



**Information & operations manual for
Jeanneau 42DS 2009
'Sosumi'**

Welcome



Welcome to Horizon Yacht Charters and your Jeanneau 42DS "Sosumi". We hope you had a pleasant journey and are looking forward to a fantastic holiday and some of the finest sailing in the world here.

This manual is here to guide you through the details 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 of the yachts in the Horizon fleet are maintained to the highest standards so that you may enjoy a trouble free vacation, 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.

Best wishes for a great vacation,

Sylvia and Andrew
Directors

Office Hours:

Monday – Sunday 08:30 – 17:30

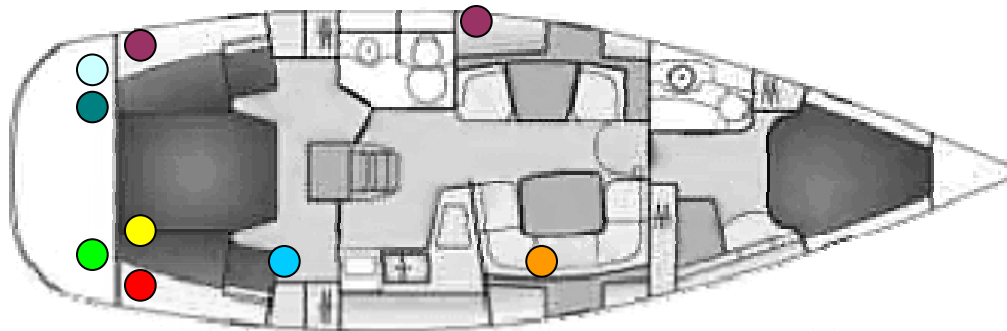
Telephone: (284) 494 8787

Duty Manager: (284) 542 0305 (Emergency Only)

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1. Yacht specifications



Length	42' 5"
Beam	13' 6"
Draft	7'
Fuel	34 gallons
Water	94 gallons
Engine	54 hp Volvo

Location of:

- Fresh water refills (1 port aft quarter, 1 amidships port side)
- Diesel refill (starboard aft quarter)
- Manual bilge pump (at starboard helm)
- Propane tank (beneath starboard helm seat)
- Windlass breaker and battery breakers (aft cabin below berth on starboard side)
- 110 volt breakers (aft starboard cockpit locker)
- Water tanks change over valve (behind starboard mid seating)
- Generator (inside cockpit transom, port side)

2. 12v & 110v Panel



110V panel

12V panel

12 volt panel

First column:
Cabin lights
12 volt outlet

Second column:
Fridge
Cell amp (for owner use only)
Fresh water pump
Bilge pump (note that this should always be switched to 'auto')

Third column:
Navigation instruments
Deck floodlight
Anchor light
Steaming/navigation lights (toggle switch)

The circular button to the right of the 12v panel allows you to check the levels of your water tanks, fuel tank and your battery levels

110 volt systems:

The switches on the 110v panel are as follows:

Water heater (can only be used when operating the generator. Make sure this is OFF at all other times)

Battery charger (must be on when charging the batteries via shore power or the generator)

Ac outlets (must be on to use the 110v outlets when using the generator, inverter or plugged in to shore power)

Breakers:

Breakers for the windlass and electric winch are located in the aft cabin beneath the bed.



electric winch breaker



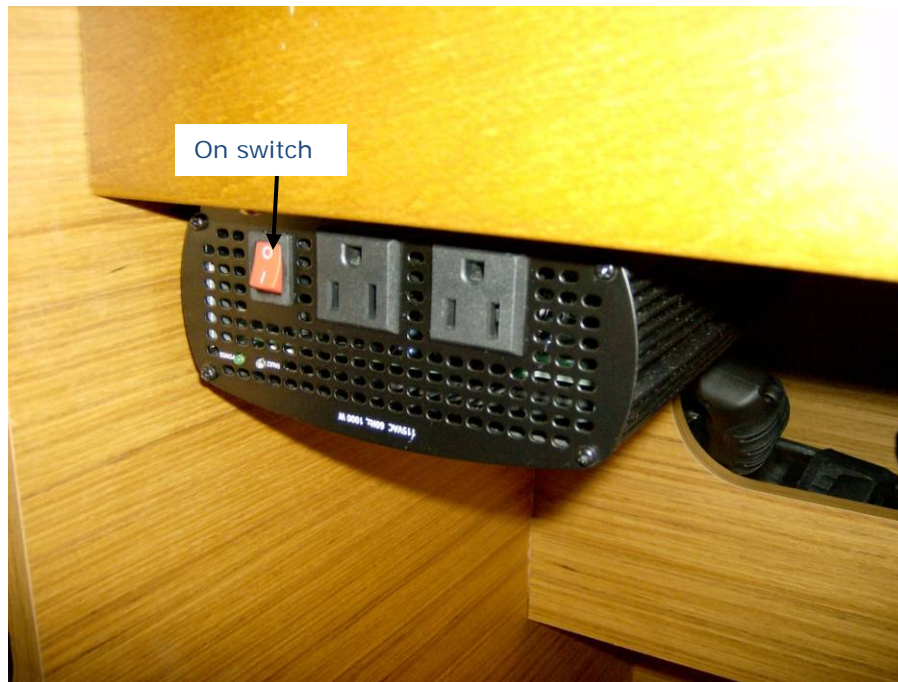
windlass breaker

3. Inverter interface panel

There is a portable inverter fixed to the underside of the chart table. To operate, simply turn the inverter on using the switch to the left of the outlets and plug in your items.

Ensure that you are running the engine at the same time to ensure that you do not drain your batteries.

Switch the inverter off when you are not using it to help preserve battery power.



4. Engine start procedures



- Engage the neutral button on the side of the throttle handle and set the handle forward to apply some revs.
- Press the button labeled "start on" to engage the ignition.
- Press and hold the same button until you hear the engine start up.
- Once the engine starts, adjust the revs if necessary and check that there is water coming out of the exhaust.
- When the throttle handle is returned to neutral the button springs back out, so the next time you move the throttle your gears will be engaged.

To stop the engine:

- Put throttle handle to neutral
- Press the button labeled "stop"
- Press the button labeled "off"

Should you hear an engine alarm during operation, check which alarm light is illuminated on the engine start panel and then shut down the engine and contact Horizon.

All yacht engines run with diesel. There is a diesel filler cap on the transom which is clearly marked 'Diesel'. DO NOT PUT WATER IN HERE!

5. Daily engine checks

- Check the oil level using dip stick located to the left rear 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.
- Located above the engine is the coolant reservoir. The coolant level should be between the maximum and minimum lines.
- Check for any engine leaks or bilge water below engine.

KEEP HANDS CLEAR OF ALL MOVING PARTS.

ANY PROBLEMS CALL HORIZON



Oil dip stick



Coolant reservoir

Coolant refill

Oil refill

6. Generator

Sosumi is fitted with its own generator which will run the 110v outlets, the air conditioning and will also charge the batteries in place of the engine. The generator is located in the transom locker at the port helm. The generators are self regulating and therefore there are no daily checks to perform.

To start the generator:

- Make sure the 110v systems are off prior to starting the generator.
- Ensure that you have switched from shore power to generator power.
- Press the top switch down for 5 seconds. Whilst holding the top switch down, pinch the bottom switch up. Hold them both until the generator starts up and the psi reaches 58.
- The generator should continue to run when you release the switches.
- Allow the generator to warm up for 5 minutes and then gradually load up the system, adding one load every 2 minutes.



Stopping the generator

- Turn off all 110v systems
- Push down quickly on the bottom of the switch and release.
- The generator will close down.

Resetting the generator:

If the generator trips out check the reset breakers on the front panel of the generator itself.

YOU MUST NOT RUN THE GENERATOR WHEN UNDERWAY

7. Air conditioning



Fwd air conditioning unit

Aft air conditioning unit

Air conditioning pump. This must be switched on first before operating either of the two units.

The air conditioning breakers should be turned on **after** the generator has been running for 5 minutes (or once the boat is plugged into shore power) and the breakers should be shut **off** before stopping the generator or unplugging from shore power.

Ensure the companionway and all hatches are closed; otherwise the compressors will freeze up.

Starting the air conditioning:

- Switch on the ac pump first.
- Switch on the required units; there are 2: forward cabin and main saloon and aft cabin.
- Each of these units also has an individual control which allows users to alter the settings for the individual units.

Using the unit control panels:



- Switch the remote units on using the 'power' button.
- Set the temperature using the 'temp' arrow controls.
- The units will work best if the minimum temperature is set no lower than 63 degrees. Set it below this and you risk frosting up the unit and causing it to shut down.
- Only select the 'cool' mode. Press the mode button until the cool option is displayed on the unit.

- The remote panel will automatically display the ambient temperature.
- Control the fan strength using the 'fan' button.

- Switch the units off by pressing the 'power' button.

8. Instruments

Located at the starboard helm are the following Raymarine instruments:



ST60+ Wind Indicator

ST60+ Tridata

ST6002 Autopilot

Located at the port helm are the following Raymarine instruments:



ST60+ Tridata

ST60+ Wind Indicator

Located at the chart table is a Standard Horizon chart plotter.

9. VHF procedures

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.

1. Make sure the radio is switched on, volume quite high; power to high unless the station you are calling is very close.
2. Squelch up until loud hissing, and then back a little until the noise *just* stops.
3. Select the channel for calling (Channel 16, unless specified otherwise).
4. Press switch on microphone when speaking. Release immediately.

If no response then wait two minutes and repeat the call. If still no response, wait a further two minutes before trying again. If calling on Channel 16, it is very important to switch to a working channel after the contact is established. Do not use Channel 16 for your conversations – this channel is for hailing and distress only.

Channels to use:

- 16 Hailing and Distress
- 74 Contact Horizon Yacht Charters (when in range)
- 12 Yacht Charter Companies working channel – assigned for yacht breakdown servicing and emergency only
- 68 Marinas and Yacht Clubs – for lunch/dinner reservations etc
- 06 Ship to Ship – along with Channel 68 and 77 can be used for contact between boats

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 Horizon Office immediately at 494 8787 or 496 0653. 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.

Types of emergency:

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.

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.

How to issue an emergency message

Select Channel 16 and press transmit button on handset

Say slowly and clearly '**MAYDAY, MAYDAY, MAYDAY, CALLING ALL STATIONS**

This is.... (vessel name)....' and repeat vessel name 3 times

Give position – vessel's position in degrees of latitude and longitude or nautical miles from, and bearing to, a navigational landmark

Describe emergency – list the problem, the type of assistance needed; number of passengers aboard (boat length, hull color and type is also useful)

Wait 1 minute for a response, repeat message

ALTERNATIVELY: Dial either 767 or 999 from any BVI cell phone or call 494- HELP (4357)

10. Batteries

There are 3 ways to recharge your batteries.

Engine:

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 you are not using. Your batteries will charge when the engine is running at 1400rpms or more, whether sitting at a mooring or motoring to a destination.

- Check the battery levels and make note of them before charging.
- Run the engine at 1400rpms or more for 1-1 1/2hrs.
- Shut the motor off.
- Wait 15 minutes before checking the battery levels, (directly after turning off the motor they will remain in an excited state for about 10 minutes).

Shore power:

Ensure the shore power / generator selector switch above the 12v panel is turned to shore power. Ensure the battery charger button on the link 2000 panel is illuminated and that the 110v battery charging breaker is also on.

Generator:

Switch from shore power to generator power using the selector switch. Ensure the battery charger button on the link 2000 panel is illuminated and that the 110v battery charging breaker is also on.



11. Anchoring & the windlass

- Establish a non verbal communication system from bow to stern, as with the noise of the engine and wind, verbal communication proves difficult.
- Choose a nice clear area to anchor in, normally in 12 to 25 feet. A white bottom is sand and perfect for anchoring. A brown or green bottom will be grass, rock or coral. **Only anchor in sand.**
- Assess the elements; approach from down wind or current, whichever prevails.
- Manually lift the anchor over the bow and feed chain so the anchor is just above the water surface, once the yacht is stationary use the electric windlass to go down with the anchor, the elements will push you back and away from the anchor.
- Minimum scope is 5:1, depending on the conditions you may want to increase that, always ensuring your 360 degree swing is clear of any obstacles.
- Engage reverse, slowly building up to 1500 rpm to really drive your hook into the sand.
- Once set, put the engine in neutral and allow the yacht to settle, take transits around the bay to ensure you are not dragging, it is always advisable to snorkel the anchor and ensure it is bedded in correctly and not just lying on its side.
- If a second anchor is required e.g., you are anchoring in a mooring field and need to control your swing, deploy the primary as above, move the secondary up to the bow, then drive the boat forward at a 45 degree angle to the primary, once in line with the primary deploy the secondary and allow the elements to push you back, then build astern up to 1500 rpm to drive in the secondary, again snorkel the anchor to ensure a good hold.
- There are a couple of spots in the BVI where it is good to deploy the secondary over the stern, thus holding the yacht bow or stern into the wind, e.g. Great or Little Harbour on Peter Island, always set your primary first, then for ease use the dinghy to drive the secondary out to deploy and set.
- Anchors, Chain and Rode can do millions of year's worth of damage to coral and coral heads so please do be very careful not to touch this fragile eco system when anchoring.
- To weigh anchor, using the already established communication system, motor the yacht forward toward the anchor. When the chain becomes slack the helmsman should go into neutral and increase rpms to 1400, the bowman is taking up the slack on the windlass. Rinse and Repeat. The hardest thing the windlass should do is pull the anchor from the bottom. Take care of it and it will do the work for you. Overload it and you will be very frustrated. Once the anchor is clear of the water be careful not to let the anchor swing into the boat. And once it is on the rollers only "one touch" the up button.
- It is important to help the chain flake-out under the windlass, it may otherwise build up and block the windlass.

Manual operation of the windlass



If you lose power to your windlass, start the engine and give it some revs, to make sure you have not just got a low battery voltage. If you still have no power, you can operate the windlass manually.

To drop the anchor, insert your windlass handle into the central opening on top of the windlass. Turn the windlass handle so that the hold on the chain loosens and pull the

break away from the windlass.

Your anchor is now ready to drop.

Remove the safety line or safety pin, and push the anchor over the bow, keeping hands and feet clear. Control the rate the chain pays out by tightening or loosening the windlass with the handle.

When you have paid out sufficient chain, between 5 to 8 times the water depth, tighten the windlass completely to stop more chain from falling. Increase revs to 1500 rpm to set the anchor. If you drag, pay out more chain, and re-try 1500 rpm in reverse. When the anchor is set, fit the snubbing line then release more chain on the gypsy so that the load is taken up on the snubbing line.

To manually haul the anchor back up place your windlass handle in the outer opening and turn in the opposite direction. Apply the brake against the windlass.

12. Picking up a mooring buoy

- Ensure the dinghy painter is tied off short on the bow or amidships and is clear of the prop.
- Approach the mooring buoy, keeping the bow into the wind or current, whichever prevails.
- Have a crew member on the bow to pick up the mooring pennant with the boat hook.
- The bowman will direct the helmsman to the mooring, using the already 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 location to moor up.
- The bowman should prepare a line to a bow cleat to slip through the eye of the mooring pennant. This line is then shortened and brought back to the same cleat.
- Once set your mooring buoy will be attached either on the port or starboard cleat and the yacht will be head to wind. Remember to centralize the wheel and lock in place to avoid the yacht sailing around the buoy.
- Next attach a second backup line to the mooring. Attach a line from the opposite bow cleat and if possible attach it directly to the mooring buoy. It is always easier to do this from the dinghy. Do not try to make the lines of equal length, the first line should be taking all the weight of the boat.
- To depart, release the backup line first. Slowly motor the boat forward to create slack, release the line from the cleat and allow the pennant to slip from the line into the water. Fall back with the wind or current, and be careful not to foul your prop on the pennant.
- **Remember to shorten your dinghy painter whenever you are maneuvering in close quarters to prevent running over the painter and wrapping the prop.**

13. Bilge pumps

Your yacht is equipped with an automatic and a manual bilge pump. The primary electric pump is operated by a switch on the 12v panel which should be left in the '**auto**' position as the pump is operated by a float switch which will automatically operate the pump when there is water in the bilge. If the float switch fails to function flick the switch to 'on'.

Check the bilges once a day to ensure they are dry. The bilge pump is located beneath the saloon floorboards.

The manual bilge pump is operated from the cockpit and is located in front of the starboard helm.



14. Fresh water system

Sosumi is equipped with two water tanks with a capacity of 94 gallons split between them. To fill the tanks, let the water run from the hose for awhile before placing the end into the fillers that are located port and starboard amidships. Please ensure that the correct fillers are used, NOT the refills labeled waste or diesel.

To use the fresh water system, turn on the fresh water breaker on the 12v panel and open a faucet. When the tank runs out of water the pump will run at high speed, the faucet will start to cough air. As soon as you hear the pump running continuously, check to see if anyone is using water. If not, switch off the pump immediately to prevent the pump from drawing more air into the system or the pump overheating, and proceed as follows:

- Switch off pump
- Locate the change over valves behind the starboard saloon seating. The open valve will have its 'flat' ends in line with the pipe. Turn the valve 90 degrees to close the tank and open the other tank.
- Switch on the fresh water pump
- Open cold water faucet at galley and purge system of air, approx 45 second.
- Turn off faucet, pump will continue to run until adequate pressure has built up to operate pressure switch to cut the pump out.
- If pump does not cut out, it may be necessary to repeat the purging process and open other faucets
- If you have any problems, call Horizon



Closed valve
(flat ends
lying across
the pipe)

Open valve
(flat ends in
line with the
pipe)

15. Heads

- Nothing is to be put down the head unless it has been digested first. All toilet paper should be placed in the garbage bins; there is one in each head.
- Prior to use, push the toggle lever to the left "flush" side and pump the handle until sufficient water is in the bowl.
- To rinse out the bowl and rinse through the lines keep the toggle switch in the flush position and pump 15 to 20 times to ensure that the lines are thoroughly rinsed out.
- To empty the bowl move the toggle lever to the right "dry" side and pump the handle until all the water is removed from the bowl.
- Always leave the bowl empty of water in between uses and ensure that the toggle lever is over on the dry side to prevent back flow.
- Wherever possible please use the heads ashore as this keeps our waters nice and clean.
- **Blocked heads will be cleared at a cost to you of \$120.00 sewage fee, plus a technician's fee of \$60 per hour, plus the call out fee.**



16. Showers

Your yacht has a hot & cold, fresh-water shower in each head and on the transom. 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 must be activated on the 12v panel.

The transom shower is located on the transom behind the port helm. To operate the transom shower the fresh water pump must be activated on the 12v panel. There is also a toggle switch located next to the shower which controls the flow and temperature of the water. To switch the water on or off move the switch up and down, to change the temperature move left to right. Finally, press down on the small button located on top of the shower head to release the water from the hose.



17. Refrigeration

The system on this boat is an upgraded 12v refrigerator. This system is designed to run 24hrs a day if you wish. To ensure that it does not fail keep your batteries charged. If the level goes below 12.2v the fridge will automatically cut out. Refer to section 6 for instructions on how to charge your batteries. If you get excessive ice on your cooler plate **do not** chip away at the ice. If something is frozen to the cooler plate do not force it away. Use warm water if you need to melt the ice.

The thermostat is located in the unit; it is a black dial running from 1-7 with 7 being the coolest setting. If necessary you can turn the system down or off if you wish. If it is not cold enough augment the system with ice. We are in the tropics so please note that fruit, vegetables and other fresh produce may not last as long as you expect.

Ask one of our staff for a deck cooler if you would like one for storing your drinks. It will keep the drinks cold and help maintain the temperature in the fridge, as people will not be going in it every 5 minutes for a drink.

There is a drainage hole in the bottom of the fridge.



18. Propane and stove

The propane tank locker is located next to the helm seat on the port side.



To use:

- The solenoid control box is located to the left of the fridge. Press the “on/off” button to open the solenoid. The solenoid is open when the green light appears above the button.

- To light, turn the knob you want 90 degrees anticlockwise, push the knob in and light the burner using the automatic ignition.
- Hold the knob in for 10-15 seconds, then release. Make sure that the flame goes all the way around. Reduce any wind that may hinder this.
- If you cannot get it to light, check the valve on top of the connected tank is open.
- When you have finished using the burners, or the stove, switch off the solenoid on the 12v panel **before** you turn off the knob on the stove. This will burn the gas out of the lines and you can test whether the solenoid is working. If the burner remains lit after switching the solenoid off **you must** manually close off the tank in the cockpit.



All of our yachts are fitted with propane detectors. The propane ‘sniffer’ has been placed in the bilge (propane is heavier than air and so will sink into the bilge). The detectors are sensitive to several types of gas and will trigger the alarm. The alarm can also be triggered if there is moisture in the bilge. If the alarm sounds it does not necessarily mean that the propane system is leaking, so don’t panic!!

In the event that the 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 Horizon immediately

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

19. BBQ

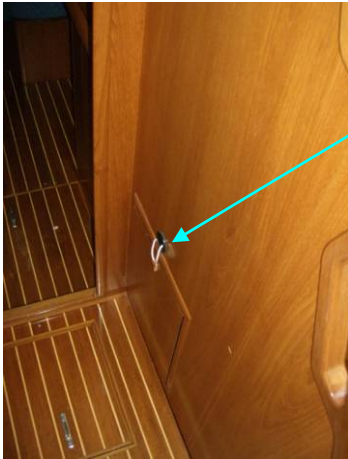
- When using the BBQ, tie your dinghy off at the side of the yacht, not off the stern
- Never use the BBQ while sailing
- Never use the BBQ on a dock
- Never change propane tanks when using the BBQ
- Make sure someone is always tending the BBQ when hot
- Call us if you have too much food



20. Fire Safety

Prevention is the best answer to fire safety.

- Always switch off the safety solenoid when stove is not in use
- Never leave the stove or oven burning unattended.
- Never change propane tanks whilst barbecuing.
- Never smoke below decks.
- Never smoke when changing propane tanks.
- Safely store any flammable liquids (for example charcoal lighter fuel).
- Keep matches away from children.



Engine compartment fire:

In the event of a fire in the engine compartment use the fire extinguisher positioned closest to the companionway hatch steps and position the mouth of the extinguisher to the fire hole.

- Pull the red key out
- Squeeze the handles together until all the contents of the extinguisher have been discharged.
- Do not open the engine compartment even if you think the fire has been extinguished, dying embers can easily be re-ignited by a fresh supply of oxygen (air).

Open fire:

- Pull out the yellow safety tab.
- Point the extinguisher at the base of the fire and press down on the red button to discharge contents.
- 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.



Galley fire:

- Take the fire blanket out of its container. Read the instructions for use carefully.
- Ensure hands and limbs are protected from the fire by the blanket.
- Carefully lay the blanket over the fire, laying the blanket away from you and keeping yourself protected at all times from the flames.
- Once in place leave the blanket until all heat has gone from the scene of the fire, this way you can be sure that the fire has definitely gone out and will not re-ignite.

21. 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.

- Always tow your dinghy on a short line while maneuvering in close quarters and a long line while sailing in open water, always tow with the engine tilted forward as it gives you an extra half knot and prevents unnecessary damage.
- If conditions are very rough, the outboard needs to be mounted on the push-pit.
- When going ashore for an evening's entertainment allocate a dinghy captain, someone who will bring the whole crew back to the boat safely, allowing the rest of the crew to enjoy various local cocktails and concoctions.
- To start the engine, lower the outboard into the water using the lever on the starboard side of the engine. The lever position corresponds to the motor position, up and fwd for towing and back and down for driving. Check you are in neutral and **the safety cord is in place**. For starting an engine that has been at rest for 3 or more hrs use the choke. Pull the choke out, and set a few revs with the throttle. Do not twist the throttle trying to prime the engine. You will only flood it. Face the engine and pull the start cord and push the choke back in as soon as it runs. If it runs for a second but cuts out, try again without the choke.
- To stop the engine, press the button on top of the kill cord, or pull the kill cord out.
- Keep the kill cord with you to prevent anyone from borrowing it. You have been provided with 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.
- At night an all round white light must be displayed along with red & green side lights, and it is always a good idea to have a flashlight with you, to show the way, and warn other vessels of your presence.
- Wear the life preservers provided in the cockpit lockers when in the dinghy.
- **Oil to gas ratio: 3oz per 1gallon**

