

SECTIONS

- **BATTERIES**
- **ELECTRONIC PANEL 12V DC**
- **ELECTRONIC PANEL 230V AC**
- **VHF**
- **GPS**
- **BOW-THRUSTER**
- **TOILETS**
- **SHOWER PUMP**
- **WATER PUMP**
- **KITCHEN**
- **MOTOR**
- **ISOLATOR**
- **ANCHOR WINDLASS**
- **SAILING**
- **MAIN SAIL**
- **ELECTRONIC INSTRUMENTS**
- **GENERAL**

BATTERIES

The yacht has got :

- one battery only for starting the motor, called **battery 1 or starter battery**
- three batteries for all the other facilities, called **battery 2 or service battery**
- one small battery for emergency, only for operating the VHF
- one battery in the front port cabin under the bed for the bow-thruster

When the motor is running all batteries are charging. The motor starts only from the starter battery. All the other facilities take power from the service batteries. Everything is automatic, you do not turn or switch something. **Every day you have to run the motor for 3 hours minimum (better to be continuous), for recharging the batteries.**

Position : Under kitchen's corridor floor



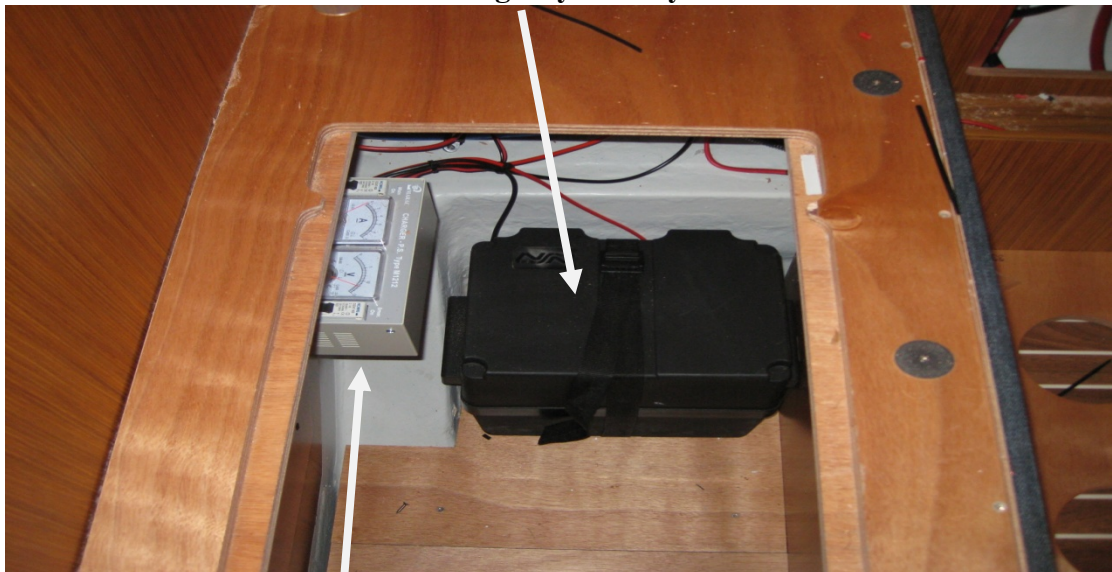
3 Service batteries

Red cables are positive (+), Black cables are negative (-)

DANGER : WHEN THE MOTOR IS WORKING, THE YACHT MUST NOT BE CONNECTED WITH 230V SHORE POWER.



**Starter battery is placed into the motor room
V.H.F. Emergency Battery**

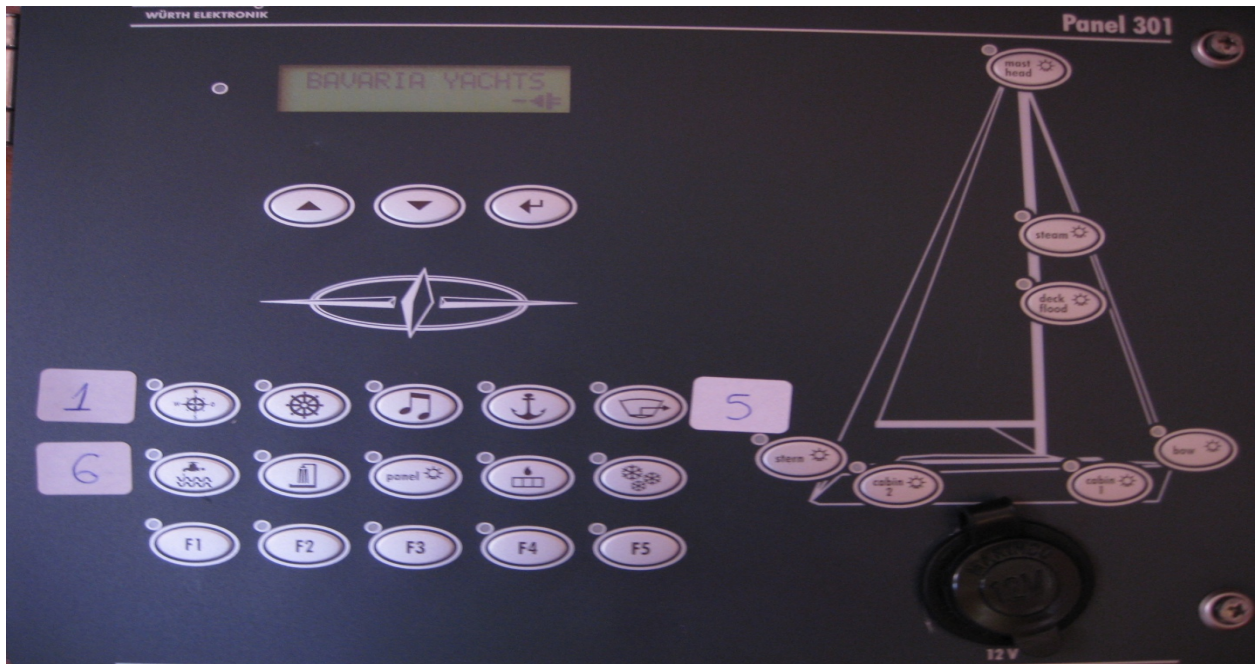


V.H.F. Controller

Location: Under skipper's chair

ELECTRONIC PANEL 12V (PANEL 301)

1. **Compass lights** (operate only at night sailing)
 2. **Navigation instruments** (DEPTH, SPEED, WIND, GPS,AUTO PILOT)
 3. **Radio-cd player**
 4. **Windlass control** (for security the button to be closed after use)
 5. **Electric bilge pump** (without flouter, operate only in an emergency)
 6. **Water pump** (switch off, every time that no one is on the vessel)
 7. **Shower pump** (the pump that drains out the water when you have a shower)
 8. **Illumination** for the digital screen of the panel (auto off after some minutes)
 9. Empty
 10. **Refrigerator** (can remain on, during the night)
- F2. **Electric bilge pump for the bow compartment**, exactly behind the windlass
(without flouter, operate only in an emergency)
- F5. **Cockpit light**



12V power supply

The symbol that appears to the digital screen means that the yacht is charging batteries by shore supply.

If any of the lights (from the buttons) on the panel is flashing, that means that the particular object is not working (is burned itself, or the fuse of the button is burned).

ELECTRONIC PANEL 230V SHORE POWER (PANEL IP 40)

Main switch for 230V (When this switch is down nothing is working)

1. **Boiler** (hot water) is working when the red light on the top of it, is on. Needs aprx. 30 minutes to provide hot water.
2. **The plugs** to the kitchen and to the bathrooms
3. **Charger 12V** for batteries and the **plug 230V** on the panel



The green light shows that shore power is connected. The red light shows that the boiler is in use.

All the above are working **only** when the vessel is connected with shore power. The boiler except the 230V electric circuit, can provide hot water every time you start the motor. So after starting the motor you have to wait aprox. 30 minutes.

WARNING : NEVER LEAVE THE SWITCH OF THE BOILER ON (No 1), FOR MORE THAN 2 HOURS. MOREOVER THE SWITCH MUST BE OFF (No 1), DURING THE TIME THAT SOMEONE IS TAKING A SHOWER, FOR SECURITY REASONS.

V H F (GARMIN 100i)

The vhf is independent, it has its own battery and there is no switch on from the panel. You turn it on and off directly from its own switch. Normally takes power from the service batteries. If you have a black out or the service batteries are very low, you will hear a continuous alarm (beeeeeep). The same time the vhf is working but is not taking power from the service batteries as before, it takes power now from the emergency battery that exist for operating the vhf only in an emergency. This is happening automatic every time when the voltage in service batteries goes less than 12 volts.



When G.P.S. is working the digital VHF screen shows the GPS position of the yacht, as is shown in the above photo.

VHF BATTERY CHARGER



Location : Under skipper's chair

To stop hearing the alarm press the **black button (Buzzer stop)** on the right lower corner of the vhf controller. If you pull down the two black switches are placed on the left and on the right side on the front surface of the panel (MAIN & EMERG.), then you stop the operation of the VHF.

CH 16 EMERGENCY CHANNEL (OLYMBIA RADIO)

CH 12 PORT POLICE

CH 25 WEATHER FOR SARONIC AND ARGOLIC GULF

CH 04 WEATHER FOR CYCLADES

DO NOT USE THE ABOVE CHANNELS FOR SHIP TO SHIP COMMUNICATION

There are more detailed information about channels and how you use them in case of emergency in a paper fixed above the chart table seat.

If you have a problem (something is not working, you damaged something, etc.) you call the office by mobile or standard phone (not by vhf).

You tell us who you are, which yacht you are sailing, where you are (your location) and what is your problem. We are going to do our best for you.

If the problem is so serious, that there is no time (sinking too fast), or life(s) is in danger, only then use the emergency CH 16 and call the military rescue team. If they cannot hear your calls or there is no time for talking, **press the distress button continuously for 5 seconds**. After this time the rescue team can see that your vessel is in danger. If GPS is working all this time, the position data from the GPS, goes to VHF (always these two instruments are connected together) so when you press the distress, the rescue team can see the name of the vessel that it is in danger and its exact position. After that wait for assistance from the Greek authorities.

Misuse of the system, or fault alarm that wasn't canceled immediately, is going to cost you a penalty from the Greek authorities of approximately 200.000 €.

DO NOT PLAY WITH THE SYSTEM. KEEP CHILDREN AWAY.

GPS PLOTTER (GARMIN DV)



With the arrow keys you move the cursor on the screen.

- + ZOOM IN
- ZOOM OUT

When you put the cursor on any area on map (as shown in photo), you see the location of the cursor, the distance from the vessel (**DST 1,41 nm**) and the route you must follow to reach that location (to our example on screen, you must follow **BRG 245°**). Take note that when you follow a route on screen take a good look that you do not have ground or shallow water on your path.

DANGER : THE GPS-PLOTTER HAS A GOOD ACCURACY BUT ALWAYS YOU FOLLOW THE INSTRUMENT AS AN ASSISTANCE. ALWAYS YOU TAKE INFORMATION AND ROUTE FROM THE SEA MAPS.

BOW-THRUSTER (Craftsman 95Kgh)

The motor, the battery, the fuse and generally all the electric system of the bow-thruster, is located into the front cabin under the bed.

The general switch must be off every time that no one is on the vessel, for security reasons (located into the front cabin). If you see that the system is not working, check the fuse of the system (located in the front cabin, below sofa). It might be burned (425 A), and needs replacement. Outside on the cockpit area, is located the control panel of the bow-thruster. To operate the system, press 2 times the button (the first time is blinking the GREEN light and the second time the GREEN light stabilizes). To stop the operation, press once the button and the GREEN light becomes off.



BOW THRUSTER CONTROL PANEL, ON COCKPIT AREA

**DANGER : DO NOT OPERATE THE SYSTEM MORE THAN 3 SECONDS.
DANGER OF FIRE BY OVERHEAT.**

If you need the system to be working for more time : operate for 3 sec, gap for 5 sec,
operate for more 3 sec and etc.

bow fuse 425A

bow battery



bow motor

Location: Into the front stern cabin, below bed's sofa



Bow-thruster switch is in **ON position as is shown to the above photo**
Location: In the front port cabin

ELECTRIC TOILET WITH CONNECTED THE BLACK WATER TANK

After using the toilet, press the toilet switch for minimum 10sec, and keep it pressed for more time depending from the situation. Never have it pressed for less than 10 sec., because there is a major possibility to block the system. Never throw toilet paper or other materials into the toilet bowl, for the same above reason.

Normally you can have all sea cocks (sea valves) opened. Although, for security reasons during your first sailing trip, check the toilettes and if you see that the sea water level into the toilet bowl increases, then close the sea valves.

TOILET SWITCH



WARNING : YOU NEVER THROW ANY PAPER OR OTHER MATERIALS INTO THE TOILET BOWL.

VERY IMPORTANT : The black water tank is always in use, so the outlet valve must always be closed when you use the toilet. If you use the toilet and you leave the outlet valve opened, after a while probably the tank will block.

So when you are in a bay or in a port, have the outlet valve closed. When you are again to the open sea, open for a while the outlet valve of the toilet and by gravity you empty the black water tank.



TOILET DOOR MARKED THAT BLACK WATER TANK IS CONNECTED



INLET VALVE

OUTLET VALVE

In the above photo, mark that the outlet valve is opened.



OUTLET VALVE

Mark here that the outlet valve remains closed, during the time you use the toilet. You open the outlet valve, when the vessel is sailing to the open sea, to empty the black water tank.

SHOWER PUMP

When you have a shower, water gathers on the floor. Press the **black button**, so the pump start pumping out water, until there is no more water on the floor. If you see that although pump is running, no water goes out, open the plastic door under the sink (in the toilet area). Inside you will find a round plastic filter. Probably the filter is blocked (very dirty). Clean the filter and put everything back as it was, and try again to run the pump. If again nothing happens, please call the office.



↑
Black button

Plastic door

Toilet bowl

WATER PUMP

Every time you open a tap, the water pump is working providing fresh water from the water tank. When you close the tap, normally after a few seconds the pump must stop working. If not then 2 things may be happening. 1. Water is leaking from somewhere (probably from the cockpit shower), 2. There is not enough water in to the water tank.

When one of the 3 water tanks is empty, go into the stern starboard toilet and open the door under the sink. There are 3 white plastic roll valves. By changing position to the valves, you change the water tank which provides you with fresh water.

Try to refill the water tank before it gets totally empty. If that happens and after refilling no water comes out from the taps, follow the next procedure (steps) :

- Leave the water tap open
- Put the water hose into the water tank refill (hole/opening)
- Open the water from the land to flow in the water tank, no matter if it overflows (the purpose is to press the water in the water pump)

- Normally if everything of the above works properly (you have to choose from the valve, the correct water tank), after 30 seconds water will come out from the open tap.
- Close all taps. Everything shall work properly now.

LOCATION WATER VALVES : STERN STARBOARD TOILET UNDER THE SINK



Forward tank Middle tank Aft tank

As is shown to the above photo:

Forward tank: is closed

Middle tank: is closed

Aft tank: is opened (we take water from that tank now to this photo).

IMPORTANT: ALWAYS TAKE WATER FROM NO MORE THAN ONE TANK THE SAME TIME.

When a tank is empty, close the white valve of this tank and open one other valve of other tank.

KITCHEN (ELECTROLUX 2 FIRE PLACES)

Kitchen works with gas. There are 2 gas bottles in the vessel. One already connected and one spare. When you don't use the kitchen, please close the inside gas valve for security reasons.

There is one more gas valve outside, on the top of the connected gas bottle. Ensure that both valves are opened, when you want to operate the kitchen. In order to have flame in each fire place, first you press in the correct **black button** and then you turn it a little bit to the left. At the same time you put fire with matches or a lighter. If fire comes, you still hold inside the button for 5 to 10 seconds. Then release the button and the fire place has continuous fire by itself. By turning the button left you decrease the flame, and by turning right you increase the flame. If after releasing the button although you tried a few times no fire stays alive to the fire place, the particular one may have problem.

IMPORTANT : KITCHEN COVER STAYS ALWAYS OPENED WHEN YOU COOK, LEAVE IT OPEN AND AFTER STOPPING THE FIRE PLACES UNTIL THE TEMPERATURE GOES DOWN TO NORMAL LEVELS. DO NOT INSTALL HOT KITCHEN MATERIALS ON THE COVER, YOU WILL DESTROY IT.

Gas valve in the closet is in ON position



MOTOR VOLVO (D2-75)

Every day you must check the condition of the motor room. Be sure that there is no oil or water under the motor.

Motor oil type : 15W40

Gear oil : 15W40

VERY IMPORTANT : EVERY DAY YOU CHECK THE OIL AND THE WATER LEVEL OF THE MOTOR. YOU MUST HAVE THE MOTOR RUNNING EVERY DAY APROX. 3 HOURS FOR RECHARGING THE LOST POWER.

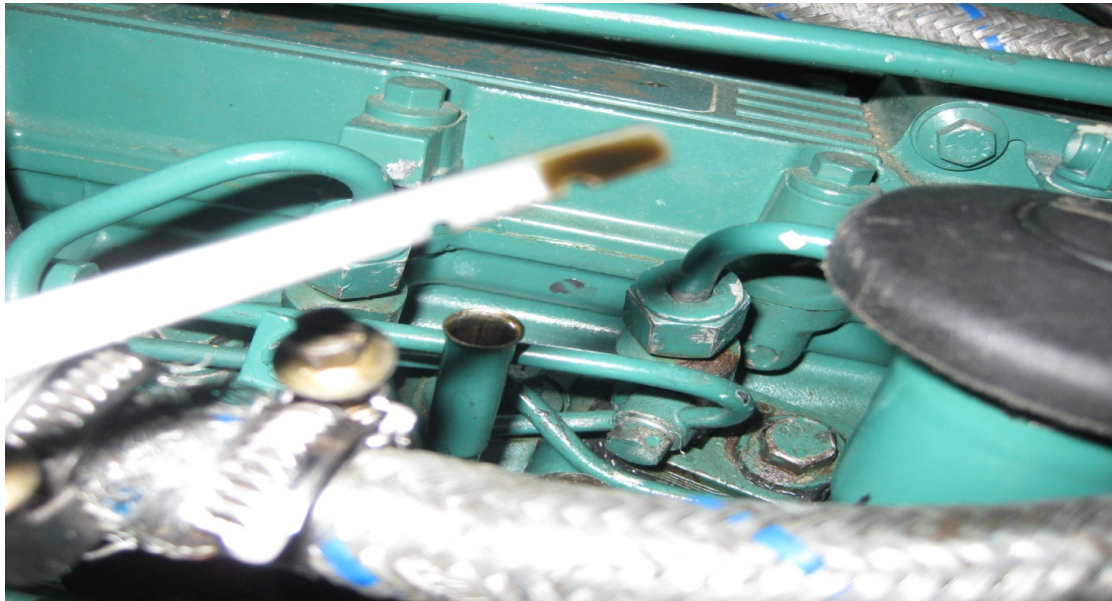
Every time you start the motor check that water comes out from the evaporation pipe. In case of alarm beep, first check which alarm rings beeps (temperature, oil, charge) and then stop the motor immediately.

Never put forward from reverse directly and fast, and the opposite. Always put neutral and after 2 seconds put soft forward or reverse. **Fast moves destroys the gear box and there is always possibility, although you put gear, gear not to work.** If something like this happens, put neutral and after put soft gear (forward or reverse) and slowly give more power.

After starting the motor have the motor running in 1000 r.p.m. for the first 10 minutes, just to warm up the motor. Never leave the motor running in neutral for a long time: 1. You do not gain more power, 2. You destroy the motor.

If you start the motor just for recharging your batteries, put the motor running in 1.200 r.p.m. You can have the motor running like this for hours without any problem.

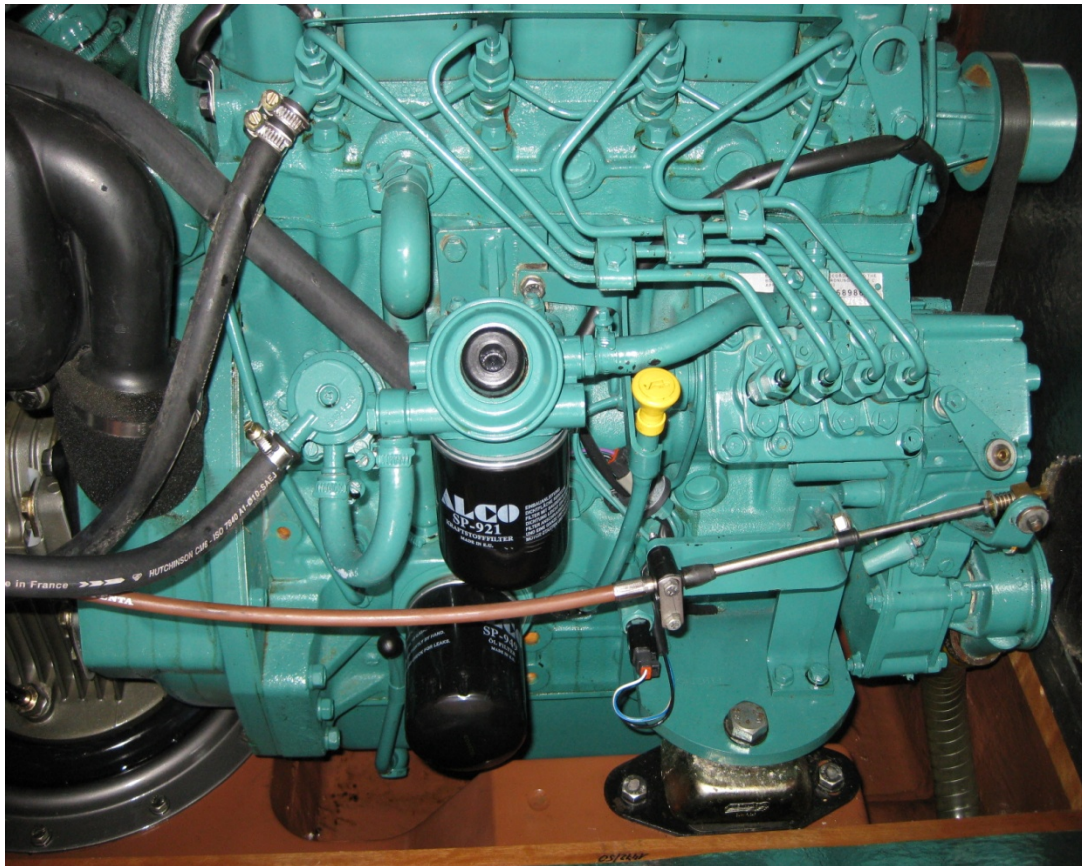
When you start your first sailing trip by motor, give to the motor max power and check how many r.p.m. goes in max (for example max is 2.800). Minimize the power by 400 r.p.m. (that means $2800 - 400 = 2400$), and that should be your cruising speed. Do not exceed this level.



Deep stick marks minimum oil. The upper mark is for maximum.

5

1

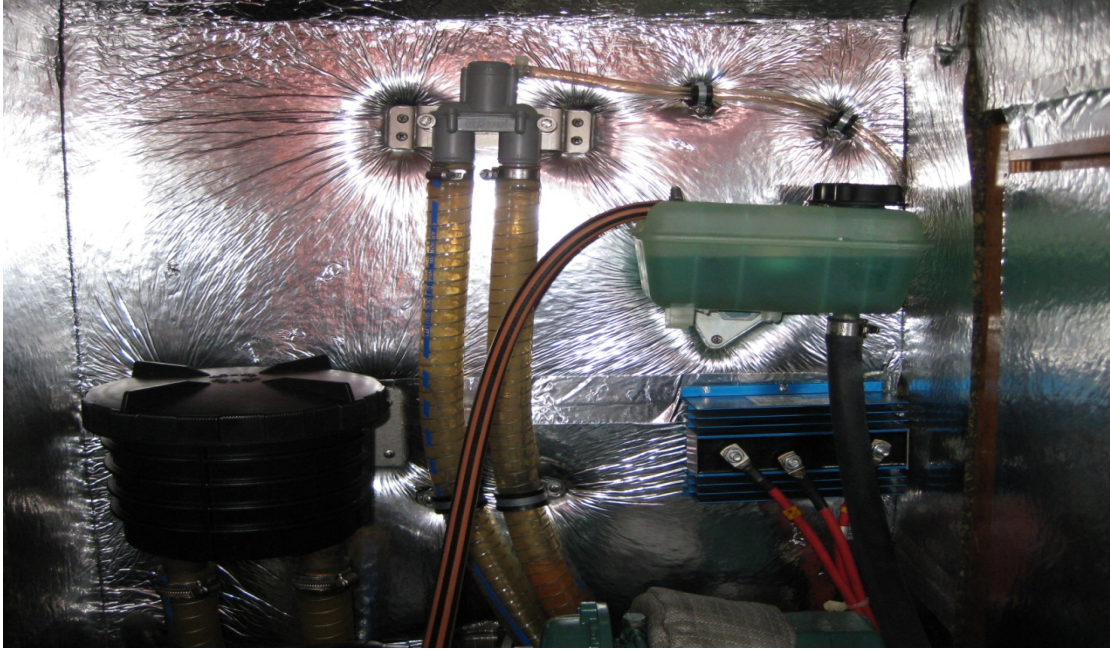


Sail drive (bottom) 9 10 (High) motor base

On the top of the fuel filter there is a pump with a black round plastic button. To bring diesel up to the top of the filter, if there is a problem or you changed fuel filter for some very important reason follow the steps below :

1. On the top of the fuel filter there is a 10 number german key screw. Unscrew it totally. Take care not to lose the metallic washer under the screw.
2. Start pumping by pressing the black round plastic, until diesel comes out from the hole of the unscrewed screw. After that, press for 5 more times just to be sure that all air came out.
3. Screw in everything as it was at the beginning.
4. Give without gear much power to the motor by the control motor stick.
5. Start the motor. If motor starts, wait in these hi r.p.m. for 2 minutes until you see that the r.p.m. of the motor is stable, and you do not have r.p.m. going up and down by itself. If everything looks stable put motor working in neutral.
6. Go downstairs to the motor room and check that you have no leakage and everything to the motor looks normal.
7. Have the motor running for 10 minutes and then stop it.
- 8.

2



12

13

11

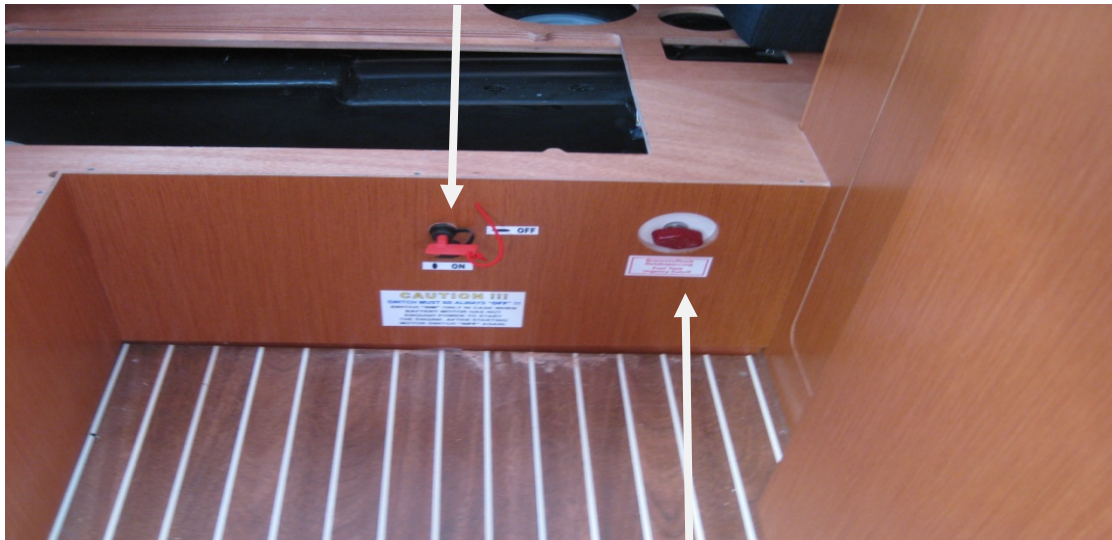


Diesel Pump ↑

↑ **Screw for coming out fuel**

For more information please call the office. If the motor runs with bad quality diesel or water together, the motor is destroyed.

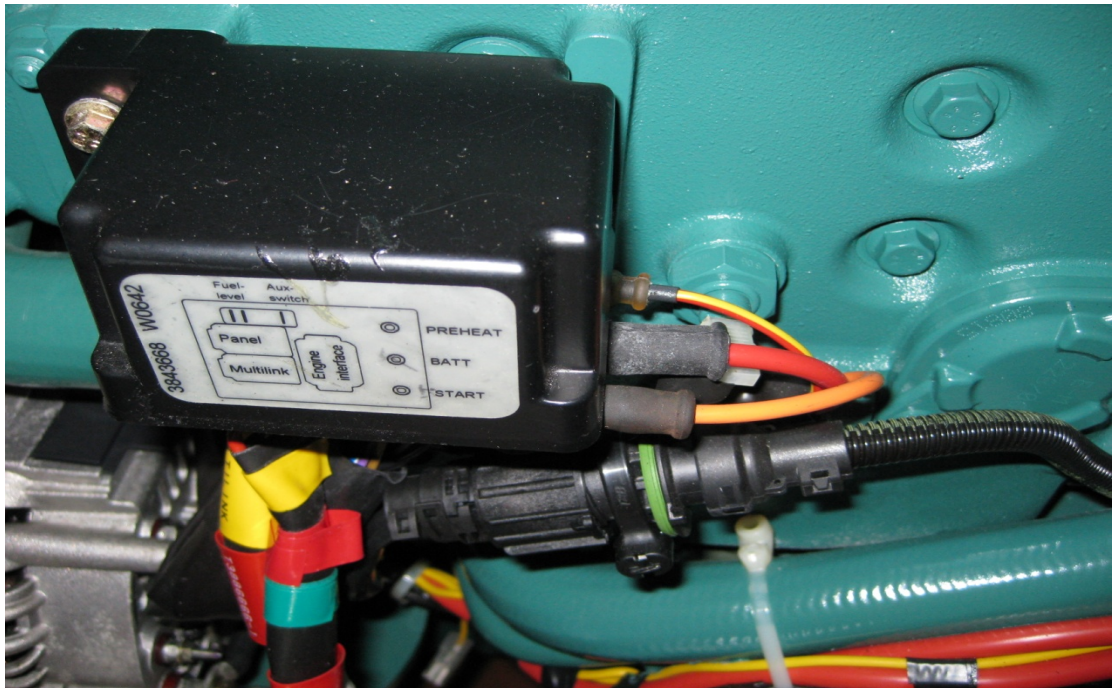
Emergency switch, connects starter with service batteries



Stern starboard cabin

Diesel valve (14) shows open (horizontal)

Brain controller



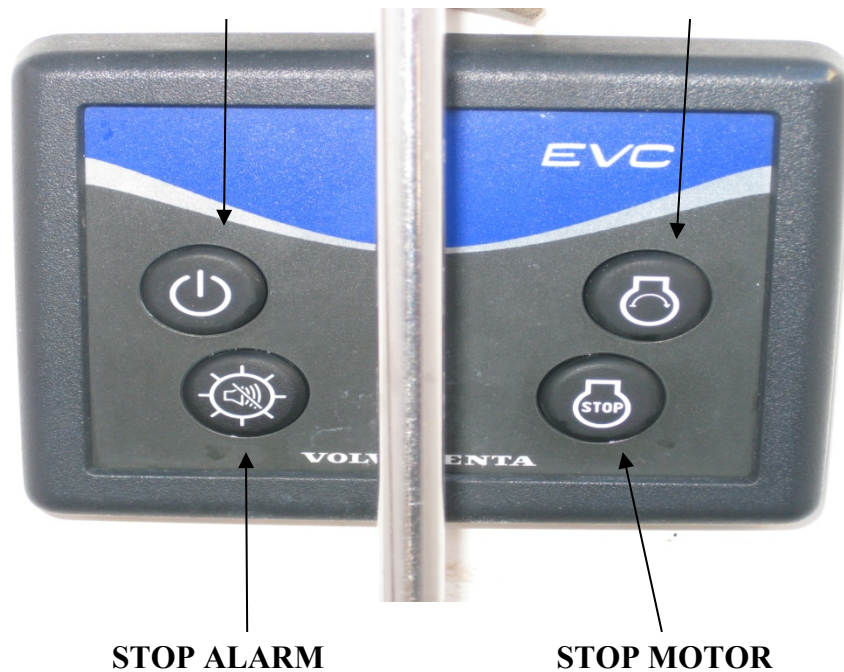
Location: Port side of the motor

When the outside panel (EVC) is on and the motor doesn't start by pressing the start button, and the panel turns automatically off, then probably the brain controller has problem.

SOLUTION : Connect(**quick touch, not permanent connection**) the red (middle) cable, with the inside 2 colored (yellow/red) cable. Directly after the connection the motor starts. Ensure before doing this contact that the motor panel outside is on.

ON/OFF PANEL

START MOTOR



IMPORTANT : EVERY TIME YOU STOP THE MOTOR DO NOT FORGET TO PRESS ON/OFF BUTTON, TO CLOSE THE ELECTRIC CURCUIT. **IF ALL NIGHT THE PANEL STAYS ON PROBABLY THE NEXT MORNING THE MOTOR WILL NOT START,** BECAUSE THERE IS NOT ENOUGH ENERGY TO THE STARTER BATTERY.

How you react to engine alarm, and how to stop alarm it:

In case that you suddenly hear engine alarm, take a look to the digital screen of the R.P.M. instrument, to see where is the problem. After that **STOP the engine immediately** to avoid any damage to the engine. Check oil level, water level (TAKE EXTREME CARE WHEN YOU OPEN THE WATER TAP), alternator drive belt condition and if it is tensioned. Check for any strange leakage. If all the above look O.K. start the engine and look directly if water comes out from the evaporation (exhaust) pipe. If that is O.K. continue your trip. Probably you took rubbish to the sea water inlet that cools the motor, blocked the inlet, the temperature raised and you had the alarm. If the alarm continues, press the button (**STOP ALARM**) and directly you stop hearing the engine alarm.

IF YOU FEEL UNCOFORTABLE OR YOU HAVE ANY SUSPICIOUS THAT SOMETHING IS WRONG, PLEASE CALL THE OFFICE.

How to start the engine if the motor battery has low energy:

In case that the motor battery has low energy and is not possible to start the motor, go to the stern starboard cabin. If you take a look below the bed's sofa it is installed a red SWITCH (as is shown to the below photo).

That SWITCH is in **OFF** position. Turn the SWITCH to **ON** position, and start the motor. After starting the motor **do not forget** to turn the SWITCH to **OFF** position again.

- No1:** Cable comes from alternator
- No2:** Cable goes to service battery
- No3:** Cable goes to motor battery
- No4:** Cable goes to bow-thruster battery

If after doing the above, you realize that after stopping the motor the motor fun is working continuously without stopping, then you have to disconnect totally the white thin cable.

WINDLASS (DEVON 1500W)

Every time you take up the anchor, you must have the motor running at the same time. Try to have the chain vertical to the vessel, so the windlass won't take too much force. Always try not to anchor in water more than 10 meters. Always try to use the most part from the chain you've got, if possible all the chain for security reasons (for the best possible holding). When you pick up the chain don't do that at once, but with small time gaps during the time you press the up button of the windlass control, just to give the time to the windlass to cool down a little bit.

If suddenly, you realize that the windlass is doing no up and no down but you hear a noise (klick) every time you press one of the two buttons of the windlass control, in that case the automatic circuit breaker (thermal protection **125A**) is out of order. In this case switch on, switch off and again switch on and after check, if the windlass is working. Normally it should be, if not call the office.

LOCATION : BELOW CHART TABLE



125A WINDLASS PROTECTION

Chain is marked, the end of the chain is connected with a line of approximately 2 meters, just to be easily cut if necessary. The other end of the line is fixed to a stable place of the vessel.



By putting and unscrewing with a winch handle, on the middle of the STARBOARD inox plate of the windlass drum, you release manual the anchor and chain.

SAILING

During sailing ensure that all the hatches are firmly closed.

Always open and close both sails when you put the vessel on the wind (0°). Never use a winch when you close entirely the sails, you may destroy something of the mechanisms, because you cannot understand how much power you use to close the sails. **Use winches only during sailing for trimming the sails.**

PORT SIDE BRAKES



1 2 3 4 5

1. empty slot.....NEVER USE THIS BLOCK
2. SPINNAKER HALYARD
3. MAIN OUTHAUL (for opening the main sail)
4. MAIN SHEET
5. BOOM VANG

STARBOARD SIDE BRAKES



1. MAIN SHEET
2. MAIN SAIL OUT
3. MAIN SAIL IN
4. TOPPING LIFT
5. empty slot.....NEVER USE THIS BLOCK

MAIN SAIL

The winch on the mast opens and closes the main sail and is controlled from the cockpit area by 2 lines (located on the starboard side triple brakes). These 2 lines (side by side with the same color) is 1 endless line. You close the sail by pulling **always** the right one and you help to open the sail by pulling a little bit (not much otherwise you open the sail **into** the mast and you block the system), **always** the port one. On the top of the winch there are 2 positions.

Starboard position : FREE. In this position the winch turns both sides. This position is for normal use, you can open and close the main sail.

Port position : RATCHET. In this position the winch turns only clockwise. You use this position for 2 reasons :

1. You are moored, sailing is finished and you are ready to leave the yacht. Put winch in ratchet position and you are 100% sure that the sail will not open for any reason.
2. You are sailing and you've got a semi or a full opened main sail. Suddenly the endless line comes out from the winch or the endless line is cut. In this case you can no longer control the winch from the cockpit area. Move yourself to the mast. Put the ratchet position, put the **short winch handle** to the winch and manually start turning clockwise the winch by the winch handle, until you close the sail entire or up to the point you wish. Maybe you lost the endless line but not the sailing. If you

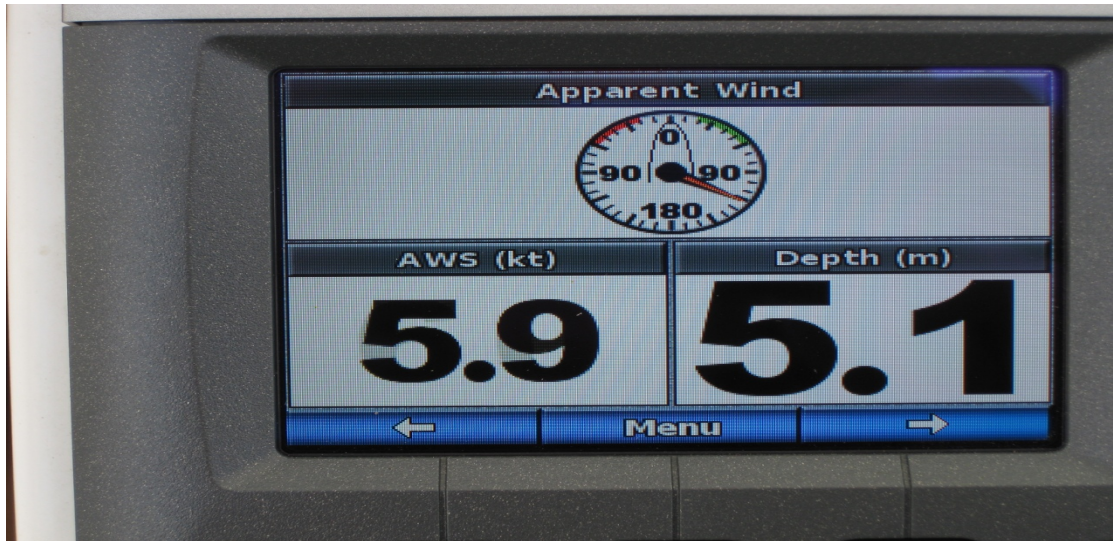
want to open the sail again, put the handle on free position, pull the outhaul and the main sail will start open again. To stop the sail to the wishing point put the handle on ratchet position. And by following again the above procedure you close again manually the sail.



The winch on the mast that opens and closes the main sail, shown in photo in free position

ELECTRONIC INSTRUMENTS

1. **Depth meter.** Shows the depth from the water line. The keel of the yacht is 2 meters. **Speed meter** shows the speed of the yacht and the log.
2. **Wind instrument.** Shows the angle of the wind and the speed of the wind. **Auto pilot.** In **STBY** the pilot is not engaged. Press **Engage** and the pilot is in use. Never follow the electronic compass of the pilot (you do not care what it shows in degrees), always follow the compass of the vessel. The autopilot can hold a route without problem **up to a weather of 6 beau fort.** **Extensive more use can destroy the pilot or cause serious problem to the steering system.**



AWS : Apparent Wind Speed



When you open the auto pilot instrument, you have to wait for 20 sec. Press escape when it will ask you for calibration.

GENERAL

Diesel refill



Diesel tap marked with red letters

The yacht has got 1 diesel tank of 300 liters.

Water refill



Water taps marked with blue letters

The yacht has got 3 water tanks of 500 liters totally.

Manual bilge pump



Electric bilge pump



Handle for manual bilge pump



Find this key if any inside cabin door is locked by itself.



By pressing the key into the top hole of the door mechanism, you unlock the door.

MAIN :

SERVICE BATTERY SWITCH (ON)



Position : Under the chart table

MAIN : MOTOR BATTERY (ON)



Position : Under the stairs