent difficulty in getting the pumps to prime, make sure the deck pump out covers are tight and lubricated with Vaseline (found in box of spare parts). It is possible the tank is drawing air through these fittings.

**USING THE SHOWER**

Hot water is stored in the insulated tank located behind the engine in the engine compartment. It takes about 30 minutes of running the engine under load to get hot water. When on shore power, you can heat your water electrically. Experienced cruisers know the sailor's shower: get wet, turn it off, soap up, rinse off. If the shower basin overflows, you're using too much water. Before entering the shower, activate the SHOWER SUMP switch on the electrical panel. During your shower, activate the SHOWER SUMP switch in the shower AS NEEDED to empty water from the floor. Shower water is pumped overboard. **CAUTION:** the engine can heat the water to **scalding temperatures!** On warm, sunny days, an alternative to the below decks shower is the swim platform shower. This is also a good way to rinse off salt after swimming or dirt after going ashore.

## **Sails and Rigging**

### **MAINSAIL**

The main is fully battened, which gives good sail shape and reduces flogging during the hoist. Reefing may be done using the jiffy reefing system.

The simplest way to reef is to heave to, release the main halyard while bringing in the first reef line on the starboard cabin top. Once the reef is done, tighten the main halyard. If you want to put in another reef, the second reef line is led back to the port cabin top. If necessary, ask San Juan staff for instructions prior to departure.

### **HEADSAIL**

The 135% genoa is furled on Pro-furl roller furling. The 135% genoa/jib has roller furling, with good sail shape at the full out position through to a storm jib position with the clew forward of the mast. When allowing the headsail to unfurl, please hold a small amount of pressure on the furling line to ensure that the furling line coils properly around the drum. When furling the headsail, hold a small amount a pressure on the sheet to ensure that the sail rolls snugly on the forestay. When sailing on a beam reach to a run you might want to place your jib sheets through the cars on the outside tracks for better sail shape. On close reaches and beats the inside cars will probably yield better sail shape and greater sailing efficiency.

## **Communications**

- VHF Channel 16 is reserved for emergencies and boat-to-boat initial contact. After contact, move to channels 68, 69, or 79. San Juan Sailing monitors channel 79 during business hours.
- Weather channels are 1, 2, 3, or 8 (whichever gives the best reception).
- Channels 28 and 85 are Bellingham Marine, for placing long distance telephone calls (much more expensive than cellular).

## Salon Bed Conversion

- Conversion of the salon table to a bed is accomplished by removing the table top and replacing the two columns with shorter columns that are stored under the forward salon dinette seat.



- Stow the longer columns until morning when the berth can be made back to a dinette.

