



**Information & operations manual for
Lagoon 46 Catamaran 2020
'Fly Again'**



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Welcome



Welcome to Horizon Yacht Charters and your Lagoon 42 "Fly Again". 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 operation 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	45'11"
Beam	26' 1"
Draft	4' 3"
Fuel	Primary 137 Gallons, Secondary 137 Gallons
Water	X2 79 Gallons
Engines	2 x 57hp Yanmar 4JH 57
Generator	Onan MDKDN-8140A 13.5KW

Location of:

- **Engines** (starboard and port aft ENG rooms)
- **Generator** (beneath port bow seating)
- **Manual bilge pumps** (cockpit both sides)
- **Propane tank** (FWD cockpit seating)
- **Water tank refill** (STBD bow)
- **Electric winch breaker** (STBD aft cabin cupboard)
- **Windlass breaker** (STBD aft cabin cupboard)
- **Diesel refills** (port aft cockpit)

- **Fuel shut off valves** (below the port and starboard aft berths)



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2. The 12-volt panel and breakers

12-volt panel:



12v switches:

Top Row:

Electronics
Navigation Lights
Steaming Light
Deck Floodlight
Anchor Light

Lower Row:

Cabin Lights
Port Primary Bilge Pump (**hit once for auto and twice for manual**)
Stbd Primary Bilge Pump (**hit once for auto and twice for manual**)
Fresh Water Pump
Refrigerator

Switches flash if there is a fault. Fuses behind the 12V panel can be reset if there is a fault.

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Breakers and Fuses

Fuses Behind 12V Panel



Fuses in starboard forward companion way locker



**110V/ Shore Power Breakers
behind starboard aft cabin door**



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3. Inverter

Warning: Leaving the Inverter turned on will severely deplete the house batteries. For that reason, it is better to run the engines at the same time. **If you have the Generator running there is no need to use the Inverter.**

Fly Again is equipped with a built-in Mastervolt 2000-Watt power inverter that allows you to have access to all outlets when the boat is underway. There is a remote switch located below the 12V panel that enables you to turn the inverter on.

To avoid additional drain on your batteries while operating electrical appliances, the engine should be turned on and revved up to 1400 rpm **IN NEUTRAL**

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



Inverter control & Power button

GFCI Switches

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NB: The inverter will not operate the air conditioning unit; this is only available under generator power or shore power.

Inverter breaker behind stbd aft cabin door.



Mastervolt inverter in starboard aft cabin.

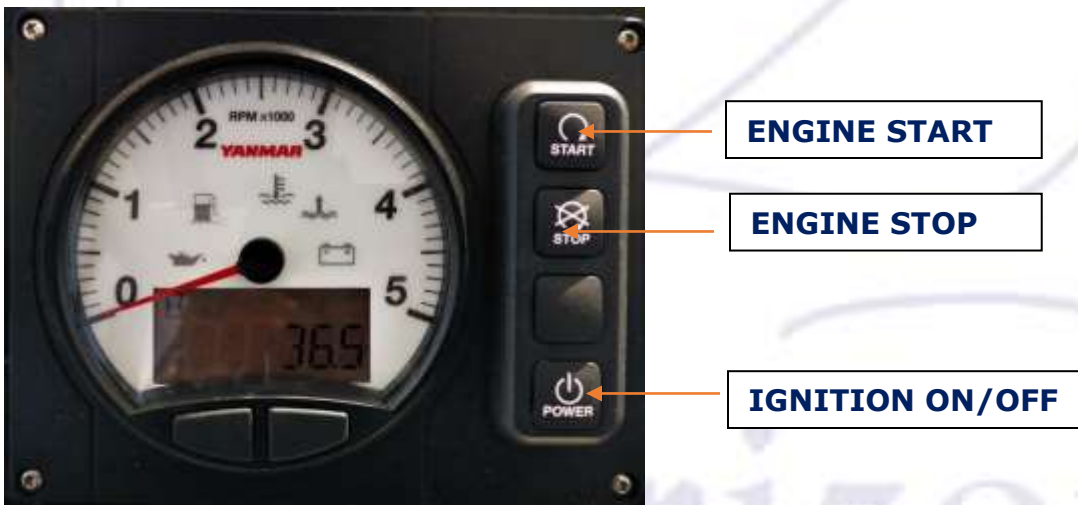


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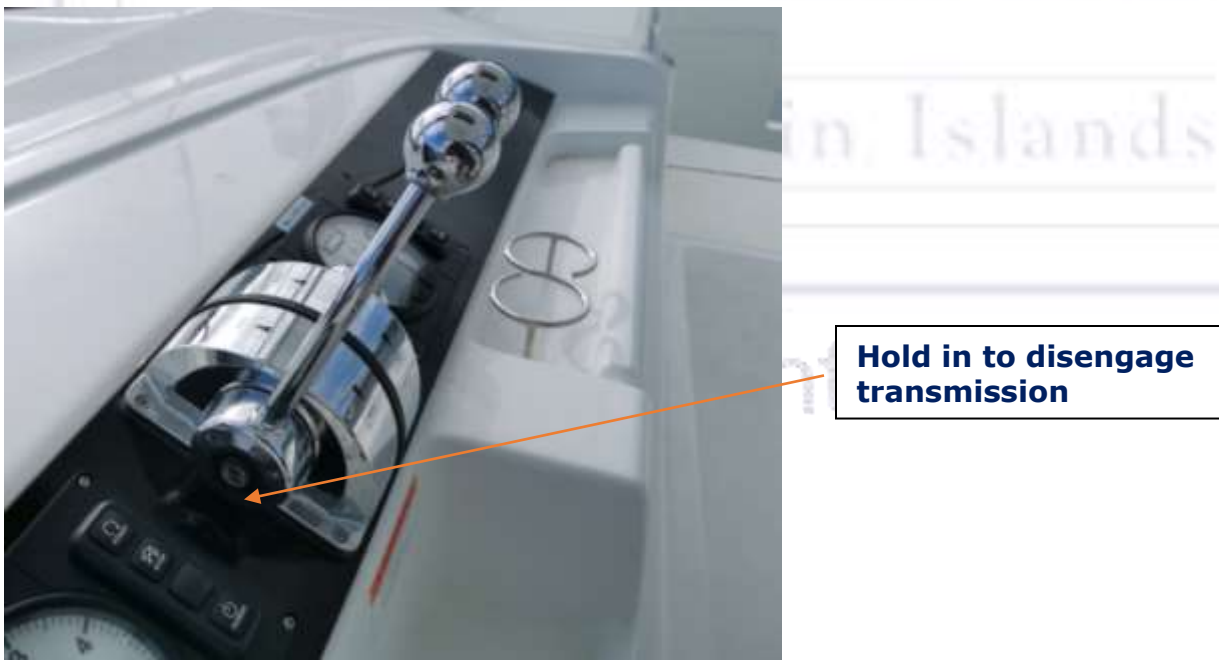
4. Engine start procedure

You have two engines and therefore two start panels. You must switch on both engines to manoeuvre the vessel.

- Make sure that the throttles are in neutral.
- Turn on the engine ignition by pressing the Power button on the panel.
- Press and hold the start button.
- Once the engines are running, check that you have cooling water coming out of the exhausts.
- To stop the engine, press and hold the stop button until the engine stops.
- Turn off the ignition panel by pressing and holding the Power button.



Should you have difficulty starting one of the engines then turn on the emergency parallel switch in the port engine room. **Remember to turn this off again after starting the engines.**



**EMERGENCY PARALLEL
SWITCH PORT ENG COMP.**

STBD ENGINE COMP.



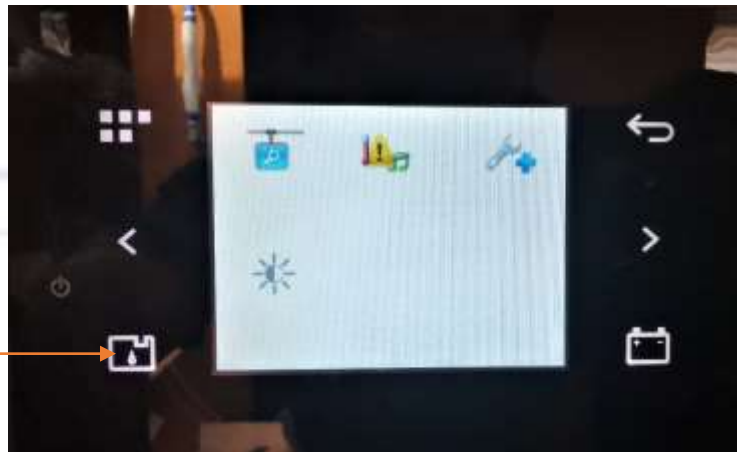
Should you hear an engine alarm during operation, check which light is on and immediately shut down the engine - **CALL HORIZON**

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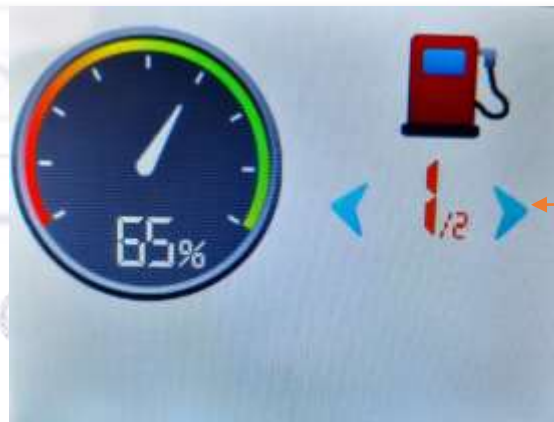
Checking Diesel Fuel



Tank Menu

Diesel Tank 1

Diesel Tank 2



**Toggle through
tank 1 and 2**

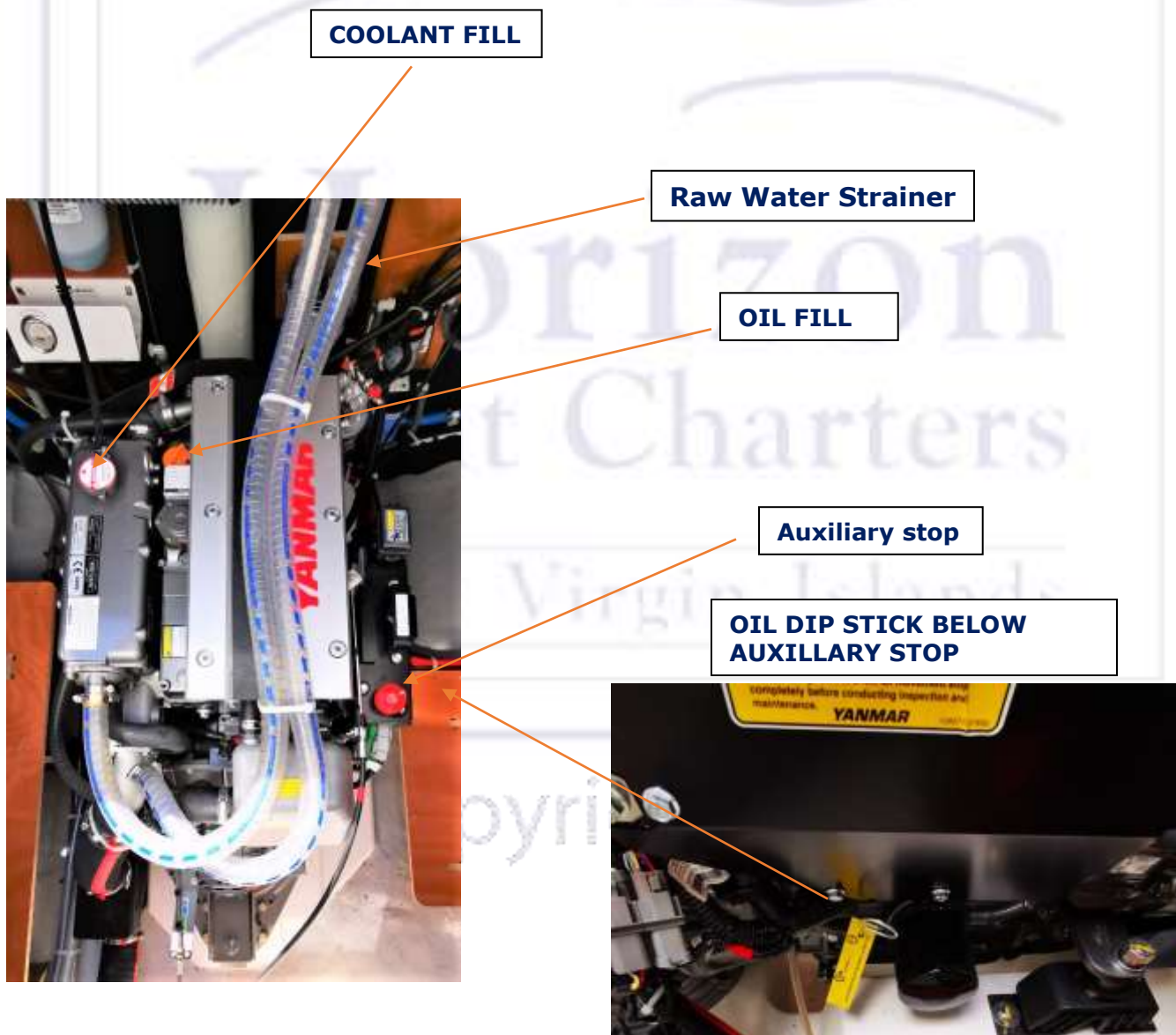
5. Daily Engine Checks

The engines are in the transoms, one in each hull. It is important that you complete the following checks on both engines.

- Check the oil level using the dip stick located on the right of the engine. The level should be at least halfway between the empty and full marks. To add oil, open the orange oil filler cap on the top of the engine.
- In front of the engine, mounted on the bulkhead, is the engine coolant reservoir (hidden from view on the picture). 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.

ENGINE WILL NOT START IF THE AUXILIARY STOP IS IN THE OFF POSITION. ANY PROBLEMS CALL HORIZON



6. Generator

YOU MUST NOT RUN THE GENERATOR WHEN UNDERWAY.

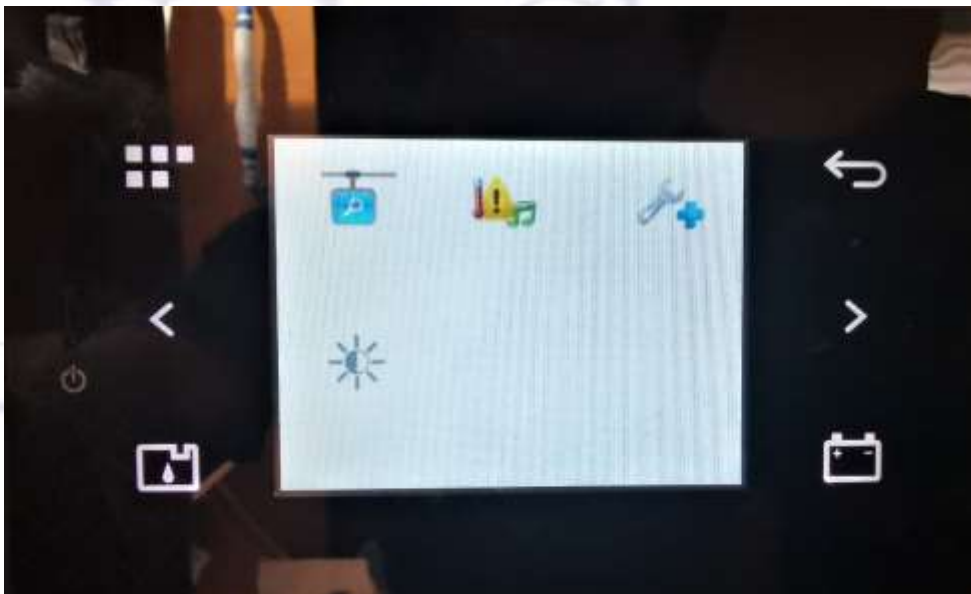
Fly Again is fitted with its own Onan generator which will run the 110v outlets, the air conditioning and will also charge the batteries instead of the engine.

Before starting the generator ensure the air conditioning units are off (Turn off all AC Units before leaving the dock). The transfer switches are in the starboard forward cabin locker but only need to be operated manually if there is a fault with the touch display at the nav station.

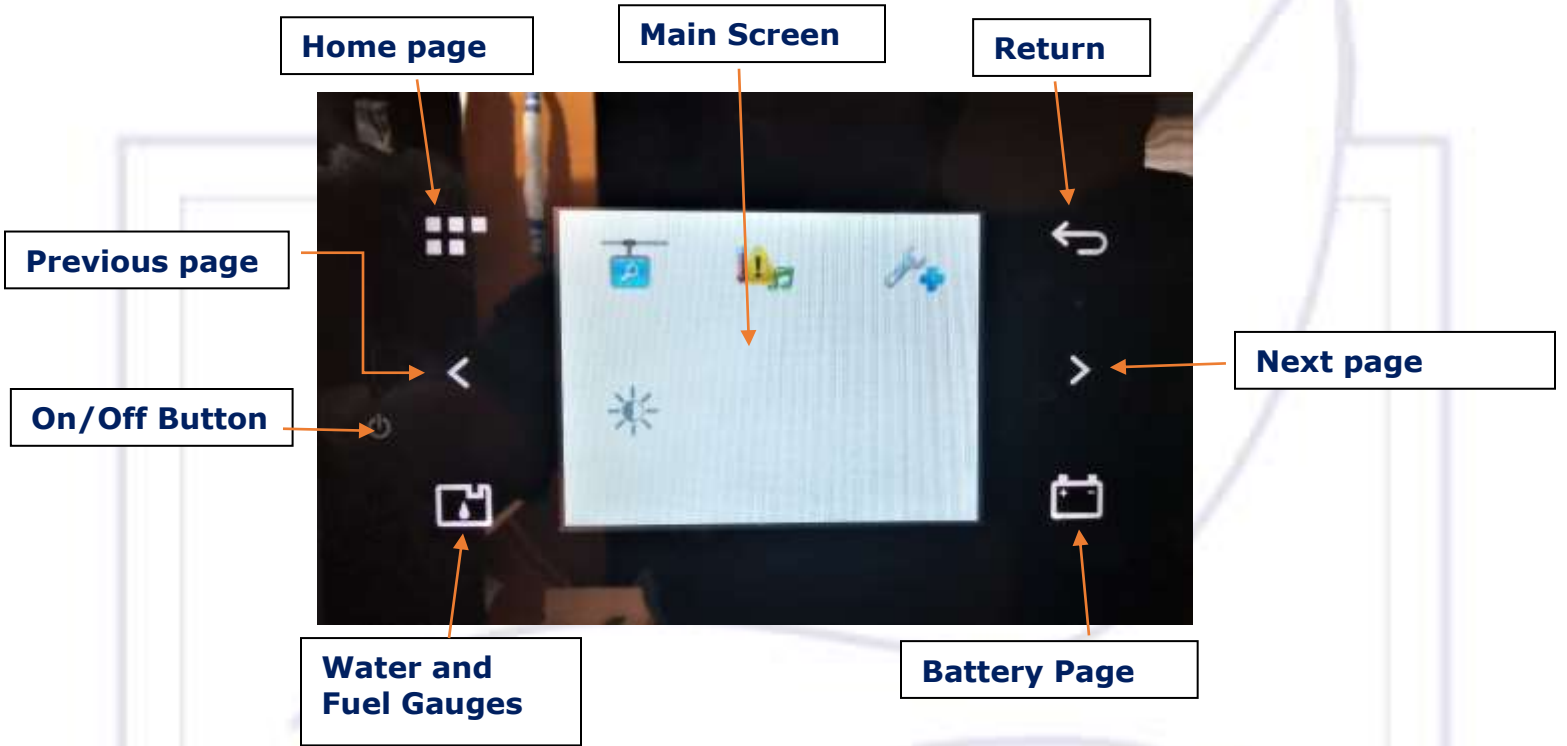
Call the manager on duty if there is a fault with the touch display.



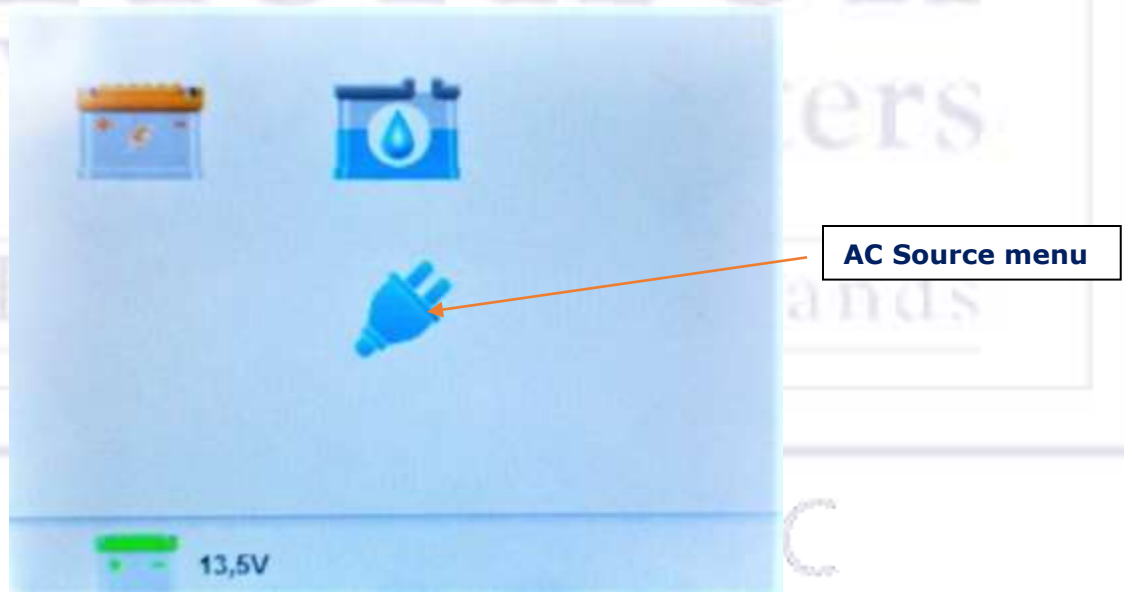
Touch display at the helm station

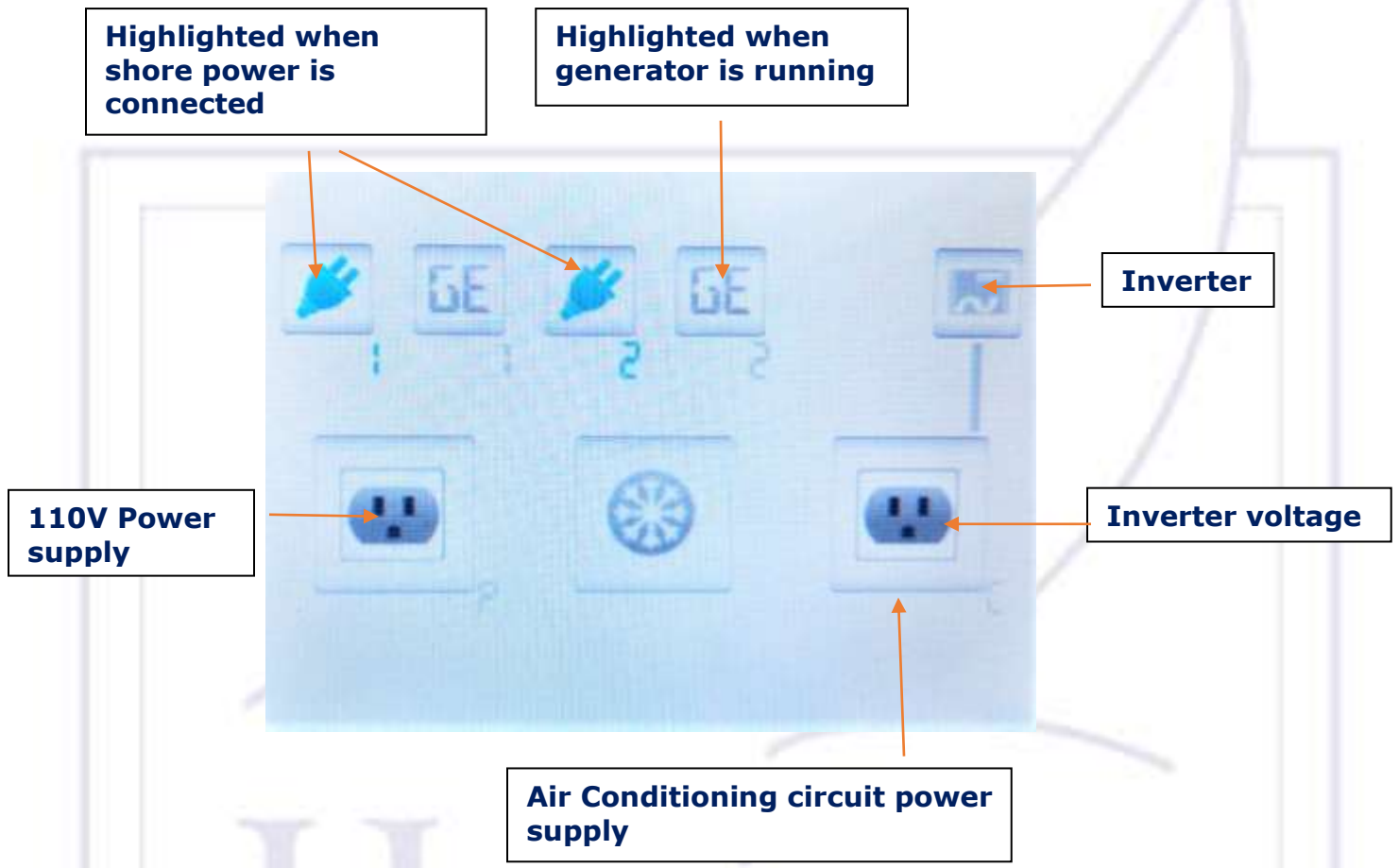


Using the touch display to start generator:

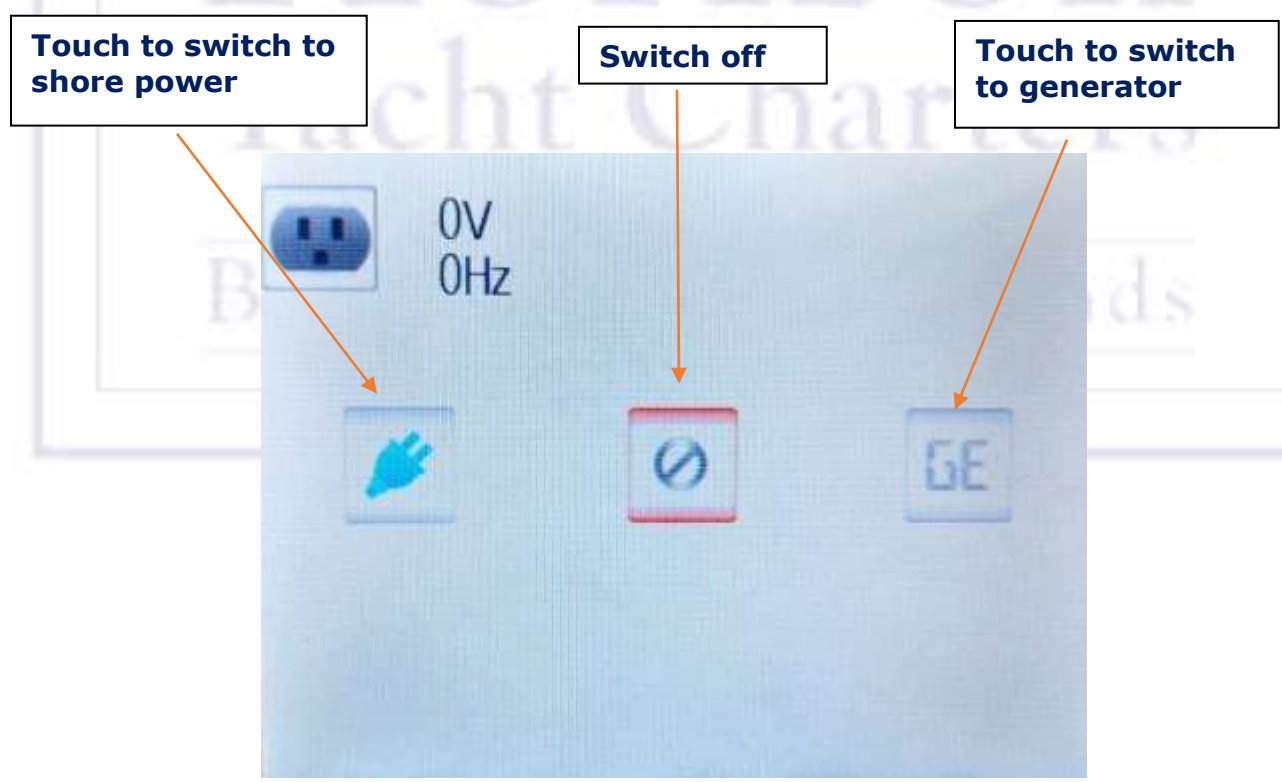


Hit the return button while on the main page to the screen below and then the AC Source menu to get to the next page.

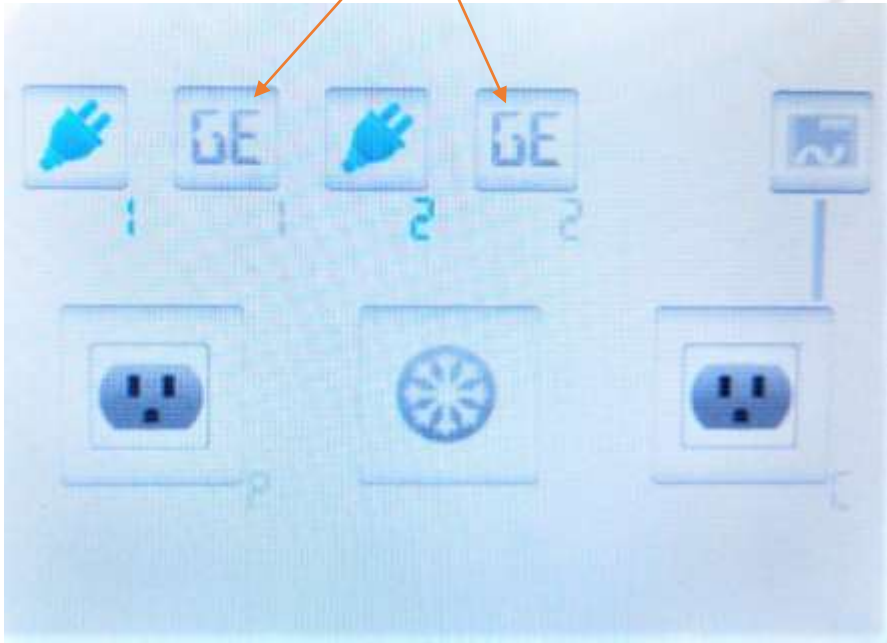




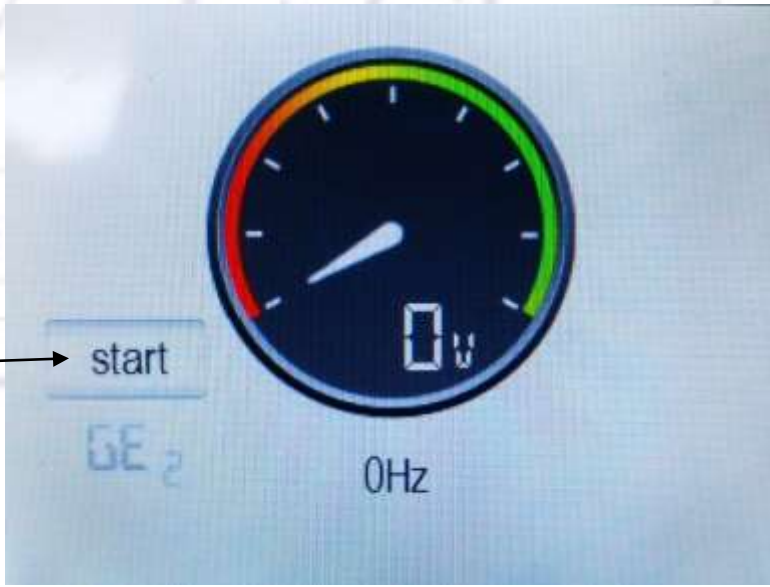
Hit 110V power supply or Air Conditioning to get to the individual transfer switch.



To start generator, touch the generator key on either side, 110V or Air conditioning to get to the voltage/start menu.

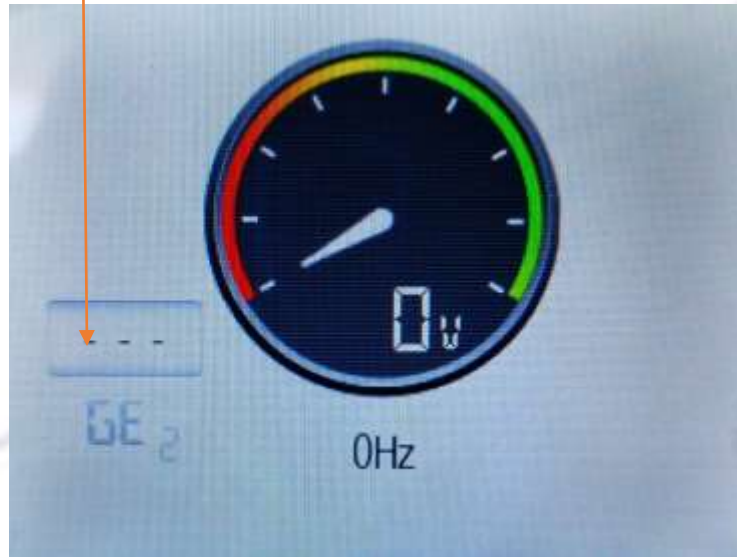


Generator voltage and start menu



Touch start and the generator will automatically prime and start

Three dashes flashing when generator is starting.



Generator is running.



Generator voltage/output.

Generator stop button, touch and the generator will stop.

Once you have started the generator, gradually apply load by turning on the AC Units 5 minutes apart. This is to avoid overloading the generator.

Before hitting the stop button on the generator ensure all the air conditioning units are off, let the generator run for 5 minutes (cool down).



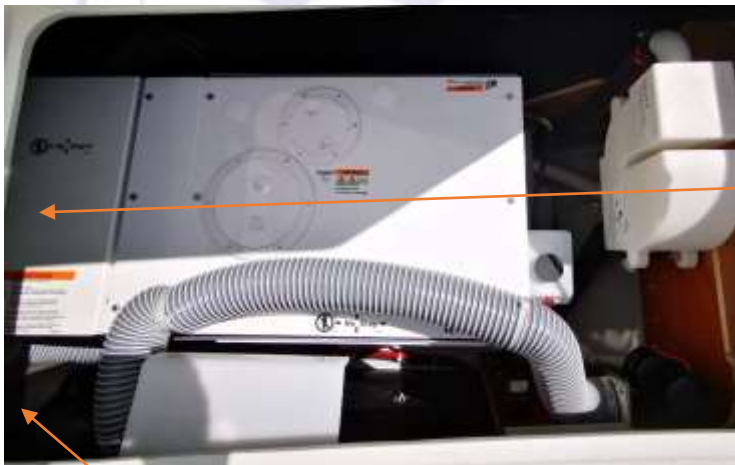
GFCI switches are below 12-Volt panel. If there is no power coming from your outlets, ensure these switches are in the on

Resetting the generator

If the generator is running but the 110 sockets and Ac units are not powering up, reset breaker to the left of generator control panel.

Cummins Onan Generator, port bow locker

Generator Reset Breaker



DC Circuit Breakers, Emergency Stop, Hour meter and Start/Stop (Prime)



Shore power/generator breakers

Behind Stbd Aft Cabin Door



Generator/Shore Power Breakers Behind Generator



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Generator raw water strainer:

Please do not run the generator when sargassum seaweed is present. The generator raw water strainer is in the generator compartment to the right of the genset and can pick up seaweed and other debris in the water. This can cause your generator to malfunction because of the lack of water flow.

Cleaning the raw water strainer:

1. Before you clean the strainer ensure the raw water intake valve is closed.
2. Remove the housing cover, this can be done with a filter wrench.
3. Remove and clean the strainer.
4. Refit strainer.
5. Prime the strainer by pouring water into it until it overflows.
6. Refit housing cover.
7. Open the raw water intake valve.
8. Start the generator
9. Make sure water is coming out the exhaust.

If you still have a problem running the generator after cleaning the strainer, check for water in the strainer. If there is no water in the strainer it means the raw water intake is blocked.

Clearing a blockage from the generator raw water intake:

1. Get the dinghy air pump.
2. Close the intake valve.
3. Remove cover and strainer from the housing.
4. Place the nozzle of the dinghy pump into the opening that is connected to the intake hose.
5. Open the intake valve.
6. Use the pressure of the dinghy pump to force the blockage out.
7. Once you have cleared the blockage, prime the strainer by pouring water into it until it overflows.
8. Refit housing cover and start generator.
9. Make sure water is coming from the generator exhaust.

If you are unable to open the strainer, remove the intake hose where it is connected to the strainer by undoing the hose clamps and use the dinghy pump to force out the blockage.

Please contact the manager on duty for further instructions.

Generator raw water strainer, STBD midship floorboard



Hand Tightened Cap

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7. Air conditioning

Cabin Air conditioning

The air conditioning units will operate when the vessel is plugged in to shore power or when the generator is running. Each cabin has its own individual air conditioning unit and there is a 5th unit located in the salon.



The air conditioning units 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 required units 5 minutes apart.
- 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 70 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.

AC Breakers:

AC Breakers are in the starboard aft cabin beside locker.



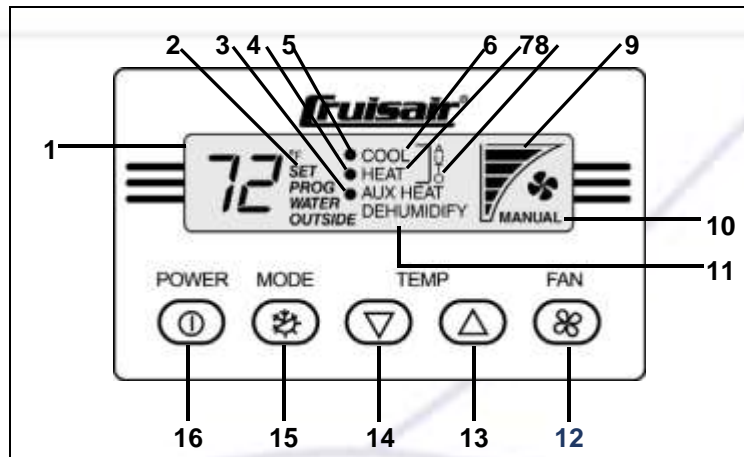
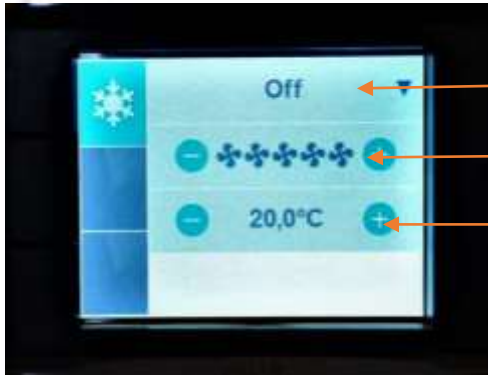


Diagram Description of Control Display Panel and Indicators

1	Data Display - Large LCD readout displays current temperature, set point, programmed values and error messages.	9	Fan Speed Indicator - A row of five bars indicate the current fan speed, with more bars indicating a higher fan speed and fewer bars indicating a lower fan speed.
2	Set Point Indicator - Display shows SET when set point is being adjusted. Normally display defaults to inside temperature.	10	Fan Mode Indicator - The word MANUAL displays when the fan is running in Manual Fan Mode. The word MANUAL does not display when the fan is running in Automatic Fan Mode.
3	Aux Heating Indicator and Aux Heat Mode Indicator (optional) - A solid dot displays next to the words AUX HEAT when the electric heater is on and running in Aux Heat mode. The words AUX HEAT display when you are in Aux Heat mode. (Press the MODE button to select the optional Aux Heat Mode.) See Programmable Function "23: Aux Heat Enabled/Disabled" on page 12.	11	Dehumidify Mode Indicator - The word DEHUMIDIFY displays when you are in Dehumidification Mode. It flashes if optional humidity sensor is connected and operating in the Cooling Mode. (Press the MODE button to select Dehumidification Mode.)
4	Heating Indicator - A solid dot displays next to the word HEAT when the compressor is on and running in Heat mode.	12	FAN Button - Press to select Manual or Automatic Fan Mode, indicated by the word MANUAL displaying or not displaying. In Manual Fan Mode, additional presses of the FAN button will adjust fan speed higher, then lower, then back to Automatic. In Automatic Fan Mode, fan speed is controlled by the microprocessor as a function of the difference between set point and inside temperature. See Programmable Function "4: Fan Response Differential" on page 9.
5	Cooling Indicator - A solid dot displays next to the word COOL when the compressor is on and running in Cool mode.	13	UP Button - Press to adjust set point up. In programming mode press to scroll through program modes and adjust values.
6	Cool Mode Indicator - The word COOL displays when you are in Cool mode. (Press the MODE button to select Cool Mode.)	14	DOWN Button - Press to adjust set point down. In programming mode press to scroll through program modes and adjust values.
7	Heat Mode Indicator - The word HEAT displays when you are in Heat mode. (Press the MODE button to select Heat Mode.)	15	MODE Button - Press to cycle through the modes of operation (refer to indicators). Mode sequence selections are COOL, HEAT, AUTO, AUX HEAT (optional), and DEHUMIDIFY.

<p>8 AUTO Mode Indicator - A bracket and the word AUTO display to the right of the words COOL and HEAT when you are in Auto Mode. If optional Aux Heat is enabled (see Programmable Function "23: Aux Heat Enabled/Disabled" on page 12), a bracket and the word AUTO display to the right of the words COOL and AUX HEAT. (Press the MODE button to select Auto Mode.)</p>	<p>16 POWER Button - Press to turn the system on and off. Note that the Data Display remains on in the Off mode. You can continue to adjust set point, display temperature readings and activate the manual fan to circulate air while the system is in the Off Mode.</p>
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Saloon AC Control

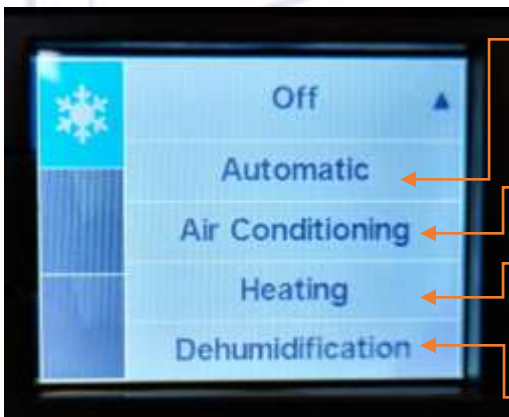


Touch to open main menu

Fan Speed

Temperature up and down

Main Menu



When Automatic mode is selected the system provides both heating and cooling, as required.

Only the cooling system operates.

Only the heating system operates.

This mode controls humidity during periods when the vessel is unoccupied and prevents the cabin temperature from dropping below the minimum default temperature setting.

Air Conditioning ON



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AC troubleshooting:

Iced up unit: You can tell a unit is iced up when it is running but there is no air coming out of the AC vent. You can also look at the actual unit, it will be covered in ice. Turn off unit and let defrost. You can also move the mode from cooling to heat for about 5 to 10 mins until you feel air coming out the vent again.

Unit not cooling: Check temperature settings. Ensure mode is set to cool.

HPF (High pressure fault): The AC units on the Fly Again are water cooled. A high-pressure fault means that there is air in the system (lack of water flow). Check the sides of the vessel and make sure water is coming out of the AC outlets on the hull. If there is no raw water flow the unit will need bleeding.

Bleeding AC unit: Bleeding the unit means letting the air out the system until there is a steady flow of water to cool unit. On Fly Again the unit is bled from the line connected to the AC pump. First turn the unit on to restart the Air conditioning pump. Undo the hose clamps on the line connected to the pump and remove it enough to let air and water out. Once there is a steady flow of water refit the hose and retighten the hose clamps, check if water is coming out the side of the vessel. The AC strainer can also pick up seaweed and debris and might require cleaning at times.

Speak to the manager on duty before attempting to bleed AC-Unit.

Ac pump under saloon floorboard



AC Intake and Strainer

AC Pump, FWD Cabin Floorboard

8. Electronics:



B&G Triton² digital display and autopilot controller X2



B&G Triton² Autopilot control



B&G Zeus³ 16 Chartplotter

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Fusion Entertainment MS-RA70N Marine Entertainment System with Bluetooth



Connecting your device via Bluetooth:

Hit the source button and select BT (Bluetooth).



Hit the Menu button and select discoverable.



Open Bluetooth settings on your device and scan for Bluetooth devices. The stereo should show up in your list of devices as 'Tola Sunrise'. An option should show up on your display asking to pair with device and confirm pairing code, select 'OK'. Once paired your song selection and device name will show up on the stereos digital display.

Push to Volume rocker to adjust the volume in individual zones (Salon and Cockpit)



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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, 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

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.



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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 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 are 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).

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10. Batteries

There are 3 ways to recharge your batteries.

Engines:

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 engines are 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. If your batteries are close to 12.2 volts you should consider charging.
- Run the engines at 1400rpms or more for 1-1 1/2hrs **twice daily**
- Shut the motor off.
- Wait 5 minutes before checking the battery levels, (directly after turning off the motor they will remain in an excited state for about 10 minutes). After charging, your Domestic/House battery should rest on 12.8 volts.

Shore power:

Ensure that the battery charger breaker is selected on the 110v panel and that 'Shore' is selected rather than 'Generator' on the Selector switch.

Generator:

Ensure that the battery charger breaker is selected on the 110v panel and that 'Generator' is selected rather than 'Shore' on the Selector switch.

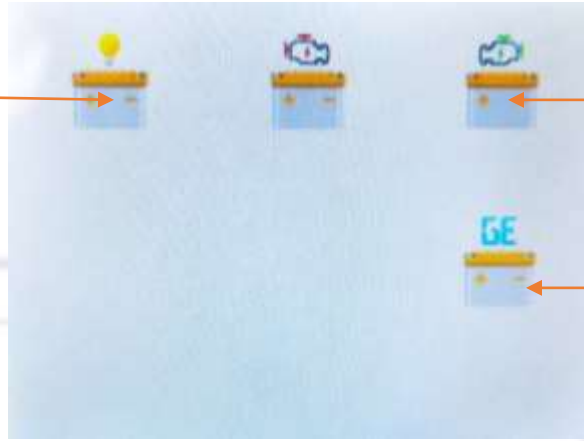
Touch to open battery menu



Port engine battery

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Domestic/house battery



Starboard engine battery

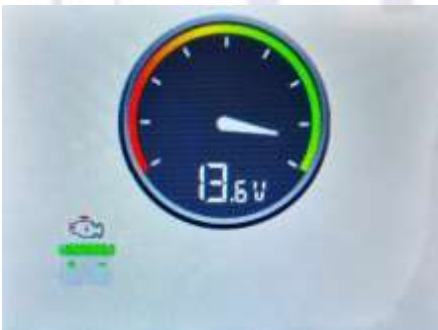
Generator battery

Domestic/House battery voltage

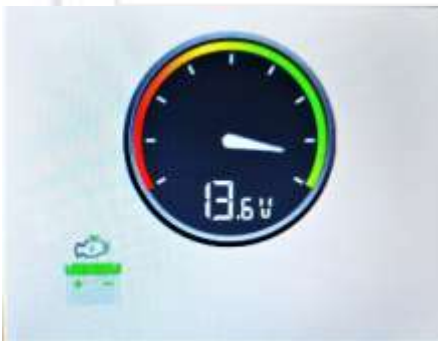


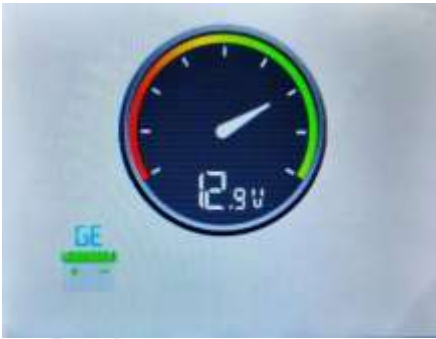
State of charge

Port engine battery voltage



Starboard engine battery voltage





Generator battery voltage

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11. 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.

Manual operation of the windlass

If you lose power to your windlass, start the engine and rev to 1500 rpms to make sure you have not got low battery voltage. **Check that the breaker shown below has not tripped in the STBD cabin behind the door.** If you still have no power, you can operate the windlass manually.

To drop the anchor, insert the windlass handle into the central hole on the top of the windlass.

Turn the handle anti-clockwise so that the gypsy loosens its grip on the chain. 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 wing nut with the stainless handle.

When you have paid out enough chain, between 5 to 8 times the water depth, push the handle forward to tighten the wing nut. Next, fit the bridle and release more chain on the gypsy so that the load is taken up on the snubbing line.

To raise the anchor, put the handle in the outer hole and turn the whole drum clockwise, this will wind in the chain. However, it is quicker if you pull the anchor up by hand as the helmsperson motors forward a little at a time, to give you slack on the chain. If you are reasonably fit and strong, it is possible to heave an anchor aboard.

Windlass Breaker



ELECTIC WINCH

There is a two-speed electric winch at the helm station. Turn cap to expose the buttons or the cover the buttons to prevent accidental use of the winch. When using the electric winch keep an eye on the sail as it is going up to make sure battens don't get caught in the lazy jack lines.

Three two-speed winches at helm



Two-way winch for travellers



Winch Breakers

The electric winch breakers will trip if a unit is overloaded. It is in the cupboard by the starboard companion way. To reset it simply push down the yellow lever to the '1' position.



12. Picking up a mooring buoy

- Ensure dinghy painter tied off short on the bow or amidships and clear of the prop.
-
- Ensure there are 2 long dock lines at the bow, one attached to each bow cleat.
- Approach 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 - generally the overnight moorings are well maintained, the day balls to a lesser degree. If you are ever unsure about a mooring buoy's integrity, choose another location to moor up.
- Pick up the mooring pennant using the boat hook. Pass one dock line through the pennant and fasten the dock line back on its cleat. Repeat with the second line.
- Once you have secured your lines remember to centralize the wheel and lock in place to avoid the yacht sailing around the buoy.
- Now set up a back-up line. The line should lead from a bow cleat to the mooring buoy and fasten on to the buoy itself. It is always easier to do this from the dinghy.
- To depart, slowly motor the yacht forward to create slack, release one end of the dock lines from their cleats and allow to slip through the pennant eye. Allow the pennant to fall into the water. Fall back with the wind or current and be careful not to foul your prop on any moorings.
- **Remember to tie your dinghy on a short painter and away from the stern whenever you are manoeuvring in close quarters**

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13. Bilge Pumps

Your yacht is equipped with two manual and two electric bilge pumps (one in each hull). The primary bilge pumps are on float switches and operate automatically providing that the bilge pump switch on the 12v panel is left in the center position. If the float switch fails, the pumps can be forced to operate by pushing the switch located on the 12v panel. It is important that you check all the bilges once a day.

The engine compartments drain into the main bilges.



The manual pumps are located either side of the cockpit at the rear and the handles for these are towed under the central cockpit locker lid.

MANUAL BILGE PUMP

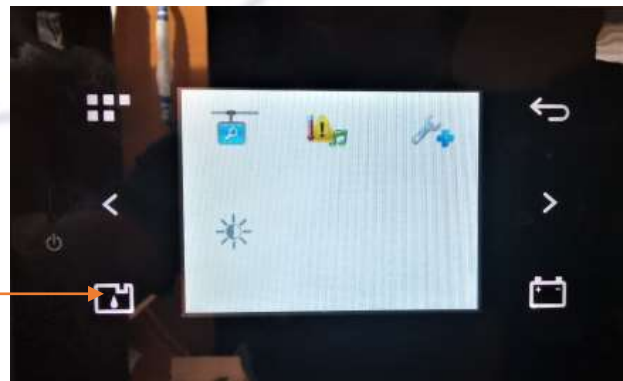


14. Freshwater system

Fly Again is equipped with two inter-connected water tanks with a combined capacity of 160 gallons. **There are therefore no changeover valves.**

Before filling the tanks let the water run from the hose for a while before placing the end into the filler located amidships on the bow, just in front of the salon windows. Please ensure that the correct filler is used, NOT the waste tanks or the diesel fills.

To use the freshwater system, turn on the freshwater breaker on the 12v panel and open a faucet. When the tanks run 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. The water level can be read by pressing the top button under the LCD display on the 12v panel.

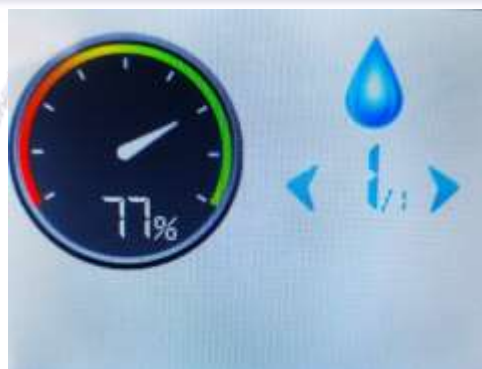


Water & Fuel Gauges

Touch to open water gauge



Water gauge



15. Watermaker

Fly again is fitted with a **Sea Recovery Ultra Whisper III Watermaker**.



Start/Stop button

1. Powers on and sets the system in its initial state.
2. When the system is producing water and the START/STOP button is pushed, the system stops all pumps and diverts water into the sea.
3. Resets all faults.

Note that this button performs its designated action, regardless of whether you are browsing a menu.



Fresh flush

This button initiates the Fresh Water Flush (FWF) cycle.

Cycle button

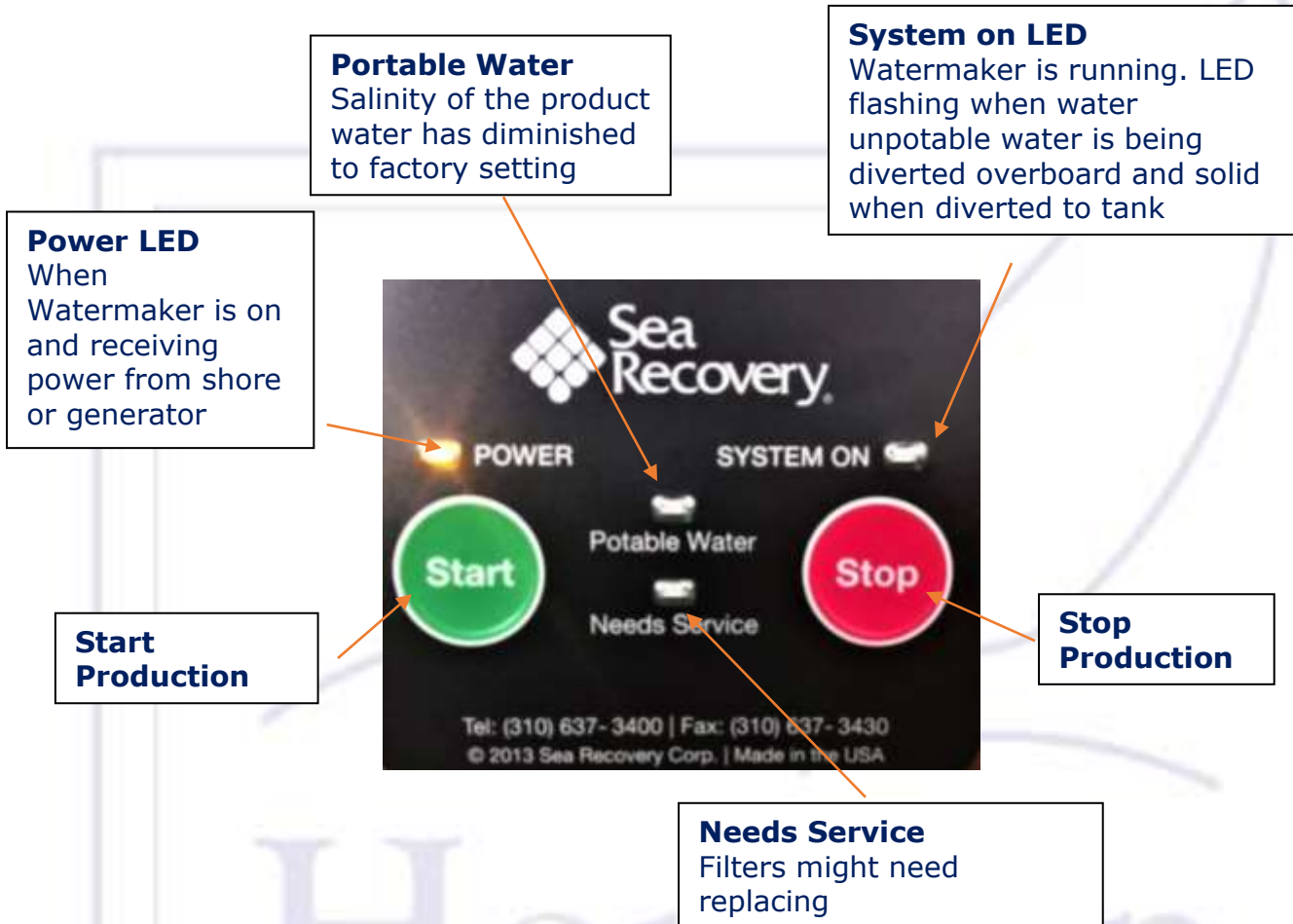
This button allows the operator to cycle through the process and configuration parameters.

- Press the CYCLE button once to view to view the Display Menu.
- Press and hold CYCLE for 5 seconds to view the Configuration Menu.

Booster Pump button

Start the booster pump. Press the Start/Stop button to stop operation. Note that this button starts the booster pump, regardless of whether you are browsing a menu.

Start Production



To start the system, press the "START" button on the panel just below the nav desk. If the system automatically shuts off immediately or after 20 seconds of operation, this may be due to a system fault. Look at the display on the unit to confirm whether a fault has occurred. **If there is a fault, make note of the fault code and contact the manager on duty.**

If there are no unforeseen abnormalities, the Ultra Whisper System pressure will automatically increase to normal operating range immediately after starting.

If any abnormality develops, stop the system and correct the problem.

Although the system is producing "product water," the "product water" may not be "potable" for up to 30 minutes. The Operating/System On light will blink, when product water is unpotable and becomes solid "green", when the product water is potable. The display on the unit should say "Diverting to sea".

The salinity of the product water diminishes gradually and is measured by the salinity probe.

When the salinity of the product water has diminished to the factory setting, the salinity controller will energize the operating light becomes solid "green" and the 3-Way Product Water

Diversion Valve opens to product. At that instant, product water will be routed to the charcoal filter, pH neutralizer, UV sterilizer and onward to the potable water storage tank (depending on your options).

Stop Production

Stop the system by pressing the "START/STOP" button once.

The freshwater flush lamp will illuminate, intermittently blinking for 2 minutes. This time delay is to allow the R.O. BOOST to dissipate its pressure. After the 2-minute wait period, the freshwater flush automatic cycle will begin, as indicated by a steady, non-blinking illumination of the freshwater flush lamp.

After the freshwater flush cycle is complete, the freshwater flush lamp will illuminate and intermittently blink in the stand-by mode. Every 7 days, the freshwater flush rinse cycle will repeat automatically.

If the "START/STOP" button is pressed twice, the automatic freshwater flush cycle will be cancelled, and the freshwater flush lamp will not be illuminated.

If the freshwater flush is activated, do not interrupt power. If the power source has been turned off, the freshwater flush will not cycle every 7 days.

**25 Micron Prefilter and 5 Micron Prefilter.
Just behind the port engine.**



Watermaker intake and Strainer



Watermaker troubleshooting

Error ID 1: High Salinity Fault

The Product Water salinity is above 100ppm for more than 10 consecutive seconds.

- 1.** We recommend using a portable TDS meter to determine if the problem is with the RO Membrane Element or with the Salinity Probe and Electronic monitoring system.
- 2.** A damaged or worn Product Water O-ring at one of the End Plugs within the High-Pressure Vessel is allowing Feed Water to mix with Product Water, which would typically result in higher than normal Product Water Flow. However, a small nick in the O-ring may allow enough Feed Water to mix with the Product Water to cause the condition without resulting in a noticeable increase in Product Water Flow.
- 3.** A crack in one of the End Plugs within the High-Pressure Vessel is allowing Feed Water to mix with Product Water, which would typically result in higher than normal Product Water Flow. However, a small crack may allow enough Feed Water to mix with the Product Water to cause the condition without resulting in a noticeable increase in Product Water Flow.
- 4.** RO Membrane Element is fouled due to normal use and requires cleaning.
- 5.** Salinity Probe has debris on the probe causing the system to read poor water quality. Clean the Salinity Probe with a toothbrush.

Error ID 2: High Pressure Fault

If the High-Pressure Sensor increases beyond 950 PSI and the System shuts down, press the "Start/Stop" button.

A high-pressure fault can be caused by:

- Low Temperature Feed Water
- High Salinity Feed Water
- Fouled RO Membrane Element
- Blockage in the Brine Discharge Line
- Blockage in the Product Water Line

Error ID 3: Low Pressure Fault

A low-pressure fault can occur when the following conditions occur:

- The value at the Low-Pressure Sensor is below 4 PSI for more than 20 seconds
- The Low-Pressure Sensor is disconnected or malfunctioning
- The value at the High-Pressure sensor is below 4 PSI for more than 20 seconds
- The High-Pressure Sensor is disconnected or malfunctioning. To troubleshoot, check for the following:
 - Cock Valve must be fully open
 - Air suction leaks at all components and fittings prior to the Feed Pump
 - Whether or not the Sea Strainer Mesh Screen is clean (no manufacturing or installation debris) and if air suction leaks are present
 - Whether or not the Pre-Filter Element is clean (no manufacturing or installation debris)
 - Whether or not the Plankton Filter Element is clean (no manufacturing or installation debris) 60
 - No kinks, blockages or air suction leaks in the inlet line
 - The Feed Pump is operational and delivering flow and pressure
 - Whether or not the Inlet Thru-Hull Fitting is clean (no manufacturing or installation debris) and if air suction leaks are present
 - Caulking compound within the opening

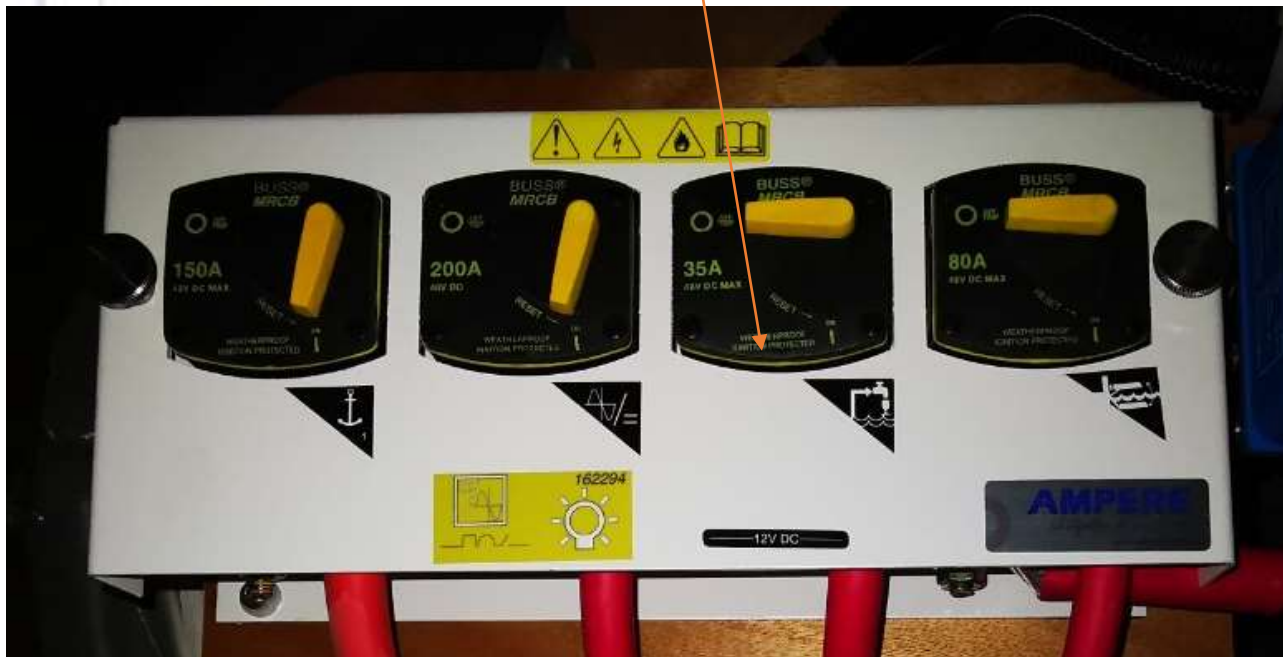
- Shipping cover or tape below the hull in the water
- Casting slag on the "fingers" below the hull in the water or within the orifice
- Plastic bag or other debris in the water below the hull in the water

Error ID 4: Low Voltage Fault

Check system voltage inside the Control Panel. The system must receive adequate voltage at start up and during operation for normal operation. DC systems will shut down by design when the voltage falls below:

- 12 VDC Systems: 10.5 VDC
- 24 VDC Systems: 21.5 VDC Loud or Whining Pump Loud or whining pump is common after long use. The cause of the loud noise is a drop motor rpms or cavitation. If the pump is cavitating, check for clogs, kinks, or dirty sea-strainer. If the noise persists, check motor supply voltage at the system source and at the motor. If there is not enough supply voltage, it will cause the motor to run at a lower rpm.

Watermaker Breaker behind stbd aft cabin door



16. Heads





- Nothing is to be put down the head unless it has been digested first.
- Fly Again is fitted with electric heads.


Blocked heads due to any other blockage other than mechanical failure of parts is at the charterer's expense as per your charter contract. This includes the chase boat and technicians fee.



Flush/ Rinse Bowl

Wet Bowl (Left) Dry Bowl (Right)

- Before use, ensure that there is enough water in the bowl.
- If the bowl is empty, hold the lower Flush Control Switch on Wet Bowl  position until the flushing pump is primed, and water enters the bowl.
- During use, pump as necessary to keep the contents of the bowl low enough for comfort.
- After use, hold the upper Flush Control Switch Flush/Rinse bowl  until the water in the bowl is clear (Flush for as long as possible so the waste travels all the way through the lines).
- When the water in the bowl is clear, hold the lower Flush Control Switch on the Dry Bowl  side  until the bowl is empty. Always leave the bowl empty to minimize odour and spillage.

AFTER USE DRY BOWL (SHUT) () THE FLUSH CONTROL.

Fly Again has an operational holding tank for each hull. Waste goes directly to the holding tank and can only be discharged by holding the down the button above the holding tank gauge. Always remember to flush your holding tanks when sailing or motoring since on Fly Again the holding tanks are always accumulating waste and must be flushed manually.

Check that the holding tanks are empty before returning the vessel and please flush each one through to minimize residual odors.



Hold to discharge holding tank

Holding tank gauge

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17. Showers

Your yacht has a hot & cold, fresh-water shower in each head and on each of the transoms. If the engine has been running, the hot water can be very hot – be cautious! Hot water is generated automatically through running the main engines. Hot water can also be created by turning on the water heater breaker on the 110v panel with the generator running or on shore power.

To use the showers, the fresh-water pump must be activated on the 12v panel.



The waste shower water can be drained by pressing the black button on the shower wall.

Deck Shower

The valve next to the shower head will switch the water on and off and control the temperature.

To use the shower head, simply pull it out and press the lever on the back. If no water comes out, make sure that the 12V water switch is on and the shower hose is not kinked.



18. Propane and stove

The propane tank locker is in the cockpit beneath the fwd locker. There are two propane tanks, one connected to the supply and one spare.



To use:

- Turn on the Propane switch in locker below the galley sink. This opens the solenoid on the tank.
- To light, turn the knob that corresponds to the burner that you wish to use through 90 degrees anticlockwise, push the knob in and light the burner using the matches provided.
- 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 by closing hatches or switching off fans.
- Light the oven in the same way, pressing the knob in whilst holding your match to the bottom burner.
- If you cannot get it to light, check the manual valve on the propane tank itself.

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

THREE BURNER STOVE



OVEN



Gas safety

All our yachts are fitted with propane detectors. On Fly Again, the display is located to the right of the 12V panel. 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!!

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 all the bilges and hatches. Point the boat downwind and use the manual bilge pump to pump out the bilges.
- Call Horizon immediately



Propane detector switch behind starboard aft cabin door



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

19. Refrigeration

There are two 12-volt refrigerators and a 12-volt freezer on board your vessel. This system is designed to run 24hrs a day if you wish. To ensure that it does 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 10 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.

Each unit can be individually controlled using the thermostats located in each unit. On your arrival, the dials will all be set to their coolest setting. Keep it on this setting until all your food has chilled thoroughly. Then you can turn the system down or off if you wish. Or if it is not cold enough you can 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. There is also an in-built cooler for drinks just forward of the salon seating.

Please note that we are in the tropics and we cannot guarantee that items will remain frozen when placed in the fridge and that fruit, vegetables and other fresh produce may have a shortened shelf life.

Ice maker

Cockpit Fridge

Galley Fridge

Freezer



A stylized line drawing of a sailboat's sail and hull, positioned in the upper right corner of the logo's frame. The sail is a large, curved shape, and the hull is a smaller, curved shape below it.

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Yacht Charters

British Virgin Islands

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20. 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.



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21. Fire Safety

Fire extinguishers are installed in each cabin, under the salon seating and in the central 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:

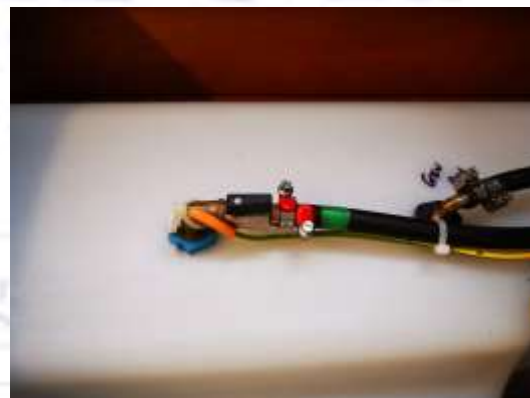
In the event of a fire in the engine compartment use the fire extinguisher positioned closest and discharge it through the access hole located centrally on each aft cabin headboard. There is a fully automatic fire extinguisher in each engine compartment.

- Pull the yellow key out.
- Press down on the red button until all the contents of the extinguisher have been discharged.
- Fuel shut-off valves are under each aft bunk.
- 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).



**Fuel shut off valves
under aft cabin
bunks**

Engine Fire Access Hole



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:

- Shut off the propane at the tank.
- Take the fire blanket out of its container.
- Carefully lay the blanket over the fire, laying the blanket away from you and keeping yourself always protected from the flames.
- Ensure hands and limbs are protected from the fire by the blanket.
- 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.

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22. 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.
- 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.
- **GAS to OIL ratio, 1 gallon: 3 ounces.**

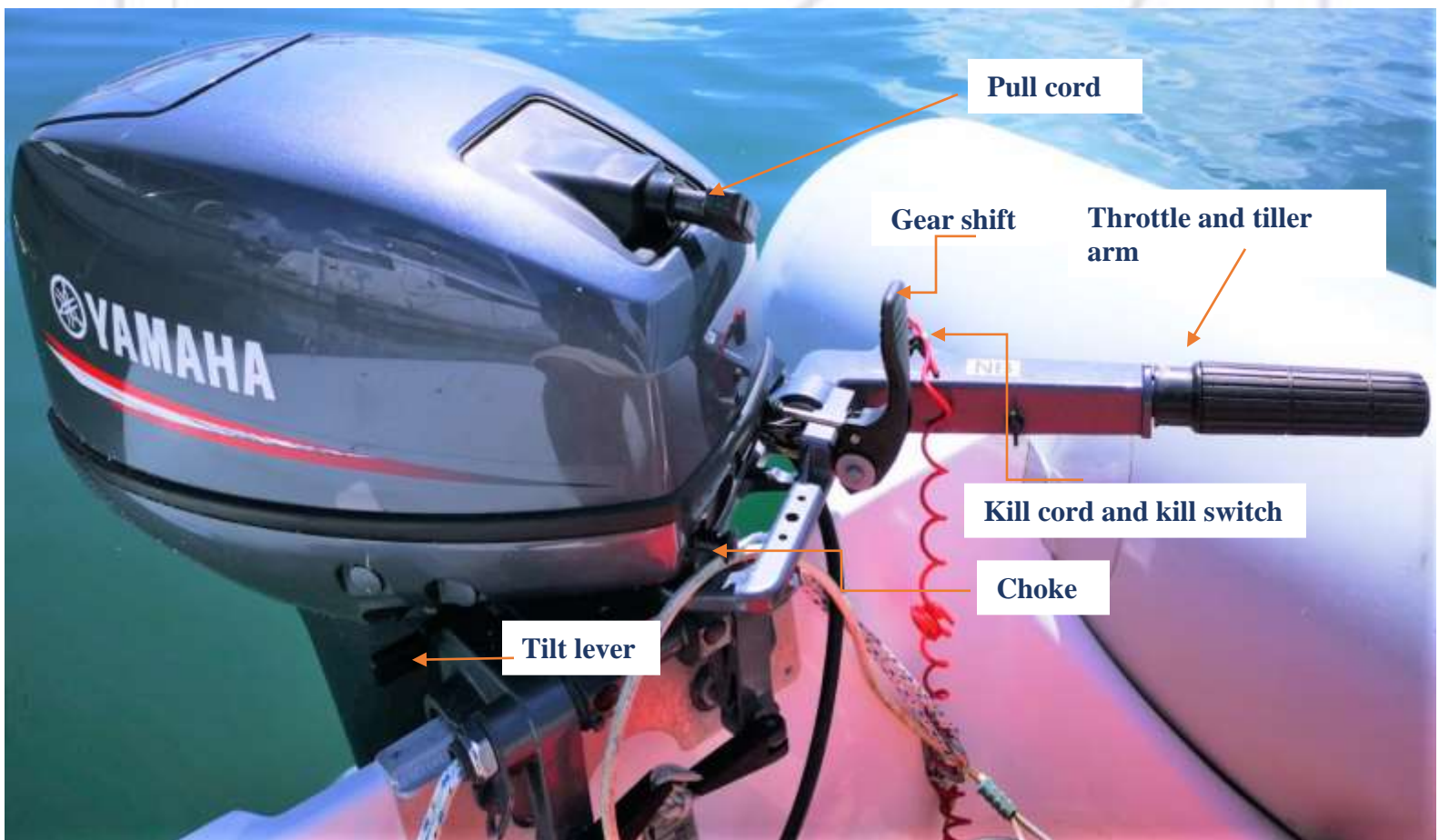
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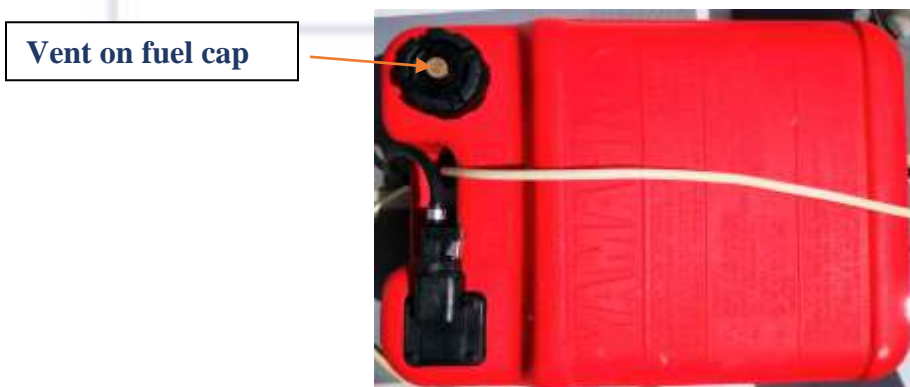
Outboard start procedure:

1. Place Kill cord under kill switch (Dinghy driver must always wear the kill cord).
2. Open vent on fuel tank cap (this vent can stay open; it allows air out but will not allow water to go in). **The fuel in the tank expands in this climate and if vent is left closed it can damage the tank and cause a fuel leak.**
3. Few pumps on fuel line bulb.
4. Make sure outboard is in neutral.
5. Add some revs using throttle on tiller handle.
6. Pull on start pull cord.
7. If the outboard does not start then pull choke and try again, as soon as the outboard start push choke back in.

Outboard



Fuel tank



24. Dinghy lift

Lowering the Dinghy Lift:

- Refit the dinghy plug if it was removed.
- Undo the safety locks on both sides (port and starboard).
- Holding down the switch until the platform just over the water.
- Undo the dinghy safety straps.
- With the dinghy painter in hand continue lowering the dinghy until it is afloat.
- Once the dinghy is off the platform, lift platform out of the water.

Raising the Dinghy Lift:

- Move dinghy over the lift platform.
- Raise platform until dinghy is resting on the two holsters.
- Secure dinghy safety straps.
- Raise platform all the way up.
- Refit and secure safety locks on both sides.



Dinghy Lift Control Switch

Dinghy Lift Breaker

