



Chamber Vacuum Sealer
Model: HVC-260T

Distributed By:

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Preface

Thank you very much for your choice of our HVC-260T/1A Table-style Vacuum Packaging Machine!

The content of this instruction is as following:

- Product Description
- Notice for Security
- Carrying & Storage
- Installation & Commissioning
- Operating Guide
- Maintenance & Repairing
- Troubles & Solutions
- Spare Parts

This manual introduces the installation and Operation of the product, the following items are included: Carrying, Storage, Installation, Startup, Operating condition, Maintenance, troubles & solutions and Repairing.

Notice:

- Please read this introduction carefully and understand it thoroughly before using.
- Make sure this introduction is possessed by the operator or the managerial personnel of this product.
- Please retain this manual after reading and make sure it is available for reference if any needed.
- Any questions, please contact the manufacturer or distributor.

Responsibility:

- This instruction is specially edited by great care. The manufacturer is irresponsible for the mistakes or the results caused by user's misunderstanding.
- The manufacturer is irresponsible for the damage or problems raised by having not adopted the specified spare part.
- The manufacturer has the right to amend the parameter or change the spare part with no further notice given to the buyer.
- The manufacturer reserves all related rights. Don't reprint any part of the instruction without our written permission.

Terms:

Teflon Cloth, is PTFE Coated Fabric. It features high temperature resistance and nonstick. **Heating Plate Assembly**, consists of Aluminum Profile (or Epoxy Plate), heating wire, Teflon cloth, etc.

A. Product Description

1. Product Usage

HVC-260T/1A Table-style Vacuum Packaging Machine possesses the advantages of superior function, easy operation, simple maintenance, wide application etc. It applies to the soft packing material such as composite film or aluminum-plastic composite film and so on. It can pack grain, food, fruit, seed, medicine, chemical product, electronic product, precision instrument and meter, rare expensive metal etc, that in solid, liquid, powder or paste shape. The products after packing can be prevented from oxidization, mildew, moth, rot and damp, so the quality and freshness is guaranteed and the food's storage period is prolonged.

2. Products Features:

- It is easy to operate this machine. The whole procedure after closing the organic glass vacuum lid, including vacuuming, heat-sealing, label printing, cooling while pressure maintaining, air-in till lifting the vacuum lid, is completed automatically
- With internally installed power cord for heat-sealing, no power cord in vacuum chamber, its electric circuit is designed to be safe & reliable and replace heating wire easily & fast.
- The widely adjustable sealing temperature enables it apply to the packing bags with different materials and thickness
- There is an emergency stop switch in the control panel. If any problem in the extracting process, to press STOP to interrupt the packing procedure and return to standby state.

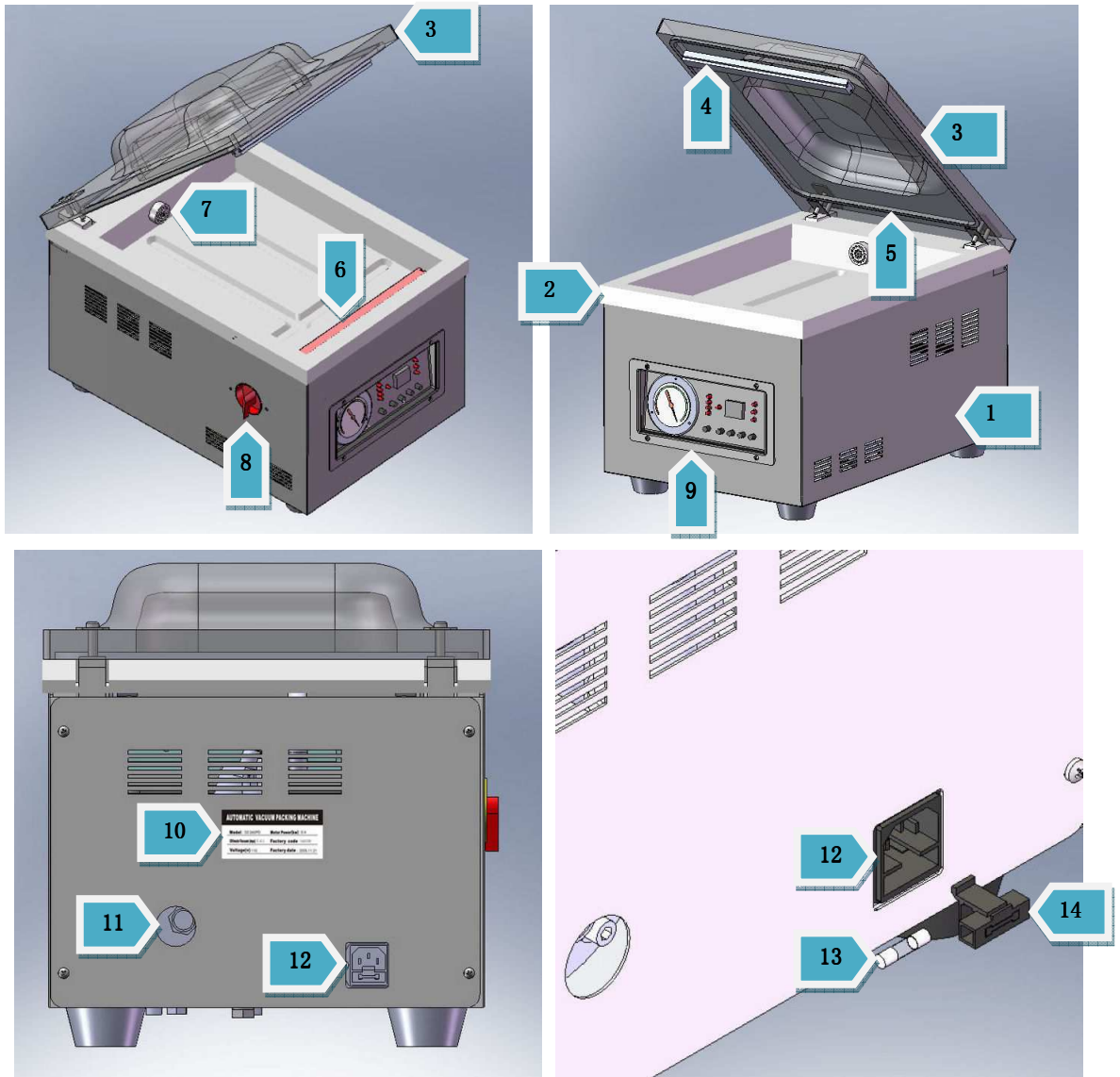
3. Operation Principle:

Put the bag in the vacuum chamber and close the vacuum lid. Startup the machine, then the vacuum pump runs and will form a vacuum space between the vacuum lid and the vacuum chamber. After the vacuuming is finished, due to the air pressure difference between inside and outside of vacuum chamber, the airbag or the cylinder will force the heating plate to lift to press the bag mouth. The flat heating wire in the heating plate will become hot to heat-seal the bag mouth when it is connected with low-voltage heavy current. Then the vacuum chamber is filled with air after cooling down, and the whole vacuum packing is completed.

There's a one-way check valve installed in the air supply opening of vacuum pump, to avoid the oil-mist generated by the vacuum pump backflow to the vacuum chamber. (Only applies to vacuum pump XD-08).

There's a oil-mist filter installed in the air exhaust opening of vacuum pump, to avoid the exhausted air from vacuum pump contains oil-mist. (Only applies to vacuum pump XD-08).

4. Main Components



No.	Components Name	Remark
1	Hull	Stainless steel
2	Vacuum chamber	Stainless steel
3	Vacuum lid	Organic glass
4	Silicon strip	
5	Sealing rubber	
6	Heating plate	
7	Air hole	
8	Power switch	
9	Control panel	
10	Nameplate	
11	Oil-level indicator	
12	Power socket	
13	Fuse tube	
14	Fuse tube base	

B. Security

1. Preparation:

This instruction is a detailed description of the Carrying, Storage, Installation, Startup, Operating condition, Maintenance, troubles & solutions and Repairing.

It is recommended that the machine be installed by trained professional worker.

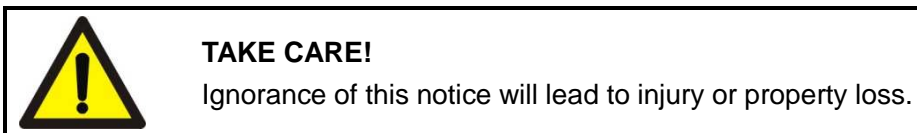
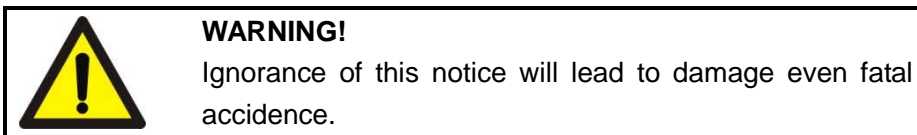
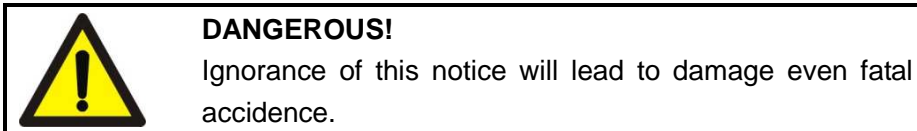
Please do abide by the maintenance instruction.

- **Please read this instruction carefully and understand it thoroughly before using.**
- **Any problems, please contact the manufacturer or distributor.**

2. Notice for Security:

- This machine is produced as per the latest technology and security standard. There maybe danger or damage under improper operation. Please notice the keywords "DANGEROUS", "WARNING", "TAKE CARE".

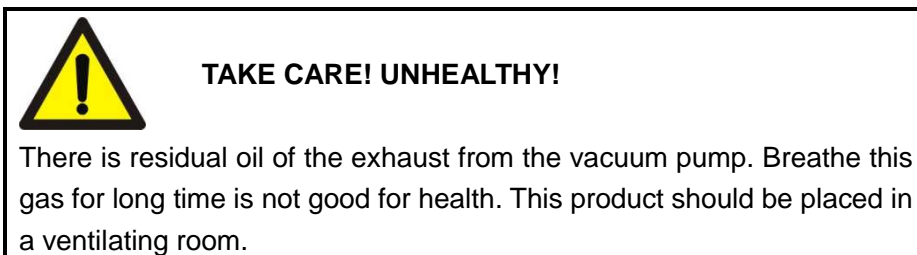
E.g.:



3. Operating Environment:

This product is designed to run under room temperature. If the environment is in bad condition, such as corrosive atmosphere or temperature is over 35°C or lower than 5°C, please contact the manufacturer or distributor

The vacuum pump oil can be separated in maximum extent during its running, but not totally separated.



Please choose the special vacuum pump oil in the food industry field if this machine is used for food industry.

C. Carrying & storage

1. With Carton Packing

If the machine is packed by carton with expanded gasket,

- Remove the expanded gasket from the carton.

If the machine is packed by carton with foam material,

- Remove the foam material from the carton.



TAKE CARE! DAMAGE TO THE MACHINE!

Lean the vacuum pump full of oil will lead much oil into the pump chamber. The vacuum pump may be damaged if there is too much oil when the vacuum pump starts up. Don't move the vacuum pump after it is filled with oil.

Note: Please drain the vacuum pump oil before moving the machine.

2. Storage for Short Time

- Power off, unplug the power and put the power cord away.
- Close the vacuum lid and fix it with hook.
- Cover the machine with plastic bags in case of dusts if possible.
- Store the machine in a dry, dustless and shockproof room.

3. Storage for Long Time

The internal of the machine has its anticorrosion treatment before it leaves the factory, so there is no need to treat it with preventive oil in addition. You can use the preventive oil if it is stored in bad condition, such as corrosive atmospheric environment, overheat or frequently changed temperature. If any question, please contact the manufacturer or distributor.

- Power off, unplug the power and put the power cord away.
- Close the vacuum lid and fix it with hook.
- Cover the machine with plastic bags in case of dusts if possible.
- Keep the original package if possible.
- If carrying, please drain the vacuum pump oil before moving the machine.
- Store the machine in a dry, dustless and shockproof room.

4. Restart after Storage


Operate according to the instruction in the INSTALLATION and START chapter.

D. Installation

Please read this instruction carefully and understand it thoroughly before installation, to understand how to install, start up, maintain & operate. The manufacturer is irresponsible for any problems caused by not complying with this instruction.

Any problems, please contact the manufacturer or distributor.

1. The Prerequisite of Installation



Take care! Damage!


If the installation prerequisite can't be reached, the machine will be damaged.
Take care! Injured!
Please do abide by the installation prerequisite.

Make sure the installation environment meet the basic security regulation.

2. Environment for Installation

- No inflammable and explosive gases around.
- Temperature: 5-30°C. If the machine will be operated in other environment, please contact the manufacturer or distributor
- Environment pressure: standard atmospheric pressure.
- Make sure the Power meets the requirement. (see the name plate in the machine)
- Make sure the machine stands upright when moving or carrying. Leaning the machine may lead to the damage of vacuum pump.
- Make sure the machine is laid in a horizontal position, which is one of the essential of trouble-free operation of the machine.
- To ensure radiating heat well, there should be enough space around the machine for airing, at least distance of 10cm.
- Do not expose the machine nearby heat source or steam device, e.g. steamer, dishwasher or stove.
- Make sure that there're enough space left for replacing easy-wear parts and vacuum pump oil..

3. Filling Oil



TAKE CARE! DAMAGE!

There is no vacuum pump oil in the newly delivered machine. The vacuum pump works without oil will damage the pump, even in a short time. Please make sure the vacuum pump has been filled with the oil before startup.

Note: The vacuum pump should be transported without oil.



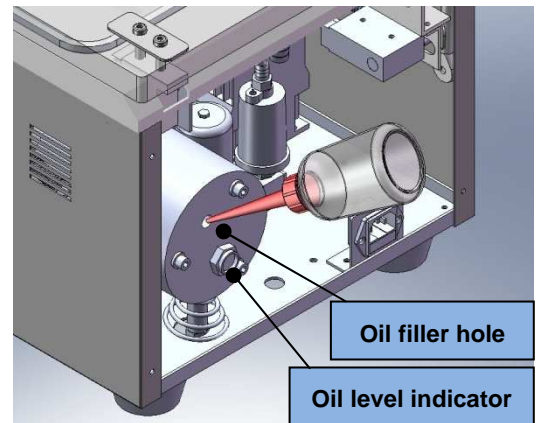
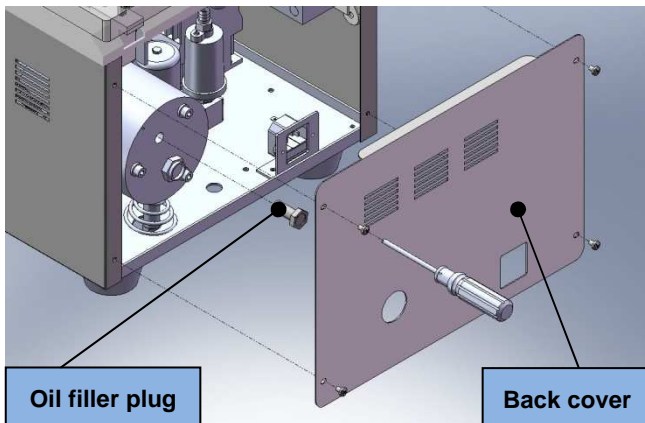
PAY ATTENTION! DAMAGE!

Filling the oil to the vacuum pump through other position of the pump may damage the vacuum pump. The oil should be filled through the oil filler hole.



TAKE CARE! SCALD!


The oil tank is full with high-temperature and high-pressure oil mist. The user may get scald by the hot oil mist if the oil filler hole is open. Only when the vacuum pump stop running can the oil filler plug be unscrewed. Please screw up the oil filler plug when the vacuum pump is working.



- Unscrew the four screws on the back cover.
- Unload the back cover.
- Unscrew the oil filler plug with wrench in right size.
- Fill the machine with appropriate special oil for vacuum pump. Please refer to the Chapter “Special Oil for Vacuum Pump”.
- Make sure the oil level is between 1/2 and 3/4 of the oil level indicator.
- Make sure the sealing rubber ring is not worn and installed in the oil filler plug. Replace the ring when needed.
- Screw the oil filler plug.
- Wait for several minutes.
- Check whether the oil level is between 1/2 and 3/4 of the oil level indicator. If it is less than 1/2, please add more.
- If the oil level is between 1/2 and 3/4 of the oil level indicator, fix the back cover.

Note: Please choose the special vacuum pump oil in the food industry field if this machine is used for food industry.

4. Connecting Electricity



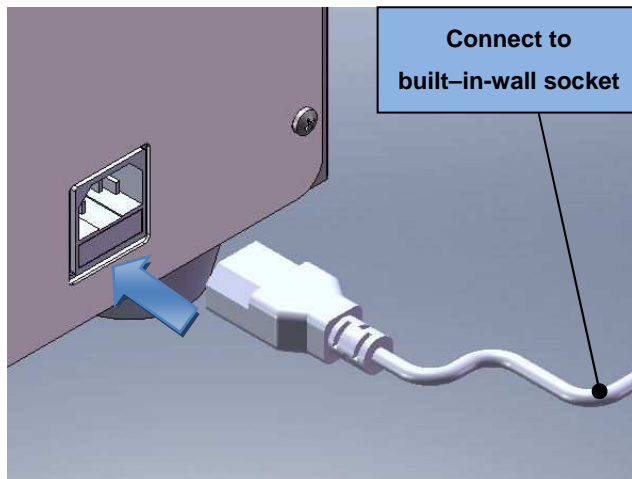
DANGEROUS! ELECTRIC SHOCK!

Please make sure all the sockets have protective ground wire.
TAKE CARE! Unmatched power will damage the machine.
Please check the power parameter of the power referring to the name plate on the machine.
Please abide by the regulation of safe operation and the national protective measure of accident.

Power/Grounded connection

- Check whether the power voltage is in accordance with the one written in the name plate of the machine.
- Please check the rotation direction of the vacuum pump when the machine is connected to three phases power.
- Make sure the machine is connected correctly to the grounded plug to avoid fire or electric shock. The grounded wire is yellow-green color.
- The cable should be movable to avoid extrusion.
- Please replace the cable if it is damaged.
- Please cut off the power first when the machine is in problem or under maintenance.
- Please put the cable away if the machine will be left unused.

If the machine employs single-phase plug:



- Connect the power cord to the machine correctly.
- Connect the other side of the power cord to the built-in-wall socket.

If the machine employs three-phase power:

- Connect the power cord to the power correctly.
- Connect protective ground wire.



TAKE CARE! DAMAGE!

The incorrect rotation direction of the vacuum pump motor will damage the vacuum pump in even a short time. Please make sure the rotation direction is correct before startup.

For the vacuum pump equipped with three-phase motor:

- Check the rotation direction of the vacuum pump according to the instructive mark.
- Turn on the power and lower the vacuum lid slightly to make the vacuum pump be running (Refer to the Start Chapter).
- Observe the fan of the vacuum pump motor if possible and determine the rotation direction before the fan stops.
- If it is impossible to observe the rotation direction, please carefully listen to the sound of the motor. The vacuum pump running in reverse direction will beep. Also note to look at the vacuum gauge to check, as the vacuum pump in reverse direction can't produce vacuum.

If it is necessary to change the rotation direction:

- Exchange any two phases of the three-phases power.

E. Start & Commissioning



TAKE CARE! INJURED!

Please operate according to this manual.



TAKE CARE! UNHEALTHY!

There is resin oil exist in the exhaust from the vacuum pump. Breathe the gas for long time is unhealthy. The machine should be used in a ventilating room.



TAKE CARE! SCALD!

The heating plate can reach to the high temperature of more than 200°C when it is heating. Even after cooling, it is still in a high temperature.

- Don't pack the goods that may be damaged when vacuuming or after vacuuming with this machine.
- If you have any question about the operation and the function that haven't stated in this manual, please contact the manufacturer or distributor
- If the machine is running irregularly or makes strange noise, please turn off the power immediately to stop the running and finally cut off the power.
- Once there is any problem, please contact the manufacturer or distributor

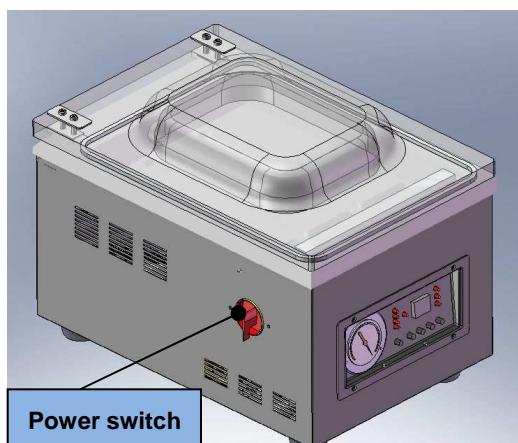
Vacuum chamber lid

- Don't place the machine nearby heat source to avoid the damage of vacuum lid.
- Don't put the stuff of heat, sharp or heavy on the top of vacuum lid, or may lead to the damage of vacuum lid.
- Please use solvent-free detergent to clean the vacuum lid. Solvent can damage the vacuum lid.
- **Please check whether the vacuum lid cracks at least once a week. If find the vacuum lid has crack, the machine should not be used until the old vacuum lid is replaced by a new one., or there may occur inner-explosion of vacuum lid. The manufacturer is irresponsible for accident or damage caused by using vacuum lid with cracks.**
- As measure of prevention, the vacuum lid should be replaced every three years referring to the standard maintenance cycle.

Vacuum pump

- Make sure the vacuum pump is filled with appropriate special oil before using.
- Please check the oil level & quality at least once a week. If oil level is too little or oil emulsify or deteriorate, the vacuum pump oil should be replaced.
- Only the special oil for vacuum pump can be used for the machine. Refer to the "Maintenance" chapter.

1. Power on



- Start the machine by turning the Power Switch, which is placed in the left side of the machine.
- Turn the Power switch to the Position 1, the machine monitor shows "□ □", which

indicates the machine is in the standby state and it can be used.

2. Standard Operation

- Turn on the power switch to startup and the monitor shows “□□”.
- Please adopt the composite bag suitable for vacuum packing and the bags should be sterilized before packing foods.
- Put the products in the bags. Choose the proper bags for the products. Don't choose the oversize bags. Ensure a clean environment during the operation. It is better that the packing materials, products and the hands are dry.
- Place the bag in the vacuum chamber or on the PP plate (if any). The bag mouth should be placed on the heating plate or the silicon strip. If the bag is much lower than the heating plate or the silicon strip, please insert the PP plate provided with the machine (if any), which can make the operation simpler and the cycle time shorter.
- Several bags can be placed simultaneously on the heating plate or the silicon strip, with the precondition that the total length of these bag mouth do not exceed the length of heating plate or the silicon strip. These bag should not be overlapped. If there're several heating plates or the silicon strips, they can be used simultaneously.
- Set correct parameters for the vacuum and sealing function. Please refer to Control Panel chapter.
- Close the vacuum lid and the machine can automatically complete the whole set program, including vacuuming, sealing and cooling. The vacuum lid will open automatically when the last deflating finishes.
- Remove the bags from the machine after the cycle is finished.
- Press Emergency Stop Switch to stop the working if necessary, then the machine will stop running, deflate immediately and the vacuum lid will open automatically.
- Circulate as above.

Note: The vacuum lid can't open automatically when there is power cut or other accidents. The machine will execute the deflation function as soon as the electricity is reconnected and then the vacuum lid will open automatically.

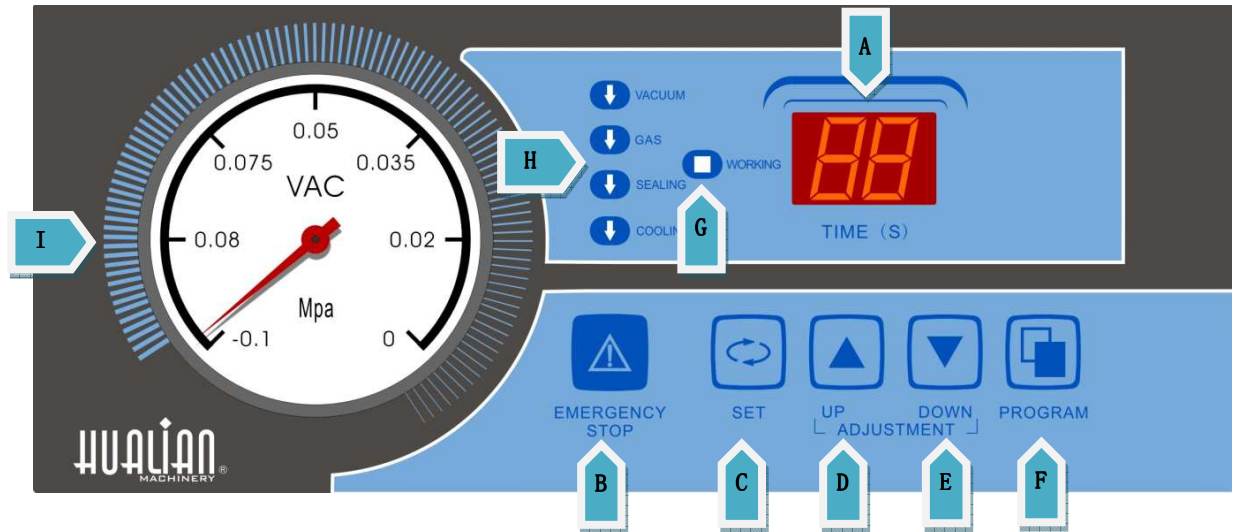
Note: If the machine operates in high altitude, the atmospheric pressure will decrease and the value in the vacuum pressure gauge will reduce accordingly.

3. Optimal Packing




- Employ good quality vacuum bag in correct style.
- Leave enough space on the bag mouth, at least 30mm.
- Place the vacuum bag neatly on the heating plate or the silicon strip.
- If the bags are much lower than the heating plate or the silicon strip, please insert proper PP plates (if any).

F. Standard Operation & Parameter Setting


1. Control Panel



No.	Figure	Name	Remarks
A		Monitor	Shows the state of the functions during the working; the numbers will diminish. Shows numbers of the parameter value of the selected function. Shows “□ □”for standby state Shows “E d” when the program is finished.
B		Emergency Stop	It is used to end the program. The emergency stop switch can be pressed in any time to stop running. When this button is pressed, the machine will stop all the working and skip to the deflating function, then the vacuum lid will open automatically.
C		Function Selecting	It is used to choose a function, such as vacuuming, sealing and cooling, or to change the relative parameters. When one function is selected, the indicator on the left side will light.
D		Up adjustment	The parameter of the selected function will increase by one unit every time this button is pressed. Press this button and not loose, the value will increase by about 5 units.
E		Down adjustment	The parameter of the selected function will decrease by one unit every time this button is pressed. Press this button and not loose, the value will decrease by about 5 units.
F		Program selecting	Choose one program from the 5 programs in-stored. Press one time then it shows the current program code such as “P1” . Press again in one second to shift the program from P1 to P5 by circle. When release the button, it will adjust to be the chosen program accordingly

G		Working indicator	The indicator lights (in red) during the working period.
H		Function indicator	The corresponding indicator will light when one function is executed during the working period. When pressing the Function Selecting button to choose one function, the corresponding indicator will light (in red).
I		Vacuum gauge	Shows the pressure value in the vacuum chamber.

2. Parameter Setting



TAKE CARE! DAMAGE!

Unreasonable parameter setting may damage the machine or shorten the service time.


- Unreasonable parameter setting may damage the machine or shorten the service time.
- Unreasonable parameter setting may cause that the whole program or the sealing is not completed correctly.
- If you have any question about the operation and the function of the machine, please contact the manufacturer or distributor.

Note: The parameter can be set and program can be shifted only when the machine is in standby state and the monitor shows "□ □"


- **Selecting of programs in-stored:**




Machine can store 5 working programs with individual code(P1,P2,P3,P4,P5). User can save the frequently used program and then choose it rapidly for different packing.

You can choose different program by program button

1		Press one time then it shows the current program code such as "P1" . Press again in one second to shift the program from P1 to P5 in circle. When release the button, it will adjust to be the chosen program accordingly
---	---	---

- **Parameter setting of the program:**

No.	Figure	Operation	Monitor
1	Startup	Start the machine and wait for the situation of standby	Shows "□ □"
2		Choose the function by pressing Function Selecting button. Press once to choose next function.	

3		When one function is selected, the corresponding indicator lights (in red). Four functions are respectively vacuuming time, gas-filling time (If any), sealing time, and cooling time.	Shows the set value of the selected function.
4		Press once to increase or decrease one unit of the selected function time. Press the button and not loose, the value will increase or decrease by 2 units every second. Press the button long time can make the value increase rapidly	Shows the set value of the selected function.
5		Press once or several times the function select button until all the indicator light out and the machine will save all the parameters.	Shows "E d".

Note: If close the vacuum lid when you adjust the parameter, the machine will save the current parameter and start up.

Note: Every setting for the parameter only changes the parameter of current program. The current program code can be showed by program button.

Note: The sealing time should be adjusted gradually to search the optimal parameter. Too long sealing time makes the temperature of heating plate beyond the limitation, causing heating plate to be broken. Normally the sealing time should not exceed 3 seconds.

The adjustment range of these functions:

Function	Parameter range	Adjusted by	Unit
Vacuuming	0~99	1	Second
Gas-filling	0~9.9	0.1	Second
Sealing	0~9.9	0.1	Second
Cooling	0~9.9	0.1	Second

3. Optimal Parameter:

- The vacuuming time should be determined by the quantity/size of the materials, the volume of the vacuum chamber and the requirement of vacuum degree. Usually the vacuuming time can be set as 40~60 seconds. The sealing function may not be completed regularly if sealing starts when the vacuum level has not down to less than 0.06Mpa.
- Prolong properly the vacuuming time for special products, such as liquid or the product consists of much water.
- The gas-filling time (if any) should be set according to the practical condition.
- If the chamber is overfilled with gas the vacuum lid will open automatically and the program will stop.
- If the sealing starts when the vacuum level reach to 0.06Mpa for overfilled gas, the sealing may not be completed regularly.
- The sealing time can be set between 1~3 seconds.
- Note: Too long sealing time will shorten the service time of heating plate and silicon strip as the heating plate will heat dramatically.

- The sealing function parameter influences the sealing quality greatly; the temperature should be adjusted slowly from low to high.
- The cooling time can be set between 1~3 seconds according to the thickness of the bags.

4. Packing Liquid Products

- The machine is suitable to pack liquid products, such as soup and sauce. It is suggested to match with a inclined PP plate to prevent the products from spilling out when pack these kinds of products.
- The temperature of the liquid will goes up to the boiling point when in a certain low pressure or high temperature. The liquid product with high temperature will soon goes up to the boiling point and the vacuum degree will be lower.
- It is suggested the liquid products be cooled down before packing to ensure the optimal vacuum packing effect.

The following data show the relation among the boiling point, temperature & pressure of water.

Vacuum Pressure [MBAR]	1000	800	600	400	200	100	50	20	10	5	2
Boiling Point [°C]	100	94	86	76	60	45	33	18	7	-2	-13

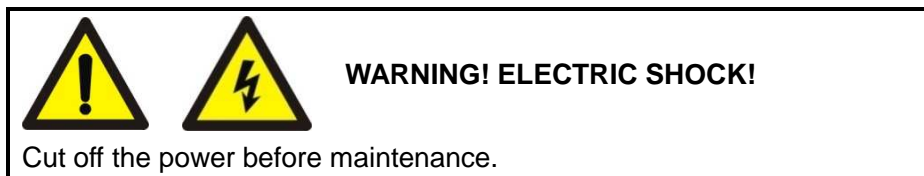
5. Instruction of Controlling Program's Cycle

No.	Process	Remarks
1	Close the vacuum lid	<ul style="list-style-type: none"> ■ Close the vacuum lid then the machine starts to work. ■ The indicator lights.
2	Vacuuming	<ul style="list-style-type: none"> ■ The machine begins to vacuum to extract the air in the vacuum chamber. ■ The indicator in front of "vacuuming" lights. ■ The monitor: the value decreases second by second from the set time (maximum 99 seconds). ■ The pointer of the vacuum gauge sways slowly to left side.
3	Gas-filling (if any)	<ul style="list-style-type: none"> ■ The gas-filling begins and gas are filled to the bags as soon as the vacuuming finishes. ■ The indicator in front of "Gas-filling" lights. ■ The monitor: the value decreases by 0.1 second each time from the set time (maximum 9.9 seconds). ■ The pointer of the vacuum gauge sways slowly to right side.
4	Sealing	<ul style="list-style-type: none"> ■ The sealing begins as soon as the vacuuming and gas-filling finish. The indicator in front of "sealing" lights. ■ The monitor: the value decreases by 0.1 second each time from the set time (maximum 9.9 seconds). ■ The pointer of the vacuum gauge keeps stay.
5	Cooling	<ul style="list-style-type: none"> ■ The cooling begins and the sealed bag is cooled as soon as the sealing is completed. ■ The indicator in front of "Cooling" lights. ■ The monitor: the value decreases by 0.1 second each time from the set time (maximum 9.9 seconds).

		<ul style="list-style-type: none"> ■ The pointer of the vacuum gauge keeps stay.
6	Deflating	<ul style="list-style-type: none"> ■ The deflating begins as soon as the cooling is completed. The air comes into the chamber and the pressure inside the chamber is equal to the outside. The vacuum lid will open automatically. ■ Monitor: shows “□ □” ■ The pointer of the vacuum gauge sways to right side dramatically.
7	Completion	<ul style="list-style-type: none"> ■ The pointer of the vacuum gauge returns to the 0 position and the vacuum lid opens automatically. ■ Monitor: shows “E d”, indicating the cycle is completed. ■ The products are packed well.

Note: The pointer of the vacuum gauge may sway slightly when the sealing just begins, which is not the mechanical failure.

G. Maintenance



The daily maintenance is necessary to prolong the service time, avoid mechanical failure and get the optimal packing effect. If the machine is frequently used (more than 8 hours a day), it is suggested to do professional maintenance once every 6 months. If the machine is used for less than 8 hours a day, the maintenance can be acted once every year. (The time can be adjusted as per the environment and the product.)

However, the partial maintenance should be often acted by the user. The following is the general introduction.

- Cut off the power supply before maintenance. Pull the plug from the built-in-wall socket.
- If the machine runs irregularly or makes strange noise, please cut off the power immediately and contact the manufacturer or distributor.
- Please clean the vacuum lid with solvent-free detergent. Check at least once every week the vacuum lid whether it fractures. If there is any breakage, please stop using the machine
- Don't wash the machine by high pressure cleaning, which will damage the electronic device and other spare parts.
- Don't let the water enter to the extracting opening or the exhaust hole of the vacuum pump, or the vacuum pump may be damaged and can't be restored.
- Non-professionals please don't do the major maintenance.
- Move or transport the machine in an upright horizontal state. Leaning the machine may damage the vacuum pump.

- The machine works at most 8 hours in a day. The manufacturer is irresponsible if the user prolongs the working hour of the machine without consulting and damage the machine.
- If the machine is damaged or in problem as the user does not follow the instruction in the manual to maintain the machine, the manufacturer is irresponsible for the problems.


1. Standard Maintenance Schedule

Cycle	Maintenance
Daily	<ul style="list-style-type: none"> ● Clean the vacuum chamber, vacuum lid and housing with wet cloth and remove the foreign materials attached on the heating plate. ● The detergent should be solvent-free. ● Don't use high pressure cleaner.
Weekly	<ul style="list-style-type: none"> ● Check the oil level and the quality. If there is not enough oil or the oil goes off, please add oil or replace the oil. ● Check whether the heating plate is damaged. Please replace the Teflon cloth /the flat heating wire when the sealing goes bad or the Teflon cloth/flat heating wire is not attached to the heating plate. ● Check the sealing rubber of the vacuum chamber. Replace it in time if the ring is damaged or stretched. ● Check whether the vacuum lid cracks. Please stop using the machine if the lid is broken.
Six months	<ul style="list-style-type: none"> ● Check whether the vacuum filter is saturated. If it is, please replace the filter. ● Replace at least once the vacuum pump oil every six months.
Three years	<ul style="list-style-type: none"> ● Replace the vacuum chamber lid. ● Replace the sealing airbag or the cylinder.

2. Vacuum Pump Maintenance



- The daily maintenance of the vacuum pump is essential to prolong the service time and ensure correct operation.
- It is suggested to check all-round the vacuum pump at least once every year if the machine is used frequently. Any question or suggestion, please contact the manufacturer or distributor.

Filling / replacing oil



TAKE CARE! POLLUTION!

Please deal with the waste oil according to the environmental regulations.

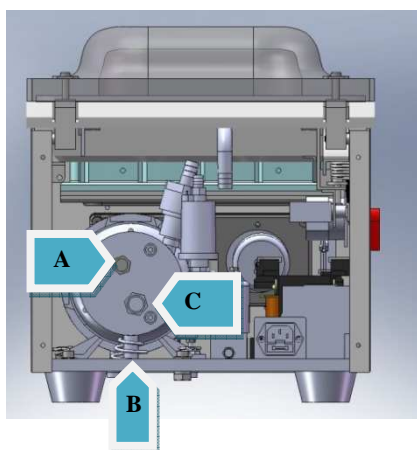
TAKE CARE! SCALD!

The surface temperature of the vacuum pump will rise to more than 70°C when it is running.

Don't touch the vacuum pump during its working. If it is necessary to touch, please stop the running, cool it down or wear thermal protective glove.

- **There is no vacuum pump oil of the newly delivered machine. Please fill the oil for its first use.**
- **Check the color of the vacuum pump oil**
The vacuum pump oil is bright and clear without any foam or muddle. If there are white materials after precipitation, it indicates there are foreign materials in the oil. Please do replace the blackened vacuum pump oil or the oil with foreign materials.
- **The service time of the vacuum pump oil**
The service time of the vacuum pump oil depends on its working environment. To extract clean and dry gas, the vacuum pump oil should be replaced every 500 working hours normally or at least once every six months.
- **Check the oil level at least once every week. Observe the oil level through oil indicator and add oil if the oil level is too low.**
- **It is suggested to replace the vacuum pump oil-mist filter at the same time when replacing vacuum pump oil.**

Keep the pump running for several minutes before replacing, to get a proper temperature of the oil and the pump, so that the wet air and the impurities can be better absorbed and filtered. High temperature will volatilize the wet air in the pump to reduce the rust.



- A: Oil filler hole**
- B: Oil-drain hole**
- C: Oil level indicator**

Replacing oil

- Open the back cover.
- Place a basin for oil under the oil-drain hole.
- Unscrew the oil-drain plug with wrench in correct size.
- Drain the oil.
- Put the oil-drain plug back after oil-draining.
- Dispose the waste oil as the environmental protection law regulates.

Note: When you unscrew the oil-drain plug, the oil flow through the oil-drain hole, so there should be a basin for oil. At the end of the oil-draining, please lean the machine slightly so that the residual oil can flow away.

Filling oil:



TAKE CARE! DAMAGE!

Correct oil type and quantity is essential to the vacuum pump. Incorrect vacuum pump oil or overfilled oil will damage the vacuum pump.

- The newly delivered machine should be filled with oil.
- Fill the oil after the oil-draining or when the oil level is low.
- Unscrew the oil filler plug with wrench in correct size.
- Fill the machine with appropriate special oil for vacuum pump. Please refer to the Special Oil for Vacuum Pump section.
- Make sure the oil level is between 1/2 and 3/4 of the oil level indicator.
- Make sure the sealing rubber ring is installed in the oil filler plug. Replace the ring when needed.
- Screw the oil filler plug.
- Wait for several minutes.
- Check whether the oil level is between 1/2 and 3/4 of the oil level indicator. If it is lower than 1/2, please add more.
- If the oil level is between 1/2 and 3/4 of the oil level indicator, fix the back cover.
- Check weekly the oil level. If it is lower than 1/2, please add more.

3. Special Oil for Vacuum Pump

The temperature of the working environment is important for the choice of the oil type. The following table lists the relationship among the working temperature, oil quantity and oil type. There are two suggested brand for the oil: Shell Vitrea, Great Wall special oil for vacuum pump.

Vacuum pump oil	VM32	VM68	VM100
Viscosity level ISO-VG	32	68	100
Applicable temperature (°C)	<5	5~20	12~30
Dosage (L)	0.3		

Note:

- If the oil applicable for low temperature is used in high temperature, the abrasion between the vacuum pump blade and the pump body will be aggravated and affect the service time of the vacuum pump.
- If the machine is not used in normal environmental temperature, please contact the manufacturer or distributor

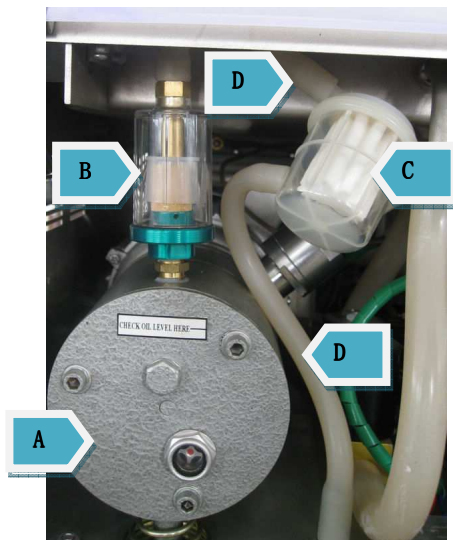
4. Replacing Filter



TAKE CARE! POLLUTION!

The polluted filter should be disposed separately from other wastes according to the regulation.

There are one or several filters in the vacuum pump, which is used to absorb and filter the oil mist. The filter will turn wet (saturated) and need replacement. The machine can't reach to the maximum vacuum level if the filter is saturated.



A: Vacuum pump

B: Filter

C: Oil-mist filter

D: Silicon tube



Note: the oil-mist filter should be often replaced.

- It is suggested to replace the filter too when replace the vacuum pump oil. The filter locates on the way of the vacuum exhaust pipe.
- The regular maintenance cycle of the oil-mist filter is between 3~6 months.

Replacing the oil-mist filter

- Open the back cover of the machine and find the oil-mist filter.
- Draw off the two silicon tubes connected to the filter.
- Remove the old oil-mist filter and replace with a new one.
- Note to correctly connect the air supply tube and air exhaust tube.
- Install the back cover to the hull.
- Dispose the wasted oil mist filter by following the environmental laws.

5. Replacing Teflon Cloth & Heating Wire



Take care! Scald!

The temperature of heating plate can reach higher than 200 °C when heating.

Even after cooling, the surface of heating plate is still with high temperature.

The sealing quality, to some extent, depends on the maintenance of heating plate and silicon strip.

Regular maintenance: Use a wet clean cloth to daily clean the heating plate and silicon strip. Check weekly the heating plate and silicon strip. If the surface of heating plate is not flat or sealing quality is not good, please replace the heating wire, Teflon cloth and silicon strip in time.

The average maintenance cycle of the Teflon cloth and the flat heating wire is at least once every three months. (The prerequisite is the machine is used regularly for packing standard products with standard vacuum packing material.)

Replacing Teflon cloth or heating wire:



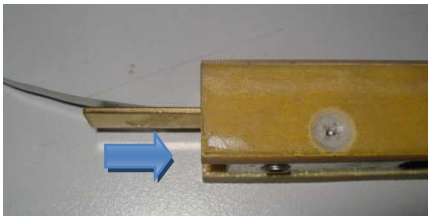
- Take off the heating plate
- Remove the Teflon cloth on the top face of heating plate
- If only need to replace the Teflon cloth, use a clean cloth to wipe the lipa and residual adhesive on the heating plate.



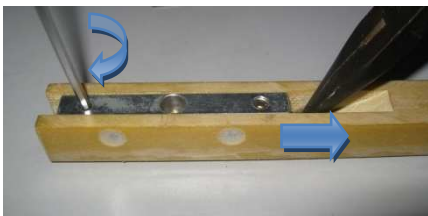
- Loose the screws on the fixing block.



- Draw off the copper presser and heating wire.
- Repeat the discharge method on the other side of heating plate.
- Remove the old Teflon cloth liner.
- use a clean cloth to wipe the lipa on the heating plate.
- Stick a new Teflon cloth liner onto the heating plate.



- Cut a new segment of heating wire with length of about more 25cm than the length of heating plate.
- Thread the heating wire through the groove in the heating plate, insert back the copper presser, then screw up the screws.
- Draw out the other end of heating wire from the other side.



- Use a plier to stretch the heating wire, insert back the copper presser, then screw up the screws.
- Cut off the segment of the heating wire outside the copper presser.
- Cut a new segment of Teflon cloth. Make sure to place it neatly without any crease and stick it onto the new heating wire.
- Put the heating plate back the set position in the vacuum chamber.

Note: While replacing the heating wire, the Teflon cloth liner beneath should be replaced too.

6. Replacing Silicon Strip

Check weekly whether the silicon strip is coarse. Replace the silicon strip once it is not flat.

- **The average maintenance cycle of the silicon is at least once every 6 months.**
 - The silicon strip is blocked in the silicon strip support and it can be removed directly
 - Remove the old silicon strip from the silicon strip support.
 - Cut a new silicon strip in the same length with the old one
 - Put the new silicon strip in the silicon strip support.
 - The silicon strip should be placed smoothly with no tension to install into the silicon strip support.



Note: One side of the silicon strip is reticulate pattern, and the other is reticulate pattern with fixed holes. It can be installed with character, which is used to print label. Choose the side as per your needs.

7. Replacing Sealing Rubber

The sealing rubber keeps the vacuum chamber sealed during its working, which is essential to get the needed vacuum level. The sealing rubber will be worn out for different pressure. Please replace it at regular intervals.

Check the sealing rubber weekly at least to see whether it is worn out or broken.

The average maintenance of sealing rubber is at least once every 6 months.



- The sealing rubber is blocked in the vacuum chamber trough and it can be removed directly.
- Please measure the length of the new sealing rubber based on the old one. The lid can't be closed or may leak for too short/long ring.
- Put the new sealing rubber in the vacuum chamber trough.
- The sealing rubber should be placed smoothly without any tension. Its end should be cut in straight-form to put into the trough without leakage.

8. Replacing Fuse



Warning! Electric shock!

Please cut off the power before replacing the fuse.

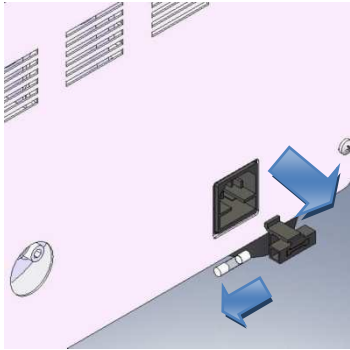


Take care! Damage!

Different voltages or different types, different fuses.

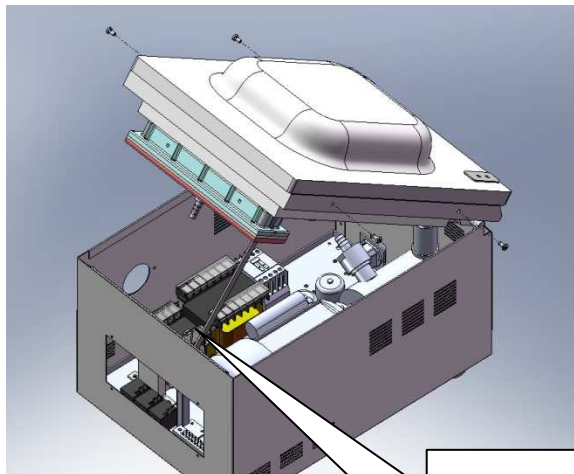
Please replace with same specified fuse to avoid the damage of the machine.

Replacing fuse for main circuit

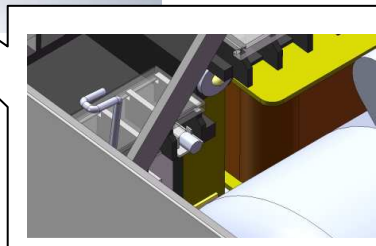


- Main circuit fuse is placed in power socket.
- Unplug the power cord.
- Pull out the fuse base
- Take out the damaged fuse from the fuse base.
- install the new fuse into the fuse base.
- Insert the fuse base into the power socket.

Replacing the fuse for controlling circuit



- Controlling circuit fuse is placed in the Control transformer inside the machine.
- Unscrew the four screws on the Side of vacuum chamber.
- Draw up the vacuum chamber and find the control transformer.
- Take out the damaged fuse.
- Install the new fuse.
- Replace the vacuum chamber to the hull, and screw back the four screws.



9. List of Maintained Components

Name	Specification	
Vacuum Pump	Model: XD-08 Voltage: 220V/50Hz 110V/60Hz Power: 370W Pump capacity: 8m ³ /h Oil dosage: 0.3L	Model: XD-020 Voltage: 220V/50Hz 110V/60Hz Power: 900W Pump capacity: 20m ³ /h Oil dosage: 0.5L
Filter	Model:866012	
Sealing System	Heating wire: 5×530mm Teflon cloth: 60×275mm	
Silicon Strip	Material: silicon rubber Specification: "工" type 270×11×16mm (L×W×H)	
Sealing Rubber	Material: silicon rubber Specification: 1.5m	
Fuse	Power: 250V 10A (Voltage: 220V/50HZ) 250V 16A (Voltage: 110V/60HZ) Control: 250V 3A	

H. Troubles & Solutions

1. Troubles & Solutions of Machine Body

Troubles	Reasons	Solutions
The machine doesn't work and the control panel shows nothing.	No connection of the power supply.	Put the power plug into the power socket.
	The fuse of the main circuit burns out.	Replace the fuse (same specification).
	The contact of the power switch looses.	Check, fasten, repair or replace.
The control panel startups, but the machine doesn't work.	The micro switch of the vacuum lid is in improper position or damaged	Adjust or replace the micro switch.
	The parameter is setting	Finish the parameter setting
	Internal failure of the machine.	Contact the manufacturer or distributor.
The vacuum lid can't open automatically.	The pneumatic spring or the tension spring fails.	Check, repair or replace.
The best vacuum state can't be achieved. The vacuuming speed is very slow.	Incorrect pump rotation direction.	Correct the rotation direction.(three phases power)
	Short vacuuming time.	Prolong the vacuuming time.
	Insufficient oil or dirty oil	Check the oil level, add or replace the oil.(pay attention to the oil type and the volume)
	Pipe leakage.	Replace it.
	Pipe contact looses.	Check and fasten it.
	The airbag or the cylinder leaks.	Check and fasten it.
	Air leakage or abrasive sealing rubber.	Replace the sealing rubber.
Oil-mist filter is saturated.	Replace the oil-mist filter.	
Sealing failure or poor sealing.	The bags are not correctly placed on the heating plate	Place the bags on the heating plate neatly and in order.
	Too long/short sealing time.	Shorten/prolong the sealing time.
	Inappropriate heating temperature.	Choose proper temperature.
	Silicon strip is damaged or with impurity.	Clean or replace the silicon strip.
	Teflon cloth is damaged or with impurity.	Clean or replace the Teflon cloth.
	The inner side of the bag mouth is unclean.	Clean the bag mouth.
Gas-filling failure or poor gas-filling (if any)	Too long/short filling time.	Shorten/prolong the filling time.
	The air tank is or nearly empty.	Replace air tank.
	Air tank is closed.	Open the valve.

	Incorrect setting of the filling pressure.	Check whether the pressure gauge or the secondary pressure is set as 1 atmospheric pressure (1-ATM). Warning! The compound gas can't be higher than 1-ATM anytime.
Normal vacuum level, but remain residual gas in the bag.	Poor reposition of the heating plate. The distance between the heating plate and the silicon strip is too long/short.	Repair the heating plate to make reposition well and flexibly. Adjust the distance.

2. Troubles & Solutions of Vacuum Pump

Troubles	Reasons	Solutions
Starting current or the working current is too high.	Overfilled pump oil or incorrect oil type.	Check the oil level and type.
	Pump oil with excessive viscosity when in low temperature.	Replace the proper pump oil.
	Exhaust filter blockage.	Clean or replace the filter.
The pump overheats during working.	Overfilled / insufficient oil.	Check and adjust the oil level.
	Poor heat dissipating.	Clean the pump and the radiating fin of the motor to improve the ventilation.
Strange noise during working	Worn out or loose .driving components	Find out the broken parts and repair.
	Incorrect rotation direction of pump	Correct the rotation direction (three phases power)
Vent smokes or exhausts oil drip	Overfilled pump oil	Let the excessive oil out.
	incorrectly installed or broken exhaust filter	Reinstall or replace the exhaust filter.
	Exhaust filter blockage.	Clean or replace the filter.

3. Troubles & Solutions of Solenoid Valve

Troubles	Reasons	Solutions
Poor sealing	Impurity is attached to the sealing area	Clear up
	Sealing side damage	Repair or replace
	Sealing rubber damage	Replace
Valve can't open & close or act flexibly.	Control fuse burnout.	Replace
	Poor contact of electric wire.	Repair
	silicon rectifier diode breakdown	Replace
	Coil burnout	Replace
	The lifting part of the Armature iron has contaminants.	Replace
	Blocked spring caused by rust or breakage	Replace
Too low voltage	Check the power voltage	

4. Troubles & Solutions of Sealing Device

Troubles	Reasons	Solutions
Sealing failure	Heating temperature is not set	Set an appropriate heating temperature
	Too long/short sealing time	Shorten/prolong the sealing time
	Sealing before the vacuum degree is achieved.	Check the vacuum degree to be not higher than 0.6mpa.
	Flat heating wire damage	Replace
	Heating transformer damage	Replace
	Sealing contactor failure	Repair or replace
	Heat-sealing solenoid valve failure	Repair or replace
	Blocked heat-sealing strip	Repair
Poor sealing	Silicon strip damage or with foreign matter attached	Clean or replace the silicon rubber
	Teflon cloth damage or with foreign matter attached	Clean or replace the Teflon cloth
	The inner side of the bag mouth is unclean.	Clean the bag mouth.
	Loose flat heating wire	Fasten
	Short cooling time	Prolong cooling time
	Improper temperature	Choose a proper temperature

5. Error Code

There is one or more error codes in control system program, which give clearly indication to user when the machine cannot work so as to prevent damage.

F1 Alarm:

Alarm Performance: The monitor shows F1 and twinkles.

Situation: Deflating solenoid valve is energized for more than 15 seconds, but the vacuum lid is still closed.

Possible reasons:

- **The pneumatic spring or tension spring of vacuum lid is broken**
In this situation, the vacuum lid cannot open automatically, so the deflating can't finish automatically.
Solution: replace or adjust the pneumatic spring or tension spring. In this case, the vacuum lid is lift gently after every deflating then the machine can be able to continue to work.
- **Deflating solenoid valve is broken**
In this situation, the deflating function can't be acted, and the vacuum lid cannot open automatically, so the deflating can't finish automatically.
Solution: Replace or repair the deflating solenoid valve.
- **Approaching switch is broken or its position is incorrect**
When the approaching switch is broken or its position is incorrect, the deflating

can't finish automatically.

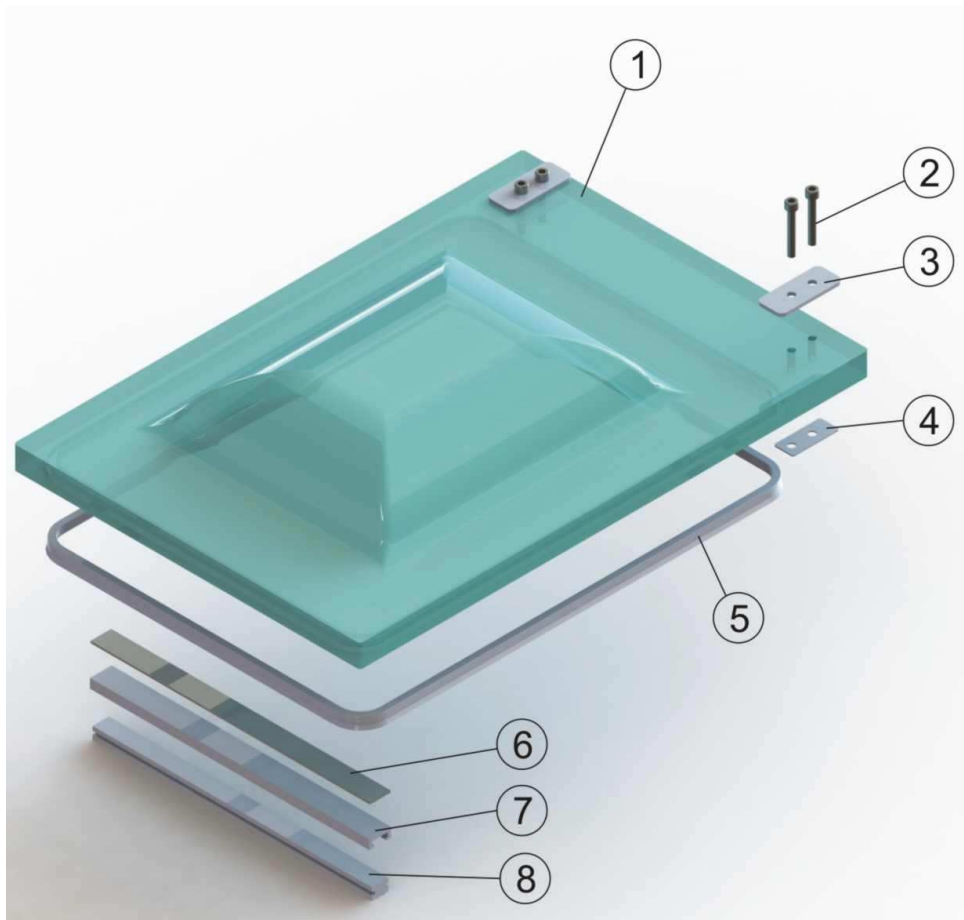
Solution: Replace or repair the approaching switch.

Note: The approaching switch is in correct position, if there is signal in approaching switch and the machine startups, when close the vacuum lid in the position where its front-end is 10~20mm distance from vacuum chamber.

If there is frequent error code showing or direct malfunction, please contact the manufacturer or distributor.

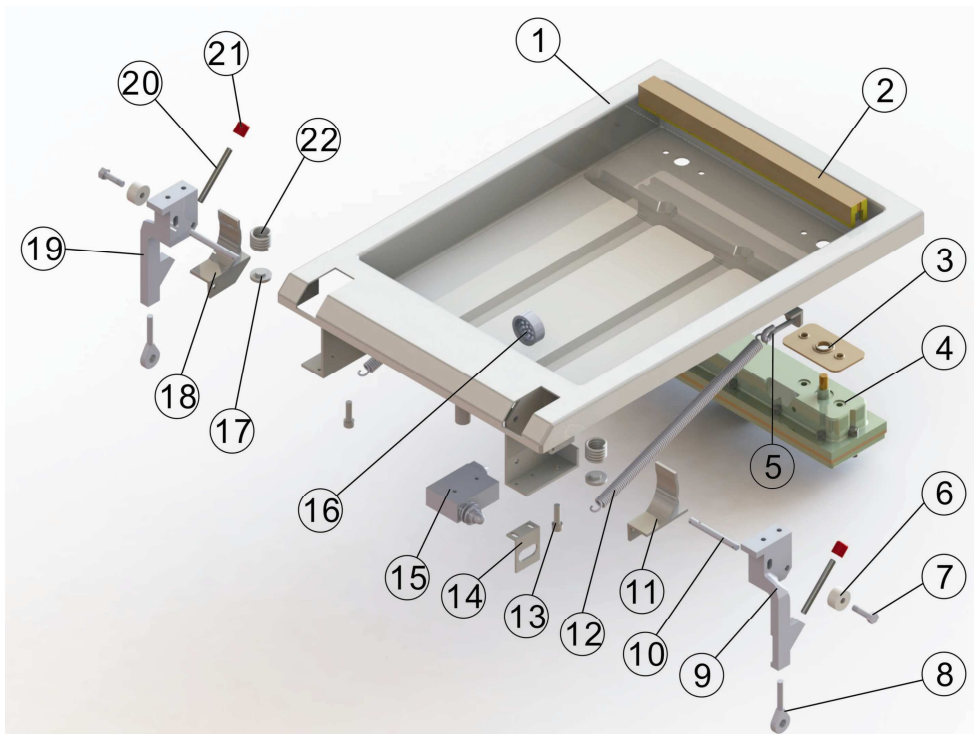
I. Breakdown Drawings

1. Breakdown Drawing of Vacuum Lid



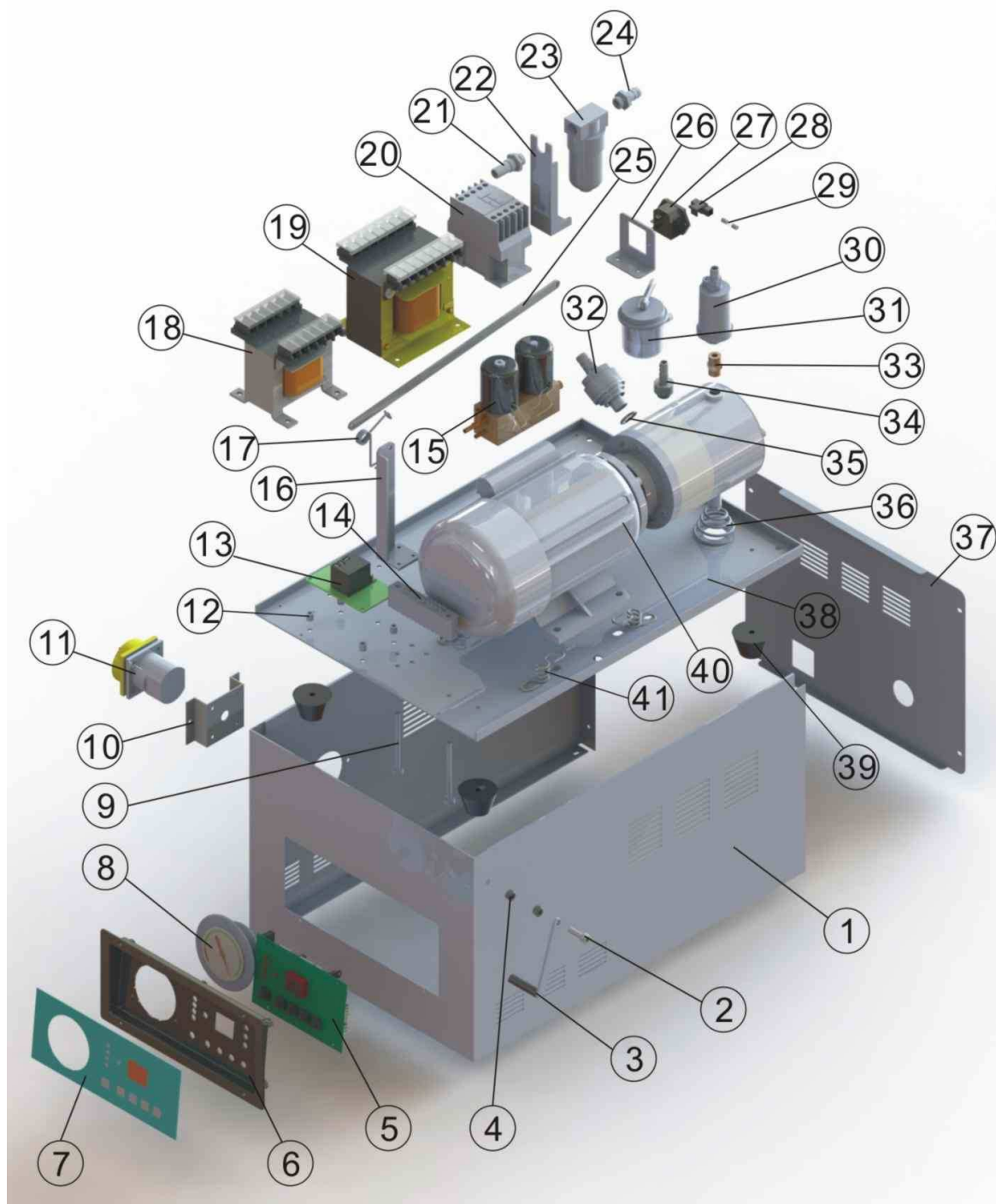
Code	Name	Qty	Unit	Remark
1	Vacuum lid	1	pc	
2	M6 cylinder-head inner-hexagon screw	4	pc	
3	Upper press plate for vacuum lid	2	pc	
4	Down press plate for vacuum lid	2	pc	
5	Sealing rubber	1.5	meter	
6	Double-sided adhesive foamed tape	0.27	meter	
7	Silicon strip seat	1	pc	
8	Silicon strip	1	pc	

2. Breakdown Drawing of Vacuum Chamber



Code	Name	Qty	Unit	Remark
1	Vacuum chamber assembly	1	set	
2	Epoxy plate assembly	1	set	
3	Air chamber sealing ring	2	pc	
4	Air chamber assembly	1	set	
5	Tension spring adjusting pole	2	pc	
6	Damping roller	2	pc	
7	Damping roller axle	2	pc	
8	Joint bearing	2	pc	
9	Right door-hinge pit	1	pc	
10	Door-hinge pin	2	pc	
11	Right damping plate assembly	1	pc	
12	Tension spring for opening lid	2	pc	
13	M6 cylinder-head inner-hexagon screw	2	pc	GB/T70.1
14	Switch plate	1	pc	
15	Limit switch	1	pc	
16	Suction hole guard	1	pc	
17	Press adjusting plate	2	pc	
18	Left damping plate assembly	1	pc	
19	Left door-hinge pit	1	pc	
20	M6 Inner-hexagon flat-head screw	2	pc	
21	position pillar buffer rubber	2	pc	
22	Damping spring	2	pc	

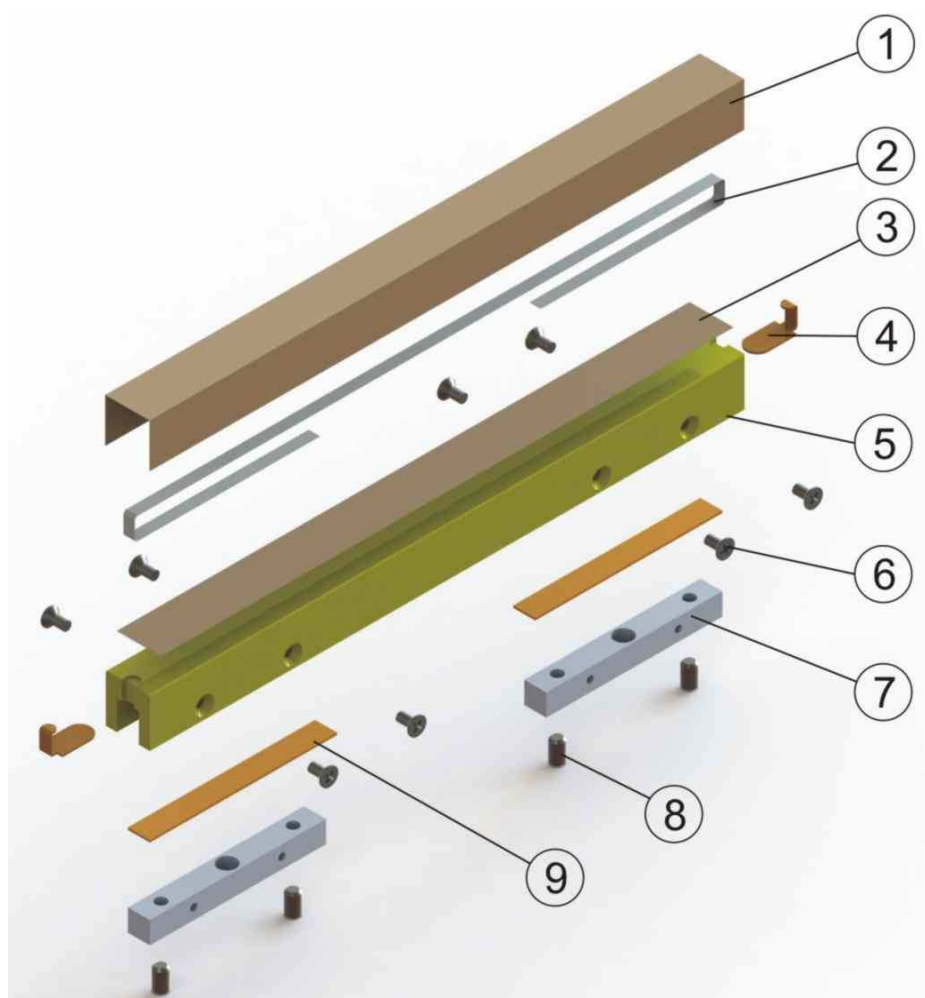
3. Breakdown Drawing of Hull & Bottom-plate



Code	Name	Qty	Unit	Remark
1	Hull	1	pc	
2	M6 cylinder-head inner-hexagon screw	1	pc	GB/T70.1
3	Vacuum lid hook	1	pc	
4	Nut	2	pc	
5	Circuit board	1	pc	
6	Control panel box (PC material)	1	pc	
7	Control panel cover (PVC material)	1	pc	

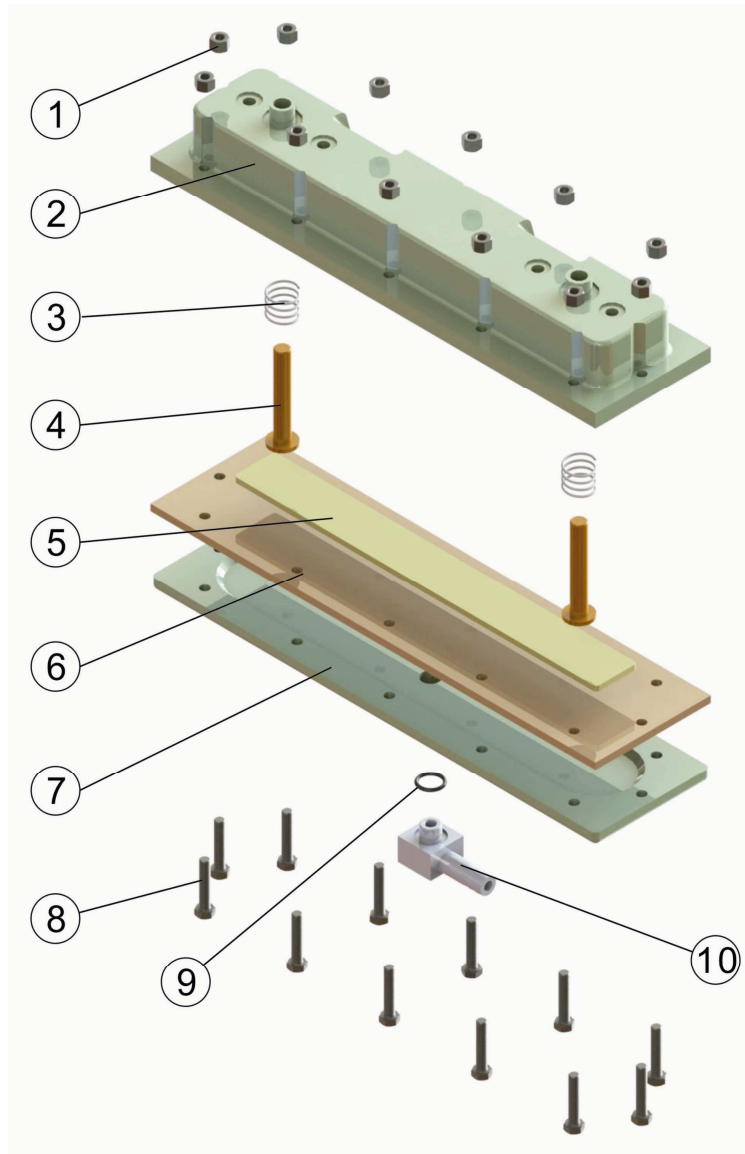
8	Vacuum gauge	1	pc	
9	M4 screw	2	pc	
10	Finger-protected switch holder	1	pc	
11	Finger-protected switch	1	pc	
12	Relay cushion	4	pc	
13	Small relay	1	pc	
14	Pin seat	1	set	
15	Combined solenoid valve	1	set	
16	Fixing support	1	pc	
17	Support pole spring	1	pc	
18	Control transformer	1	pc	
19	Sealing transformer	1	pc	
20	AC contactor	1	pc	
21	Filter connector II	1	pc	
22	Filter fixing support	1	pc	
23	Filter	1	pc	
24	Filter connector I	1	pc	
25	Support pole	1	pc	
26	Socket fixing support	1	pc	
27	Power socket	1	pc	
28	Fuse tube	1	pc	
29	Fuse tube base	1	pc	
30	Vacuum pump filter	1	pc	
31	Oil-mist filter	1	pc	
32	One-way check valve assembly	1	pc	
33	Filter connector	1	pc	
34	M14×1 solenoid valve connector	1	pc	
35	O-type sealing ring	1	pc	
36	Turriform spring	1	pc	
37	Back cover	1	pc	
38	Bottom plate	1	pc	
39	Rubber foot	4	pc	
40	Vacuum pump	1	pc	
41	Shock-proof spring	4	pc	

4. Breakdown Drawing of Sealing Epoxy Plate Assembly



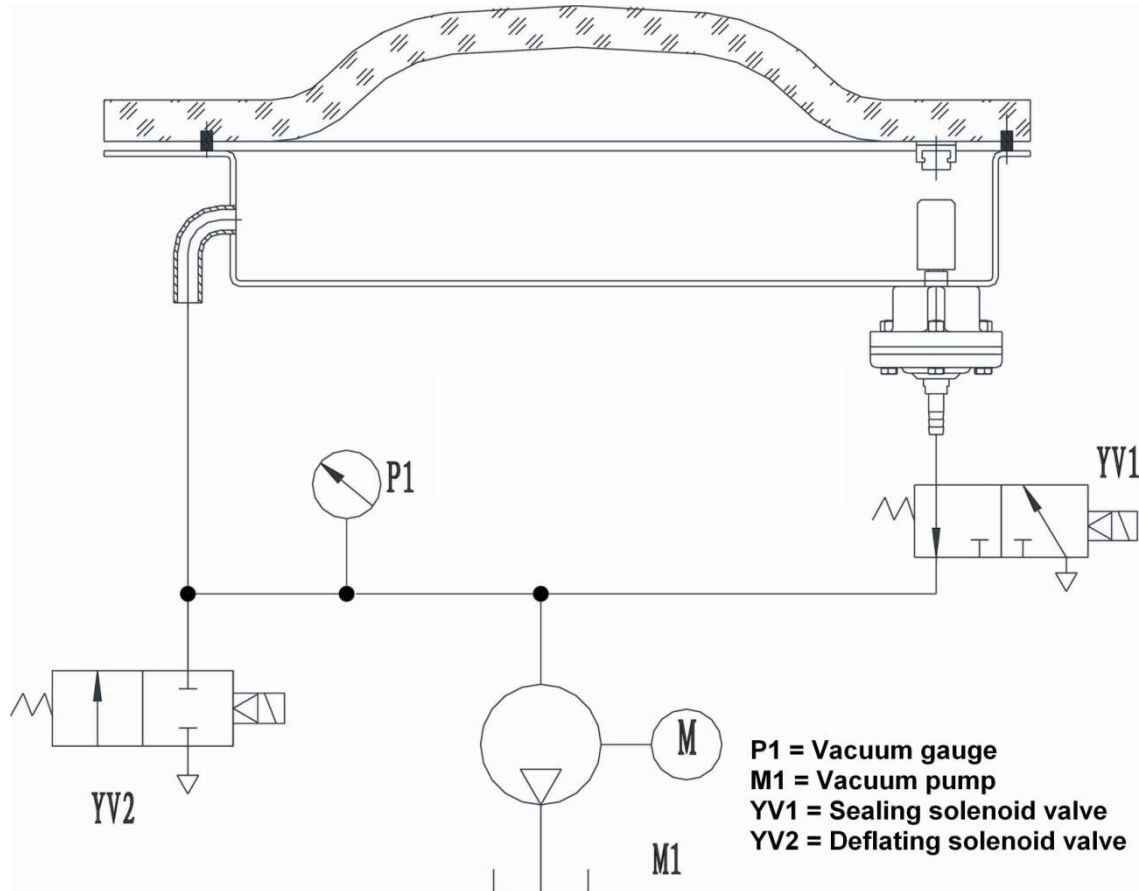
Code	Name	Qty	Unit	Remark
1	Teflon cloth	1	pc	275×60(mm)
2	Nickel chromium strip (heating wire)	1	pc	550×5(mm)
3	Pressure sensitive adhesive tape	1	pc	275×19(mm)
4	Heating wire copper cushion	2	pc	
5	Epoxy plate	1	pc	
6	M4 cross-sunk screw	8	pc	GB/T 819.1
7	fixing block for epoxy plate guiding pillar	2	pc	
8	M6 Inner-hexagon flat-head screw	4	pc	GB/T 78
9	Heating wire copper presser	2	pc	

5. Breakdown Drawing of Air Chamber Assembly



Code	Name	Qty	Unit	Remark
1	M5 nut	12	pc	
2	air chamber	1	pc	
3	Sealing pillar spring	2	pc	
4	copper pillar	2	pc	
5	airbag top plate	1	pc	
6	airbag rubber plate	1	pc	
7	air chamber cover	1	pc	
8	M5 half circle-head screw	12	pc	
9	O-type sealing ring	1	pc	
10	air chamber connector	1	pc	

K. Gas Circuit Diagram



L. List of Spare Parts

No.	Name	Specification	Qty	Remark
1	Flat Heating Wire	550X5 (mm)	1 pc	
2	Teflon cloth with gum	275X60 (mm)	1 pc	
4	Double-sided adhesive foamed tape	With width 20mm	1 roll	
5	Vacuum pump oil	VG32; 300ml	1 bottle	
10	Operation manual		1 book	This manual

Note: The manufacturer has the right to change the spare part with no further notice given to the buyer. Please refer to the real spare parts in hand.