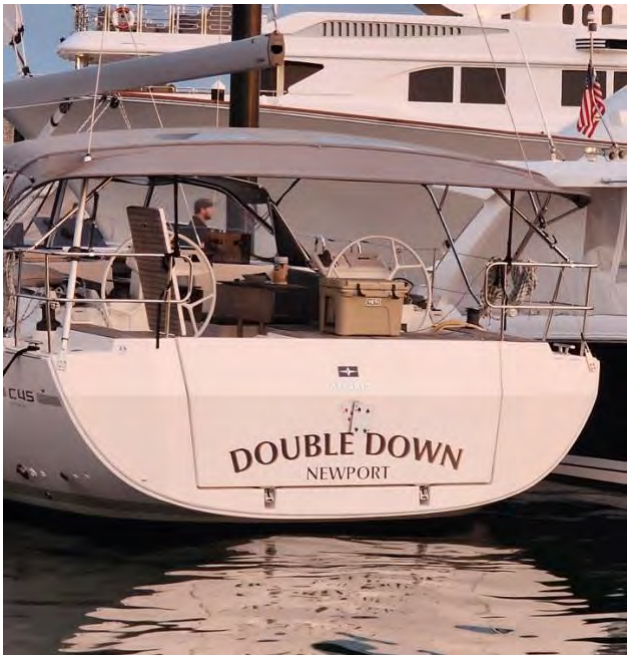
Operator's Manual

2023 Bavaria C45
'Double Down'



Welcome

Welcome to NESC and your Bavaria C45 'Double Down'.

This manual is here to guide you through the ins and outs of your yacht. Please take the time to read this manual and don't hesitate to ask any of our professional, friendly staff if you have any questions.

All yachts in our fleet are maintained to the highest standards so that you may enjoy a trouble-free charter, on a beautiful yacht. Please remember that these yachts are all privately owned and we ask that you care for it like it was your own.

'Double Down' is fitted with a number of adjustable electrical and mechanical systems. Please do not attempt to operate or adjust any of these until the correct method has been demonstrated or explained.

Best wishes for a great vacation,

Swain Sailing

Contact Numbers:
Office: 284 547-6211
Fleet Manager: 401 835-5275 (Technical questions, damage reports and emergencies)

Contents

1. Vessel Specifications

Length	44.7 ft
LOA	47.3 ft
Beam	14.7 ft
Draft	5.9 ft
Mast Ht	70.8 ft
Fuel	66 gals
Water	172 gals
Engine	Yanmar 80 hp
Generator	8K Fischer Panda
Hull Speed	8.7 kts

2. Bavaria 12 Volt Monitor and Breaker Panel

The 12-volt Monitor and Control Panel is located at the Salon Pilot Station, starboard aft facing cabinet. Use the side-to-side icon to illuminate the screen. This will indicate the battery levels (Service, Engine, and Generator) as well as the water tank levels (Forward and Aft).

Below the Monitor are three sets on control icons:

Navigation

First Row
- Anchor Light (Top of Mast)
- Deck Lighting
- Sailing Lights (Port, Starboard and Stern)

Second Row
- Steaming Light (Fwd Mast)
- Below Water Light
- Cockpit Navigation

Third Row
- Auto Pilot
- N1 (Spare)
- N2 (Spare)

Systems

First Row
- Interior Refrigerators
- Exterior Refrigerator
- Fresh Water Pressure Set

Second Row
- Showers Sump Pump
- Gray Water Over Board Pump
- Freezer

Third Row
- Anchor Windlass
- S1 (Spare)
- S2 (Spare)

Interior

First Row
- Salon Lighting (Ceiling)
- Cabin Lighting (Behind Doors)
- Cockpit Lighting (Helm Station)

Second Row
- Music (Fusion / Port Pilot Station) and Music USB (Under 12V Cabinet)
- Television (Not Installed)
- Cooking Range Extractor Fan (Port Salon)

Third Row
- I1 (Spare)
- I2 (Spare)
- I3 (Spare)

3. Main and Bilge Pump Breakers

There are toggle type Main Breakers (4) and Bilge Pump Breakers (3) located inside the starboard outboard aft salon pilot station cabinet. From left to right, these provide power to:

- Engine
- Bow Thruster and Anchor Winch
- Service Batteries
- Generator

These must be on in order to function those systems.

To the right (aft) of those breakers are the Bilge Pump Breakers. From left to right, these control the:

- Bow Bilge Pump
- Salon Bilge Pump
- Aft Bilge Pump

By depressing the top position, this will activate the 'auto' function mode. The middle position is off. By depressing and holding the bottom position this will activate the manual mode.

The Bilge Pumps should normally be left in the Auto (top) position.

4. Bavaria 120 Volt Control Panel

The 120v Control Panel contains the Voltage Indicator display, Selector Switch and Main Breakers. It is located inside the starboard outboard Salon Pilot Station aft cabinet.

The 120v outlets will function while the vessel is plugged into shore power, the Generator is running or the Inverter turned on. 'Double Down' is equipped with an 8kw Fisher Panda Generator and an 2kw power Inverter that enables you to access to 110v outlets while underway (see Section 5 - Inverter for details of the Inverter Function).

The 120v Indicator provides digital display of the vessel's AC voltage. Below it is the Selector Switch. It has four positions dependent on the source of power that is available:

- Shore (upper left)
- Off (vertical)
- Generator (upper right)
- Inverter (lower right)

To the right of the Selector Switch are the 120v Outlet Breakers. From left to right these control the:

- Head Outlets
- Cabin Outlets
- Salon Outlets

The next set of breakers to the right control various 120v equipment. From left to right these control the:

- Water Heater / Boiler
- Main Charger
- Micro Wave
- Spare (1)
- Spare (2)

Important ! The Main Charger Breaker must be on in order to charge the 12v batteries.

5. Inverter

The vessel is equipped with a 2kw power Inverter that allows you to activate 120v Outlet power by converting 12v energy to 120v energy. The Inverter is located under the starboard aft cabin bunk (under outboard mattress).

To activate the 120v energy:

- Depress the black Inverter 'On/Off' button (mounted in the starboard outboard Pilot Station Locker).

In addition !

- The Inverter Breaker (under the starboard aft cabin bunk) must be on.
- The Inverter 'toggle' switch (located on the forward end of the Inverter) must be in the down (On) position.
- The 120v Selector Switch (in the starboard outboard Salon Pilot Station locker) must turned clockwise to the 'Inverter' position.

To avoid additional drain on your batteries while operating electrical appliances, the generator should normally be turned on.

Make sure that the Inverter is turned off at all times when not in use.

6. Generator

DO NOT RUN THE GENERATOR WHEN UNDERWAY

The vessel is fitted with a Fisher Panda 8kw generator which will run the AC 120v outlets, all three air conditioning units and will also charge the batteries in place of the engine.

The Generator is located in the aft engine space. Daily checks should include oil, coolant, and the strainer which can be seen in the photos below.

The Generator Control Panel is located at the salon pilot station, starboard aft facing cabinet.

To start the Generator:

First!

- Ensure the inlet and exhaust sea cock valves are open (located under the generator and mounted above the waterline port aft steering space; access is from the port aft cabin bulkhead hatch).
- Ensure all AC (120v) systems and breakers are off.

Then:

- Turn on the Generator Main Breaker (stbd outboard Pilot Station locker).
- Tap the Start / Stop button (aft Pilot Station panel).
- Standby! The Generator will 'Initialize' for a few seconds., then self-start.
- Confirm sea water is discharging to the port aft side.
- Allow the Generator 5 minutes to warm up with no load.
- Turn the Selector Switches to 'Generator'.
- The 120v Digital Indicator should display 120v or thereabouts.
- AC (120v) energy is now ready for use.

Apply loads to the Generator slowly. Stagger activation of various equipment (i.e. Air Conditioning Units) 5 minutes apart.

To shut down the Generator:

- First ! Ensure all AC (120v) systems and breakers are off
- Turn the Selector Switches to vertical.
- Allow the Generator to run a few minutes to cool down and stabilize after securing AC systems.
- Tap the Start / Stop button.
- Turn off the Generator Main Breaker.

7. Air Conditioning

The Air Conditioning Selector Switch and Breakers panel is located inside the starboard outboard Salon Pilot Station aft cabinet (aft lower panel).

There are three AC Control Units with local control (Fwd Cabin, Salon Pilot Station, Port Aft Cabin.

Prior to activating to Air Conditioning Systems:

- Air Conditioning energy is provided when connected to the Shore OR when running the Generator only; but not both.
- Ensure all hatches and companionway doors are closed when running the air conditioning otherwise the air conditioning units may freeze up.
- Stagger activation of each Control Unit by 5 minutes.

To activate each Air Conditioning System:

First !

- Open the Sea Water inlet seacock (located below the Galley deck hatch).
- Turn on the AC Sea Water Pump Breaker first and shut off last.
- Turn the Selector Switch to the appropriate energy source (Shore or Generator).
- Turn on the desired system Breaker.

From left to right each are labeled:

- Aft Cabin (Stbd)
- Fwd Cabin
- Salon
- AC Pump
- AC Spare 1
- AC Spare 2

Once the 120v Breaker is on, go to each desired Control Unit and press the left button to turn it on. Then set the temperature using the down and up arrows. Do not adjust the temperature below 70 degrees otherwise the compressors may freeze up.

The display reads ambient room temperature except when setting the desired temperature. The fan speed sets itself automatically unless you change it.

Each air conditioner drains into a sump drain box to ensure that condensation is automatically expelled.

8. Engine Start / Stop Procedures

The Engine Control Switch is located at the starboard helm.

To Start the Engine

- Make sure engine is in neutral.
- Press and hold the On / Off button to the left until the cooling fan starts.
- Then press and hold the Start / Stop button until the engine is running.
- Ensure cooling water is flowing out of the exhaust on the port aft side.

To Stop the Engine

- Press and hold the Start / Stop button until the engine stops.
- Allow the cooling fan to run for a few minutes.
- Then press and hold the On / Off button until the cooling fan stops.

Cruising Speed should not exceed 2000 RPMs. Maximum Engine speed should not exceed 2200 RPMs.

The vessel is equipped with a 'Folding' Propellor. To activate while the engine is off, put the throttle into reverse. Ensure to return the throttle to Neutral before starting the engine.

Should you hear an engine alarm during operation, check the tachometer to identify the reason for the alarm (over heating/oil pressure etc.) immediately shut down the engine - CALL NESC.

The yacht runs with diesel fuel. There is a diesel filler cap on the outboard starboard cockpit area clearly marked "DIESEL". DO NOT PUT WATER IN HERE.

9. Daily Engine Checks

- Check the oil level using the yellow dip stick located to the left of the engine. The level should be at least halfway between the empty and full marks. To add oil open the oil filler cap on the top of the engine.
- To the upper front of the engine is the seawater strainer. Check to see that it is clear of debris.
- To the front of the engine is the engine coolant reservoir. The coolant level should be between the maximum and minimum lines.
- Check for any engine leaks or bilge water below engine.
- Check the belt for any damage and correct tension. You should be able to create about ½ inch of deflection by pulling the belt; no more, no less.

KEEP HANDS CLEAR OF ALL MOVING PARTS. ANY PROBLEMS CALL SWAIN.

10. Instruments

The vessel is equipped with a full B&G instrument package to assist with sailing and navigation.

- Zeus3 S Chartplotters
- H5000 Pilot Controller
- Triton 3 Display

Manuals for each are kept in a black B&G bag under the pilot station settee.

The transducer (measuring water depth and water speed) is located in the V-berth starboard floor board locker. Digital readout is assigned to the port helm station Triton display. Water depth is set in feet. Water speed is set in knots.

Note: Water depth is set to measure from where the Transducer is mounted. As an extra precaution, always subtract 6 feet from the digital readout to determine safe water depth under the keel.

11. Batteries

The systems on 'Double Down' are all 12-volt with the exception of the Air conditioning, battery charging and 120v outlets. The batteries will need to be recharged as often as you deplete them. Conserving power will result in less time needed for charging, so turn off systems that are not being used.

Your batteries will charge most efficiently when the engine is running at 1500 rpms. They can also be charged through shore-power or when running the generator. Check the battery levels and make note of them before charging.

Battery voltage monitoring is available at the pilot station circuit board monitor.

They are fully charged at approximately 13.0 volts. Shut the engine or generator off when the battery levels reach approximately 14 volts. Wait approximately 10 minutes before checking the battery levels which will remain in an 'excited state' for a period until they settle an accurate reading.

The batteries should come to rest at approximately 12.8 volts.

Never allow the system to go lower than 12.2 volts (50% discharged).

House / Service Batteries

The vessel has a 3-battery house bank in two compartments located under the salon galley floorboards directly aft of the refrigerator/freezer and outside the head entrance.

Starter Battery

The vessel has a single starter battery located under the starboard aft cabin bunk.

Bow Thruster / Anchor Windlass Batteries

The vessel has a 2-battery pack bow thruster/windlass located under the V-Berth fwd cabin bunk.

Note: There is a high amperage fuse located (near the windlass batteries) that will blow if the windlass gets overloaded.

You can tell if the fuse is blown by the tab that pops up. Compare the fuse you have removed with the one in the chart table. To replace, first turn windlass switch off on the 12v panel, pull the blown fuse straight out and replace with the new one that is located in the chart table.

12. Anchoring and Windlass Operations

The vessel is equipped with a plow type anchor and 150 ft x 9.5mm (3/8”) chain; quite suitable for the intended anchoring areas.

Colored plastic tie-wrap length markings have been attached to the chain as follows:

Yellow		10 fathoms (60 ft)
Orange		15 fathoms (90 ft)
Blue		20 fathoms (120 ft)
Red		24 fathoms (144 ft)

Preparation:

- Ensure the deployment or retrieval plan has been discussed and well understood.
- Ensure the engine is on and approximately 1500 rpms minimum maintained.
- Shorten the painter **to a ‘tight tow’** so it cannot wrap around the propellor.
- Turn the Windlass breaker on at the Pilot Station Breaker Panel (outboard).
- Turn the Windlass relay switch on at the Pilot Station Control Panel (aft).
- Locate the Windlass remote mounted in the Bow Sail Locker. Test the same prior to arriving at the drop location.
- Ensure a non-verbal communication system between the helms-person and Windlass operator is established, used and understood. Mechanical and environmental noise will make verbal communication challenging and certainly unprofessional.

Location:

- Choose a clear area with sufficient swing room and suitable bottom conditions; ideally where you can see the bottom. A white bottom is sand and perfect for anchoring. A brown or green bottom will be grass, rock or coral. Only anchor in sand.
- Pre-determine proper rode scope which must be minimum 5:1 ratio (water depth plus 4.0 ft freeboard) as a ‘rule of thumb’. Severe weather would require additional rode. Use caution. Note that the transducer is set for the depth below the keel (assume 6.0 ft draft)
- Avoid anchoring on a lee shore unless in an emergency and environmental conditions are reasonable.

Deployment Action:

- Approach from down-wind or current, whichever prevails. Observe other vessels set/heading if available.
- Make the anchor ready for deployment (off the stem head).
- With the vessel slightly forward of the intended drop location and moving slowly astern, lower the anchor to the sea floor.
- Use and elements and/or propulsion to continue directly astern as straight as possible.
- Windlass payout and vessel speed should be adjusted and synchronized to maintain a slight forward chain lead without excess windlass tension.
- Deploy 50% of the scope then stop to test whether the anchor has set and there is reasonable holding.
- Once holding is confirmed, continue to payout the remaining required scope.
- Attach the snubbing line(s). Ensure to transfer all tension from the windlass to the snubber before the final holding test using the engine and/or the environment conditions to protect the windlass.
- Set an anchorage watch. Use GPS and visual shore bearings to confirm the vessel is not dragging. It is always advisable to snorkel the anchor and ensure it is 'bedded' correctly and not just lying on its side or hooked on a rock.

Retrieval Action:

- Never use the windlass to pull the vessel to the anchor. The windlass operator should direct the helms-person using hand signals and the engine to move the vessel to the anchor prior to breakout.
- As during the anchor deployment, chain retrieval and vessel speed should be adjusted and synchronized to maintain a slight forward chain lead without windlass tension.
- Avoid stemhead side/cheek tension, 'over running' with an aft chain lead, or excess windlass tension.
- Once over the anchor, the vessel should be stopped and allow gentle vessel movement to slowly 'breakout' the anchor before final retrieval. Be patient in the event the anchor has become deeply embedded.

Note: Always review where windlass switches and breakers are and the manual operation before anchoring in case the windlass trips a breaker etc. Be aware that the chain can sometimes get jammed in the windlass or in the anchor locker. That is the first place to look if the windlass stops moving. If the windlass stops working, let the helms-person know and then look for the reason. Do not keep pressing the buttons on the remote.

Manual Windlass Operation

- Note: In the event the windlass becomes inoperable, contact NESC for assistance.
- To drop the anchor, insert the windlass handle into the center star fitting on the top of the windlass.
- Turn the center fitting counter-clock wise to release the brake. It might take some force.
- 'Feather' the brake tension to lower in a controlled manner. Do not allow excess lowering speed.
- Tighten the brake tension (clockwise) once at the desired scope; acting similarly as noted above.
- Retrieval must be by hand, and/or using the assistance of an aft winch, if necessary, after easing the brake/center star fitting as above.

13. Mooring Pickup and Departure

Preparation:

- Ensure the pickup or departure plan has been discussed and well understood.
- Ensure the plan includes which line to attach (or release) first and last.
- Ensure the helms-person has identified an escape route should the operation not proceed as planned.
- Shorten the dinghy painter to a 'tight tow' so it cannot wrap around the propellor. Secure to the bow or amidships.
- Ensure a non-verbal communication system between the helms-person and the pickup team is established, used and understood.
- Have the boat hook ready for use.
- If using the vessel's lines (in most cases), have them ready and eyes cleated (port and starboard).

Pickup Action:

- Approach the mooring buoy from downwind, keeping the bow into the wind or current, whichever prevails.
- The bowman will direct the helms-person to the mooring using the established non-verbal communication system.
- Once at the mooring, inspect the buoy and pennant for any signs of wear and tear. If you are unsure about a mooring buoy's integrity, choose another.
- Each line should be run through the mooring pennant eye(s) then returned to the same cleat and 'cleated' securely.
- Adjust the lengths to equal line lengths about 45 degs off the bow or higher.
- Remember to center the helm and lock in place to limit yaw.
- Consider attaching an additional 'Safety Line' directly to the mooring ball metal ring atop of the ball or to the shackle just below it. Never attach a line directly to a mooring thimble. Note: there are large shackles available in the starboard cockpit settee for connecting to the mooring if needed.
- Use the dinghy for this operation.
- Do not try to make the lines of equal length, the first line(s) should be taking all the weight of the boat.

Departure Action:

- Review the Preparation steps.
- Release the 'Safety Line' if used first and secure the dinghy forward.
- Slowly motor the vessel forward to create slack, release and recover each line in the intended sequence at the direction of the helms-person.
- Ensure the bowman continues to point toward the mooring ball until the vessel is safely clear and the helms-person has visual location.
- 'Fall back' with the set taking care not to foul the propellor on the pennant.

14. Bilge Pumps

The vessel is equipped with three electric bilge pumps and one manual pump.

There are three toggle Bilge Pump Breakers (3) located inside the starboard outboard aft salon pilot station cabinet controlling power to the pumps.

From left to right, these are labelled:

- Bow Bilge Pump (located under the Sail Locker Deck)
- Salon Bilge Pump (located under the mid Salon Floor Board Locker)
- Aft Bilge Pump (located under the Generator aft, access is from the starboard aft cabin hatch)

By depressing the top position, this will activate the 'Auto' function mode. The middle position is off. By depressing and holding the bottom position this will activate the manual mode.

The Bilge Pumps should normally be left in the Auto (top) position.

15. Fresh Water System

The vessel has a capacity of 172 gallons of fresh water in two separate tanks (Fwd and Aft). Available quantity can be checked at the 12V Pilot Station monitor.

An RV water filter is located in the starboard cockpit settee. Attach this to the dockside hose and allow some flow before taking water on board.

Water tank deck plates are marked 'Water'. The forward deck plate is located on the port bow. The aft deck plate is located on the port stern.

Please ensure the correct fill point is used taking extreme care not to mix with the Diesel.

To use the fresh water system, turn on the fresh water icon (appears like a faucet) on the Pilot Station 12v panel and open a faucet.

Do not allow the water pump to run dry. Plan to switch the tanks or refill before this occurs.

If the water pump begins to 'cycle' on and off or run continuously secure the pump immediately. Check to see if the tank is empty or the system is leaking.

Water Tank Selection

Water Tank selection valves are located under the port aft corner salon settee locker. These are marked Forward and Aft.

Water Heater / Boiler

The Water Heater is located under the port aft cabin bunk. Power to the Water Heater is located on the starboard outboard Pilot Station 120V breaker panel. It may only be used when connected to shore power or when running the generator.

Normally hot water is provided by water lines running through the engine absorbing engine heat.

Note: T**here is a large junction of hot and cold 'Pex' water lines located** at the forward end of the Water Heater. This is a potential source of leakage. In the event water is noticed in the bilges and/or the water **pump continues to 'cycle' on and off, check this area**.

16. Heads

The vessel is equipped with two electric fresh water supplied Heads (V-Berth and Stbd Salon).

NOTHING SHOULD BE PUT DOWN THE HEAD UNLESS IT IS DIGESTED FIRST.

The Heads are powered with the 12v battery system and supplied when the fresh water pump is on.

Operation of the head is by a toggle switch. One direction to add water and one direction to evacuate.

Blocked heads will be cleared at a cost to you of $150.00 sewage fee, **plus a technician's fee of** $75 per hour and the call out fee.

17. Showers

The vessel has three hot and cold, fresh-water showers – one in each head and one on the port transom access. If the engine has been running, the hot water can be very hot – be cautious!

In order to use the showers, the fresh-water pump icon (appears like a faucet) and the shower drain sump pump icon (appears like a shower) must be activated on the 12v panel.

The shower drains are fitted with electric sensors which automatically activate the sump pump.

Transom Shower

The transom shower is located behind the small plastic swing door at the Swim Platform accessway.

Water flow may be adjusted by lifting the control valve vertically up and down, rotationally for temperature.

18. Refrigeration

The vessel is equipped with a number of 12v refrigeration systems:

- 1 x drawer type galley refrigerator (top) and freezer (bottom)
- 1 x top load galley wine cooler
- 1 x drawer type aft cockpit refrigerator
- 1 x deck ice cooler

Power to the refrigeration systems is at the Pilot Station 12v panel. The systems are designed to run 24 hrs a day as long as there is sufficient battery power.

To ensure the system does not fail:

- Batteries must remain charged above 12.2v at all times. If the level goes below 12v the system will malfunction.
- Do not chip at ice or use any other sharp items in the fridge. If something is frozen to the side of the fridge do not force it away. Defrost or poor warm water on it to melt.

Thermostats are located inside each unit. It is a white dial with numbers on it going from 1-7. Setting it at 7 dial is the coldest. Normally 5 is sufficient, otherwise vegetables tend to freeze towards the back.

Note: Outside temperatures can be extreme and prolonged. We cannot guarantee items will remain frozen in the freezer. Augment with ice if needed.

19. Propane / Stove / Grill

The vessel is equipped with two propane lockers and tanks located at the port and starboard transom. The port tank serves the interior stove. The starboard tank serves the Swim Platform grill.

The port locker has an electric Solenoid Valve. It is controlled by the Solenoid Control Panel mounted in the port aft galley (normally with red illumination indicating closed).

An Isolation Valve is located in the locker below the stove (vertical is open / horizontal is closed).

Stove Function:

- Open the galley isolation valve.
- Open the propane tank valve.
- Press the On/Off button at the Solenoid Control Panel functioning the solenoid valve at the propane tank (green illumination).
- Push and hold the desired stove burner knob in, turn 90 degs counter-clockwise, and light the burner (to light oven put the flame in the tube that is inside/center bottom).
- Hold the knob in for 10-12 seconds, then release. Make sure the flame goes all the way around.
- If you cannot get the burner lit try a different one, check the manual valves and check the propane tank itself; which might be empty.

Grill Function:

- Open the propane tank valve.
- Lift the grill lid. Keep the lid open until the grill is no longer needed and the cooled to ambient temperature.
- Push and hold the grill burner knob in, turn 90 degs counter-clockwise, push and hold the electric igniter button for a couple seconds. The grill should self-light.
- Hold the burner knob in for 10-12 seconds, then release. The grill should become warm fairly quickly.
- Use the metal grill cover provided.
- Clean the grease container when finished.

Solenoid:

The 12v solenoid system is USCG approved device. Nevertheless, you should shut off the propane tank valve when no longer needed for a period.

- In the event the Solenoid Alarm goes off follow these steps:
- Close the valve on the propane tank.
- Check the stove and surrounding area for propane smell.
- If detected, open up the bilges and hatches. Point the boat downwind and use the manual bilge pump to pump out the bilges.
- Call NESC immediately.

Under no circumstances should you use the propane system, electrical bilge pumps or any other electrical system if you suspect a gas leak.

20. Dinghy / Outboard

The driver of the dinghy must be over 18, and must at all times be wearing the kill cord. Never operate the dinghy under the influence of alcohol or drugs.

Towing:

- Always tow the dinghy on a short 'tight tow' line while maneuvering and entering or departing port.
- Use a long line with a bridle while sailing or motoring to a new destination.
- Always tow with the engine leg up and secure.
- If conditions are very rough, the outboard needs to be secured in the garage.
- When going ashore for an evening's entertainment allocate a dinghy captain who can operate bring the crew to shore and back safely.

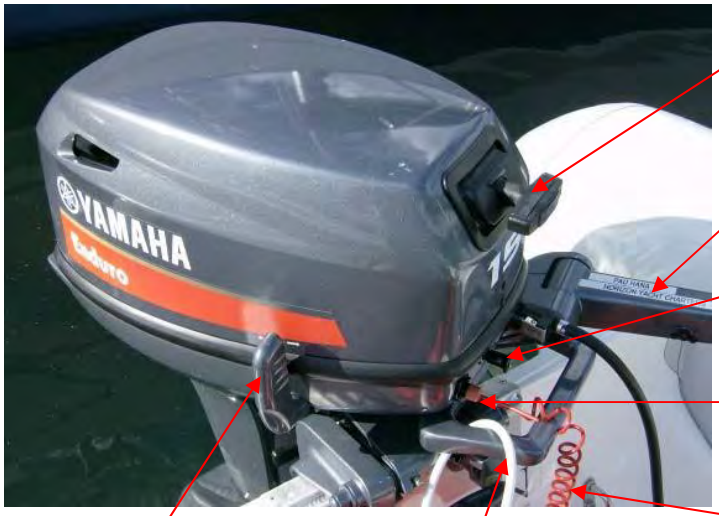
Operating:

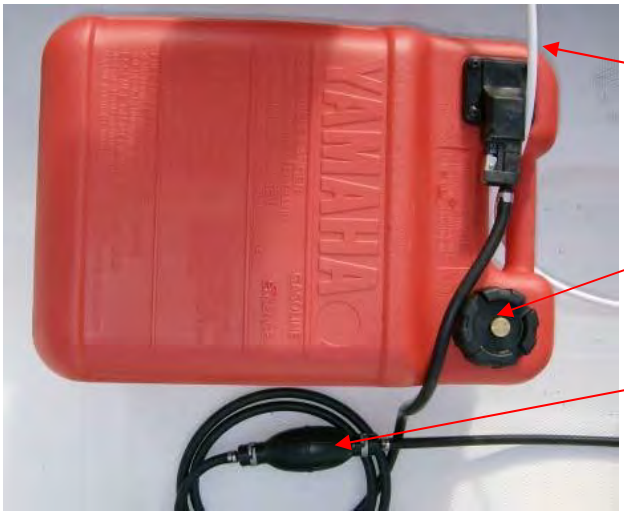
- To start the engine, lower the motor into the water using the lever on the starboard side of the engine.
- The lever position corresponds to the motor position, up and forward for towing and back and down for driving.
- Test the transmission positions. Ensure you are in neutral and the safety cord is in place.
- Ensure the fuel tank vent is open.
- Pull the choke out.
- Pump the fuel bulb until it is firm.
- Set the throttle to the start position.
- Ensure nobody is in line with your pull (flying elbow).
- Pull the start cord.
- If the motor attempts to start but does not, push the choke in half way and try again.
- Once the engine starts, slowly reduce the choke and adjust (reduce) the throttle
- To stop the engine, press the button on top of the kill cord, or pull the kill cord out.

Safety and Security:

- Keep the kill cord with you to prevent anyone from borrowing it. You have been provided a dinghy lock and cable. Use them.
- Do not drag the dinghy onto a beach; anchor it off or put it on a dock with a stern anchor to prevent damage from going under or hitting the dock.
- Do not speed in and around other yachts, speeding fines have been introduced.
- Ensure you have a light for night operation
- Wear life preservers.

Outboard Engine - 15HP Yamaha 4 stroke





21. Stanchion / Swim Platform

The vessel is equipped with an electric retractable Swim Platform transom that along with swimming can be used as access to the garage, aft sink and to grill.

The Platform is lowered and raised by a toggle switch located under the port aft cockpit Swim Platform access bench.

Warning! The Swim Platform access bench is very heavy. If it is lifted, it must be secured to the Stern Pulpit with the line provided or it may cause serious injury or damage if dropped uncontrollably.

Safety and Security:

While under sail, the transom should remain closed and secure. After the vessel is secure at an anchorage or to a mooring, feel free to deploy the Swim Platform for easy access to your dinghy, swimming or snorkeling.

There is a removable swim ladder stowed in the garage.

Ensure that the swim ladder feet are fully engaged in the mounting holes and that the security line is attached to the boat securely.

22. VHF Procedures

The vessel is equipped with 5 VHF radios:

- 1 x B&G V60 Fixed Mount (Salon Pilot Station)
- 1 x Vesper Cortex Fixed Mount, AIS Transceiver (Salon Pilot Station)
- 1 x Vesper Cortex Remote (Starboard Helm / Battery Charger Mount)
- 2 x Standard Horizon Handhelds (Salon stbd fwd outboard Locker)

Using the VHF Radio:

Familiarize yourself with the method for switching channels, and with the squelch and volume controls on your radio. Most radios have a button to instantly select Channel 16 – ensure you understand how this operates or you could end up speaking on Ch. 16 when you think you are on some other channel.

Channel 16 is for hailing and distress only. Do not communicate more than 30 seconds on the channel unless in an emergency.

For normal communications, once the intended station is contacted, it is very important to switch to a working channel.

If there isn't a response to an attempt to communicate with another station, wait two minutes then you can repeat the call. If still no response, wait a further two minutes before trying again.

Channels to use:

06 Ship to Ship – along with Channel 68 and 77 can be used for contact between boats CH/WX 06 for local marine forecast
12 Yacht Charter Companies working channel – assigned for yacht breakdown servicing and emergency only
16 Hailing and Distress
68 Marinas and Yacht Clubs – for lunch/dinner reservations etc.
70 DSC (Digital Selective Calling) – Distress and select DSC stations only
71 TPG/Conanicut Marina (Jamestown), Village Cay Marina (Roadtown)
74 Contact NESC (when in range)

Wx 1 – Wx 8 NOAA Weather

Ensure the handheld radios are powered 'Off' while charging.

VHF Operation / Communication

- Make sure the radio is switched on, volume quite high, power to high when transiting, power to low when in port or within 3 miles of the station you wish to communicate with.
- Squelch up until hissing/static occurs, then back just enough to 'squelch' noise
- Select the channel for calling (Channel 16, unless specified otherwise)
- Ensure the channel is clear.
- Press and hold the PTT button (Press to Transmit) to transmit a message, then release when finished.
- Speak slowly and clearly across the microphone.
- Hail the station name 3 times, followed by the vessel name 3 times.
- Wait for a response.
- For normal communications, switch to a working / non-distress channel.
- Keep the conversation brief. Know what you need to say ahead of time.
- End each transmission with the term 'Over'.
- End the conversation with the term 'Out'.

Life Threatening Emergency

Transmitted on Ch 16 or Ch 70 DSC using high power (25 watts)

See the 'Professional Mariners Tallybook' Section 1 for a complete list of 'VHF Radio Channels', 'Urgent Transmissions', 'Emergency Contacts' and 'Select Services'.

Distress: "MAYDAY, MAYDAY, MAYDAY." This is an International Distress signal and an imperative call for assistance. It is used only when a life or vessel is considered to be in grave and imminent danger.

Mayday Relay: used to summon help for a vessel which is either too far offshore to contact the coastguard directly, without radio capabilities or whose radio has been damaged or destroyed.

Urgency: "PAN-PAN, PAN-PAN, PAN-PAN" This is the International Urgency Signal and is used when a vessel or person is in some jeopardy but is not considered to be in grave and imminent danger.

Medical emergency: "PAN-PAN MEDICO, PAN-PAN MEDICO, PAN-PAN MEDICO" (Pronounced med-ick-oh). This is an International Urgency Signal that should be used when medical advice is needed.

Safety: "SECURITE, SECURITE, SECURITE" (Pronounced Say-cure-it-tay). This is an International Safety Signal and is a message about some aspect of navigational safety or a weather warning.

'Mayday' or 'Pan Pan' x 3 (as appropriate) followed by the Distress Message which must include:

- Vessel Name, Call Sign, MMSI #
- Position as accurately as possible
- Nature of the Distress
- Number of people on board and condition
- Assistance required and any other relevant information
- Vessel Name again followed by 'Over'
- Repeat after 1 minute if no response

Non-life Threatening Incident

In the event that your vessel is involved in a non-life threatening incident with an object or with another vessel, it is important that you contact the NESC Office immediately at 401 619-1697.

Please remember to get as much information as possible about your location, the other vessel's description and what damage has been done to your vessel so that we can best assist you.

Failure to report any accidents or incidents in a timely manner may result in nullification of your hull damage insurance.

23. Safety and Security / Emergency Procedures

There are numerous Safety and Security features and equipment onboard 'Double Down'. Please take the time to become familiar with each.

In the unlikely event that you are involved in an emergency stay calm and follow these steps. You will also have an Emergency Procedure card next to your VHF.

See Section 22 – VHF Procedures (above) for details on Emergency VHF Communication.

See also **the 'Professional Mariners Tallybook' Section 1** Communications and Section 10 for specific Emergency Response checklists.

Safety Equipment Locker

Safety equipment is located under the aft inboard Salon Settee. Items that can be found include (but not limited to):

- Wood plugs
- Orange smoke flares
- Red hand held flares
- Red parachute flares
- Emergency steering drogue and bridle
- Duct tape

Other Emergency and Non-Emergency Equipment:

- 2 x SOS Flightlights (middle starboard outboard Salon Locker)
- 1 x Emergency Tiller (stbd Cockpit Settee)
- Serrated knife (Pilot Station Chart Table)
- Toolboxes (forward Salon Settee and starboard Salon Floorboard Locker)
- Hacksaw, blades, bolt cutter (forward Salon Settee)
- Engine Spares (port outboard Salon Settee)
- Electrical Equipment (port forward Salon Settee)

Life Saving Equipment

Life Jackets

The vessel has 8 Adult and 4 Child 'Type I' Offshore USCG approved Life Jackets onboard. These have been dispersed to the port cockpit settee locker and each cabin berth lockers.

Dan Buoy / Life Ring / Life Sling

The vessel has 1 Dan Buoy (located in the starboard cockpit settee locker), 1 Life Ring and 1 Life Sling on board (both mounted on the Life Lines).

MOB Response and Recovery

Actions:

- Yell – "Man Overboard", at least 2 crew don PFDs
- Throw – Lifering / Dan Buoy / Orange Smoke
- Point – To the person at all times
- Set – Vessel position / DSC Distress Button
- Call – Rescue Authorities, "Mayday"
- Execute – The recovery plan

Normally MOB recovery would occur via the Swim Platform (See Section 24 for details on how to operate it).

There are a number of spare lines for MOB recovery in the starboard cockpit settee locker. Also the dinghy may be used if necessary.

First Aid

First Aid kits are located in the V-Berth Shower Locker in the event a minor 'First Aid' injury occurs.

In the event of any injury requiring more than 'First Aid', contact local medical professional assistance immediately. Also contact NESC as soon as possible thereafter.

Fire Safety

There are 3 Fire Extinguishers onboard; one in each Aft Cabin tall lockers and one below the Galley sink. There is one Fire Blanket, located in the Salon middle starboard outboard locker.

Prevention:

- Prevention is the best solution to fire safety.
- Ensure the bilges are clean, unnecessary flammable debris removed or properly stored, and propane gas secured when not in use.
- Never leave the stove or oven burning while unattended.
- Never smoke onboard. Smoking is not allowed anywhere on the vessel.
- Safely store any flammable liquids in the garage and in a container.
- Keep stove strikers away from children.

Fire Response:

- Yell "Fire, Fire Fire!"
- Get everyone on deck.
- Prepare to abandon immediately. You can always cancel. Initiate emergency communication ashore.
- Secure electrical power, fuel and gas.
- Gather ALL extinguishers and fight the fire with urgency.
- Remove the extinguisher pin retainer.
- Point the extinguisher at the base of the fire and press the trigger.
- Sweep side to side.
- Generously cover the base of the fire and surrounding area to ensure the fire is under control and cannot spread. Continue discharging extinguisher until the fire is out (Do not become trapped if the fire cannot be extinguished).
- Set a fire watch.

Engine compartment fire:

In the event of a fire in the engine compartment position the mouth of the extinguisher to the fire hole in the Companion Way stairs. Trigger the entire contents into the space. Do not open the engine compartment even if you think the fire has been extinguished as this can cause re-ignition with fresh oxygen.

Galley fire:

- Locate the Fire Blanket.
- Ensure hands and limbs are protected (wrapped under the blanket).
- Carefully lay the blanket over the fire away from you, and keeping yourself protected at all times from the flames.
- Leave the blanket in pace until all heat has gone or it could re-ignite.

Security

Other than dinghy security incidents, onboard vessel security incidents are almost unheard of in the charter areas. In the unlikely event there is a security incident contact the local Authorities and NESC.

See Section 1 - Emergency Contact List in the Professional Mariners Tallybook.

Dinghy security incidents have occurred. A lock and cable has been provided for security of the dinghy and motor. Please use it when going ashore.

'Double Down' is equipped with a lockable companionway and hatches. The companionway key is normally kept in the Pilot Station Chart Table.