

Operation Manual

Kalm Jeanneau Sun Odyssey 490 2020



Operation Manual

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INTERIOR


































General Information's

APPENDIXE: MEANING OF THE LABELS

					
Engine group	Plumbing group	Colour - WC group	General electrical equipment	Comfort group	Drainage group



Meaning of the symbols

 Motor	 Shower	 Electric pump
 Port engine	 Washbasin	 Manual pump
 Starboard engine	 Icemaker	 Toilet
 Propeller shaft	 Deck wash	 Washer
 Filter	 Sea water tap	 Dryer
 Hull drainage	 Waste water tank	 Dishwasher
 Sea water intake	 Fresh water tank	 Water maker
 Shore power socket	 Fuel tank	 Fuel filter
 Service	 Holding tank	 Inverter
 Generator	 Battery stock	 Heating
 Breaker	 Thruster	 Air conditioning

Control Panel

Yacht control panels are electronic devices for the remote control of one or more pieces of equipment including windlasses, navigation lights etc.

These devices can control the windlass, thrusters, navigation lights, alarms, video surveillance systems, windshield wipers, engines, fuel, water and oil levels, generators and other equipment.

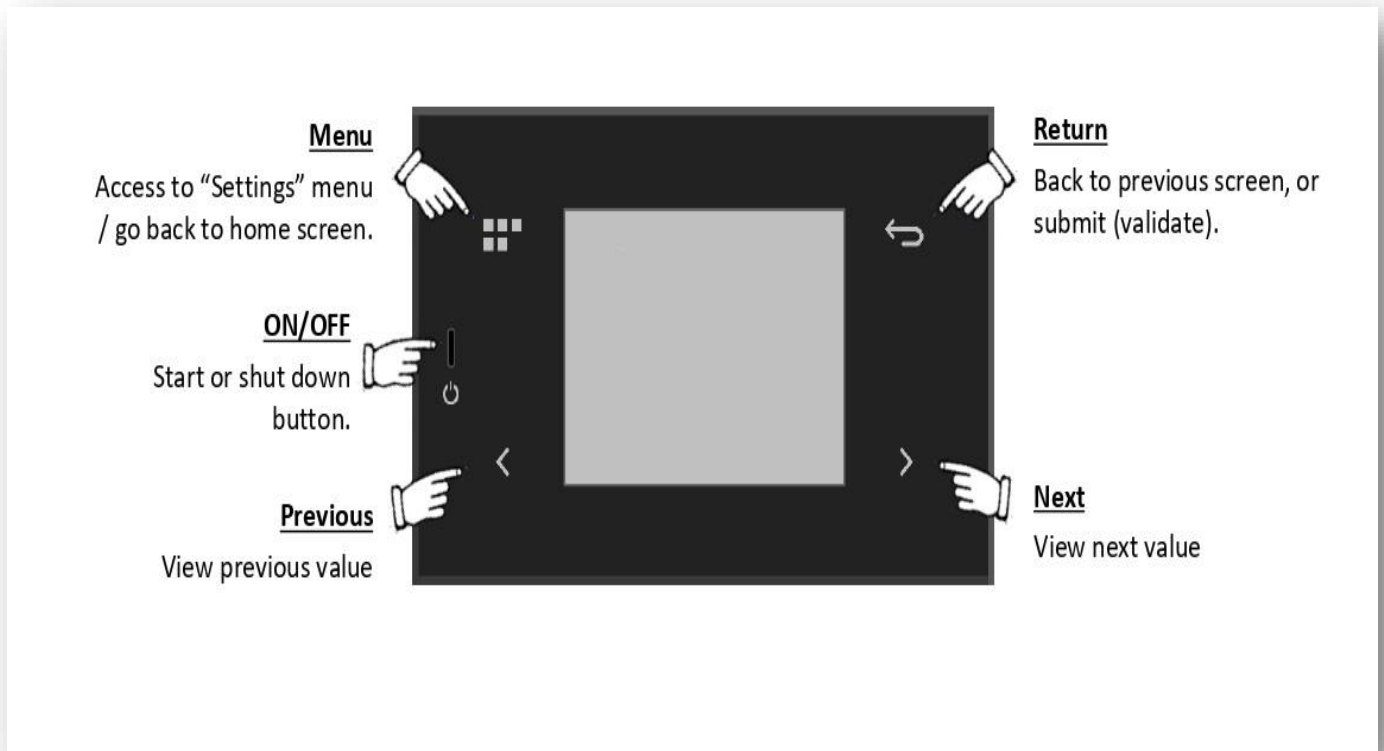


To operate this panel you need to remember that, when the button is RED that means it's ON and when the button is WHITE it's OFF. Do not forget to close the buttons after use.

- **ELECTRONICS:** When you open this button you turn on the autopilot, plotter, and wind plotter.
- **NAVIGATION LIGHTS:** When you open this button you turn on the outside lights (white-red-green).
- **STEAMING LIGHT:** When you open this button you turn on the steam light. For example when you use together the sails and engine you must open it. If you press the steaming light button you will notice that are open and the navigation lights.
- **DECK FLOODLIGHT:** When you open this button you turn on the deck light.
- **ANCHOR LIGHT:** When you open this button you turn on the anchor light.
- **LIGHTING:** When you open this button you turn on the cabins and saloon lights.
- **BILGE PUMP:** When you open this button you turn on the bilge pump, if you press it one (1) time it works manual and if you press it two (2) times it works automatically.
- **AUX:** When you open this button you can use the USB sockets.
- **FRESH WATER PUMP:** When you open this button you turn on the fresh water.
- **FRIDGE UNIT:** When you open this button you turn on the fridge.

Batteries / Water/ Diesel Viewer

A **battery / Water / Diesel indicator** is a device which gives information about a battery, water level, or diesel level.

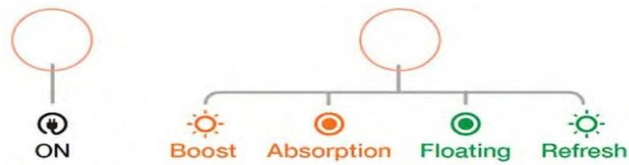


The control panel viewer is used to control the electrical functions in the living area of your motor home and to display information about engine and leisure battery charge levels, and fresh water/diesel tank levels.

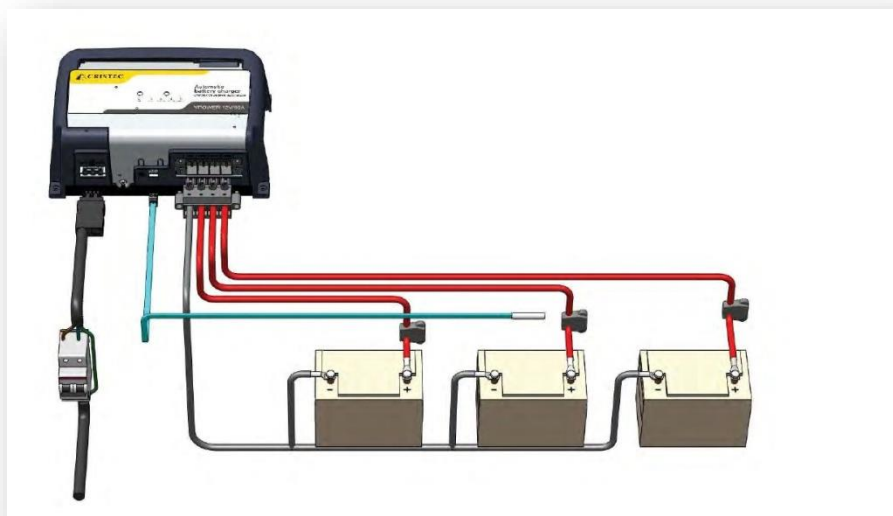
Battery Charger Location

A battery charger or recharger is a device that stores energy in a battery by running an electric current through it. The Cristec Charger supplies a maximum capacity wherever you are via auto-ranging.

You will find it at the stern port cabin, inside the middle cupboard.



INDICATORS	STATE	MEANING
Green LED 1 "ON"	On	Charger is ON
	Off	No or poor quality AC current Input fuse is blown Internal charger malfunction
Orange LED 2 "BOOST/ABSORPTION"	Flashing (1 sec. ON, 1 sec. OFF)	Charger in BOOST phase (switch E = '1')
	On fixed	Charger in ABSORPTION phase (switch E = '1')
Green LED 2 "FLOATING/REFRESH"	On fixed	Charger in FLOATING phase
	Flashing (1 sec. ON, 1 sec. OFF)	Charger in REFRESH phase (switch F = '1')
	Off	Internal charger malfunction or output fuse blown




Interior / Exterior Radio

Radio works by transmitting and receiving electromagnetic waves. The radio signal is an electronic current moving back and forth very quickly. A transmitter radiates this field outward via an antenna; a receiver then picks up the field and translates it to the sounds heard through the radio.

Stereo Controls



Dial 	<ul style="list-style-type: none"> • Turn to adjust the volume. • Press to switch between zones. • Hold for at least one second to adjust the subwoofer levels. • Turn to move through the menus or adjust a setting. • Press to select the highlighted option.
	<ul style="list-style-type: none"> • Select to open a menu. • Select to return to the previous screen or menu.
	Select to change the source (<i>Selecting a Source, page 1</i>).
	<ul style="list-style-type: none"> • Select to skip to the previous track, when using an applicable source. • AM or FM source: <ul style="list-style-type: none"> - Select to tune to the previous station. - Hold for faster tuning (manual mode only). • AUX source: Select to decrease the gain for the connected source. • DAB source: Select to return to the previous DAB station in the ensemble. When you reach the beginning of the current ensemble, the stereo automatically changes to the last available station in the previous ensemble.
	<ul style="list-style-type: none"> • Select to skip to the next track, when using an applicable source. • AM or FM source: <ul style="list-style-type: none"> - Select to tune to the next station. - Hold for faster tuning (manual mode only). • AUX source: Select to increase the gain for the connected source. • DAB source: Select to advance to the next DAB station in the ensemble. When you reach the end of the current ensemble, the stereo automatically changes to the first available station in the next ensemble.
	<ul style="list-style-type: none"> • Select to turn on the stereo. • When the stereo is on, select to mute the stereo. • Hold to turn off the stereo.
	<ul style="list-style-type: none"> • Select to pause or resume. • AM or FM source: <ul style="list-style-type: none"> - Select to cycle through the tuning modes (auto or manual) and presets (when two or more presets are saved). - Hold to save this station as a preset. • DAB source: Select to scan for DAB stations.

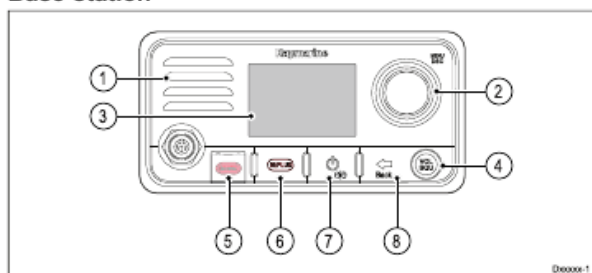
VHF

A very high frequency (VHF) transceiver is a device that is composed of a transmitter and receiver that operates between 30 megahertz (MHz) to 300 megahertz (MHz). The wavelength of a VHF transceiver varies between 39.37 inches (1 m) to 393.70 inches (10 m), mainly depending on the frequency used.

Controls and interface

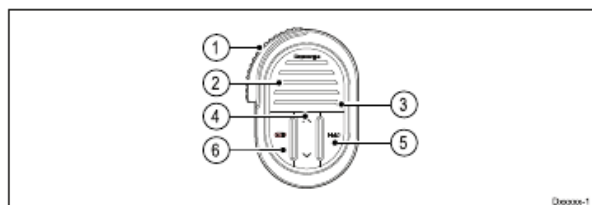
The controls and interface available are as follows:

Base station



1. **Built-in speaker**
2. **Rotary knob / OK push button** — Press knob in to access menu / DSC functions and to confirm selections. Turn rotary clockwise or anti-clockwise to move up and down through menu items or to change channel from the Homescreen.
3. **LCD**
4. **VOL/SQ** — Turn knob to adjust volume or squelch up and down. Press center button to switch between volume and squelch control.
5. **DISTRESS** — Push up the spring loaded cover and press this button to make a DSC distress call.
6. **16 / PLUS** — When powered on press to switch between priority channels.
7. **Power** — Press to power the unit on. Press and hold for 3 seconds to power the unit off. Momentary press to access the shortcut list.
8. **Back** — Move back through menu options.

Fistmic



1. **PTT (Push to Talk)** — Press and hold to send a voice message. Release to return to receive mode.

Note: The maximum transmit time is limited to 5 minutes to prevent un-intentional transmissions from occupying the VHF channel.

2. **Speaker**
3. **Microphone location**
4. **Channel Up and Down** — Changes the channel up or down.
5. **HI/LO** — Press to switch between High (25 W) and low (1 W) transmit power.
6. **16 / PLUS** — When powered on press to switch between priority channels.

GMDSS



The Dual Energy Power Supplies and Battery Chargers are designed and developed for charging and maintenance of voltage on lead-acid batteries and provide consistent and uninterrupted power supply (main or backup). You will find it behind of the control panel.

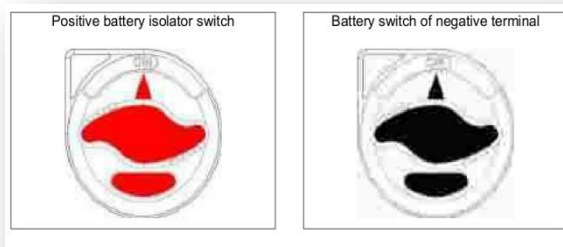
General Switches

This battery master switch functions as a battery isolator and a theft deterrent device. The battery master switch is commonly used in vehicle applications, such as marine, transportation and automotive. The switch has an impact-resistant housing and has a detachable key for added security.

Service / Engine



You will find the service and engine battery switches at the stern port cabin.



Thruster



The switch that turns off the Thruster battery power will be found at bow deck locker. You will find it at the bow cabin under the mattresses.

Thermal Fuses

Fuses are mechanisms that are inserted into an electrical circuit in order to interrupt the supply of electricity throughout the electrical installation or in individual circuits of the installation, when large current values occur due to short circuit or overload to protect the wiring lines. Are always installed after the circuit breakers and are never installed in ground conductors. The use of these fuses is as follows:

12V Control Panel / Bilge Pump / Vhf / Solar Panels



The most of fuses you will find them back from the control panel.

Anchor fuse

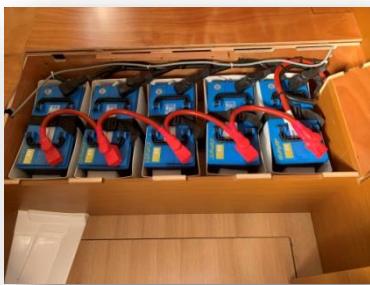


At the image indicates fuse of the Windlass. In case the fuse has fallen, you will see the yellow plastic in zero (0) position, almost vertically, with the use of your hand (fingers) you press the yellow plastic down so that it reaches a horizontal position one (1) and clicks. Then does an operation test to find out if everything is working properly. You will find it at the stern port cabin.

Batteries Location

A battery is a device that stores chemical energy and converts it to electrical energy. The chemical reactions in a battery involve the flow of electrons from one material (electrode) to another, through an external circuit. The flow of electrons provides an electric current that can be used to do work.

Service / Engine



You will find the service and engine batteries at the stern cabins.

Smart Battery Protect



The Smart Battery Protect disconnects the battery from non-essential loads before it is completely discharged (which would damage the service batteries) or before it has insufficient power left to crank the service batteries. When using Bluetooth to program the Smart Battery Protect any required engage/disengage levels can be set. <https://www.victronenergy.com/panel-systems-remote-monitoring/victronconnect>

Thruster



You will find the thruster battery at bow stb cabin

Water System

Freshwater pumps deliver water to fixtures onboard a boat. Pressurized water systems make life aboard more comfortable by providing water "on tap" for dishwashing, showers and other applications.

Location of fresh water pump / Location of the water valves



You will find the fresh water pump and the water valves in the left corner of leaving room you need to open the cupboard.

Location bilge pump



A bilge pump is a water pump used to remove bilge water.

You will find it on the floor and under the kitchen table. On this yacht the bilge pump is automatic. So keep the corresponding button always on.

Operation of toilet pumps



An electric marine toilet eliminates the need to manually pump, pump, pump to clear the bowl.

NOTE: Do not put in: Sanitary Towels, Wet Strength Tissues, Cotton Wool, Cigarettes, Matches, Chewing Gum, or any solid objects, Petrol, Diesel, Oil, Solvents of any kind or water more than hand hot.

Operation of shower pumps



On this boat the shower pumps are automatics.

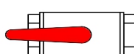
Operation /Location of Waste tanks/valves

Seacocks

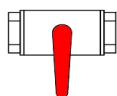
Seacocks are of the ¼-turn type:

- OPEN position: handle in the direction of the seacock body,
- CLOSED position: handle perpendicular to the seacock body.

Vanne ouverte



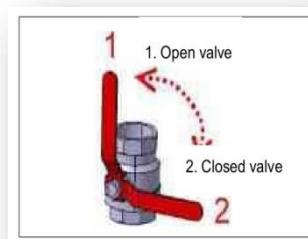
Vanne fermée



A stop-and-waste valve is a fitting that attaches to your irrigation sprinkler lines, and it prevents waste from freezing.

When closed, they go to waste tank until you open the valve.

As all valves, when it's vertical to the tube connected to it, it is closed and the excrement ends at the waste tanks. When it is parallel to the tube then it is open and the waste tank contents are emptied to the sea. You will find three waste valves. The 1st and the 2nd are at the bow toilets under the bath sink. You need to open the cap board. The 3rd is at the stern toilet under the bath sink.



Oven/Stove



In order to turn on the oven or a hob, press the respective switch inwards and turn clockwise. Without letting go light up the hob with a lighter and hold for 5 seconds, then release. If the flame does not hold try holding in the switch for longer. Also make sure no liquids are spilled on the hobs.

Location of gas valves inside



In case you need to insulate the gas inlet in the kitchen under the sink, opening the cupboard there is the gas outlet valve in the kitchen. When the valve is parallel to the pipe it is open and when it is perpendicular to the pipe it is closed.

Location of Gas bottles

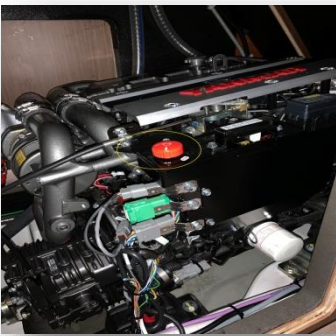


For more safety if you want to close all system of gas you need to go outside at the port side and to open the locker. There, you will find the bottles gas. If you turn the valve clockwise you open the gas system and when you turn the valve from the other direction you close the gas system.

Engine

An engine is some machine that **converts energy from a fuel to some mechanical energy**, creating motion in the process.

Emergency stop



IN CASE OF EMERGENCY AND ONLY IN THIS CASE!!!

If you need to **turn off** the engine, you will be directed to the rear right cabin to have a picture of the engine as in the photo.

If you want to turn it off, you will press the red button down and rotate it to the left.

Engine oil check



If you want to check your oil, you will be directed to the rear right cabin to have a picture of the engine oil as in the photo.

EXTERIOR

Engine Control Panel

An engine control unit (ECU), also commonly called an engine control module (ECM), is a type of electronic control unit that controls a series of actuators on an internal combustion engine to ensure optimal engine performance.



How to turn on your engine?

You press continuously the power, and then you press the start continuously until the engine starts.

How turn off your engine?

You press continuously the stop, and then you press continuously the power.

Thruster Controller

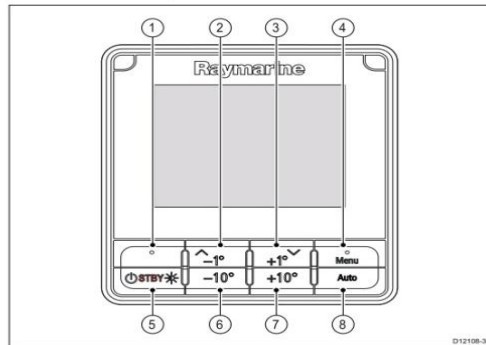
Thrusters are designed with propellers facing in a sideways direction so when they are turned on, **they push the bow or stern of a boat sideways through the water**, in either direction. If only one thruster is used, for example in the bow, then the boat will also turn and change orientation.

1. Turn main power switch for the bow thruster on. (Always turn off the main power switch when not onboard.)



2. Please take some time to exercise thruster usage in open water to avoid damages to your boat.
3. Turn the control panel on by pushing both buttons on the original Side-Power panel simultaneously. If another type of control is installed, engage the On/Off switch for the bow thruster.
4. Turn the bow in the desired direction by pushing the red button for port movement or the green button for starboard movement. If you have a joystick control, move it in the direction you wish the bow to move. Other controls like footswitches or toggle-switches on the throttle can be used. These are normally logically installed, so by engaging the port control, the bow goes port etc. In case of any doubts, try in open waters first.
5. Depending on the sideways speed of the bow, you must disengage the control device shortly before the bow is in the desired direction, as the boat will continue to move after stopping the bow thruster.

Autopilot Operation



Item	Description
1.	LEFT SOFT BUTTON Cancel, Back, mode selection.
2.	UP BUTTON / -1 Up navigation, Adjust Up, Decrease angle.
3.	DOWN BUTTON / +1 Down navigation, Adjust Down, Increase angle.
4.	RIGHT SOFT BUTTON Menu, Select, OK, Save.
5.	STANDBY BUTTON Disengage pilot, Manual control, Power, Brightness.
6.	-10 BUTTON Decrease angle.
7.	+10 BUTTON Increase angle.
8.	AUTO BUTTON Engage Auto pilot.

Item	Description
1.	LEFT SOFT BUTTON Cancel, Back, mode selection.
2.	STANDBY BUTTON Disengage pilot, Manual control, Power, Brightness.
3.	ROTARY CLOCKWISE Down navigation in list, Adjust Up, Increase angle (locked heading), adjust numerical values, power steer.
4.	ROTARY ANTI-CLOCKWISE Up navigation in list, Adjust Down, Decrease angle (locked heading), adjust numerical values, power steer.
5.	RIGHT SOFT BUTTON Menu, Select, OK, Save.
6.	AUTO BUTTON Engage Auto pilot.
7.	ROTARY END PUSH BUTTON Menu, Select, OK, Save.

The pilot controller supports the following combination button presses:

Combination button press

Buttons	Action
STANDBY and AUTO.	Puts pilot in to Wind Vane mode.
-1 and -10 or +1 and +10.	AutoTack (in wind vane mode), AutoTurn

Operation Platform



The platform of this yacht is manual. Check the photo. Start from left to right:

- Table: Spare button.
- Ambiance: You open the lights around the cockpit area.
- Cockpit: You open the cockpit lights.
- Platform: Spare button. It is manual.

Outboard

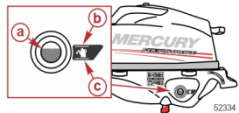
How to start the outboard:

- Make sure there is plenty of gasoline/petrol in the outboard fuel tanks.
- Open the fuel valve.
- Open the air from the top.
- Set the outboard to neutral.
- Place your ignition key.
- Set the throttle to 2/3 and
- Pull the rope until the outboard turns.

NOTICE

Without sufficient cooling water, the engine, the water pump, and other components will overheat and suffer damage. Provide a sufficient supply of water to the water inlets during operation.


1. Check the engine oil level. Place the outboard in a level position and check that the engine oil level is within the operating range.



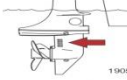
a - Oil level inspection window
b - Upper oil level
c - Lower oil level

OPERATION


2. Shift the outboard to the neutral (N) position.




3. Make sure the cooling water intake is submerged.



4. Open the manual vent screw on the fuel tank.



5. Move the fuel shut off valve to the open (ON) position.




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OPERATION



6. Attach the lanyard to the stop switch. Refer to **General Information - Lanyard Stop Switch**.

NOTE: The engine will not start unless the lanyard is engaged with the stop switch.



a - Stop switch
b - Lanyard


7. If the engine is cold, set the throttle grip to the "START" position. If the engine is warm, set the throttle grip to the "RE-START" position.

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OPERATION

8. If the engine is cold, completely pull out the choke. Push in the choke halfway as the engine is warming up. Push in completely after the engine is warmed up.




NOTE: Starting flooded engine - Push in the choke knob. Wait 30 seconds, then continue to crank the engine for starting.

9. Pull the starter rope slowly until you feel the starter engage, then pull rapidly to crank the engine. Allow the rope to return slowly. Repeat until the engine starts.



10. Check for a steady stream of water flowing out of the water pump indicator hole.

IMPORTANT: If no water is coming out of the water pump indicator hole, stop the engine and check cooling water intake for obstruction. No obstruction may indicate a water pump failure, or blockage in the cooling system. These conditions will cause the engine to overheat. Have the outboard checked by a dealer. Operating the engine while overheated may cause serious engine damage.




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OPERATION


Gear Shifting

The outboard has two gear shift positions to provide operation: Forward (F), and Neutral (N). Reduce throttle speed to idle speed. Always shift the outboard into gear with a quick motion.



Reversing Boat

1. Move the throttle grip to the slow position.
2. To reverse direction, turn the outboard 180°. The tiller handle can be swung back for ease of operation.
3. Return the throttle grip to the slow position when turning the outboard back to forward direction.



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Entries Water

This yacht has two water tanks.



When you want to refill the 1st water tank you need to go at the stern starboard side on the deck. There you will find the water cap. It writes up water.

When you want to refill the 2nd water tank you need to go at the bow middle starboard side on the deck. There you will find the water cap. It writes up water.

Entries Diesel



This yacht has one diesel tank.

When you want to refill it you need to go at the stern port side. There you will find the diesel cap. It writes up diesel.

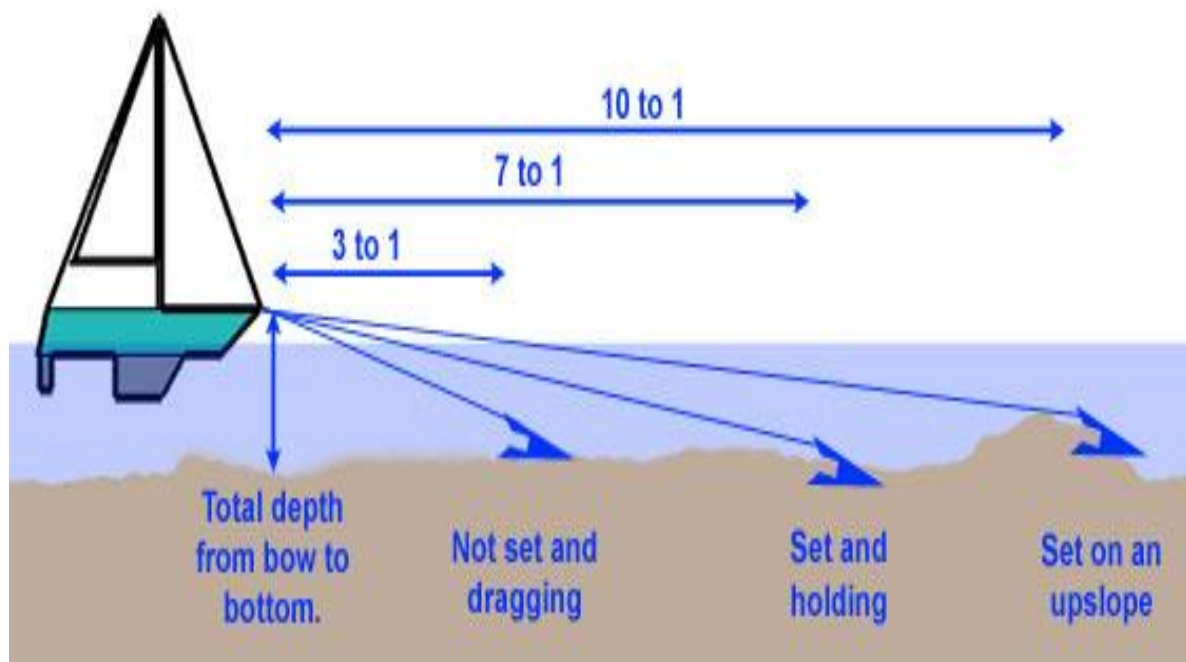
Chain marking

The boat has approximately 80 meters chain total. Every ten (10m) meters the chain marked with colors as follows:

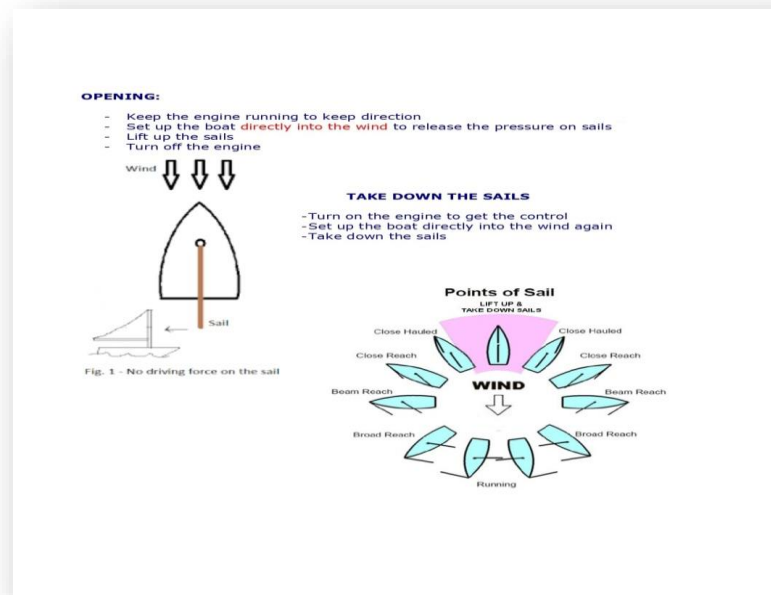
- 10 meters **White**.
- 20 meters **Blue**.
- 30 meters **Green**.
- 40 meters **Yellow**.
- 50 meters **Red**.
- The last 10 meters are painted with full Red and secured with Rope.

ATTENTION

1. When you throw the anchor you need to be careful the bow side to do not damage it.
2. When retrieving the anchor and when the blue mark appears, the anchor will be just below 15m under the surface. Proceed slowly at this point to avoid damaging at the bow and at the bowsprit.
3. The engine must be running when you use the windlass motor.



Sails



Main Sail

On this yacht you have full batten main sail with 3 reefs, which means when you want to open the main sail you must release all reefs and pick up the main halyard. This procedure must be simultaneously. If you want to close the main sail you must take back one by one all the reefs and to release the main halyard. This procedure must be simultaneously

Genoa



On this yacht you have genoa sheets, which means when you want to open the genoa you must release the genoa sheet and to take out the genoa furling. This procedure must be simultaneously. If you want to close the genoa sail you must release the furling rope and to pull the genoa sheet. This procedure must be simultaneously.