Notes from the Owners of True Blue American Tug 365

True Blue is a 2012 American Tug 365, powered by a Cummins diesel engine, with a HP rating of 380 @ 2600 RPM. It is a pilothouse coastal cruiser built on a Lynn Senour hull. True Blue has 2 - 200 gallon fuel tanks, (400 gallon total fuel), and tankage for 150 gallons of water, and 45 gallons of waste. At a time of high fuel prices and environmental concern, True Blue provides an efficient and comfortable cruising solution. According to Cummins Northwest, Inc. data, the American Tug 365 provides hours of cruising fun at reasonable speeds, with a range in excess of 1200 nm, on very limited fuel consumption. Recommended Power settings.... experience....



consumption. Recommended Power settings.... Per American Tug Operators Guide, and Owner

<u>RPM</u>	SPEED (kts)	Gallons	<u>/hour</u>
1200	6.75	1.5	
1400	7.6	2.1	Economy Cruise
1800	8.75	5.2	Best in a rolling sea; stern squats & bow rises, very stable.
2200	10.2	9.8	

NOTE: All system operation instructions assume you have appropriate AC and DC circuit breakers powered.

We hope you enjoy cruising aboard True Blue. Please let us know if you find anything missing or in need of improvement. We want you to have a great time, and to charter with us again and again....

While using or reviewing these notes, please feel free to make corrections, suggestions and improvements. Your constructive criticism will be appreciated by us as owners as well as guests.

Thank you,

Mark Stevens and Diane Farris (Owners), Mrstevens57@gmail.com, 228 424-3768

Note: Throughout this manual, red lettering indicates safety items or key operational notes.

These notes are prepared for Quick Reference. American Tug, Inc. has provided an operation manual for the 2012 model. Much of the information is taken from the Tug Operator's Manual but has been condensed for quick reference. For more in depth systems information please consult the owner's manuals and component manufacturers' installation/operation manuals that came with the boat. They are large notebooks found in the document cabinet located under Fusion Stereo unit under the port side Helm Station seat.

The Owner's Notes assume that the charter guest/operator is experienced and competent in the safe operation of a 22,000 pound, 37 foot powerboat, and knowledgeable of boating rules and regulations. 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.

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Additional Reference Materials:

RayMarine e125 ops manual link: https://data2.manualslib.com/pdf5/114/11398/1139722-raymarine/a65.pdf?b8fc464704c6e8f8dfca906946aaaa30

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2. SPECIFICATIONS AND VESSEL INFORMATION

Vessel Information:

Washington State Parks Annual Permit Decal – Located on the transom, port side.

U.S. Customs Re-Entry Decal – Located next to the aft entry door, starboard side.

Vessel Official Number - 1240454 (same number as shown on the Coast Guard Certificate of Documentation found in Section 5 Documentation of the Charter Guest Reference Manual (white binder). True Blue's number is located inside the cockpit floor locker on the aft bulkhead. Look for 3" high characters.

Coast Guard Boarding Document – Refer to the Charter Guest Reference Manual (white binder), Section 5 Documentation. Explains what to expect if you are boarded by the Coast Guard and where to find the information/equipment they may ask to see as part of their safety inspection.

Specifications:

Year: 2012 Engine: 380 HP Cummins diesel

Make/Model: American Tug 365 Fuel: (2 tanks) 200 US Gal each

LOA: 36′ 6″ Water: 150 US Gal Beam: 13′ 3″ Holding: 45 US Gal

Draft: 3' 5" Heads: [1, QUIETFLUSH freshwater

marine toilet

Displacement: 22,000 lbs. (Dry) Electronics: Raymarine

Berths: 1 Queen, dinette table in salon converts to a large double berth

Master Stateroom: Headroom: 6'-8", Berth Dimensions: 6'-5"x4'-9" (head), 6'-5"x4'-6" (feet)

Salon: Headroom: 6'-6", Berth Dimensions: 6'-9"x4'-7" (head), 6'-9"x3'-4" (feet)

SalonHeadrm: 6'-6"

Refrigerator: 1'-7"x2'-1"x1'-3" Freezer: 1'-7"x1'-0"x1'-0"

3. EMERGENCY/SAFETY EQUIPMENT

Emergency/Safety Equipment Locations: You are not likely to need many of these items, but must know their location.

Bilge Pumps (3). Rocker switches are located in the pilothouse on the overhead dash board, helm side. During normal operation the switches are left in "AUTO" mode (flipped UP). Can be held down to "ON" for override mode if needed. Pumps are located as follows: Bow – under the floor board in the forward stateroom, Midship – access via the large floor hatch in the salon – look under the drive shaft, Stern – in cockpit floor locker forward end of bilge. Note: can use shower sump pumps also in emergency.

Carbon Monoxide Detector. Master stateroom, starboard side.

Fire Extinguishers (4): Stateroom inside starboard hanging locker, Salon at aft entry door, Pilothouse starboard side, Engine room – FireBoy automatic – switch at helm for "armed/override".

First Aid Kit. In head vanity cabinet.

Flare (Electronic) and Folded Plastic Distress Flag. Pilothouse port side step locker.

Flares (Pyrotechnic). Pilothouse port side step locker.

Flashlights. Chart Table.

Lifesling. Upper deck stern rail. Please review the cartoons on the face of the case for procedures. The lanyard is secured to the boat so that tossing the floating harness allows it to tow behind the boat like a ski tow rope. Circling the person overboard will draw the recovery line near them.

PFDs, Inflatable (5). Located in the salon below the settee seat, aft drawer. NSO: please check for "green" visible at bottom of clear canister before each cruise. That verifies the auto-inflate function when immersed. We wear these at all times when working the deck and often in the cockpit.

PFDs, Foam vest (2). Located in the tank room below the salon floor.

Propane Detector. The Trident propane detector and solenoid switch control panel is located just inside the salon door to starboard, on the cabinet, near the fire extinguisher.

Tapered Plug, Universal Foam Orange StaPlug. Located in the Pilothouse port step locker.

Spares. Pilothouse, starboard settee floor level cabinet.

Tools. West Marine Shipyard Socket Set: Pilothouse, starboard settee floor level cabinet. General Toolbox: starboard step locker.

Windlass Clutch Release/Tighten Wrench. Deck bow locker, starboard end in black plastic clips.

4. PREPARING FOR DEPARTURE



Engine Coolant Reservoir

Oil Dipstick, Main Engine

ENGINE ROOM CHECKS (performed daily, before cruising).

At the helm station switch panel, turn ON the Engine Room Lights. Enter the engine room through the port side hatch in the floor in of the pilot house.

 Engine Oil level is checked prior to your arrival, and rarely varies over the course of a weeklong charter. A visual check for any oil drips on absorbent mats beneath the engine, and that the dip stick (yellow) on the port side of the engine is secure, is usually all that is necessary.

You are welcome to check the oil level on the dipstick if you'd like, but it is not usually needed. If checked, it should indicate in the hash mark area on the dipstick.

Often times the dipstick is not fully reinserted in the dipstick tube, and this can make quite a mess.... So if you do remove the dipstick, please make certain it is fully inserted until it "snaps" into its detent.

If the **OIL LEVEL IS LOW** (near or below the bottom mark):

i. Add oil from the **Delco 400 15/40 SAE**, blue plastic jug located with the spares on the Starboard side of engine room, using the oil funnel located with the spares kit.

- ii. Oil is added via the black plastic fill cap on the forward top of the engine, using a funnel.... NOTE: It doesn't take much to go from low to full see below...
- iii. NOTE: Metal cap with return hose is for **COOLANT RECOVERY**, near center top.
- iv. **DO NOT OVERFILL THE OIL CAPACITY** of the engine. It only takes 1 quart to fill the oil supply from the lower line to the upper line on the dipstick. Oil level should never go above the top mark on the dip stick.
- v. Insure that the dip stick, is properly seated

2. Visually inspect COOLANT LEVEL....

Check the coolant level of the white plastic recovery reservoir mounted on the forward bulkhead in front of the engine, starboard of center. Should be between ¼ and ½ full.

If the **COOLANT LEVEL IS LOW** (less than ¼ tank in recovery reservoir....:

Add coolant to the recovery reservoir only, to the approx. ½ full line on the Reservoir with the engine cool, being careful not to overfill—the coolant needs room to expand and fill the reservoir.

i. The pre-mixed engine coolant is located with the spares kits in the starboard side of the engine room.



Visually Check the interior of the generator compartment for any leaks or drips. The generator has a diesel engine requiring the same care as the main engine. Open the rectangular panel on the INBOARD SIDE of the generator to inspect.

If desired, (but not usually necessary unless long periods of generator operation have occurred or are planned), you may check the oil level on the dipstick. IF checked it should be within the hatch-marked area on the stick.

If the oil level in the generator is low:

Open the OIL FILL CAP... just forward and to the right side of the dipstick.

Add oil from the Delco 400 15/40SAE blue plastic jug using the oil funnel located with the spares kits in the starboard side of the engine room. Be careful not to overfill. A few ounces makes a big change....

Check the coolant level in the generator. The generator's diesel engine uses coolant just like the main engine. A plastic coolant recovery reservoir is mounted on the aft area and is visible in the above picture of the generator. Visually check that the coolant level shows approximately 2 inches of coolant when the generators engine is cold and 6 inches if hot.

If the generator coolant level is low:

Add coolant to the recovery reservoir to the appropriate level, being careful not to overfill—the coolant needs an opportunity to expand.

Use the pre-mixed engine coolant located with the spares kits in the starboard side of the engine room.

FUEL FILTERS...MAIN ENGINE RACOR Fuel Filters - Check for water or debris. Few things you do are as important to your safety on the water as having uncontaminated fuel going to the engine. As you enter the engine room through the port side hatch, look on the aft bulkhead where you will find the RACOR fuel filters. The 2 larger fuel filters on your left as you are facing aft, are for the main engine. The smaller fuel filter on your right is for the generator. Use a flashlight while performing the following visual checks.

NOTE: The pointed tip on the Yellow handle selector valve points to the active filter currently in use. If this filter is dirty, move the valve selector /pointer to the opposite filter and notify San Juan Yachting.

Make sure both filters are free of debris or water. Look through the glass at the liquid in the bottom of each filter. You don't want to see contaminants or a separation of fluid in the bottom. (Water is heavier than diesel fuel, and will collect at the bottom of the glass bowl if there is water in the fuel.)

IF YOU SEE CONTAMINANTS OR FUEL/WATER SEPARATION, FIRST CALL SJS/SJY OR VESSEL MAINT. PROFESSIONAL FOR ASSISTANCE.

To remove water or contaminants without removing all the fuel in the glass bowl following these steps:

- 1. Close the shut-off value to the specific fuel filter (located under the fuel filter)
- 2. Be prepared to catch any fuel from the filter with a small container and some polyester fuel oil diapers/rags.
- 3. Remove the plug from the bottom of the drain valve and slowly open the valve to evacuate just the water or contaminants, and then quickly re-tighten the valve and reinstall the safety plug
- 4. Open the shut-off valve.
- 5. Note: If the engine doesn't start, you may need to prime the fuel system at this time: Priming the Fuel System:
 - a) Turn the ignition switch at the helm to the 'ON' position.

- b) Fuel priming pump runs automatically for approximately 20 seconds.
- c) Turn off the ignition switch after the pump has stopped.
- d) Repeat steps a) through c) at least one more time.
- e) If engine fails to start after repeating 3 times, contact San Juan Charter.

GENERATOR RACOR FUEL FILTER – Check for water or contaminants. If you see liquid separation or other contaminants, you need to remove them. Steps 1 through 4 above.

<u>RAW WATER COOLING THRU-HULLs</u> – Check that both the Main Engine, and Generator THRU HULLS are in the 'OPEN' position (lever vertical/in-line with its respective hose).

Main Engine RAW WATER SEA STRAINER - inspect the Raw water strainer If necessary:

- a) Using a flashlight, visually check to see if that the engine strainer is clear and not plugged with seaweed or debris.
- b) To clean the strainer, first <u>close the seacock</u> (lever horizontal), then unscrew the top with (may require a tool), lift out the basket, swish it back and forth in a bucket filled with clean sea water. There is a bucket in the lazarette that can be filled with clean saltwater. Please use a bucket to rinse the screen, which will prevent accidentally dropping either the main or generator screen overboard.
- c) Replace the screen, then secure the cap, hand tighten to snug. **REOPEN THE SEACOCK. Handle of thru Hull in line with Hose supplying raw water.**

GENERATOR Raw Water Strainer - Make sure that the seawater strainer for the generator is free of seaweed or debris. Use the same procedure as above. It is a smaller unit similar to the engine strainer and is located on the left side (facing aft) of the generator.

REOPEN THE SEACOCK. Handle of Thru Hull in line with Hose supplying raw water.

Complete a visual check of the engine room for leaking oil, fuel, or coolant, loose items, tools, Toolboxes, etc., that should be secured, or anything unusual.

When you have completed the engine room checks, secure engine room flashlights, return to the helm station, close hatches, replace carpets.

Turn off the engine room lights, (helm station switch panel). Failure to do so may needlessly deplete the House batteries.

DISCONNECT SHORE POWER

AT HELM... At the AC breaker panel, turn OFF the Main AC breaker labeled "SHORE POWER". AT DOCK... turn OFF shore power circuit breaker <u>for your receptacle only</u> on the pedestal.

AT DOCK... Disconnect the Shore power plug/cord from the dock power receptacle. (these steps are in order to protect you, and your crew, and to minimize arcing of cord contacts.)

ON BOAT... Disconnect the shore power cord, then coil the cord and store in the cockpit hanging up on a hook or in the lazzarette.

Caution: To avoid handling and moving a LIVE cord, always first DISCONNECT from the SHORE-END first. Conversely when connecting to shore power always CONNECT the BOAT-END first!

POWER AND CONFIGURATION CHECK

The electrical system is divided into two distribution systems: 110-volt AC and 12-volt DC. The systems are controlled from the AC ELECTRICAL PANEL located in the Pilothouse, the DC AUXILIARY PANEL located in the Pilothouse, and the BATTERY SWITCHES FOUND next to the starboard side helm seat. When not connected to shore power or running the generator, batteries are providing all of the ships power. Therefore, monitor the use of onboard electricity carefully with your volt meter located on the DC Panel, and turn off electrical devices that are not needed.

Getting Under Way - recommended switch configuration, in most instances:

DC Panel		
Electronics	On	
VHF	On	
Refrigerator	Always On	
Head	On	
Fresh Water	Off	
Macerator	Off	
Wipers	On	
Lights	On	
12 volt Receptacles	On	
Autopilot	On	

AC Panel	
Shore Power	Off
Reverse Polarity	Off
Generator	Off
Battery Charger	Always On
Water Heater	Off
Heater	Off
Heater 2	Off
Washer Dryer	Off
Spare	Off
Outlets	Optional
Outlets 2	Optional
Microwave	Optional

Check DC Voltages of the 3 battery banks, using the switch.

#1 – Thrusters #2 – House #3 - Generator

Approximate Voltage Battery State:

Voltage	State
12.8	100%
12.4	75%
12.2	60% (time to recharge)*
11.8	25%
11.6	0%
*Note:	Running the voltage below 12.2 volts shortens battery life. Should the house
	batteries discharge to this level, please start the generator or plug into shore power
	to recharge the batteries.

CLOSE ALL 4 PORT HOLES AND HATCHES that might permit water to enter the interior, especially during rough seas and windy conditions. (1. Shower, 2&3, Above both hanging lockers, 4. Opp head door.)

CONFIRM DINGHY IS SECURE – Davit turnbuckles are snugged up to at least hand tight, and bow and stern stabilizing lines/ratchet straps are cleated snugly to Tug transom, preventing dinghy swaying.

CHECK AROUND THE BOAT

Review the exterior areas on, and around the boat to confirm that there are no obstacles in the water or loose items that should be secured on deck. Verify lines, extra gear properly stowed.

HELM CHECKLIST

Check the fuel level in both the port and starboard fuel tanks using the WEMA tank level indicator located in front of chart table. The tanks should be full on the first day of your charter. Notify San Juan Yachting staff if tanks are not full.

Check the potable water tank level using the WEMA tank level indicator. See instructions below for adding water, if necessary.

Start up the RayMarine e125 Hybrid Touch Chartplotter, Radar and Autopilot by turning on their respective C/B's on the DC breaker panel. You may also have to press the power buttons on each unit until the display comes on.

Power on the VHF radio: (usually by turning on its dedicated C/B, but may have to turn unit on)

- ii. Check the weather channel (Channel 4)
- iii. Radio Check with SJY on Ch 80a, then Channel 16 to monitor.

5. GETTING UNDERWAY

Start Engine

- a) Set throttle/shifter control handle to neutral (perpendicular to base, in detent).
- b) Turn ignition switch key 2 clicks clockwise to ON.
- c) Wait 30 seconds for the Vessel View control panel (located left side of the throttle/shifter) to power up and for the engine to pre-heat. The red Neutral light on the throttle/shifter base will glow when the shifter is set to neutral.
- d) The "Critical Fuel" alarm may sound on the

 VesselView press the "X" key to silence. Note that this not a problem and occurs because there is no
 link between the VesselView and the fuel tank level. Use the WEMA Tank Level Gauge described in
 the Fuel section of these notes to obtain tanks levels.
- e) Press and hold the soft black Start/Stop button on the throttle/shifter base and crank engine until it starts. Note-Cummins engine ops manual states "do not crank engine for more than 30 seconds, wait 2 minutes to allow the starter motor to cool down before restart attempt.

Check that cooling water is coming out the exhaust on the aft starboard side.

If no water flow is visible, shut down the engine and check in the engine room to see that the ENGINE seawater seacock is open.

NOTE: For cold weather warm up, the transmission can be disengaged and the RPM increased by pressing the soft black" Throttle Only" button on the throttle/shifter base. The red Neutral light will flash in this mode. Increase the RPM to 800 to smooth out the engine vibrations. When the engine temperature reaches 100 degrees the throttle can be decreased back to idle.

WITH THROTTLE IN NEUTRAL...Press Throttle Only button again to re-engage transmission.

Observe the readings of the gauges. The oil pressure will register about 50-60 PSI. The engine temperature should rise slowly. Note -- If oil pressure is low, shut down engine, and inspect engine compartment and look for possible cause (for example, loss of oil.) Caution -- If the engine is overheating or there is lack of raw water expelled in the engine exhaust, STOP THE ENGINE immediately.



When needed, stop the engine by pressing and holding the soft rubber, black Start/Stop button on the throttle/shifter base until the engine shuts down, then turn the ignition key to OFF.

Turn on the bow and stern thrusters **by simultaneously** pushing BOTH "ON" buttons below the thruster joysticks. The amber light between the buttons will come on.

NOTE: An AGM 4D battery provides power to start the Main Engine. A separate AGM 4D battery is used to power the Bow Thruster via a 400 Amp Thruster Fuse as well as the Anchor Windlass via a 125 Amp Fuse. NOTE: Do not operate the Bow Thruster and Windlass at the same time, or it may trip fuse or C/B.

Toggle the THRUSTER joysticks briefly in both directions to ensure that the thrusters are functioning properly.

NOTE: The thruster control panel will turn off automatically after 5 minutes of non-use. Press BOTH of the ON buttons again to reactivate.



Use the thrusters in short bursts of 3 - 5 seconds to prevent overheating. If the thrusters are used continuously for more than 2 minutes they may overheat. It can take 10-15 minutes for the thrusters thermal protection fuse to reset after overheating.

NOTE... The bow and stern thrusters both have manual-reset circuit breakers and fuses. Locations as follows:

<u>Bow Thruster Breaker/Fuse</u> – In the head under the floor hatch. Pull the large red knob to reset. Fuse is near the breaker with a spare zip-tied to it.

<u>Stern Thruster Breaker/Fuse</u> - Tank Room under the floor hatch in the main salon, aft starboard side of the hatch opening on the underside of the floor. Pull the large red knob to reset. Fuse is near the breaker with a spare zip-tied to it.

The thrusters are used primarily in maneuvering at or near the dock. DO NOT USE while underway, as the thrusters are not effective under way.



Bring up rudder indicator – in the upper part of the RayMarine Autopilot display, by cycling through the screens. Move wheel left/right, then set rudder to neutral position, or as desired.

Check wind and current directions, other vessels in area, and dock and fender arrangement.

NOTE: THERE IS A 2 SECOND DELAY IN THROTTLE/TRANSMISSION INPUTS. When you move the Throttle lever forward, or Reverse, you will feel it come out of a slight NEUTRAL detent, just out of the detent is usually all that is needed for initial movement and/or close quarter maneuvering. You may find that you will only leave throttle/gear lever just out of the neutral detent for a second or two. That nudge of power will begin to move the boat. Then return throttle to the vertical/neutral detent, and coast. Use Thrusters to move laterally, then add another nudge of power to continue, or add a short input in the opposite direction for a second or two to slow or stop the vessel.

Use the thrusters in short 3 to 5 second or less bursts to control sideward movement of the bow and stern, while operating the throttle in short/small applications of forward or reverse, pausing in neutral, as you maneuver in or out of the marina.

Note: IN REVERSE, the STERN WALKS TO STARBOARD.

6. CRUISING

When clear of the marina, make sure all mooring lines, fenders and anything loose are stowed. Operate the engine at or below 1000 rpm for warm up. (5 to 10 min.)

After engine warm up, operate the engine no faster than 1400 rpm until the coolant temperature reaches 140 degrees. You will probably operate at 1200 to 1500 rpm, as this is economical and quiet.

Please make all engine power changes SLOWLY AND SMOOTHLY, as rapid power changes can put great stress on engine and drive components.

Monitor the engine instruments at the helm station while cruising. NORMAL ENGINE READINGS ONCE WARMED UP, OPERATING

Volts should read between 13 and 14 at normal cruising.
Water temperature should be between 160 and 180 degrees.
Oil pressure should range between 30 and 100 PSI depending on RPMs.

Windshield Wipers and Defoggers

Wiper Controller

See photo of the wiper controller on right. Following are instructions for operating the controller:

- a) Press the on/off "I" button (lower left corner) to turn all 3 wipers on then press again to cycle between Continuous and short/medium/long intermittent (as indicated by orange lights at top of controller).
- b) Press and hold the on/off "I" button to turn the wipers off.
- c) After turning on, press the lower middle button to cycle between operating the starboard wiper only, all 3 together or the port/middle wipers only.
- d) With the wipers on or off press the lower right button to wash and wipe all 3 windows. Note that the washer fluid is plain water from the domestic water tank. No need to refill a reservoir.



Defoggers

Turn on the defogger fans by flipping up the toggle switch next to the helm. Note the ignition must be on for the fans to operate. Engine heat warms the defogger air.

7. RETURNING TO DOCK

- 1. Ensure you have fenders out and mooring lines prepared:
- ** On docking side of the boat, (starboard/Helm side is most convenient,).
- ** 3 4 Fenders set at appropriate level/height for the dock. Orange Roving Fender at ready.
 - 2. **Turn on the bow thrusters** by pushing the 2 "ON" buttons simultaneously. The amber light between the buttons will come on. Toggle the joysticks momentarily in both directions to ascertain that the thrusters are functioning properly.
 - 3. Approaching dock, ball, anchorage, etc., Operate the engine at low RPM's/vessel at slow speeds for <u>at</u> <u>least 5 minutes</u> to allow the engine & turbo temps to cool/stabilize before shutdown.
 - 4. Once docked and the mooring lines are secure, turn off the engine. Record days fuel usage.

5. End of Charter Return – Re-fueling

When returning to Bellingham at the end of your charter, refuel at the fuel dock.

The Following is the refueling procedure that works best for us:

- i. One person watches the WEMA tank monitor panel. Alert the fueling person when the gauge reaches 7/8 full and again when approaching full.
- ii. The fueling person listens for a change in pitch (higher pitch) in the fill pipe. Stop the fuel flow immediately when the pitch rises. If the monitor shows FULL, you're done. If not wait 30 seconds for any bubbles in the filler pipe to recede and SLOWLY continue filling until the pitch rises again OR the monitor person indicates the gauge is at FULL.
- iii. Note that the sight tubes on the fuel tanks are not convenient to use and will only show the fuel level up to 90% full. Please use the Tank Monitor as described above.
- 6. If docking for the day, record engine hours and fuel consumed in the Daily Log book.
- 7. At the DC POWER breaker panel, turn OFF breakers labeled **ELECTRONICS, VHF,AUTOPILOT.**
- 8. Please re-place the screen covers on all electronics/radios as direct sunlight can damage them.
- 9. Please consider installing the interior window cover/shades on all helm area window to reduce wood and upholstery fading, and to increase privacy aboard. They are easy to install using the 3 foot dowel located on the sill below the forward helm windows, near defroster vents.

8. CONNECTING TO SHORE POWER

At the electrical distribution panel, make sure the AC gang circuit breaker marked SHORE POWER is in the OFF position.

Take the Orange "Smart Plug" 30 amp shore power cord located in the lazarette, connect it to the boat's receptacle located near ladder, port side, aft cockpit. Insert the plug, and lower plug lid over plug.

Locate the power supply on the dock; making sure that the breaker on the dock is in the OFF position. The Shore Power cord is 30 amps. Check the amps for the shore power on the dock, and use an appropriate

adapter, if necessary. Connect the electrical cord to the shore power source, matching prongs, insert, then gently twist about 1/8 turn clockwise to lock (It can be helpful to twist the plug about ¼ turn counterclockwise prior the inserting the plug into the receptacle so the clockwise torque will keep the plug locked in position). Then turn the dock power source C/B or Switch to ON.

Return to the boat and first verify the reverse polarity indicator on the electrical distribution panel is GREEN, the A/C meter shows 120 volts. Then turn the AC SHORE POWER circuit breaker to ON.



Verify that you have power to the main electrical distribution panel by looking at the AC voltage gauge on the panel.

Ensure that the BATTERY CHARGER IS ON to allow the battery charger to engage if necessary. Other AC breakers may be turned on/off as desired. Check Magnum display to ensure that it reads charging, if not press inverter button to toggle between INVERT to "CHARGING" mode.

NOTE: 30-amps of power may not be sufficient to run all the ships systems if the batteries have been discharged. The inverter/charger will draw large amperage to charge up the batteries and may cause the dock power to disconnect. If the load exceeds 30 amps, the breaker will activate. If this occurs, turn off any non-essential systems (e.g. water heater, electric heaters, etc.) until your total load drops below 30 amps. This procedure will be even more important if you are limited to 20 or 15 amp dockside power, which is common at smaller marinas in Canada. Remember to recheck that AC power is still connected after 10 minutes, if not reduce the load more. The most important thing is to keep the batteries charged and not let them fall below 12.2 volts. As the charge level comes up the inverter/charger will draw less power and enable you to turn on other systems like the water heater and / or electric heaters.

NOTE: Any time you are connected to shore power, be sure to turn the inverter **OFF** (green LED light not illuminated) on the Magnum control panel (port side of helm station table). Failure to do so could rapidly discharge the batteries should the dock side power fail. Should this occur, the inverter will attempt to run the entire electrical load.

9. CLOSING THE BOAT

- a) At the AC panel Verify Shore Power is connected....120 Volts A/C on meter.
- b) Ensure the Battery Charger circuit breaker is ON. Check the Magnum Control Panel, verify that the "Charging" function is displayed. If necessary, toggle between inverter function (lower left button on

- Magnum). CHG LED should be illuminated, and LED labeled INV should not be illuminated. The LCD display should read "Bulk" or "Float" or "Absorb" charging.
- c) Turn OFF ALL DC POWER circuit breakers except for the double green dot "always ON" breakers (Refrigerator & Battery Charger).
- d) Turn off the water heater breaker on the A/C panel.
- e) Close all windows and hatches.
- f) Lower all the Salon/Galley blinds shades to the daytime/privacy screen position. Prevent sun damage.
- g) Install all the sun/privacy shades in pilothouse.
 - The shades are stored, neatly rolled together, in the forward stateroom starboard side closet on the floor.
 - To install the shades, use the 3' long dowel located in the pilothouse on the shelf in front of the center window near defroster vents. Or, if you can reach, just snap on by hand as appropriate.
 - Installing the 3 forward helm window shades with dowel The three largest shades are for the forward windows. They have a small tab/label on the inward facing side at top center. They are labeled "star symbol" (starboard), C/L (Center), Port (Port). To easily place the brass grommets in the upper corners of these 3 larger shades, over their respective posts, place the end of the dowel in one sewn in corner pocket, while using the dowel to position the brass grommet over the post in each upper corner of these three front windows. When one grommet is on its post, use the dowel to position the other grommet on its post. (You do have to keep slight tension on the upper edge of shade with dowel and allow the upper edge of the shade to go under and behind the wiper motor while placing the second grommet on its post).
 - Other shades are labeled similarly, and are unique in size and shape. These remaining shades all snap onto inside window frames, except the two that velcro onto the two helm doors.
 - Use of these shades does 3 things. 1. Improves privacy aboard your vessel, (you can see out, but others can't see in) 2. Reduces fading of wood finishes and upholstery. 3. Keeps helm area cooler, when this is desirable.
 - Storage of shades when underway We recommend removing the 3 fwd window shades first, lay one on top of the other on the nav chart flat area at helm. Next remove the 3 side shades (fwd, door, aft) from one side placing each on top of the other, then the 3 shades from the other side, then the two smallest aft shades. Simply roll the entire stack of shades up, and place the roll behind helm seat while underway. By rolling then up they will stay flat, not wrinkled, and should hang back up easily.
- h) Lock the doors. Consider leaving salon door key in lockbox in propane locker to avoid key loss.
- i) On the dock, check the position of all fenders and see that mooring lines are secure.

10. ELECTRONICS

RayMarine e125 Hybrid Touch screen Chart-plotter, Depth, GPS, Auto Pilot, Radar (High Def).

True Blue is equipped with the latest RayMarine electronic equipment with highly-detailed BlueChart g2 Vision marine cartography of the San Juan Islands to Alaska. Advanced features include:

MarinerEye view and FishEye view provide you a 3-D perspective of map information, both above and below the waterline. NOTE: There is no "SONAR", but there is "DEPTH".

High-resolution satellite images and aerial photographs help you orient yourself in unfamiliar areas.

Auto Guidance technology searches through all relevant charts to create a route you can actually follow — one that avoids obstacles, shallow water, buoys and other obstructions.

Navigational support for storing routes, way points, favorite locations and tracks

Built in information on marine services and facilities Man overboard feature

Built in tide and current tables and sun/moon calendars

Raymarine

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It is a wonderful tool and confidence builder and should be used in conjunction with paper charts. Routinely, we operate with the map display/split screen view. One window will be zoomed in for more detail; the other window will be zoomed out for a bigger picture of the area being navigated. Your check-out skipper will show you the basics on the chart plotter. Use the manual located on board for more detailed functions.

IMPORTANT NOTE: The digital compass for the auto pilot is located inside the forward stateroom starboard (larger) hanging locker on the aft bulkhead up high. Placing anything magnetic or steel (like a coat hanger) in this area can cause the auto pilot to not work properly. This compass also feeds the boat's current heading to the chart plotter, so something like an electric toothbrush, cell phone or steel coat hanger placed near this compass can cause both auto pilot and chart plotter problems.

Personal electronics Navigation. We strongly recommend the use of Paper Charts as PRIMARY, and supplement them with the Chart plotter and our personal iPad and phones using the Navionics app. You can download a trial of Navionics for FREE for 30 days, and subscribe for \$30/yr. Tides, Currents, auto routing, port information, reviews of marinas and anchorages are all available. One subscription allows for at least three devices to have access to this incredible information and charting tool. Download and get familiar with this app a few weeks before you arrive, plan and store your routes. We use the following settings in the Set Up... Boat info: 8 knots, 3 gph, 37 feet, 14 feet beam, 4 feet draft, 16 feet bridge clearance,

VHF Radios: Standard Horizon Matrix AIS+ GX2150 Primary VHF Radio plus Handheld VHF unit.

The Operations manual can be found the Systems Binder in the port side document cabinet, directly under the Fusion Stereo unit.

It is recommended that mariners monitor channel 16 while underway. Weather updates are found on channel 4. Please become familiar with the VTS (Vessel Traffic Service) scheme, and recommendations as outlined in Waggoner Cruising Guide, pg. 50 in the 2017 edition.

The handheld VHF Radio is both a backup to the primary Standard Horizon unit, and if needed when operating the dinghy. The handheld unit is stored in the Starboard side pull out drawer, located at the top of the steps between the saloon and the pilot house. Or on its recharger at the helm station.



True Blue is equipped with an entertainment package consisting of:

- A Fusion Marine DVD Stereo system (12 Volt DC power, "Lights" CB - ON)
- A 22" Samsung HD TV (110 Volt AC powered, AC Outlets CB's must be on, and powered)
- Bluetooth Audio connection to Stream audio to Fusion from personal devices. (BT-100)

The Fusion DVD Stereo system is mounted on the aft facing bulkhead above the Salon settee, to the left of the stairs. It has a very user friendly interface and all functions are easily accessible from the front





control panel. There is also a remote control which provides handy access and management of the systems features. The system provides over air AM/FM radio stations, a DVD/CD player for both music, or video, and a Bluetooth connection to the "AUX" input.

To use the Fusion system, the "Lights" breaker switch on the DC Panel must be turned on.

The manual which describes all operations is found in the documentation cabinet which is in the top of the Galley to Pilot house steps, port side, under the Fusion Stereo Unit.

Radio:

To listen to the radio, select the antenna source and tune to your radio station of preference.



Bluetooth Streaming from a personal device, phone, etc....

Search for Bluetooth devices, BT100 should show up, connect to that device, and select "AUX" input/channel on the Fusion system. Stream your music to the fusion system...

CD:

There is a black rubber area/button on the top of the Fusion console. Depressing this rubber area will allow the front panel of the console to open and swing down revealing a CD/DVD access slot. Insert CD/DVD into the slot and select the "disk" icon source on the front panel of the console. Then select play on the remote or console face.

Watching a DVD

Carefully pull down the hidden TV entertainment center located immediately above the sink in the salon. Check that the Outlet C/B's are "ON". Turn on the Samsung TV using the remote control and select AV1 as the source video input using the remote control. Next follow the same procedure as in CD above to insert a DVD disc into the Fusion CD/DVD Stereo unit. Hit play and the DVD will start; audio for the DVD is now available over the speaker system for the Fusion Stereo unit. Use stereo volume control, not TV.

Television

First insure the Outlet circuit breakers have been turned out (AC panel). If not plugged into shore power, the Inverter must also be turned on at the Magnum control panel, and the Outlet CB turned on as well.

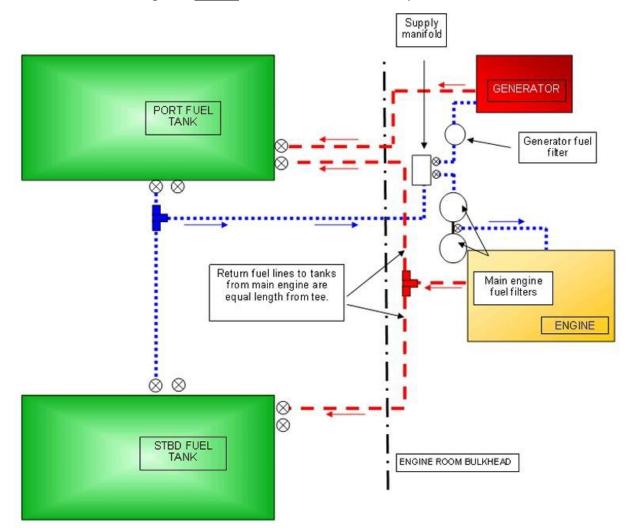
Turn on the Samsung TV using the remote control and select TV as the source video input. You can now tune to over the air channels that may be accessible. Note that unless you are close to a major city/broadcast center, channels may not be available.

NOTE: you can utilize an on screen search function via a menu on the TV to have it auto tune to all available TV stations the antenna is currently able to receive. Use remote to access menu on TV, follow prompts to "Auto Tune" and let it cycle through choice for 5 to 8 minutes....

NOTE IF TV NOT POWERING UP... check the GFCI Breaker above Washer/Dryer cabinet, reset it, (this receptacle provides power to plug in TV console), then check that lamp on top of W/D cabinet works, (same receptacle), now try TV again.... This breaker often trips if shore power fluctuates

11. FUEL

True Blue has two 200 gallon **DIESEL** fuel tanks located on the port and starboard sides of the tank room,



under the salon floor. The tanks are connected to each other by a ¾" I.D. cross feed hose that will keep them balanced. The fuel supply hose for the engine T's into the middle of the cross feed. There are shutoff valves at the tank ends of the cross feed hose. If the tanks are drawing down unevenly them most likely the shutoff valve on the tank that isn't being drawn down is partially or completely closed. Refer to fuel system schematic below.

Managing Fuel Consumption and Monitoring Fuel Levels

True Blue fuel tanks will be full upon your departure. Unless extended cruising is expected, you shouldn't have to worry about how much fuel is onboard. However, it is a good practice to measure fuel usage on a daily basis to track your overall consumption. Following are the procedures for measuring fuel level as well as daily tracking of fuel consumption:



Measuring Fuel Level:

The WEMA Group Tank Level indicator is located on the port side of the helm station (see photo above). Flip the toggle switch to "ON" and Press the #4 button for Port Fuel, OR the #5 button for Starboard Fuel. The tank number button will light up as well as the green light above the tank type icon below the "boat". Steady light indicates more than 1/4 Full, and flashing indicates less than 1/4 remaining. NOTE...do not press and hold buttons or you may enter a programming mode that will need to be reset.

Measuring Daily Fuel Consumption:

To measure daily fuel consumption, use the Trip Log feature available in the Vessel View display (see photo on right – "GAL USED" in lower left corner). The feature is accessible on the "Trip Log" screen. Readings for daily operating hours and fuel consumption can be taken directly from this display. These should be recorded each day in the True Blue log book. This feature will record your total fuel used, and it is very, very, accurate.

Resetting the Trip Log values to zero:

 Turn the engine start key to "ACC" to activate the VesselView. It takes about 30 seconds to boot up.



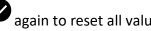
The "Critical Fuel" alarm may sound – press the "X" key at the top right to silence. Note that this not a problem and occurs because there is no link between the VesselView and the fuel tank level sensor. Use the WEMA Tank Level Gauge described above to obtain tank levels.

Press the Menu key (lower right) to display the menu dialog box. If needed, press Menu again until "Trip Log" is displayed - use the arrow keys to scroll down or up to



highlight "Trip Log". Press the symbol to select. Press the symbol again to bring up the Reset

dialog box (see photo on right). Press again to reset all values to zero.



FILLING THE FUEL TANKS

Fuel should be added as needed on extended cruise and/or upon return to the fuel dock in Squalicum Harbor at the end of your journey.

Fueling is a 2 person job. One person monitors the tank monitor fuel gauges and one person fills the tanks.

Note: The "deck key" to open the filler ports is located in the Starboard side pull out drawer, located at the top of the steps between the saloon and the pilot house.

Preparation

Before you start to fuel, make sure the engine is shut down, the furnace is off, and all ignition materials have been extinguished. Everyone except the person monitoring the gauges and the filler should be off the boat. Also, have an oil/fuel diaper/cloth handy to soak up any spilled fuel. You should have a good idea of the total number of gallons needed if you have set the VesselView at the start of the cruise. Or have been monitoring engine hours and fuel consumption on a daily basis.

Open Fill Caps. Located on port and starboard side decks just forward of the cockpit (push down on filler cap, which will pop it up, then twist off by hand).

NOTE: On the starboard side the water filler cap is next to AND FORWARD OF the diesel fill cap.

Do not fill starboard side diesel and water at the same time!! Open ONLY ONE CAP AT A TIME, AND VERIFY. Make sure you have the correct fuel hose! → DIESEL! DIESEL! DOUBLE-CHECK! FOR the correct fill PORT. (THEY ARE LABELED ON THE FLANGE OF EACH FILL PORT, DIESEL ARE **FURTHEST AFT ON EACH SIDE**

Fueling: Please consider following this suggested refueling procedure:

a) The person watching the WEMA tank indicator, set for the tank being fueled, alerts the person fueling when the gauge reaches 7/8 full and again when full.

b) The person fueling listens for a change in pitch (higher pitch) in the fill pipe. Stop the fuel flow immediately when the pitch rises. If the monitor shows FULL, you're done. If not wait 30 seconds for any bubbles in the filler pipe to recede and SLOWLY continue filling until the pitch rises again OR the monitor person indicates the gauge is at FULL.

c) Note that the sight tubes on the fuel tanks are not convenient to use and will only show the fuel level up to 90% full. Please use the WEMA tank indicator as described above.

SERVICING THE FUEL FILTERS

Few things you do are as important to your safety on the water as having uncontaminated fuel going to the engine! True Blue is equipped with two RACOR fuel filters. (One filter for each tank) and are located aft of each fuel tank in the engine room. A vacuum/pressure gauge is read at the top of each filter.



Check the two fuel filters for contaminants or water as part of the pre-cruising engine room check. If there are contaminants or a separation of fluid in the bottom of the glass collection containers, they should be drained of the contaminants as follows:

- a) Close the shut-off valve to the specific fuel filter (located under the fuel filter)
- b) Be prepared to catch any fuel from the filter with a small container and some rages.
- c) Remove the plug from the bottom of the drain valve and slowly open the valve to evacuate just the water or contaminants, and then quickly re-tighten the valve and reinstall the safety plug.
- d) Open the shut-off valve.
- e) Note: If the engine doesn't start, you may need to prime the fuel system at this time.

Replace the RACOR fuel filter if the pressure gauge reads between 7 and 10. The two RACOR fuel filters located in the engine room have a vacuum gauge read when the engine is running at cruising speeds. The RACOR Company instructions say when the needle on the vacuum gauge reads between 7 to 10 inches (of vacuum) it is time to replace the filter element. The elements are changed routinely, but you never know when water or contaminants will get into the fuel tank, so be prepared to change out the filter if the vacuum gauge is reading between 7 and 10 inches! The replacement RACOR 10-micron filters are located in the black plastic bin in the engine room. Labeled SPAREPARTS, AND FILTERS.

Change the filter with the reading between 7 and 10 inches of vacuum. If both indicate in this range then change them both. To change the filter element:

- a) Close the shut-off valve to the specific fuel filter (located under the fuel filter)
- b) Unscrew and remove the lid to the filter housing
- c) Slowly remove the filter element from the top of the housing.
- d) Slowly insert the replacement element and replace the lid and tighten the T-handle (hand tight only).
- e) Open the shut-off valve.
- f) Start the engine and check for leaks. Correct any leaks with the engine off.
- g) You may need to prime the fuel system at this time.

12. WATER

There is a 150 gallon fresh water tank on True Blue. The tank is located in the aft section of the tank room. The tank room is accessed through the hatch door in floor of the salon.

CHECKING THE WATER LEVEL/Refilling Water Tank

Observe the water level by pressing the #6 button on the WEMA tank level indicator located forward of the Navigation Table in the Pilothouse. First, flip the toggle switch to "ON" then press the #6 button for water. The tank number button will light up as well as the light above the tank type icon below the "boat". Steady blue light indicates more than 1/4 Full, and flashing indicates less than 1/4 remaining. The water tank level can also be checked by viewing the sight tube on the tank (located under the hatch in the Salon floor) which is more accurate.

DO NOT FILL WATER AND DIESEL AT THE SAME TIME! PLEASE CHECK DIESEL CAP & SNUG

To refill the tank,

- 1. remove the WATER CAP located on the starboard side deck, forward most of the two caps on this side. Push down on the cap, which will pop up, and can be twisted open by hand. Avoid flushing debris from the deck into the cap/tank
- 2. Connect the fresh water hose (stored in the lazarette under the cockpit) to the domestic water supply at the dock. Let the water run through the hose (overboard) for a minute or two to rinse out hose.
- **3.** Avoid using a hose at the dock you are not familiar with You don't know where it has been!
- **4.** Fill until the filling sound starts to CHANGE or water comes out the Vent/overflow on the hull just below the deck fill.
- 5. Hand tighten cap/deck plate and drain and stow the hose in the lazarette.

HOT WATER TANK

The HOT WATER HEATER (shown at right, lower silver unit) has an 11 gallon capacity tank and is available when connected to shore power,or the generator, or via a heat exchanger with the engine when underway. To use on shore power or with the generator in operation, flip on the water heater circuit breaker on the AC electrical panel. Do not use the water heater if the water tank level is very low. The water heater tank is located in the starboard-side



engine room, just below ITR furnace (upper silver unit).

Shower

Before taking a SHOWER, make sure the shower sump breaker is on. The breaker is located in the pilot house, on the starboard side above helm in the switch overhead panel. All other Bilge pumps should remain "ON" at all times.

It generally a good idea to take short "boat showers". To keep shower tidy wipe down the shower stall and floor after each shower with a small towel/cloth. Check for accumulation of hair in the shower and sink drains. An optional hand-held FRESH WATER SHOWER is located in the cockpit. Ensure that the faucets and nozzle are turned completely off after use.

Note: Should the shower begin to drain slowly, it is probably because the filter in shower sump reservoir has become clogged. The shower sump is located beneath the hatch in the HEAD floor. There is a plastic enclosure covering the sump. It can be carefully unsnapped and the sump and filter and cleaned. Please be sure the filter is replaced and secure before reassembly.

13. BOAT ELECTRICAL

The electrical system is divided into two distribution systems: 120-volt AC and 12-volt DC. The electrical panels controlling each of these systems are located in the pilothouse inboard of the helm behind the Plexiglas. The panel breakers use the color dot convention shown on the legend below right.



When not connected to shore power or when using the generator as an A/C source, the batteries are providing all power. Therefore, monitor the use of onboard electricity carefully with your volt meter located on the DC Panel, and turn off electrical devices that are not needed. Note: switches controlling the batteries are located next to the starboard side helm seat.

120-Volt AC System

The shore power inlet main 120V 30A circuit breaker is located at the aft end of the port salon settee behind the seat back. Tip the top of the seat back cushion inboard, and the breaker is located on the forward side of the Washer/Dryer Cabinet, facing forward. See photo on right. This breaker rarely trips but if it does, then try resetting it once. If it trips again, contact SJY for assistance.



SHORE POWER supports all AC equipment and receptacles on board, as well as the inverter/battery charger.

At the ELECTRICAL PANEL in the Pilothouse, flip the SHORE CIRCUIT BREAKER on (note that there is a sliding protector to insure that the panel can be energized by either shore power or generator, but not both). Check for reverse polarity. Then turn on appropriate breakers for battery charger, water heater, outlets and microwave. Watch your amp meter for load. If the load exceeds 30 amps, the breaker will pop. If this occurs, turn off any non-essential systems (e.g. water heater or space heaters) until your use of amps drop.

All outlets on board are controlled via the 3 circuit breakers in the Auxiliary AC Panel (Outlets, Outlets 2 and Microwave). Should any outlets fail to work, check your GFI outlets (one in the galley behind stove, one in the head, one above Washer Dryer cabinet with lamp plugged into it.) to make sure that they have not been tripped. Just press reset button on receptacle to reset.

Generator

True Blue has a 6KW Northern Lights generator. You will likely not need to use it as long as you are connected to shore power or using the engine several hours a day. To start your GENERATOR, first check that your generator's fluids are topped off and the raw water intake is open. The generator controls are located under the inboard end of the Co-Helm seat facing inward toward steps leading to the helm station.

Before starting the generator, make sure you have performed the pre-start checklist.

At the control panel, (inboard end of the Co-Helm bench, facing inboard top of stairs) push and hold the rocker switch to preheat the generator for 15 seconds. While continuing to hold down the pre-heat rocker switch, push the start button. The engine should start. See manual to add more details.



Let the generator warm up for about two minutes, and then at the AC control panel, move the sliding protector up and energize the generator power breaker. Then turn on AC systems as you would on shore power one system at a time. Monitor your current usage amp draw.

To turn the generator off, first take off the load by turning off AC breakers. Then turn off main AC breaker. Let the generator idle for 2 minutes, before shutting it down. After at least 2 minutes, using the generator control switch, press the bottom of switch labeled "STOP" switch until it shuts down.

12-volt System (DC System and Battery System)

Three battery banks support 12-volt DC power:

#1 THRUSTERS #2 HOUSE #3 ENGINE START

The BATTERY SWITCHES are located on the cabinet below the starboard-side helm seat. The "DC Main" toggle switch is normally left in the "On" position and supplies power to the DC Panel.

The rotary switch below the DC Main is the "Starting Battery Switch" for the Main Engine. It is normally left in the "On" position unless there should be a fire in the engine room or a battery problem. Except in an emergency, do not change this switch while the engine is running. Alternator damage will result.

The "Battery Parallel" rotary switch is normally left in the "Off" position. This switch should only be used to combine the Main Engine Start and House Batteries as a last recourse to provide additional cranking power to start the Main Engine. To the right is the "Constant 12 Volt Breaker". This breaker provides power to the Fuse Block located under the console in the Pilothouse, which supplies power to the Bilge Pumps, Propane Sniffer Systems, Tank Monitor Panel and Defroster. It should be left in the "On" position at all times.

House Battery Bank: Three AGM 8D batteries supply House Power. The 12 volt panel shows all the systems supported by the House Battery Bank with the exception of those on the Constant 12 Volt Breaker mentioned above. This includes the Engine Room lights, wash-down pump, and Navigation Lights (all controlled with rocker switches at the console), the Inverter and the Diesel Heater, bilge pumps, CO Detector and Propane Sniffer. Primarily you will be turning on the panel breakers for your lights, water pressure, electronics, autopilot, refrigerator, toilet, wipers and 12 Volt outlets.

Console rocker switches for the Bilge pumps should always be left on.

Main Engine Start Battery: An AGM 4D battery provides power to start the Main Engine

Generator Start Battery: A separate Group 24 battery supplies power to start the Generator.

Inverter/Battery Charger

True Blue is equipped with a combined Inverter/Battery Charger unit which is controlled by the Magnum control panel located on the upper port side of the helm station.

When connected to shore power or when the generator is running AND the Battery Charger circuit breaker on the Main AC panel is ON, the unit acts as a charger for all of True Blue's batteries. When disconnected from these AC power sources,



the units' Inverter converts DC battery power to AC power to supply all AC outlets on board with 110V AC. Note: The inverter does not provide AC power to the water heater or the electrical heating units.

The inverter's power source is the DC house batteries located under the hatch in the Salon. The quantity of DC power is limited to the capacity of these batteries. Therefore, running hair dryers, toaster, coffeepots, etc. and will quickly discharge the house/inverter batteries. Use these items VERY SPARINGLY! Monitor your battery usage very carefully! Also, note that the inverter has a 2,000 watt capacity governing maximum connected load.

The Magnum INVERTER control panel has a display which is useful for monitoring the status of the battery charge levels and the operation of the Inverter /Charger. The location of the integrated unit is within the cabinet behind the settee in the salon.

Battery State and Charging

The HOUSE BATTERY BANK provides power for all DC systems, except the engine and other systems noted above. When disconnected from shore power, all 12-volt devices drain the house battery. Use devices only as needed. Battery charge state monitoring is done with the DC voltmeter on the DC panel, which can be switched between #1 Thrusters #2 House #3 Engine Start to measure charging or resting battery voltages in each of the battery banks.

The Main Engine Start and House Batteries are charged by the engine ALTERNATOR while underway. The Main Engine Start and House Batteries are charged by the BATTERY CHARGER when connected to Shore Power or to the Generator. Ensure the Inverter circuit breaker at the 110 Volt electrical panel is ON.

The Generator Start Battery is charged directly by the Generator when the Generator is in use. On Shore Power the Generator start battery can be charged by the Battery Charger if necessary after a long period of inactivity. To do so, turn-on the rotary switch found near the Battery Charger below the hatch in the Salon (Normally this switch should be kept in the "Off" position. With the Generator running, the Battery Charger will not provide a charge to any of the batteries if it detects another charging source, namely the direct charge from the Generator to its own battery).

When a battery bank is being charged, the voltage will read from about 13.1 volts to 14.4 volts depending upon state-of-charge of the battery bank. When the battery bank is at rest, (that is, not being charged), the voltmeter can give a rough indication of the state-of-charge of the battery bank.

Approximate Voltage/Battery State

12.8 volts 100%

12.4 volts 75%

12.2 volts 60% → Recharge at 60% or battery damage could occur.

11.8 volts 25%

11.6 volts 0%

14. HEAD

True Blue has one head with a Dometic MasterFlush Model 8100 freshwater marine toilet. The head also has an enclosed shower, vanity, and sink. The toilet uses a MasterFlush freshwater system, which helps to eliminate odors often emanating from salt-water toilets. The MasterFlush system flushes into a 45 gallon holding tank. The holding tank can be emptied at a pump-out station, or can be pumped overboard through a macerator



pump, and a seacock in the bottom of the hull, if you are in a legal zone to do so.

USING THE TOILET

Important Notes to Read Before Use:

It is important that every member of the crew be informed on the proper use of the MARINE TOILET. The valves, openings, and pumps are MUCH SMALLER than a household toilet, and may clog easily. If the toilet clogs, it is YOUR RESONSIBILITY. Always operate the toilet for children, so you can make sure nothing foreign is being flushed.

<u>PLEASE</u> – DO NOT PUT ANYTHING DOWN THE HEAD THAT HAS NOT BEEN EATEN, SWALLOWED, AND DIGESTED FIRST. Never put GUM, paper towels, tampons, Kleenex, sanitary napkins, 'flushable wipes" (they're not), household toilet paper, or food into the marine toilet. A lot of things say "flushable" on the package, but they are not, don't flush them at home.... And never on the boat. The fibers OF many "flushable wipes, etc." will jam and damage the macerator immediately. Imagine putting a rag into a blender.... This toilet is basically a 12 volt blender....

MARINE TOILET PAPER IS THE ONLY EXCEPTION! True Blue is supplied with this type of special dissolving paper. Should you run out, please get more at the nearest marine or RV store.

NOTE: It is prudent to minimize the amount of marine toilet paper put in the head. If possible, neatly fold ALL USED Toilet paper, and place it in the vanity wastebasket or a paper bag next to the toilet. It won't smell, and a plugged up waste system can ruin an otherwise great cruise.

Flushing Procedure:

After using the toilet, locate the control panel mounted on the face of the vanity, near the toilet (see photo on right).

FLUSH

Press the "Flush" symbol (right side of control panel). This starts a powerful macerator pump, and will siphon water and waste from the bowl, and send it to the holding tank.



FILL/ADD WATER

Normally used before/when flushing solid waste. Press the "Add Water" symbol on control panel (left side of the panel), until desired water level is reached.

FLUSH MODES (2 MODES)

MasterFlush toilets offer two flush settings to help manage water consumption and holding tank pumpout frequency.

- 1. Normal Flush uses 0.85 gal per flush, adds water after each flush.
- 2. Dry Bowl Flush uses .45 gal per flush, does not add water after flush. (Recommend using this mode, less water usage, no water to spill out of bowl when underway)

Changing Flush Modes

Press and hold the Flush button for 5 seconds until the green "Power On" light begins flashing. Release the Flush button. Flush mode has been changed. Repeat process to change back to previous mode.

CLEANING THE TOILET

There is a toilet brush in the cabinet under the sink. Use a few drops of liquid dish washing soap and water for everyday cleaning of the toilet bowl. Never use chlorine based cleaners, caustic cleaners, chemicals, drain openers, alcohol, solvents, etc. in the system. They will damage hoses valves, macerators, and the holding tank itself.

HOLDING TANK

The sanitation HOLDING TANK holds approximately 45 gallons. Be aware of the rate of waste production which is about ¼ gallon per flush or approx. 100 flushes to get the tank ½ full. This is the point that you should start planning to head for a pumpout station or if legal to do so, discharge overboard using the macerator pump. **IMPORTANT NOTE:** See the "**Discharging the Holding Tank Overboard using the macerator**" section below for information about where it's legal to dump overboard.

With an overfilled tank, it is possible to break a hose, clog a vent, or burst the tank. The result will be indescribable catastrophe and an EXPENSIVE FIX. Empty the tank when over ½ full on WEMA tank indicator, or about every 3 days...

The HOLDING TANK is located under the Stateroom floor. It can be inspected via the hatch in the Head compartment, and may be given a visual check with a flashlight or the "watermelon" test by thumping it. There is also a WEMA tank level indicator with a read-out panel at the Helm station. NOTE: by design there will be no reading on WEMA indicator until the tank is approx. 1/3 full. Press Button #1 to read Holding tank level. A red light will illuminate above the "toilet" symbol at the bottom of the touch pad. Steady red indicates less than 3/4 full. If over 3/4 full, then it would flash red. For the Holding Tank, it is only approximate and should not be relied on as the tank gets full. Note that the tank monitor must be powered off then back on again to get an updated reading on the gauge. Best practice is to minimize using the boats toilet if alternative/dockside options are available as often as you can, and then also best to pump out about every 3 to 4 days... or about midway on a one week charter.

EMPTYING THE HOLDING TANK:

The holding tank is emptied in one of two ways:

At the Marine Pump-Out Station

- a) remove the WASTE CAP located on the port side deck just forward of the Pilothouse door (push down on the cap, which will pop up, and can be twisted off by hand).
- b) Insert the pump-out nozzle into the waste opening. Double-check your deck fitting!
- c) Turn on pump and open valve located on the hose handle.
- d) When pumping is finished (will now be sucking mostly air with a little water), close lever on handle and turn off pump. Remove from deck fitting.

e) If there is a fresh water hose on the dock, rinse the tank by adding 2 - 3 minutes of water into tank. DO NOT USE True Blue's FRESH WATER HOSE. Hold the hose end well above the Waste Cap opening, allowing the only water stream to enter the opening.

- f) Then re-pump the tank. This rinse will aid in minimizing head odors.
- g) Replace the WASTE CAP and tighten to just snug by hand.
- h) Wipe up any spills on the deck and throw away the used disposable gloves and wipe up rags.
- i) Rinse the deck area on the boat with the dockside fresh water hose.

Discharging the Holding Tank Overboard using the macerator.

The tank's contents can be discharged with the MACERATOR only where legal to do so. In the US, this is 3 miles or more from US shores (Canadian rules differ however). Confirm that through-hull seacock located in the starboard-side engine room is OPEN. Note by Coast Guard regulation this through-hull must remain closed unless a pump-out is taking place where legal to do so.

- a) Ensure the Holding tank discharge sea cock is open, 2" hose (located forward on starboard side just ahead of engine room access ladder. See label on forward bulkhead.
- b) Turn on Macerator breaker on DC Control panel.
- c) Insert the key into the Macerator key switch on the console.
- d) Turn the key 2 clicks clockwise to begin pumping. The indicator light will illuminate. Use the tank monitoring system and listen for a change in pump motor pitch as the tank empties. It should only take a few minutes to empty the tank.
- e) When finished, turn off the key to stop the macerator pump and close the overboard through-hull seacock (located in starboard side of the engine room at the bottom the access ladder).

15. BOW ANCHOR WASHDOWN

There is a seawater deck wash down access port at the bow on the port side of the windlass. The hose (kept in the bow seat/locker), should be used to clean the anchor and chain as it is raised, or to wash dirt off the deck overboard. To utilize the Sea/Salt Water washdown system:

Plug in and twist the hose CONNECTOR FITTING into the seawater access port. (DO THIS FIRST BEFORE TURNING ON PUMP AT DC CONTROL PANEL)

Turn on the SEAWATER WASHDOWN C/B on the helm station panel. Seawater should pressurize the hose and enable you to stand at the bow and use the spray nozzle to clean the anchor and chain as it comes out of the water. It is best to spray water on the chain before it gets to the roller so that mud and other debris wash back into the sea and not onto the deck or in the chain locker.

Note: If there is no water flow, check to see that the seawater seacock, located in the starboard side of the engine room is OPEN and verify that the blue wash down adapter is twisted fully into the access port.

STERN COCKPIT SHOWER – There is a freshwater (potable) shower with Hot/Cold mixer located in the cockpit behind a small hatch, just above the propane locker. This shower has a 5 foot hose, and can be used to rinse gear, shower, etc.

16. GALLEY

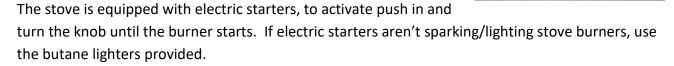
Stove

To operate the stove:

NOTE: PLEASE RAISE THE STARBOARD WINDOW SHADE BEFORE OPERATION ... this will minimize the chance of food spattering on the shade, and minimize risk of a fire should a flare up occur.

> a) Check the propane tank valve is open. (Tank is located in the propane locker in the aft cockpit starboard side of the salon door).

- b) Turn on the propane control safety solenoid switch, located on the propane monitor panel, just inside the salon door to starboard, on the cabinet, near fire extinguisher. This switch is the left most switch/indicator on the panel.
- c) Propane should now be available to the stovetop and oven.





To activate the oven, you must first light the pilot. To do so, use the long stemmed butane lighter found in the galley drawers. First open the stove door, then turn oven control knob to the pilot starting position, press in and hold knob in, while lighting the pilot with butane lighter.

Tip: if the stove or oven have not been used for a while, you may need to bleed air from the feed lines. Hold knob in the position for lighting for 15 seconds before using the electric starter or butane lighter.

Non-stick cookware

Do not use nonstick cooking sprays on the nonstick cookware- an invisible buildup will impair the nonstick release system and food will stick in the pan. The nonstick cookware does not need oil. If you prefer oil for flavor, olive oil or peanut oil is recommended.

Use *low to medium heat* only. Excessive use of heat will cause pan warping and permanent nonstick coating damage. The non-stick cookware is *oven safe to 350 degrees F*, but never in the broiler.

Do not use metal or sharp-edged utensils.

Clean using mild dishwashing detergent and warm water. Use only nonabrasive plastic mesh pads to dislodge food particles.





Refrigerator/Freezer

Make sure the refrigerator breaker is ON at the DC Control panel in the HELM station. Set temp inside the refrigerator – recommended setting is 5 to 5-1/2. Consider a "less cold temp setting" if on the hook, using battery to power frig. You could use the ice chest in lieu of powering the refrigerator for long periods on battery power alone.

Microwave

Make sure the Microwave circuit breaker is ON at the AC panel in the HELM station. Each time power is applied to the microwave, you may need to set the clock before the unit can be used.

NOTE: Only use the micro when connected to shore power or while running the generator. Using the microwave via the inverter will rapidly discharge the house batteries.... Just start the genset if needed when not connected to shore power.

17. HEATING SYSTEMS





There are three sources of heat on True Blue: Hydronic Diesel Furnace, and 2 - 120v electric.

1. Hydronic Diesel furnace:

There are 2 heating "zones' in True Blue. The first is the Salon, Galley and Helm area and the second is in the Forward Stateroom. Each has its own thermostat control.

To use the Hydronic furnace, first turn the "ITR" switch to the "ON" position. The switch located in the panel on the starboard side of the steps to the helm station.

You may now set either thermostat to your desired temperature.

Note: The furnace burns diesel and circulates hot water to radiators. Fans are then activated to blow across these heated radiators, and warm the air. It may take 15 or 20 minutes for the furnace to heat water, which is then circulated through its distribution system.

Note: The furnace will occasionally "flame out". Should this occur, an alert tone will sound from the heater control panel for about 15 seconds and a message displayed on the control panel. Recycling the ITR switch typically resolves the issue.

TIP: The salon thermostat is mounted on a space adjacent to the engine room and hydronic pump. This space has a tendency to heat up, so you may want to set the thermostat a few degrees higher than your desired air temp. Conversely, the state room thermostat is located on an outside wall and under conditions where the outside temp is low, the space behind the thermostat will be cool, you may want to set the temperature a few degrees lower than the desired temp.

2. Auxiliary heat when the engine is running

Auxiliary heat is available in the salon/galley/helm station area, any time the engine is running and up to its cruising temperature of 170 to 180 degrees. Just turn on the ITR switch and set the salon thermostat to the desired temperature.

3. **Two electric heaters;** one in the aft part of the salon, on the port side and one in the stateroom

These heaters should be used only when plugged into shore power and typically when you have left the boat for an extended period of time.

To use the salon heater, turn on the AC panel breaker labeled "Heater".

To use the state room heater, turn on the AC panel breaker labeled "Heater 2" Each heater has a small thermostat control knob located on the front panel.

Caution: Do not leave anything in front of these heaters which would impede airflow while they are operating, especially something combustible.

18. OTHER SYSTEMS

Cell Phones

You can re-charge your cell phones at the 12-volt receptacles located on the port side of the helm station. There are 12v recharge ports on both sides of the stateroom bed. The small switch and red light must be turned on, then utilize the round 12v port or the 2 USB outlets to charge phones, iPads, etc.

If cruising in Canada, consider contacting your cell provider to activate an international calling plan, and inquire about its cost. Some are rather expensive, Verizon, for example, is about \$2/day per phone.

Barbeque Grill

The stainless steel propane barbeque grill is mounted on the starboard aft railing. It is for *outdoor use only*. The propane tank which serves the grill is secured in the propane locker located in the port aft lazarette in the cockpit.



To use the BBQ GRILL:

- a) First remove the cover. Open the grill lid, and remove any tools, grill brush etc.
- b) Make sure the regulator knob on the grill is in the OFF position.
- c) Open the valve on the large propane tank as well as the YELLOW BBQ shutoff valve, both of which are located on the starboard side cockpit propane tank Locker.
- d) Open the lid to the grill. Remove any accessories stored inside.
- e) Push and turn the regulator knob counter-clockwise to the high setting.
- f) Insert the long BBQ lighter into the hole on left side of grill and light burner.
- g) Confirm that the burner is lit, by looking through the front vents of the BBQ.
- h) Adjust the regulator knob on the grill to the desired heat setting.
- i) The BBQ does not require pre-heating. Do not overheat.
- j) Do not cook on the high setting with the lid closed.
- k) Unless you are searing a steak the low setting works best for general use.
- I) To shut off the grill, turn the regulator knob on the grill clockwise to the LOCK-OFF position.

GRILL MATS... Below galley sink along left hand interior cabinet wall you will find numerous black fine mesh silicone grill mats. These can be placed on the grill while cooking, you will find they do an outstanding job of keeping food from falling through grates, and make clean up even easier. Just let them cool, wipe off grease with a paper towel, wash with dish soap in sink, and they are ready to go for next grilling session. We also use small disposable aluminum 6-7 inch square trays to cook/steam vegetables in. just place on grill mat, over with foil, serve and rinse or toss as appropriate when done.

Cleaning the Grill:

The grill should be cleaned on a regular basis. Stainless steel exposed to high heat will change color over time. Discoloration of components does not affect the operation or performance of the BBQ.

1. On the front lower outside of the BBQ slide out the grease tray for cleaning.



Lift out the cooking grill and the heat plate for cleaning.

The exterior of the BBQ can be cleaned with soapy water.

Lock the lid of the grill securely with the latches.

Cover the grill with the canvas cover between uses.

Anchoring Systems

1. CHAIN MARKINGS

The anchor chain is 250' in length with about 15' of nylon line at the "bitter end". The nylon line is used in case of emergency to release the anchor by cutting the line.

NOTE: If you need to cut away the anchor, and you have time, attach several fenders to act as a marker/ float for the anchor and rode, make note of location on chart and GPS coordinates.

The chain length is marked per the legend on the right. The last 20 Feet of chain is RED PAINT, then there's a final 15 feet of Nylon rope.



CHAIN LENGTH MARKING

2' lengths of line woven into chain:

- 1 piece every 25'
- 2 pieces at 100' + 200'

2. WINDLASS Operation and technique

The anchor windlass has foot controls (up/down) at the forward end of the deck.

If there is no power to the Windlass, check the circuit breaker located in the master stateroom on the starboard side of the berth platform, just below the mattress.

The anchor can be lowered quickly in an emergency if the windlass motor fails by easing the tension on the windlass clutch using the clutch tool (handle). The handle is stored in the bow deck locker along the anchor bridle.

3. SCOPE AND TIDE SWING

Scope is the relationship of length of rode (chain, line, cable) to the depth of the water. San Juan Sailing recommends a minimum of a 4:1 scope, more is better when able.

Check the tide tables to know at what point in the range you are anchoring, and measure the scope for the high tide.

Check for depth and rocks within the proposed "swing" area.

4. SETTING THE ANCHOR

The boat should be stopped facing into the wind.

Remove the anchor bridle from foredeck storage locker.

Depress the down arrow foot switch momentarily to let out about 2' of chain.

Gently ease the anchor out on the roller so that gravity can take over.

Let out the proper amount of rode based on scope desired, 4 to 1 minimum.

Put the engine astern momentarily until you begin to put a strain on the anchor.

Verify the anchor is set by feeling the anchor catch and then the boat move forward.

The angle of chain dropping down should be near straight when the boat finally rests.

Use the snubber/bridle to secure the chain in front of the anchor roller.

Let out more chain so that a slack loop is created in the chain between the anchor roller and the place where the hook grabs the anchor chain. This will relieve stress on the windlass and ensure additional chain is not pulled from the windlass.

Do an "anchor watch" for the first 30 minutes, observing how the boat swings and how close it gets to other boats and objects. Verify depths as you swing, consider tidal change for the entire swing area while asleep or not on anchor watch.

5. RETRIEVING THE ANCHOR

Preparation for Retrieving.... (there's a reason for this specific order of events)

Start the engine, allow it to warm up, confirm normal readings...

- a. Locate the hose and nozzle from the bow seat locker.
- b. Connect the hose to the blue "Jabsco" fitting, and insert and twist the blue "Jabsco" fitting into the seawater receptacle at the bow, near windlass.
- c. Connect hose to installed Jabsco fitting, install nozzle to control flow of water on hose.
- d. Turn ON the SEAWATER WASH DOWN breaker on the DC power panel.
- e. Raise the chain using windlass until you can easily uncleat the anchor bridle/harness. Release the line from one of the bow cleats and bring it over to the other cleat and remove the anchor bridle, and set aside or stow.
- f. Wash the chain and anchor with plenty of sea water as it is retrieved.

Using very short, idle/forward engine bursts, begin to move the boat slowly toward the anchor.

At the bow, have a crewmember depress the up arrow switch to retrieve chain as it slacks. Use the seawater nozzle to continuously wash the chain and anchor before mud and sand reach the deck.

If the chain tightens and starts to bog down the Windlass, signal helm to apply another very short burst of idle/forward power, and wait until the boat "catches up" before continuing.

Don't drag the boat through the water by using the anchor chain and windlass. You will certainly blow the windlass circuit breaker, or damage the windlass.

When the anchor is clear of the water make sure it is clean of mud and seaweed. A boat brush and spray nozzle may be necessary to make this easier.

Be careful for the last couple feet to make sure the anchor is facing the proper direction. Use short bursts on the windlass as the anchor comes up to roller, to allow it to orient without striking the boat.... And then finally all the way up to snug it up in the roller and aboard.

Use short line with chain hook attached to secure the anchor in the bow roller. Release the tension on the chain slightly to take the strain off the Windlass. Re-stow the hose and nozzle in the bow seat locker.

Stern Tie

There is 600' of line located on the upper deck on a spool that can be used for a stern tie off to an object on shore. Please be certain that this spool is coiled and secure before getting underway. Use the tender to take the line ashore and loop around your tie off ring or tree, etc. Bring the end of the line back to True Blue and tie both ends off to a cleat.

If all goes well, you may be able to just undo the end coming from shore at your cleat, then pull the end at the spool and begin to coil the line up on the spool. Otherwise you may have to launch the dinghy to assist in retrieval of the stern line.

Mooring Buoy

You may use one of the bow dock lines to tie to a mooring buoy by using the boat hook to catch the ring on top of the buoy. Carefully maneuver the boat to approach and come along side of a buoy. Then move the boat forward while walking the buoy toward the stern were it will be easier to attach the dock line. Pull the ring up enough to pass the dock line through the ring twice, back the boat until you can easily tie off to the port and starboard bow cleats. A second bowline looped through the buoy ring is advisable as a safety backup.

Tender

When not in use, <u>Secure Tender</u> with sling cables, and raise it well clear of water. Install turnbuckles and straps if wind/wave action is forecast.

A rocking vessel and bouncing dinghy tangling with the davit arms will inflict severe damage to the dinghy, motor, swim step and transom.



LAUNCHING THE TENDER

The Swim platform Davit system is used to launch the tender.

The tender is an APEX 11 foot EuroSport Center Console hard bottom inflatable style boat. It can handle a maximum of four people for a sight-seeing cruise or can be used for a variety of activities for two people including fishing, crabbing, and gathering other meals from the sea. Power is a 20 Hp Tohatsu four stroke motor with electric start and trim.

The outboard is a FOUR STROKE, it uses unleaded, preferably non ethanol gas straight from the fuel tank, which is located in the bow seat locker of the dinghy.

(THERE IS NO NEED TO MIX OIL WITH THE FUEL, IT'S A 4 STROKE).

To launch the tender:

- a) Loosen, and remove, the tender's bow and stern "tie off" ratchet straps. Then tie tender's bow line to the Starboard Stern cleat with plenty of slack.
- b) Verify the winch line is snug, use davit control UP switch on inside of cockpit
- c) Loosen the turnbuckles by loosening only enough to allow the snap ring to be released from the gunwale attach locations. Turnbuckles should remain attached to the davit arms.
- d) Using the winch control DOWN button, lower tender about half way down, and then open transom door. Stand on swim platform to both see and reach the dinghy transom drain plug/hole from the aft side.
- e) Insert the drain plug into the transom drain hole, and secure.
- f) Check that there no lines or straps restricting the tender from being deployed. Once satisfied, proceed to lower the tender in a smooth continuous operation.

g) You may have to "assist the dinghy" by applying slight pressure to help spray rail clear the swim platform during lowering operation.

- h) Deploy the davit until the securing bridle lines are slack.
- i) <u>Before removing lifting bridle Check that no water is entering past drain plug.</u>
- j) It is now safe to step into the tender and release the securing lines. Its easiest to leave the cables attached to the davits so they go back on in the correct position. (two green end cables on front of tender, three yellow on stern end)
- k) The tender should now be floating freely, secured to the boat by its bow line (painter).
- Position the tender close to the swim platform, so any passengers boarding (max 4 total) can step off the platform and comfortably on board.
- m) All parties boarding the tender should be wearing life vests provided on True Blue, prior to boarding, and they should remain on until safely ashore.

Starting the tender

- a) Ensure the gas line is connected, and pump the primer bulb until it is firm.
- b) Make sure the outboard is in neutral, (throttle lever centered/detent), and the motor is tilted/lowered to the full down stop.
- c) Attach "kill switch" lanyard to operators wrist.
- d) Lift the WARM UP lever (see photo on right) up about midway between the down position and the shift lever (ie. 45 degrees).
- e) Turn key to start. The choke is automatic. Recoil pull start rope is also available.
- f) In the event of a weak battery, utilize the recoil handle to pull start.
- g) As the motor warms up and the RPM increases you can slowly lower the WARM UP lever until the motor is idling smoothly.
- h) There is a Garmin Chartplotter with sonar on the tenders console
- i) Radio: Bring the VHF Handheld. Enjoy, please mind your wake.

Retrieving the tender

- a) Position dinghy bow to Starboard, Stern to Port.
- b) Turn off outboard (key to "OFF")
- c) Fold the seat, turn off lights, bilge switches, and cover GPS
- d) Lower davit to allow easy attachment of cables while standing in the dinghy.



- e) Connect cables from davit to dinghy (see photos below).
- f) GREEN taped cables to forward dinghy lifting eyes.
- g) Short YELLOW taped cables go to aft dinghy lifting eyes.
- h) LONG YELLOW taped cable goes to PORT FORWARD lifting eye (which will also have a cable from the forward davit attached to it) to reduce lateral sway.







- i) Raise the davit a few inches and check that cables are secure and nothing is twisting or binding.
- j) Raise dinghy until it is in a position to easily reach and remove the transom drain plug.
- k) Continue raising the davit until it just barely contacts the protecting pads on the transom.
- I) Attach and tighten the turnbuckles which secure the davit to the stern rail.
- m) Attach the ratchet straps (see photo above on pg. 43).

n) Release tension off davit winch with one short tap of the DOWN button.

Note: If the davit is raised to quickly and strikes or binds against the protective pads on transom, the 40 amp protective circuit breaker may trip. Should the control buttons not work, you will need to reset the breaker, located on the forward bulkhead of the tank room under the galley floor. See photo on right.



19. SALON SETTEE CONVERSION TO A BED

Advise San Juan Yachting staff as soon as you are able if you plan on using the salon settee as a bed and they will provide the additional linens you will require.

Conversion Instructions (see second photo below of completed setup):

- a) Please install the protective table cover (see photo on right). It is stored behind the settee seat back at the aft end. Tip the top of the seat back cushion inboard to access the storage area.
- b) Retrieve the very important wooden support leg that you must install under the aft inboard corner of the bed. It is located in the aft drawer under the settee, velcroed to the aft side of the drawer.
- c) Release the locking lever under the settee table and lower the table to its lowest position, and relock the lever. It takes about 40 pounds of pressure to lower. Note: Please ensure the table is at its lowest position, locked in that position, and table cover is on, to avoid scratching the upper table surface as the settee is moved in or out above the lowered salon table.
- d) Unlatch the pin/barrel bolt on the forward end and underside of the

long settee seat and smoothly pull the bed platform toward center of vessel with a very slight



upward/lifting pressure. The backrest part of settee slides down and will fill out the bed to its full width.

e) Install the wood support leg by locating its recessed pocket under the long settee that you just pulled out. The recessed pocket is located at the aft inboard corner and it supports that corner. Also locate the barrel bolt at the forward inboard corner and slide it into the latch hole to support the bed platform and avoid damaging table.

In the area behind the settee cushions you will find additional bed sheets, comforters and pillows.

20. FOLDING CHAIRS AND TABLES

True Blue has the following deck/salon folding chairs and tables on board for your comfort. They are stored in various locations.

- a) Two deck chairs and two chaise lounge chairs and a folding table stored in True Blue bags on the upper deck. See photo on right.
- One comfortable wood and "pleather" folding chair stored in a pillow case located inside the salon floor locker.
- c) White plastic/steel folding card table chair stored in the aft cockpit hanging on bulkhead hooks.



21. KEY ITEMS TO REMEMBER

- 1. Remember to properly seat any dipsticks if you may have removed while checking oil levels.
- 2. Ensure Magnum Power Control panel is in "Charging" mode. (At helm station dash, below window) when shore power is connected. (If left in "Inverter" mode *battery depletion will occur if shore power fails*.
- 3. We strongly recommend disposing of all toilet paper in a trash bag rather than flushing it down the toilet. Just roll or twist up used TP, and toss it in a paper bag next to toilet.
- 4. When raising and lowering the shades, use two hands. Note... there is both a courtesy shade and a privacy shade associated with each salon window.
- 5. PUMPOUTs are easiest at Roche Harbor, and Friday Harbor where they will bring a boat to you in your slip to pump out your tank. Check with Harbor master by phone or VHF

- for this service. Phecal Freak in Roche, and Pumpty Dumpty in Friday. \$5 fee, usually a \$5 tip. You can always do it yourself at the pumpout dock at all marinas for FREE.
- 6. When operating Macerator, first check that the seacock is open, then turn the macerator key 2 clicks clockwise to begin. The associated LED light indicates the pump is running. Check that tank is emptying on WEMA gauge. (Rarely in waters legal to dump).
- 7. Have a great time, relax and enjoy your time aboard. Please don't hesitate to contact San Juan Yachting with any questions, concerns, or requests for guidance if anything seems to be different than you are comfortable with, or may have planned or anticipated.
- 8. FEEL FREE TO CALL, TEXT, OR EMAIL OWNER MARK STEVENS and let me know how much fun you are having on "your" boat.... We love to hear from our guests... Really, we do!
- 9. Mark ... cell/text 228 424 3768 stevens917@bellsouth.net Mrstevens57@gmail.com