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ISENSOR

iSENSOR floor standing

Product Manual

Installation, use and maintenance







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1. INTRODUCTION

This document has been prepared in order to provide reliable and helpful information regarding the use of the appliance. The manufacturer waives all liability, whether express or implied, for any possible errors or omissions that the manual may contain.



Before operating or using this appliance, read this manual carefully and thoroughly.



The owner of the appliance is responsible for requiring all personnel in charge of use and maintenance to read this manual.

2. TECHNICAL CHARACTERISTICS

2.1. Functional equipment

- Removable solder bar without connections.
- Possibility of programming up to 10 work cycles.
- Polyethylene plate inside the chamber, which increases the vacuum speed and regulates the working height.
- Vacuum control by sensor.
- Auto-calibration system.
- Intelligent mode for packaging liquids and porous products.
- Progressive pressure recovery to avoid damage to the bag caused by spines, bones, etc.
- Controlled visualization of all process steps.
- Vacuum plus to force air out of porous products.
- "AUTO-CLEAN OIL" process, self-cleaning oil system.
- Optional inert gas inlet on all models. This optional conditions the manufacture, it
 must be requested in advance since it cannot be added later.
- Equipped with Bluetooth 4.0 or higher for connection with the "Mychef iSensor" app available on iOS and Android, for managing packaging programs and printing labels.
- For label printing, the accessory <u>TVAA0036 Label Printer with Bluetooth LE</u> is required.

2.2. Design features

- Made of stainless steel.
- Well with rounded edges for easy cleaning.
- Transparent methacrylate lid to visualize the element to be packed.
- Side display for checking the oil level.

3. GENERAL STANDARDS FOR SAFETY AND ACCIDENT PREVENTION

3.1. Personnel in charge of the use of the appliance

The use of the appliance is reserved for trained personnel.



Personnel must be familiar with the safety standards and the instructions for use.

3.2. Electrical hazard



Work on the electrical power source and access to live parts is only permitted to skilled personnel and is under their responsibility. In any case, said access must be carried out with the appliance disconnected from the electricity grid.

3.3. Thermal hazard



Make sure the ventilation openings are not blocked.

Do not install the appliance near flammable products.

3.4. Hazard arising from the use of gas



The use of gas for controlled atmosphere packaging is restricted to the use of nitrogen (N_2) or carbon dioxide (CO_2) or mixtures of both. This machine is not designed for the use of Oxygen (O_2) or other flammable gases.

4. INSTALLATION

Once the appliance has been received, remove the packaging carefully and check the equipment against the label (located on the rear-left side) to be sure that this is the requested appliance. Once the appliance has been checked, read this "Product Manual: Installation, use and maintenance" bearing in mind the following precautions:

- a) The personnel in charge of the installation must be qualified in appliance installation.
- b) Verify that the voltage/current source corresponds to that required by the appliance.
- c) Grounding is mandatory.
- d) Check that the elements that make up the equipment are properly situated and free from damage from transport.

Place the appliance on a flat surface and ensure that it is level. The appliance should be placed so that it is protected from splashes of water and dirt.

Before starting up the equipment, check the rear display to see whether the oil level is between the MAX and MIN markings. If the level is below the minimum, it must be refilled (see section 6).

5. USE

5.1. Control panel

Mychef iSensor packaging machines consist of an LCD display and a rotary encoder with a central button.



Do not clean the vacuum packer screen cover with alcohol-based liquids, solvents, acids or detergents as these may damage the screen cover and affect the display.

The LCD display is structured in three main zones:

- The left zone or operating mode zone (A in Figure 1)
- The central or percentage level zone and error indicator (B in Figure 1)
- The right zone or status zone (C in Figure 1)



Figure 1. LCD Screen with all segments

Each zone contains a series of icons and text elements that describe at all times the state of operation of the vacuum packaging machine and allow the user to interact with the machine, changing the packaging parameters to suit each use. The role of each of them is explained below:

	Function		Description			
	1	Modes	Labels of the 3 operating modes: Automatic, Manual and Self Cleaning.			
	2	"AUTO" icon	Automatic mode indicator.			
	3	"MANUAL" icon	Manual mode indicator.			
	4	"CLEAN" icon	Self-cleaning mode indicator.			
A	5	"OFF" icon	Indicator of the vacuum packer shutdown process.			
	6	Program indicator	Program display in the Manual mode. The numeric display shows the number of the selected program.			
	7	Numerical display	Shows integers from 0 to 199 or with a decimal from 0.0 to 99.9. This display shows all the numerical parameters required during the vacuum cycle or the configuration of the vacuum packaging machine; from the vacuum level in % to sealing times, self-cleaning, etc., passing through the error number or program selection in manual model.			
В	8	Error icon	Error indicator, shows that the central numerical display shows an error value.			
	9	Vacuum percentage icon	Icon indicating that the central numeric display shows a value in %.			
	10	Seconds icon	Icon indicating that the central numeric display shows a value in seconds.			
	11	Minute icon	Icon indicating that the central numeric display shows a value in minutes.			
	12	States	Labels of the 5 operating cycle states of vacuum packers: Vacuum, Gas, Sealing, Air and Repeat.			
	13	Extra vacuum indicator	Indicator of the Extra Vacuum status, where the packer maintains 100% vacuum for a certain period of time.			
	14	Vacuum icon	Vacuum status indicator. Indicates that a vacuum process is being carrie out in the chamber. (Pump running)			
	15	Gas icon	Gas status indicator. Indicates that gas is being injected into the chamber.			
	16	Sealing icon	Sealing status indicator. Indicates that the vacuum bag is being sealed.			
	17	Air icon	Air status indicator. Indicates that atmospheric pressure in the chamber is recovering.			
С	18	Cycle icon	Repeat status indicator. Indicates the vacuum cycle repeat number and recovery in manual mode. If a multicycle mode is set, the numeric display below the icon indicates the current cycle number in countdown.			
	19	Encoder push button icon	Indicates that pressing the central button will present a change, skip or cancellation of the current operating process.			
	20	Closed lid icon	Indicates that the cover can be closed to start operation.			
	21	Open lid icon	Indicates that the lid can be opened.			
	22	Mode of air entry icon	Indicates the selected air inlet mode: Soft (progressive air inlet), Fast (normal air inlet) and Stop (blocking of the vacuum percentage in the chamber for making marinades, etc.).			

23	Indicates whether the machine is ready to start a new packaging cycle. If this icon flashes, the machine will be ready after opening the vacuum packer lid.
	packer liu.

Table 1. Control board indicators, displays and buttons

5.2.Self Calibration System (SCS)

The iSensor floor standing vacuum packers have a fully automatic calibration system, Self Calibration System (SCS), patented by MyChef. As a result of this automatic recalibration algorithm of the vacuum percentage, we have the following advantages:

• Calibration without user intervention

The appliance automatically detects optimal calibration conditions and, completely autonomously, can recalibrate itself according to the following physical changes:

- Automatic adaptation to temperature variations.
- Automatic adaptation to climate variations.
- Automatic adaptation to altitude variations.
- Automatic adaptation to variation in oil properties.

The appliance is able to detect increases and decreases in differential atmospheric pressure, recalibrating itself as needed.

• Increased precision in measuring the vacuum

By constantly calibrating itself automatically, the values used to calculate the vacuum percentage are dynamically updated. Therefore, the vacuum percentage that the user selects has a smaller error margin than if it were to not dynamically calibrated.

The SCS calibration system determines when it is necessary to perform a calibration and does so automatically without the user intervention. However, the user can force a calibration at any time simply by making a packaging with 100% vacuum.

5.3. Connecting and turning on the appliance

When the appliance is connected to the electricity grid, a start-up process takes place where all internal values are initialized, and safety and control checks are carried out to ensure optimum control of the vacuum packing. This process will be indicated on the screen by the simultaneous flashing of all segments for a number of seconds.

While the segments are flashing, you can check the technical control parameters by pressing the centre button. These parameters may be relevant for the maintenance of the appliance. Two parameters will be displayed:

- Vacuum pump operating hours.
- Number of vacuum cycles performed.

The first value displayed is the operating hours of the vacuum pump. This will be identified by the "Vacuum" icon, which will light up in the right-hand block of the screen. The digits of the number will be shown on the central display cyclically by marking the end of the digits

with an "H". For example, if the pump motor has been running for 20991 hours, the display will show: $^2 - 0 - 9 - 9 - 1 - H$, on a loop.



Figure 2. Display of vacuum pump operating hours

By pressing the push-button while the number of pump operating hours is displayed, the vacuum packer will go on to show the number of complete vacuum cycles it has completed. The value will be displayed using the same method, changing the "H" that identifies the end of the number of operating hours to a "C" for packaging cycles. In this case the value will be identified by the "Repeat" icon.



Figure 3. Displaying the number of vacuum cycles performed

Press the central button again to finish displaying this value and continue to end the machine initialization process.

Once the vacuum packaging machine is connected and the initialization process is completed (whether or not the status values of the pump are consulted), it will be switched off, waiting for the user to switch it on to start working.

The machine can be switched on in two different ways:

- Pressing any of the three buttons.
- Opening the lid.

Any interaction will put it into operation in automatic mode so that just with one more movement of the lid it can start to pack.



¡WARNING! The Manufacturer shall not be liable for any injury to persons or animals and damage to components resulting from improper use and not in conformity with the machine.

5.4. Gas injection

In some foods, it may be interesting or advisable to use antioxidant gas to improve the food preservation or also mixtures of gas to avoid crushing the packaged product. This option is available with all Mychef iSensor vacuum packers.

The following is a description of the precautions to be taken into account when carrying out vacuum packaging in a protective atmosphere:

- NEVER USE FLAMMABLE GASES OR MIXTURES IN WHICH THERE IS TOO MUCH OXYGEN, THE OXYGEN CAUSES THE FLAMMABILITY POINT OF THE MATERIALS TO DROP AND THERE IS A RISK OF EXPLOSION.
- THE INSTALLATION MUST BE DONE BY A SPECIALIZED TECHNICIAN.
- GAS TANKS MUST BE SECURELY FASTENED.
- THE GAS OUTPUT PRESSURE OF THE PUMP SHOULD NOT EXCEED 1 bar BECAUSE A HIGHER-PRESSURE MAY DAMAGE THE COMPENENTS OF THE PACKAGING MACHINE.
- ONCE THE LAST GAS OPERATION HAS BEEN MADE, CLOSE THE STOPCOCK OF THE GAS TANKS.
- TO CONNECT THE GAS INPUT TO THE PACKAGING MACHINE A FLEXIBLE 10mm Ø_{INTERIOR} TUBE THAT SUPPORTS PRESSURE, AND A METALLIC FLANGE TO SECURE
- THE TUBE ARE NEEDED.

5.5. Operating modes

iSensor vacuum packers have three different operating modes: Automatic mode, Manual mode and Self-Cleaning mode. The operating mode is selected by rotating the encoder (right and left) until the corresponding icon is highlighted in the left menu of the LCD screen.

5.5.1. Automatic mode

The automatic mode of operation is designed so that the user can pack perfectly and efficiently without having to configure any parameters. This mode performs a complete packaging cycle without the need for monitoring: it produces vacuum in the pouch by controlling the vacuum percentage with the intelligent iVAC algorithm, seals it hermetically by regulating the seal duration with the iSeal algorithm and automatically recovers atmospheric pressure in the chamber.



Figure 4. Automatic mode

Mychef patented iVAC control algorithm automatically detects and completes the vacuum process depending on the type of food and its conditions. It is particularly suitable for the packaging of porous foods and liquids as it prevents them from boiling and overflowing out of the bag.

On the other hand, the iSeal algorithm regulates the sealing time of each cycle to avoid overheating in the bar and thus avoid burning the bag. This allows the bar temperature to be adjusted to each seal, extending the service life of all bar components and guaranteeing perfect seals regardless of the number of cycles previously performed.

To start it, just select the automatic mode by rotating the encoder and lower the cover once the "AUTO" icon is on.

5.5.2. Manual mode

The manual mode allows the user to fully control the packaging parameters and access special features such as repeat vacuum cycles or extra sealing times.



Figure 5. Manual mode

Once the "MANUAL" icon has been selected, the "PROG" icon at the bottom left of the screen will light up and the digit next to it will indicate the selected program. By default, this will be 0. By pressing the button, the program icon will blink, allowing you to select the different programs when rotating the encoder.

This mode is organized in 10 packaging programs, from 0 to 9. These allow you to configure packaging parameters for a specific purpose such as making marinades or vacuuming products with bones or pieces that may damage the bag. The programs allow you to save these parameters and load them quickly every time you want to pack with the same characteristics. These values do not have to be edited and entered each time, making it easy to perform specific packaging processes multiple times over.

To edit the parameter values, press the encoder button with the selected program to be modified. On the right size of the LCD screen, the icon related to the parameter to be modified will start flashing; for example, if the vacuum level to be reached is changed, the

"VACUUM" icon will start flashing (later all the parameters and their relation with the LCD screen icons are presented). Then by rotating the encoder, you can modify the parameter value and pressing it again saves it and jumps to the next value to be set. This process will be repeated until all parameters are modified and saved, returning to the manual mode starting point.

If you want to use a previously configured and saved program without editing any options, you can close the lid once you have selected the program in question. The vacuum packer enters the manual vacuum cycle according to the parameters stored in the memory without any modification or confirmation of each value.

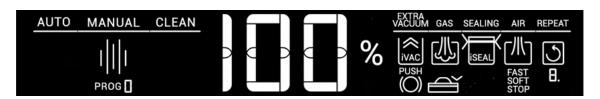


Figure 6. Edit the packaging parameters in the manual mode

All parameters are described below in configuration order:

Vacuum percentage:

This parameter sets a vacuum value expressed as a percentage, once this value is reached the pump will switch off and jump to the next state. Once the value "Int" has been selected, the vacuum percentage control is delegated to the iVAC algorithm explained in the automatic mode. The icon that identifies it, is the "VACUUM" icon.

Vacuum extra time:

The extra vacuum time marks a time in seconds during which the vacuum pump is kept turned on. This bonus is used to guarantee vacuum in very porous foods. For proper operation this time can only be set when 100% vacuum is selected. The icon that identifies it is the "EXTRA" icon.

Gas percentage:

This parameter determines the value of the percentage of gas with which the chamber will be filled. This value is conditioned by the percentage of vacuum selected in the previous parameter; The vacuum level minus the gas level must be at least 50%. The icon that identifies it is the "GAS" icon.

Sealing time:

This time value specifies the sealing time of the bag. It marks the duration of electrical contact on the sealing bars and must be adjusted to each type of bag. In order to know the ideal time, it is recommended to consult with the bag supplier. As in the selection of the vacuum percentage, selecting the "Int" value delegates control of the sealing time to the

iSeal algorithm that will regulate this time automatically. The icon that identifies it is the "SEALING" icon.

Atmospheric pressure recovery mode:

This parameter allows the selection of 3 types of air inlet:

- 1. **FAST**: The atmospheric pressure recovery in FAST mode allows the air to be blown in by opening the inlet valve until the atmospheric pressure inside the chamber recovers. It is the quickest and most suitable way in most cases.
- 2. **SOFT**: The pressure recovery in SOFT mode allows the air to enter intermittently, controlling the deformation of the bag. This mode is useful for slowly restoring atmospheric pressure so that the packaged food is properly molded to the pouch and preventing sharp objects from breaking it.
- 3. **STOP**: This mode allows the pump to stop at a certain vacuum value by pressing the encoder button or until it reaches the value determined by the vacuum percentage parameter. The vacuum packer will hold this vacuum until the button is pressed again. This process can be useful for marinating meat or fish or for extracting air from sauces.

The icon that identifies it is the "AIR" icon and selecting each type of recovery is done using the icons below it: "FAST", "SOFT" and "STOP".

Repeat multiple vacuum cycles:

It is possible to program series of repetitions of the same vacuum cycle, i. e. it allows the vacuum to be carried out and the atmospheric pressure in the packaging machine to be restored cyclically. In each repetition, the packer reaches the vacuum value set in the "Vacuum percentage" parameter. If this is 100% and an extra vacuum time is set, this time is also completed within each repetition. The atmospheric pressure inside the chamber is then recovered. This recovery is not fully completed as a small percentage of vacuum is kept in the chamber to avoid opening the lid, allowing another repetition to start automatically.

This process will perform as many repetitions as defined in this value, with a maximum of 9. The icon that identifies it is the "REPEAT" icon and the digit below it marks the number of repetitions remaining.

The gas injection is compatible with the cycle repeat mode, although it should be noted that the gas will be injected only at the last repetition, in the same way that it is injected when sealing is performed.

5.5.3. Autoclean

When the vacuum pump's oil has taken on a whitish shade, due to water condensation, it can be removed using this mode. Due to the temperature, this process means any water that may be in the oil will end up evaporating and exiting the pump.

These water particles may cause rust particles to develop on internal components of the pump.

→ The vacuum packer will notify the user of the need to perform a self-cleaning process after every 200 cycles. This will happen when the appliance is connected to the

electricity grid, or it is turned on from the "OFF" rest mode. If the lid is lowered during this time, the "AUTOCLEAN OIL" process will begin automatically.

→ If you do not wish to perform the AUTOCLEAN process when the notification appears, you can rotate the encoder to any direction (right and left) to go through the menu as normal and perform the cycle you prefer.

You can run an AUTOCLEAN cycle whenever you wish by manually entering AUTOCLEAN mode from the operating mode selection menu. The maximum duration of AUTO-CLEAN mode is 20 minutes, although you can stop it by rotating the encoder to any direction.

5.6. Packaging

In order to pack a product, the bag (suitable for vacuum packaging) must be placed correctly on top of the polyethylene plate, the entire bag width must be above the sealing area. Make sure that there is no product on the sealing bar. Then lower the lid of the vacuum packer. It is important to remember that a packaging process cannot be started while the manual mode parameters are being set.

NOTA: It is recommended to use the safety latch on each packaging cycle.

At this point the active mode or program is started and the indicators of the processes to be carried out (vacuum, extra vacuum, gas injection, sealing, progressive air inlet, repetitions) are illuminated continuously:

- The vacuum process (**VACUUM**) extracts the air from the chamber and the central display shows the percentage of vacuum achieved so far.
- The vacuum plus process (**EXTRA VACUUM**) keeps the vacuum pump running during the programmed seconds. This is used to extract air from very porous food. The central display shows the elapsed seconds.
- The gas injection (**GAS**) fills the chamber with the percentage of gas specified in the program. The percentage of gas entered is also shown on the central display.
- The seal consists of three phases. The first is the lifting of the cylinders. During this phase, the fixed value of the sealing duration in seconds is shown in the central display. The second is resistance heating. In this phase the **SEAL** display will progressively decrease from the previous value. The third phase, which lasts five seconds, is the cooling of the bag and in it the **SEAL** display increases progressively up to 5.0 seconds.
- The last phase is the recovery of atmospheric pressure (**AIR**). The display will show the percentage of vacuum in the chamber decreasing. During this phase, the selected type of atmospheric recovery will also illuminate; **SOFT** or **FAST**.

The active process is signalled by the associated indicator light. Once the process is complete, the indicator will turn off.

If repetitions of packaging cycles (**REPEAT**) have been set up, they will be done at the start of packaging. The "REPEAT" icon will light up and the "VACUUM", "EXTRA VACUUM" or "AIR" icon will also light up, depending on whether vacuum in the chamber, extra vacuum

time or atmospheric pressure is being recovered. Each time a repetition is made, the digit below the "REPEAT" icon will decrease its value until it is passed to the last packaging cycle.

All processes except pressure recovery in the vacuum chamber can be cancelled by pressing the encoder button while running. This will take you to the next step in the cycle until you reach the air inlet where it will end.

If the vacuum is not correctly performed, the machine will display an error (see 5.7). 3-minute rest periods are recommended between cycle.

5.7. Errors

The machine has algorithms that allow the detection of anomalous situations that can lead to a malfunction of the machine. These situations are reported to the user via an error screen as shown below:



Figure 7. Errors display

The table below shows the errors and possible solutions:

Error	Description	Solution
E01	Lowered lid	Open the lid. If the error persists, call the technical service, indicating the error code.
E02	Error in the vacuum system	The system has detected that the vacuum pump has operated too long to reach a certain vacuum level. Calibrate the system. If the calibration is carried out successfully, conduct the test again. Otherwise, call the technical service. The maximum operating time is 2 minutes.
E03	Error in the vacuum sensor (minimum)	Check the vacuum sensor connection tube for leaks or a poor connection. If everything seems correct, call the technical service indicating the error code and the central display value right before the error.
E04	Error in the vacuum sensor (maximum)	Check the vacuum sensor connection tube for leaks or a poor connection. If everything seems correct, call the technical service indicating the error code and the central display indicator value right before the error.
E05	Internal error	The control board has detected an internal error. Call the technical service, indicating the error code.

Table 2. Errors and possible solutions

The appliance runs automatic checks and, as a result, it may turn itself off to prevent a serious error. Turn it on as usual.



In the event of an error with the vacuum packer, please contact the technical service.

6. MAINTENANCE



Before the appliance is handled for cleaning, maintenance or repair, it should be disconnected from the electricity grid.



If the power cable is damaged, it should be replaced by the manufacturer, its aftersales service or by personnel with similar qualifications in order to avoid danger.

6.1. Cleaning

Clean the vacuum packer regularly and carefully.



Cleaning the vacuum packer with pressure cleaning equipment is HARMFUL to the appliance and may cause the appliance to break, and it will void the WARRANTY.

To clean the stainless-steel outer casing, use a damp cloth with water and detergent.



The lid must be cleaned with a damp cloth soaked in water; chemical products must not be used. DO NOT USE ANY TYPE OF LIQUID WHICH CONTAINS ALCOHOL, ACID, DETERGENTS, SOLVENTS OR EQUIVALENT TO CLEAN THE LID.

Failure to comply with these instructions may break the lid and void its warranty.

6.2. Vacuum pump oil

Periodically check the oil level, topping up where necessary, according to the maximum and minimum levels.

Use the type of oil recommended by the vacuum pump manufacturer (depending on the model).

Oil in a good condition will be transparent. If it turns white, this means that it has taken on water from the condensation of the damp vacuumed air which would entail that it has lost its characteristics and must be replaced.

The oil may also take on a dark colour due to vacuumed dirt, which would entail that it has lost its properties and must be replaced.

The vacuum pump used by this appliance is not prepared for working in extremely hot/cold environments. Operating temperature range is 12/35°C.

6.3. Sealing bar

Periodically check the condition of the Teflon adhesive tape and the sealing tape. They must be in perfect condition and not have any defects.

6.4. Water-tight seal on the lid

Periodically check the condition of the water-tight seal on the lid. It must be in perfect condition.

6.5. Maintenance schedule

Period	Action	
First 100 operating hours	Change the oil	
	Carry out an auto-clean program	
Weekly or when the "CLN" message appears on the vacuum packer	Check the oil level	
	Check the condition of the sealing bar	
	Check the condition of the water-tight seal	
Weekly or every 500 hours of operation	Change the oil	
Every 1000 hours of operation	Change the oil filter	
Annually	Check for possible leaks in the vacuum circuit	

Table 3. Maintenance schedule



It is recommended that maintenance be carried out by a qualified professional, your distributor, or the technical service.

6.5.1. Check the oil level

To check the pump's oil level, it is not necessary to open the vacuum packer; there is a viewing hole on one of the two sides for this purpose.

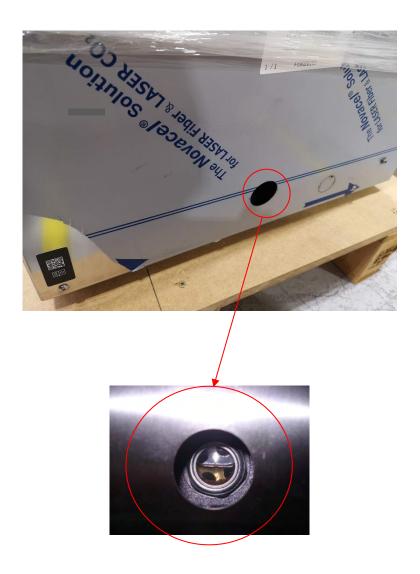


Illustration 1. Rear display for checking the oil level

6.5.2. Change the pump oil

Material needed for the oil change:

• Material: Synthetic oil SAE 10 VSL32

Model	FSS	FSS	FSM	FSM	FSL 63m ³ /h
	20m³/h	40m³/h	40m³/h	63m³/h	FSL 100m ³ /h
Oil quantity (I)	0,25	1	1	2	2





Illustration 2. Oil replacement kit

- Tools:
 - o Number 3 Allen wrench
 - o Adjustable wrench



Warning: Before removing any components, verify that the appliance is disconnected from the electricity grid.

Step 1→ Remove the two rear screws

Using the number 3 Allen wrench, remove the two rear screws on the sides (do not remove the front screws because the well pivots on them). After removing these two screws, use the same Allen wrench to loosen the centre screw on the rear (it is not necessary to remove it completely).



Location of the 6 screws

Illustration 3. Rear screws

Step 2 \rightarrow Open the outer casing of the vacuum packer

Remove the outer casing of the vacuum packer to access the pump.



Illustration 4. Open outer casing

Step 3 \rightarrow Open the plug to empty the pump

Using an adjustable wrench, remove the plug to drain the oil from the pump.



Illustration 5. Remove the oil drainage plug

Place a container below the hole for the oil to drain into, in order to keep the vacuum packer shelf clean.



Illustration 6. Oil drainage

When all of the oil has drained out, replace the plug.

Step 4 → Open the oil filling plug

Using the adjustable wrench, open the oil filling plug and use a funnel to pour the oil up to the vacuum packer maximum level.





Illustration 7. Remove the oil filling plug and refill with new oil

The oil level must be between the MIN and MAX levels indicated by the pump's display window.

Step 5 → Close the oil plug

Using the adjustable wrench, close the oil filling plug and perform these steps in reverse to make the appliance operational again.

6.5.3. Other maintenance operations

Other maintenance operations, such as changing the oil filter, must be conducted by specialized technicians, your distributor, or the technical service.

6.6. Owner liability



THE OWNER IS RESPONSIBLE FOR REGULAR MAINTENANCE. TO KEEP THE WARRANTY VALID, THE OWNER MUST PROVE THAT MAINTENANCE HAS BEEN CARRIED OUT.

Should the vacuum packer be submitted to harsh conditions such as low temperatures (lower than 12-15°C), or short operating periods, the checks must take place more regularly.