



**Information & operations manual for
Bavaria 41 2018
'Island Karma'**



Welcome



Welcome to Horizon Yacht Charters and your 2018 Bavaria 41 "Island Karma". 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 in's and out's 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 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

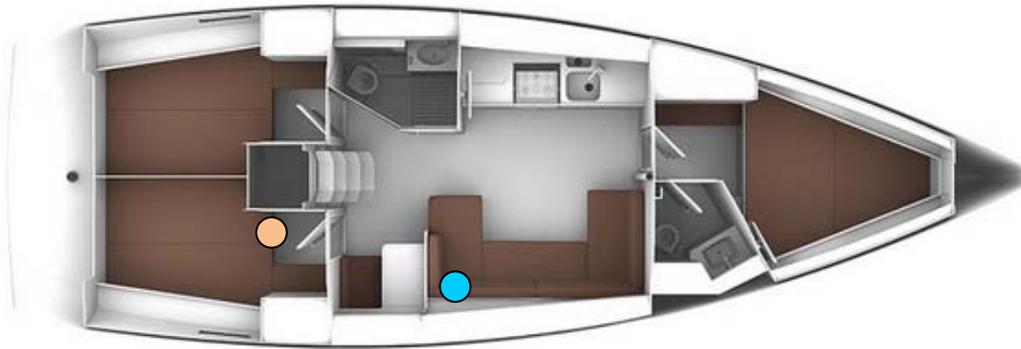
Telephone: (284) 494 8787

Duty Manager: (284) 542 8788 (*Technical questions, damage reports and emergencies*)

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1. Yacht Specifications



Length	40' 6"
Beam	13'
Draft	5' 5"
Fuel	56 gallons
Water	56 gallons
Engine	60 hp Volvo-Penta D2-60F

Location of:

- Fresh water refill (port transom)
- Diesel refill (starboard transom)
- Manual bilge pump (stbd helm)
- Propane tank (port helm)
- Windlass fuse (behind stbd saloon back rest)
- Emergency fuel shut-off (stbd aft cabin below bunk)

2. The 12-volt panel

Use the up and down switches to toggle through your water tank gauge and your battery voltage.

The following functions are available on the 12v panel.

Top row functions from left to right:

- Compass light
- Navigation instruments
- Stereo system
- Anchor windlass
- Primary bilge pump override

Middle row functions from left to right:

- Fresh water pump
- Shower drain
- Panel light
- Not in use
- Fridge

Bottom row functions:

- F1** – Propane
- F2** – Cockpit light
- F3** – Secondary bilge pump
- F4** – Propane detector
- F5** – Cockpit table lamp



110-volt systems:

110 breakers under Nav desk



Shore power breakers in stbd transom



AC breakers in stbd transom

AC Box 110V		
1	Steckdosen T-Räume	Sockets Heads
2	Steckdosen	Sockets
3	Steckdosen	Sockets
4	Boiler	Boiler
5	Ladegerät	Charger
6	Mikrowelle	Microwave
7	Spülmaschine, Waschmaschine	Dishwasher, Washing machine
8	Weinkühler	Wine Cooler



Island Karma is equipped with 11 x 110v outlets: one in each cabin, one in the salon, one at the Nav desk, two in the galley (GFCI protected) and two in each head (GFCI protected). These will operate when the boat is connected to shore power on when the inverter is turned on. The inverter will allow use of 110V appliances when away from shore power. See next page for further details.

3. Inverter

There is a 1800W inverter installed which will allow the use of 110V appliances when no shore power is available.

To use the inverter:

1. Start the yacht's engine; bring the rpm up to 1400 **in Neutral**.
2. On the 110V panel, move the selector switch from shore to Inverter.
3. Press the green "power" button on the inverter panel. The yellow 'status' light on the switch will then illuminate.
4. On the 110V panel, ensure the main and outlet breakers are switched on; leave the water heater switch off.
5. **ALL the 110V sockets are now live.**

Always ensure that you have switched the inverter off by checking that the light on the panel is no longer illuminated. Leaving the inverter on will cause your batteries to rapidly lose their charge.

Press this button to turn on the Inverter



4. Engine start procedures.

- Make sure engine is in neutral.
- Press the ignition switch then press the start button until you hear the engine running.
- When the engine is running check to make sure you have water coming out of the exhaust.
- To stop the engine, press the stop button until the engine has stopped.
- An alarm will sound after you stop the engine. Press the ignition once more to turn off the ignition

MAXIMUM ENGINE REVS ARE 2400 RPM



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 HORIZON**

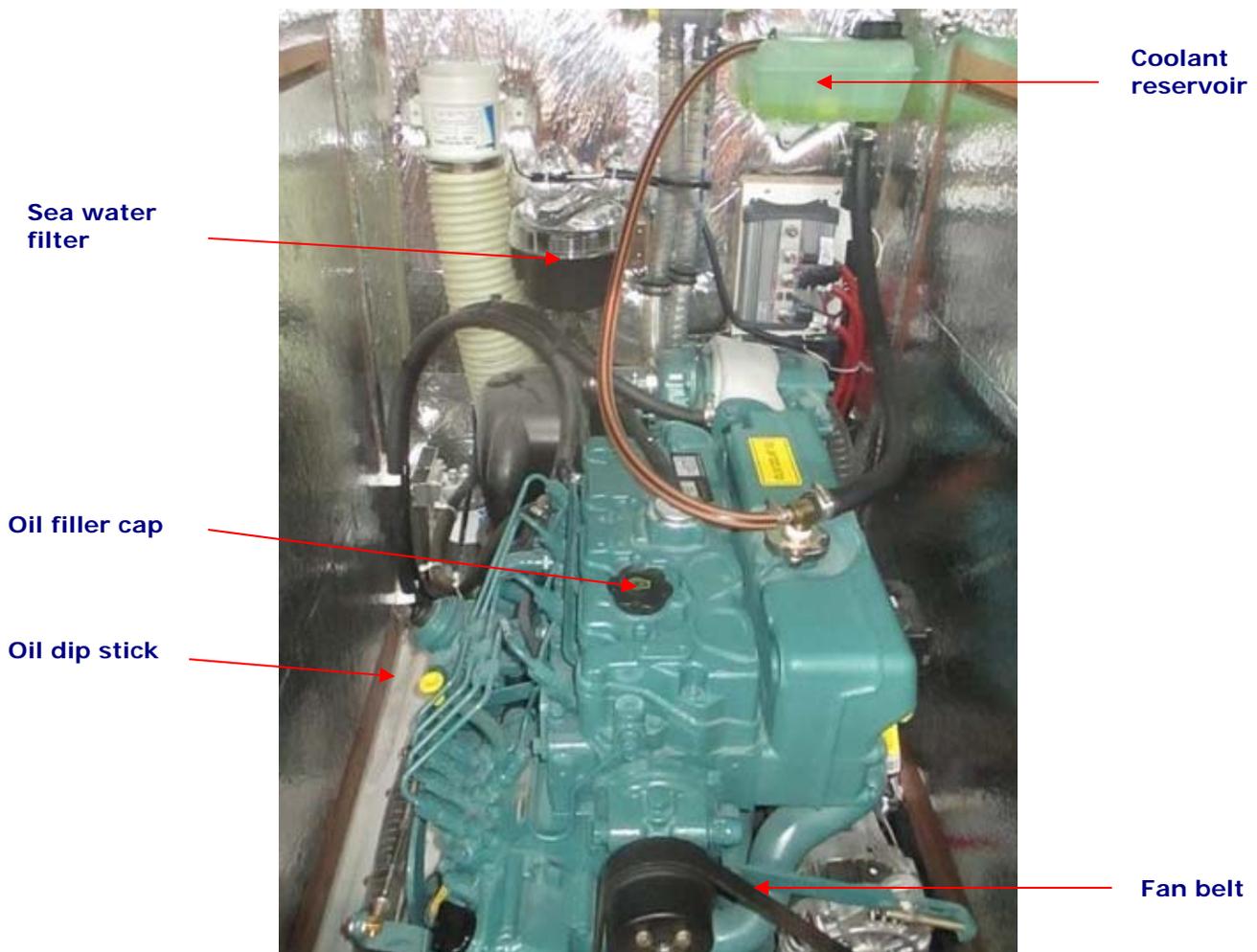
All our yacht engines run with diesel fuel. There is a diesel filler cap above the Engine start panel which is clearly marked "DIESEL" **DO NOT PUT WATER IN HERE.**

5. 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 rear of the engine is the seawater filter.
- Above and to the right 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.

KEEP HANDS CLEAR OF ALL MOVING PARTS.

ANY PROBLEMS CALL HORIZON



6. Instruments

Island Karma is equipped with the following instruments on board:

Located at each helm is a Garmin GMI 20 multi data. The stbd helm also has a Garmin GHC 20 auto pilot and a stereo remote control. A touch-screen Garmin GPSmap 922 is mounted at the aft end of the cockpit table.

Garmin GMI 20



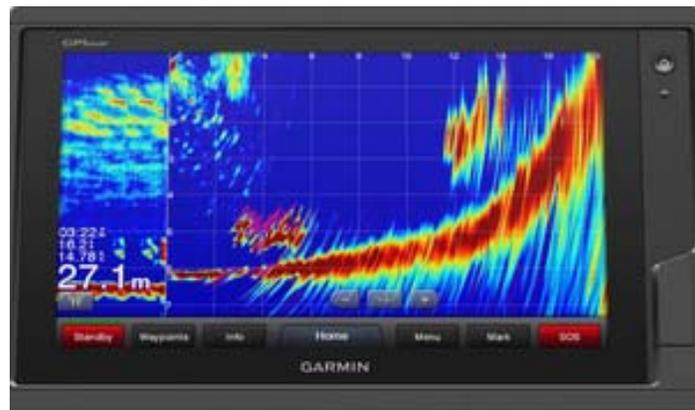
Garmin GMI 20



Garmin GHC 20



Garmin GPSmap922



Stereo remote control



7. Air Conditioning

There are two air conditioning units installed (fwd cabin and salon). The AC units are fed from the same raw water pump located under the fwd salon seating.

The air conditioning operates **ONLY** when connected to shore-side. The breakers for the air conditioning are in the stbd transom. Access can be achieved by removing the under the floor storage at the stbd helm position.)

Salon AC unit and raw water pump



AC breakers (in stbd transom)



Ensure all hatches and companionway doors are closed when running the air conditioning otherwise the units may freeze up.

Each AC unit can be operated at the display or by a remote control. Press the button on the left to turn it on, or use the remote control, then set the temperature using the up and down arrows. **Do not adjust the temperature below 70 degrees otherwise the units may freeze up.**

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



Water from the AC units drains to sump boxes and is automatically expelled by pumps with float switches. As a result, you may hear intermittent pump operation when running the air conditioning.

Bleeding the AC units

Occasionally air can become trapped in the air conditioning system which will prevent the air conditioning from operating normally. This may be coupled with an error code displayed on the relevant control unit. Instead of displaying the ambient air temperature, it may display an error code such as 'E1'. This signifies 'High Pressure' which usually means that the system has become air locked.

In this case call the Duty Manager to be talked through the simple process of bleeding the system. **DO NOT attempt to do this without contacting the Duty Manager as failure to carry out this procedure correctly could be extremely hazardous to the safety of the yacht.**



The AC bleed valve is installed at the AC pump under the fwd salon seating.

8. 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
CH/WX 06 for local marine forecast

If 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 542 8788. 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 colour and type is also useful)

Wait 1 minute for a response, repeat message

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

9. Batteries / Battery switches



The systems on your yacht are all 12 volts except for the Air Conditioning, Water Heater & Battery Charger. 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.

Note that the Freezer uses a considerable amount of battery power. If it is not being used, then it is strongly advised to turn the freezer off. See Section 16 – Refrigeration.

Your batteries will charge when the engine is running at 1400rpms or more, whether sitting at a mooring or motoring to a destination. They can also be charged through shore-power or when running the generator. Check the battery levels and make note of them before charging.

Run the engine at 1400rpms or more for a minimum of 1-1 1/2hrs **twice daily**. 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).

The House system should come to rest at 12.8 v. and then slowly get lower. When the system gets to 12.2 v you should start planning to re-charge the batteries soon.

Island Karma has two battery systems which are isolated from each other. The 285AH house batteries are located under the salon seating.

The engine battery isolator is located to the side of the companionway steps and the house battery isolator is located at the Nav desk.

10. Anchoring & the windlass

Setting your anchor:

Preparation:

- Establish a nonverbal communication system between helmsperson and windlass operator, as with the noise of the engine and wind, verbal communication proves difficult.
- Shorten the painter so that it cannot go under the yacht and wrap around the prop.

Location:

- Choose a clear area to anchor in and 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.** Maximum depth would be 1/5th of your anchor rode. Remember the depth is set from the bottom of your keel so keel draft should be added to the reading of your depth gauge.
- Anchoring on a lee shore is not recommended and would recommend using both your primary and secondary anchor if you choose to anchor off a lee shore. (see below)

Action:

- Always have your engine revs increased to @ 1400 rpms before windlass operator touches the windlass remote. The windlass needs optimum energy to operate correctly.
- Minimum scope is 5:1. In heavy weather you may want to increase that, always ensuring your swing area is clear of any obstacles.
- Use the elements; approach from downwind or current, whichever prevails.
- Have the anchor ready to deploy. This may require you to slack the chain and manually push the anchor slightly overboard so that it will go deploy when you press down on the remote.
- Once the yacht is stationary use the electric windlass to drop the anchor to the sea floor. The elements will push you back and away from the anchor. Keep deploying chain until you have acquired the correct scope. Attach the snubbing line.
- **Always attach the snubbing line before setting the anchor with the engine and whilst you are anchored. The snubbing line protects the windlass and it is important that you attach the snubber every time you set the anchor. Attach the hook around the chain link (the hook is too big to go through the link) and cleat off the bitter end of the line to a bow cleat. Pay out enough chain so that the snubbing line becomes taut.**
- If the hook falls of the chain, it means that there is not enough tension on the line. You may need to hold slight tension on the snubbing line as you deploy more chain until the snubber takes the load of the anchorage. Engage reverse, slowly building up to 1500 rpm to really drive your anchor into the sand. Take transits as you set the anchor so that you know that the anchor is not dragging.
- It is always advisable to snorkel the anchor and ensure it is bedded in correctly and not just lying on its side or hooked on a rock.

Retrieving Primary Anchor:

- Never use the windlass to pull the yacht to the anchor. The windlass operator should point in the direction of the anchor chain so that the helmsman can move slowly in that direction. As soon as there is some slack on the anchor chain the bowman tells the helmsman to put the engine in neutral and then increase RPMs. Bowman then retrieves all the slack chain. When the chain becomes taut then you repeat the process from the beginning. Ensure the anchor does not swing into the bow of the yacht.

Setting a secondary anchor:

- Your secondary anchor is a quick set type of anchor and is usually stored in the cockpit locker. It has 30 feet of chain and about 170 feet of line. For this reason, we have always found it easiest to put this chain in the dinghy with two people and deploy it from there. Take note where your primary is and drive away from the yacht at a 45-degree angle of the primary. Drop the anchor with the shank pointed at the yacht and deploy the rode as you drive back to the bow of the yacht. Tie off at the bow. Once back on the yacht and dinghy secured, manually take the slack out of the 2nd rode and tie off. Now engage reverse to 1500 RPMs as before.

There is a 100A fuse that will blow if the windlass gets overloaded.

Before replacing the fuse, ensure that the windlass breaker on the 12V panel is switched on, and that the green light is not illuminated. If it is illuminated, this indicates that the fuse is NOT blown, and that the yacht battery power is too low to run the windlass. Please run the engine at 1500 rpm for 15 minutes and try again. **The fuse is located on the stbd side of the salon, behind the cushion.**

Windlass fuse



Windlass and remote control



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. Then make sure the windlass breaker with the anchor icon is in the 'on' position on the 12-volt panel. If there is still no power, check the location of the windlass fuse in this manual, and replace it with the spare in your navigation table. If you still have no power, you can operate the windlass manually.

To drop the anchor, insert the windlass handle into the star fitting on the top of the windlass.

Continue to pull back on the windlass handle, so that the brake cap loosens.

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 brake with the windlass handle.

When you have paid out enough chain – 5 to 8 times the water depth, push the handle forward to tighten the brake. 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, and cleat it off, then release the chain on the gypsy as above, so that the load is taken up on the snubbing line.

Your boat briefer will demonstrate how to manually retrieve the anchor.

11. 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 ready 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 back up line directly to the mooring ball. There will be a metal ring at the top of the ball or a shackle just under the ball. Attach a line from the opposite bow cleat and if possible, run the line through the ring or shackle and back to the cleat. 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 back up 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 tie your dinghy away from the stern whenever you are maneuvering in close quarters.**

12. In-Mast furling mainsail

Unfurling the mainsail:

1. Ensure the lever on the reefing winch at the mast is in the free position.
2. Open the line clutches "Main In" and "Main Out". This is the endless line that goes around the winch at the mast. Take the "Main out" side of the line and put one wrap around the winch. This will enable you to control the speed of pulling out the sail in breeze.
3. Check the outhaul clutch is closed.
4. Ensure the yacht is pointed into the wind and the vang is eased a little so the boom is horizontal/perpendicular to the mast.
5. Open your mainsheet clutches and ease mainsheet a foot or two. *Most of the vessels at Horizon Yacht Charters will have X2 mainsheets and no travelers.*
6. Pull on the "Outhaul" whilst you ease the "Main Out" line, always keeping an eye on the mainsail coming out of the slot in the mast and keeping tension on the "Main Out" line (*the line can hop off the winch if this is not done*). It is recommended you unfurl the sail by hand and not with an electric winch to reduce damage to the sail if something were to go wrong.
7. When unfurling the main all the way, do not tension the outhaul so that the clew goes beyond the black marker near the end of the boom.

Do not open any clutch labeled "Do not touch" as it is the halyard. Releasing the halyard will make it difficult to furl and unfurl the sail.

"Main in" and "Main out" line clutches. *This is an endless line that runs through both clutches.*



Reefing winch lever. *In the ratchet position the sail can only go in the mast not out. This can be used to reef the main in heavy wind conditions. **Release both clutches beforehand.***

Reefing winch. *If the continuous line were to break this can be used to furl the sail back in. Just move the lever to ratchet and use a winch handle to furl the sail.*

Furling or reefing line
(endless line)



Unfurling- Open the “Main in” and “Main out” clutches. Keep tension via X2 turns on the winch with the “Main out” line.

Pull on the outhaul to unfurl mainsail always keeping an eye on the sail as it unfurls.



Black marker on boom, do not furl beyond this maker.



Reefing the mainsail:

Pull the main sail out as above. You can stop unfurling by pulling on both the "Main In" and "Main Out" simultaneously. This stops the winch which stops the sail.

1. Move the Lever to "Ratchet" position. This will keep the sail from coming out any further, but you can furl in, making it perfect for reefing and sailing in strong breeze.
2. To flatten the main in reefed position put the outhaul around the self-tailing winch tension slightly then open the "Outhaul" clutch. You will then need to ease this as you reduce sail.
3. With both the "Main In" and Main Out" line clutches open start winching the furl in line while keeping tension on the "Main Out" to keep the line in solid contact on the mast winch.
4. Once the desired sail area is achieved and achieved a good tension on the foot of the main, close the "Out Haul", "Main In" and "Main Out" clutches. Clear the winches needed for main sheets etc and go have fun.

If reefing in very strong winds, ensure the lever on the reefing winch is in the ratchet position. This way you have more control over the sail area.

Furling in the mainsail:

Turn the vessel slightly up wind and ease your vang and mainsheet slightly so the boom is above mast ensure your boom is horizontal/perpendicular to the mast. Open the "Main out" clutch for the endless looped line, pull on the "Main In" line while keeping slight tension on the "Main Out" so the line is securely turning the furling mast winch. Ease the "outhaul" as you furl in the main. In higher breezes you may find it easier to put the winch in the "Ratchet" position so that it cannot mistakenly unfurl. **Take note of the different color of the triangle of sail at the clew. Do Not furl this into the mast.**

Troubleshooting:

Trouble unfurling the main:

1. Ensure that the lever on the reefing winch is on free and not ratchet.
2. Pull on the furl out and outhaul at the same time. The outhaul is pulling on the clew of the sail as the furl out is turning the foil to let the sail out. If the sail is jamming as you pull it out, you will most likely see furled sail being pulled through the slot in the mast. If so, furl back in until the sail is no longer bulging out the slot. Pull on the "main out" first and the "out haul" second. Repeat this several times until you have 1/3 of the sail out and from there the sail should come out easier.

Furl in and out line breaks while the sail is out:

1. Move the lever on the reefing winch to ratchet.
2. Using a winch handle in mast winch. Note this is a one speed winch. In the ratchet position it will only turn one way. That is furling the sail away, ease the outhaul as you furl in.

Never leave winch handle in reefing winch.

Furl in and out line hops off the reefing winch:

1. Ensure lever on reefing winch is in the free position.
2. This is just like putting a chain back on a bicycle.
3. Turn the winch with a winch handle to determine which way is better for you.
4. Using your thumb press part of the in between the winch drum and the body of the winch on either side of the winch. Turn the winch so that it is taking the line into that slot. You will need to continue to assist the line until it is completely back around the winch.

13. Bilge Pumps

Your yacht is equipped with one manual and two electric bilge pumps. The primary electric pump is automatic. In an emergency, the secondary bilge pump can be operated by pressing F3 on the 12V panel. The manual pump is located in the cockpit and its use will be demonstrated to you during your briefing.

Float switch Primary bilge pump 2nd bilge pump pick-up Manual bilge pump



Strainer Secondary bilge pump



Manual bilge pump with integrated handle in cockpit

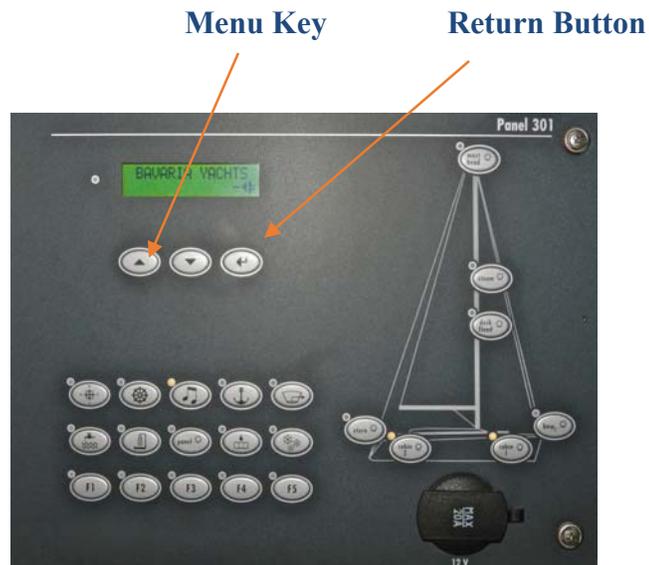
14. Fresh water system

Island Karma has a single water tank with a capacity of 56 gallons. Before filling the tank let the water run from the hose for a while before placing the end into the filler that is located on the transom and the bow. Please ensure that the correct fillers are used, NOT the holding tanks or the diesel fill.

To use the freshwater system, turn on the freshwater breaker on the 12v panel and open a faucet. When the tank runs out of water, the pump will run at high speed and 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.

Use the menu key on the 12v panel to confirm the water level in the tank.

Be advised that the 12V panel has an inbuilt alarm preset at 25% capacity. When this level is reached the LCD display will show a flashing 'Alarm' message and a small red LED will illuminate to the left of the screen. There is no audible alarm for this. To reset the alarm, hold the return button for a few seconds this will clear the alarm and allow you to toggle through your other gauges.



15. Heads

- **Nothing is to be put down the head unless it has been digested first.**
- **Blocked heads will be cleared at a cost to you of \$150.00 sewage fee, plus a technician's fee of \$85 per hour and the call out fee.**

Electric head usage



- Prior to use, press the lower left button for a few seconds to wet the pan.
- Use the head, remembering that all non-human waste must be put into the waste bin.
- After use, press the upper button for at least 10-15 seconds to flush the pan.
- Lastly, press the lower right button to leave the pan dry.
- Wherever possible please use the heads ashore as this keeps our waters nice and clean.

Each head on Island Karma has a fully operational holding tank which can be used by closing a valve on the waste seacock. These are located under the sinks in the heads. **Check that the holding tanks are empty before returning the vessel and please flush each one through to minimize residual odors.**

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. There is also a shower-drain switch on the 12v panel. Switch this on also.

The shower water drains into a sump with a float switch and is automatically expelled.

Transom Shower

The lower valve in the picture has two functions:

- By turning the knob clockwise and counterclockwise you can adjust the temperature of the water. Be careful. The water can be very hot. Test before showering.
- By pushing the valve from side to side you can change the water pressure. In this picture you would move it to the left and right.

To use the shower head simply pull it out and press the button on the back. If no water comes out make sure that the 12V water switch is on, that the shower hose is not kinked (access from aft cabin, same side as shower) and that the water pressure valve is in the correct position.



17. Refrigeration

Island Karma has a 12v refrigerator and separate 12V freezer. The freezer is located under the aft salon seat cushion. The thermostat is inside the freezer unit at the rear and can be adjusted to avoid unnecessary battery usage which can be high. These systems are designed to run 24hrs a day if you wish. To ensure that they do not fail there are two things you should do.

- Firstly, keep your batteries charged. If the level goes below 12v the system will malfunction. Refer to section 12 for charging instructions.
- Secondly, do not puncture the cold plate in your fridge! Do not chip at the 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. Pour warm water on it if you need to melt the ice.

There is a thermostat in the fridge. It is a white dial with numbers on it going from 1-7. Putting 7 at the apex of the dial is the coldest setting. Keep it on this setting until it is too cold. Then you can turn the system down or off if you wish. Or if it is not cold enough...augment the system with ice. Ask one of our staff for a deck cooler if you would like one for storing your drinks. It will keep the drinks cooler and the refrigeration colder, as people will not be going in it every 5 minutes for a drink.

Please note that we are in the tropics and items that are frozen placed in the fridge will not stay frozen since this is not a freezer but only a fridge and that fruit, vegetables and other fresh produce may have a shortened shelf life. Neither the fridge nor freezer have drains.

12V fridge



12V freezer



**Freezer
Thermostat**



18. Propane and stove

The propane tank locker is in the cockpit at the helm seat on the port side.



To use:

- Press the F1 switch on the 12V panel. This opens the solenoid on the propane tank.
- To light the stove, push the knob in, turn the relevant knob 90 degrees counterclockwise, and light the burner (to light oven put the flame in the tube that is inside/center bottom).
- 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 the burner lit, check the manual shut offs - there are two. One on the propane tank and one in the galley in the cupboard. Make sure these are both open and try again.

The 12v solenoid system is USCG approved device. You do not need to shut any manual valves off unless you wish.

Island Karma is fitted with a Xintex S-1 Propane detector. This device will detect propane and any other noxious gas or fume. The propane 'sniffer' has been placed in the bilge (propane is heavier than oxygen and 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!!

If 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 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

The engine room has a fully automatic fire extinguisher installed. Additional fire extinguishers are installed in each aft cabin under the seat, under the galley sink and in the stbd cockpit locker.

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 barbequing.
- 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 yellow key out
- Press down on the red button 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 always protected 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 gone out and will not re-ignite.



Smoke alarm:

- There is a battery-operated smoke alarm mounted in the salon. This alarm will be triggered by smoke caused by cooking or burnt toast. Opening a hatch to allow ventilation will minimize triggering the alarm. For safety purposes, the 9v battery should not be removed from the smoke alarm.

21. Dinghy & Outboard

The driver of the dinghy must be over 18 and must always 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 motoring and a long line while sailing, always tow with the engine leg up as it gives you an extra half knot.
- Most of the time it is fine to leave the outboard on the dinghy, but if conditions are very rough, the outboard needs to be mounted on the push-pit.
- When going ashore for an evenings 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 motor 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 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.

Outboard Engine - 15HP Yamaha Enduro 2 stroke



Gear shift

Pull cord

Throttle

Choke

Stop button

Kill cord

Locking cable

Fuel tank



Security cable

Fuel cap w/ air vent

Fuel line

22. Swim Ladder

Island Karma is equipped with a retractable transom that also doubles as a transom seat when the transom is closed. There is a removable swim ladder that is stowed in the port cockpit locker. While under sail, the transom should remain closed and secure. After you have gotten to your anchorage feel free to deploy the transom for easy access to your dinghy, swimming or snorkeling. There is a lanyard attached to the swim ladder that enables you to secure the ladder while in use.

Always use the safety lanyard while using the swim ladder to prevent losing the ladder overboard.

