

Small Steam Sterilizers

Operation Manual
Technical Manual



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Revision date: 2025/08/07

Dear Valued Runyes Customer!

Welcome to Runyes and thank you for your purchase! Ningbo Runyes Medical Instrument Co., Ltd. is a professional dental equipment manufacturer, headquartered in Ningbo, China.

The mission of Runyes Medical is to produce dental equipment that meets the highest standards of performance and reliability. Strict quality control is enforced during manufacturing of our dental equipment.

We hope you enjoy your product. If you have any questions, comments, or special requests, please contact Runyes Medical or our authorized agents or representatives.

User Registration

On the nameplate at back of the machine, you can find the unit's model number, and serial number. Please double check the number and fill in the form with them, you should quote the reference number when you are in contact with your distributors.

Product Name:

Product Model:

Serial Number:

Date Of Manufacture:

Voltage:

A large dashed rectangular box, intended for the user to fill in the product details requested in the labels to its left.

*Before operating the sterilizer, please read carefully all safety cautions and instructions of operation. This operator's manual will help you understand all functions of Runyes autoclaves as far as possible.

*Please follow the instructions carefully in this operator's manual while servicing and maintaining the units.

*Please keep this manual safe for your future references.

*When error occurs during operation of the machine, please get in touch with your local distributor for our best qualified services and assistance.

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1. Introduction

1.1. Intended Use

For medical units and bio-medical research units, the product is used for surgical instruments, medical instruments, dental instruments, and which can be sterilized by high temperature and high pressure.

1.2. Reference Standards

MDD 93/42/EEC amended by 2007/47/EC

PED 97/23/EC

IEC61010 - 1: 2010

IEC61010 -2- 040: 2015

EN13060: 2014

EN61326: 2005

1.3. Responsible Body

Operator

Person who operates equipment for its intended purpose.

Equipment Manager

Individual or group responsible for the safe use and maintenance of equipment.

Authorized Person

An individual or entity authorized by the responsible organization to install, assemble, maintain, or repair the sterilizer.

Manufacturer

The equipment manufacturer and its designated personnel.

In order to use the sterilizer safely, you shall ensure all personnel who operate or maintain the equipment are well trained.

Also, the operator must have a solid understanding of the related sterilization knowledge well.

1.4. Product Performance, Structure, and Compose

The product is composed by sterilization chamber, thermal -protective coating, door assemblies, solenoid valve, piping system, electrical system, main board, control board and shell. It has two working modes; 121 °C and 134°C. The safety valve opens automatically at 0.27 MPa. The product displays real-time pressure and temperature data, and features indicator lights for different stages of the cycle. Electrical components ensure accuracy and timing control.

1.5. Contraindications: N/A

1.6. Product Life Cycle:

The sterilization chamber is designed for 8 years.

1.7. Safety Equipment Introduction

The product is equipped with the following safety elements:

Heat protector: The chamber has the heat protector.

Automatic safety valve: Safety valve will automatically release the pressure when the pressure is over the set value.

2. Symbols, Sticker, and Warning

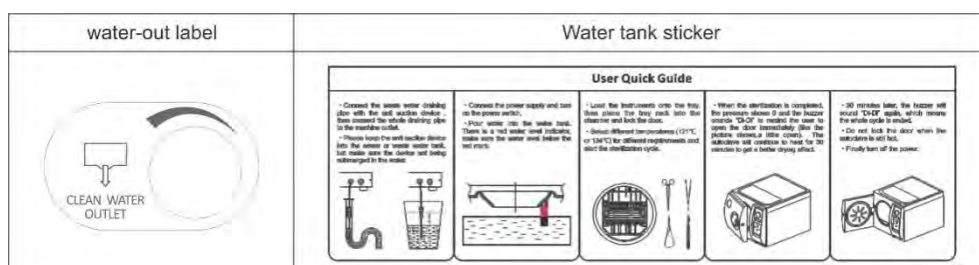
For safety issues, please refer to the following symbols and stickers.

2.1. Symbols

#	Symbols	Definitions	#	Symbols	Definitions
1		Protective conductor terminal	7		Note, refer to operation manual
2		Alternating current	8		Fragile, handle with care
3		Dangerous voltage	9		Keep dry
4		Fuse	10		Manufacturing date
5		Caution, hot surface	11		Serial no.
6		Product fulfill WEEE directive	12		Drain out

2.2. Sticker Introduction

Keyboard Sticker



2.3. Warnings

- 2.3.1. Please follow the instruction manual for all operations.
- 2.3.2. Please make sure to keep the manual in a safe place during the service life, keep safe all the updated information as well. When the product needs to be moved to another place, don't forget to bring the manual as well.
- 2.3.3. The product belongs to the category of pressure vessels, is designed, manufactured, and tested according to <Press vessel> and follow <Pressure vessel safety technology supervision regulations>
- 2.3.4. In order to reach the sterilization requirements, please use distilled water only.
- 2.3.5. This product can't sterilize the sealed liquid.
- 2.3.6. This product can't sterilize the halogenated medium which contains chloride ions, or corrosive medium, such as: detergent, 84% NaClO solution, etc. Chloride ion is a dangerous substance which will harm the stainless steel. If the sterilized articles have the halogenic medium or corrosive medium, chamber must be cleaned by pure water after sterilization. Otherwise, it will harm the chamber and therefore affect the product service life.
- 2.3.7. The product can only sterilize the medical articles which have high temperature resistance and high-pressure resistance, it cannot sterilize oils-based articles such as Vaseline or powder articles. When you see any symbols on the product, please refer to operation manual for detail information to avoid any potential danger.
- 2.3.8. When you see the symbol () that means the temperature at this area is very high, don't touch it.
- 2.3.9. The product's power supply needs to have 2000VA with safe grounding.
- 2.3.10. If the power cord is broken, only professional engineer can fix it.
- 2.3.11. Don't place the autoclave in an unstable place.
- 2.3.12. Don't cover the door, ventilation opening and thermal ventilation opening.
- 2.3.13. Don't put any articles or liquid on top of product.
- 2.3.14. If you don't use the product for a long time, please clean and dry the chamber, and drain all the water out from clean tank.
- 2.3.15. Don't try to open the door during the sterilization cycle.
- 2.3.16. Don't turn off the power when the product is running.
- 2.3.17. Don't try to open the door until pressure show 0 bar.
- 2.3.18. Keep the product away from the flammable articles.
- 2.3.19. Ensure the product is monitored while operating.

- 2.3.20. When the safety valve is releasing high-temperature steam, for your safety, do not stand behind the unit.
- 2.3.21. If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired
- 2.3.22. The power cord needs to be kept away from heat sources.

3. Processing Principle and Product Structure

3.1. Processing Principle

During the sterilization process, the air will be driven out by saturated steam. The thermal steam is introduced into chamber with the high temperature, high pressure and high humidity. The pressure and temperature are kept in a specific condition to achieve effective sterilization.

3.2. Product Structure

The product is composed of the chamber, control system, electrical system, water/air piping system, and outer casing.

Main Parts:

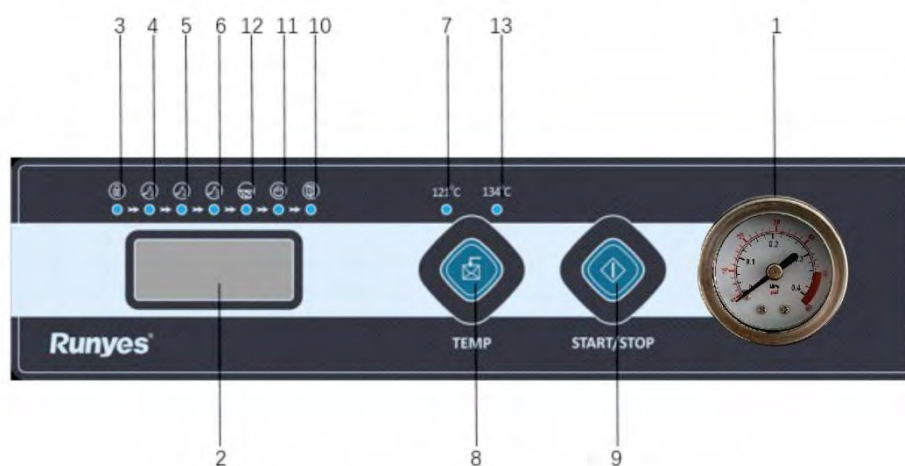


Specifications

#		Details(12L)
1	Overall size (L*W*H) mm	490 *310*370
2	Chamber size(mm)	Φ200*350
3	Chamber capacity (L)	12L
4	Product classification	N
5	Input power (VA)	1800VA
6	Design pressure (Mpa)	-0.1/0.28Mpa
7	Design temperature (°C)	140°C
8	Temperature display accuracy (°C)	0.1°C
9	Pressure display accuracy (kpa)	1kPa
10	One cycle water consumption (ml)	450mL
11	Environment temperature (°C)	+5°C~40°C
12	Relative humidity range	≤75%
13	Net weight (kg)	22kg
14	Max load(kg)	26kg
15	Noise	70dBA
16	Max. Instrument load	3.5kg
17	Max. Fabrics articles load	2.0kg
18	Single package max weight	1.2kg

Voltage	110V~ / 120V~	230V~240V
Fuse Parameter	F20AL 250V	F12AL 250V

4. Operation Interface Introduction



No.	Definition	Description
1	Gauge	Indicates the real-time pressure in the chamber, the pressure value is gauge pressure, Unit: bar
2	Temperature indicator	Indicates the temperature in the chamber, Unit: °C
3	Locking indicator	Indicates the door is locked and it's ready to work
4	The first boosting indicator	Indicates the first boosting stage.
5	The second boosting indicator	Indicates the second boosting stage.
6	The third boosting indicator	indicates the third boosting stage.
7	Program selection/121°C indicator	Lights up when the 121°C program is selected.
8	Program selection button	Selects either the 121°C or 134°C sterilization program.
9	Start/stop button	Starts or stops the program by pressing and holding the button for 3 seconds.
10	Sterilization finished indicator	Indicates the sterilization process is complete.
11	Exhausting indicator	Indicates the exhausting phase after sterilization.
12	Sterilization indicator	Indicates the sterilization is in process.
13	Program selection/134°C indicator	Lights up when the 134°C program is selected.

5. Steam Sterilization Cycle Introduction

5.1. Sterilization Cycle

2 cycles in total as below:

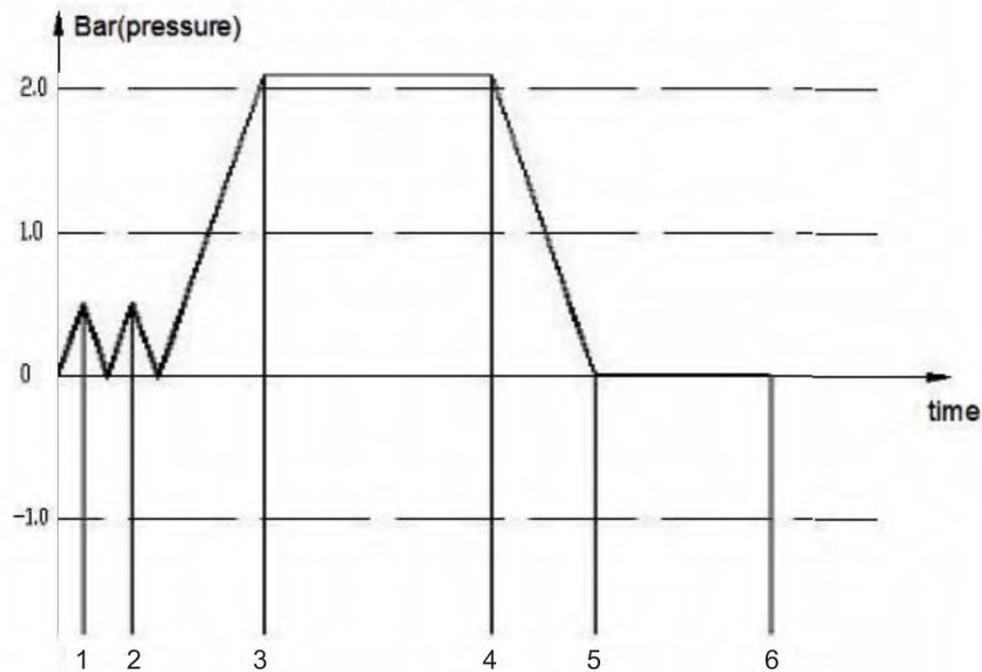
5.2. Cycle Detail Introduction

Item	Sterilization Cycle Mode	Sterilization Temperature	Sterilization Pressure	Sterilization Time	Exhaust Time	Cycle Complete Time	Load Type or Usage
1	134°C Cycle	134°C	210Kpa	6 mins	4 mins	23 mins	Suitable for sterilizing unpackaged bare metal objects with high temperature resistance, such as solid metal instruments or standard load models.
2	121°C Cycle	121°C	110Kpa	20 mins	4 mins	37 mins	Suitable for rubber items or other materials not resistant to 134°C high temperature, including solid or hollow items without packaging.

The data in the table were measured with the sterilizer operating in a hot pot without any load.

None packaging sterilization cycle: used for sterilizing the heat resisting metal objects with no package, such as the standard simulation load is solid metal screw

No packaging sterilization cycle working chart

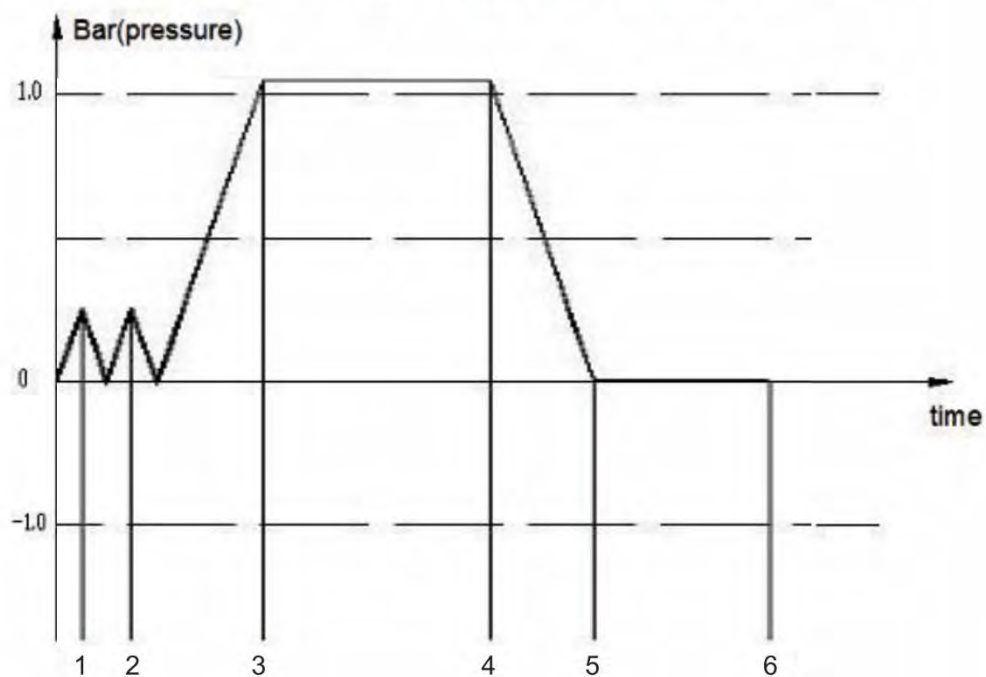


0.start

1. The first time temperature rising and exhausting.
2. The second time temperature rising and exhausting.
3. The third time temperature rising and exhausting.
4. Start sterilization
5. Finish sterilization
6. Finish exhausting
7. Finish sterilization

Rubber or plastic objects sterilization cycle -- Including the rubber cannot resist the high temperature of 134 °C, the solid or cavity items. The working chart is as following

Rubber or plastic objects sterilization cycle working chart



0.start

1. The first time temperature rising and exhausting.
2. The second time temperature rising and exhausting.
3. The third time temperature rising and exhausting.
4. Start sterilization
5. Finish sterilization
6. Finish exhausting
7. Finish sterilization

6. Introduction For Sterilization Cycle Setting

6.1. 134°C sterilization cycle without package

- 1) Turn on the power, the system begins to self -test
- 2) Press the TEMP button twice; the 134 °C indicator will light up
- 3) Press the START/STOP button. The RUNNING indicator will light up

6.2. 121 °C sterilization cycle without package

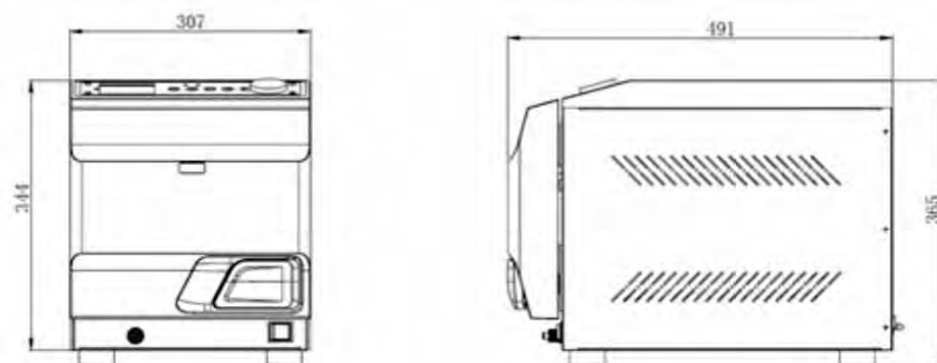
- 1) Turn on the power, the system begins to self -test
- 2) Press the TEMP button once; the 121 °C indicator will light up
- 3) Press the START/STOP button. The RUNNING indicator will light up

7. Installation

7.1. Environment for Installation

- 1) Requirements for installing the autoclave: a minimum of 50 cm clearance on each side is required to ensure proper ventilation for heat dissipation.
- 2) The work surface for placing the autoclave must support a minimum load of 100 kg.
- 3) No flammable materials should be present around the autoclave, including on the work surface.
- 4) The installation area should be well-lit.
- 5) The main switch serves as the isolation device from the mains supply. Position the equipment so that the disconnecting switch is easily accessible.
- 6) Device cannot be placed under direct sunlight.

Overall size of the machine is as below:



7.2. Working Conditions

Environment temperature: 5 °C - 40 °C

Relative humidity: <85%

Atmosphere: 95kPa - 106kPa

7.3. Power Supply

- 1) The rated voltage of the product is 230 ~ 50/60 Hz. The power supply circuit can withstand 1800VA;
- 2) The product must be properly grounded

7.4. Water Supply

	Water Supply	Condensate
Evaporation residue	≤10mg/l	≤1.0mg/kg
SiO ₂	≤1mg/l	≤0.1mg/kg
Fe	≤0.2mg/l	≤0.1mg/kg
Cd	≤0.005mg/l	≤0.005mg/kg
Pb	≤0.1mg/l	≤0.1mg/kg
Other heavy metal	≤0.1mg/l	≤0.1mg/kg
Chloride	≤2mg/l	≤0.1mg/kg
Phosphate chloride	≤0.5mg/l	≤0.1mg/kg
Electrical conductivity (20 °C)	≤15us/cm	≤3us/cm
PH	5-7.5	5-7.5
Appearance	Colorless clean no precipitation	Colorless clean no precipitation
Hardness	≤0.02mmol/L	≤0.02mmol/L

7.5. Open the Package and Checking

- 1) Remove the carton cover and side pieces; remove the PE plastic; take the autoclave out of the package; then remove the plastic bag.
- 2) Keep all the package material in good condition for future use.
- 3) Check all the information on the nameplate and compare them with your order details.
- 4) Check the entire appearance, if any scratches or broken parts is found, please contact us with transportation information.
- 5) Check all the accessories with the product. If anything is missing, please contact us.

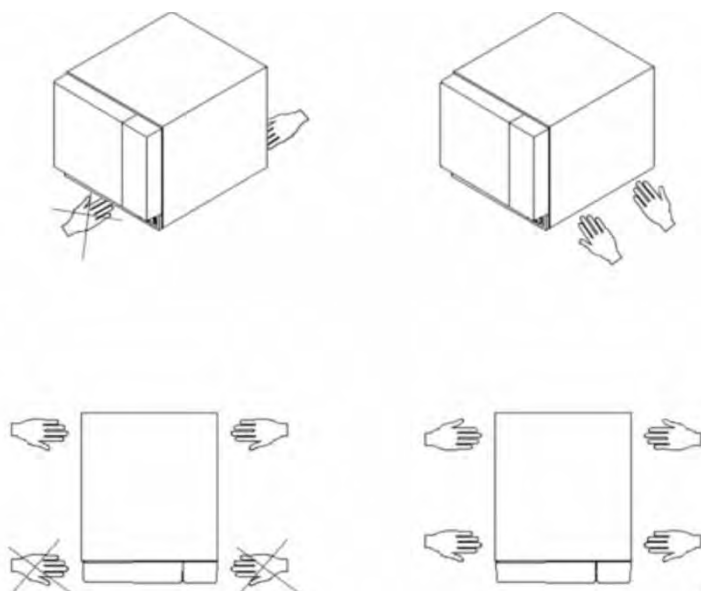
7.6. Installation

- 1) Place the product in the specified place
- 2) Connect power supply by inserting the plug of supplied cord into the socket.
Note: Power cord need to be placed away from the heating dissipating area.
- 3) Turn on the product. After the power supply is connected, switch on the power. The power indicator will light up, indicating successful power connection. The product will perform a self-check, including an initial buzzing sound. After the check, the product will be ready for use.
- 4) Open the door by rotating the handle on the outer housing.
- 5) Remove all accessories from inside the chamber and keep them safely for future use.

Warning for moving the product:

- 1) Do not hold the product by the door;
- 2) Do not carry the autoclave by the rubber feet (or base pads) only;
- 3) Do not carry the product from the sides or tilt it upside down;

Correct instruction for holding the product is as below:



Installation:

- 1) Place the product in the designated place.
- 2) Place the autoclave on the working surface, make sure the front pads are the same level as the rear ones.
- 3) Connect the power supply. The power cord from the autoclave should be connected as follows: the brown wire to the live wire, the blue wire to the neutral wire, and the yellow/green wire to the ground wire.

Note: This step must be performed by a qualified electrician.

- 4) Add clean water: Open the water tank cover by loosening the screws. Pour clean water into the water tank. Do not exceed the warning line. (See diagram below)



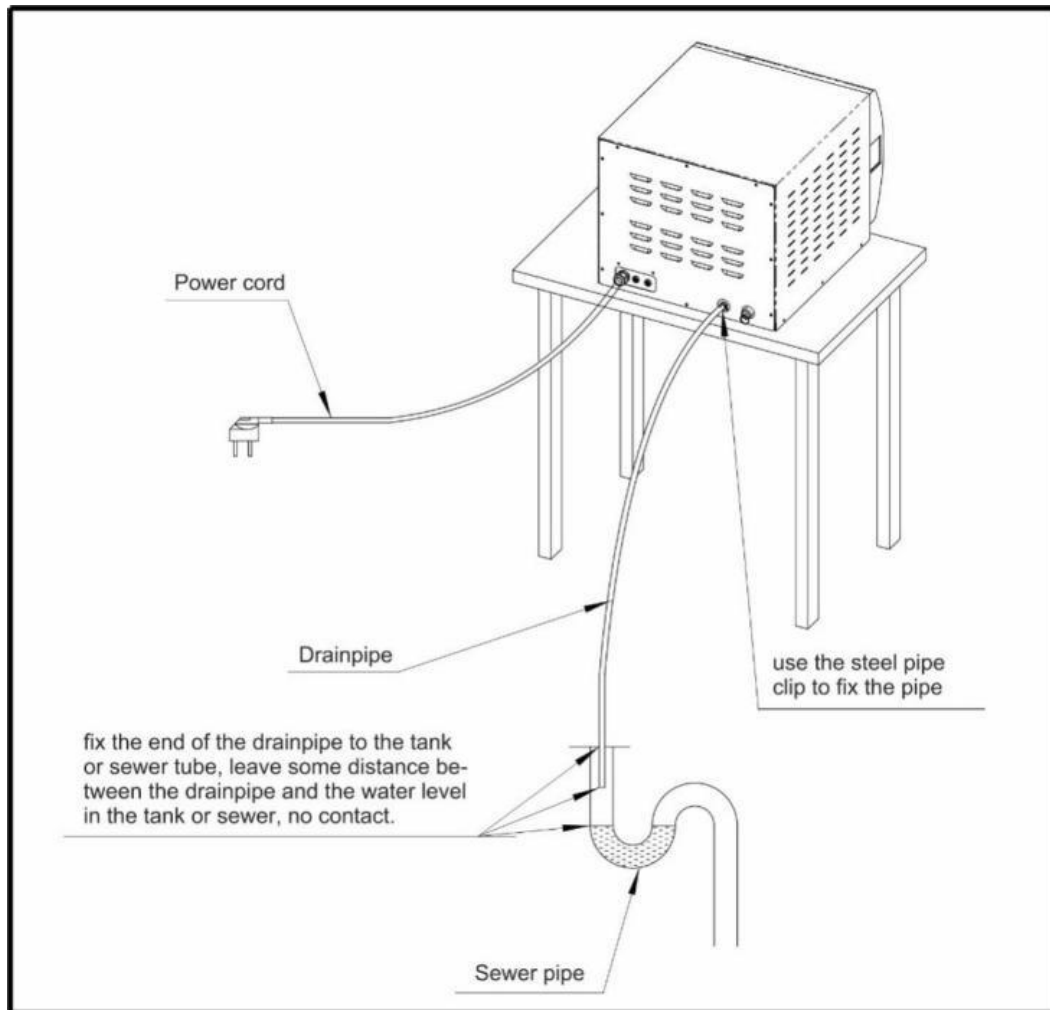
Warning Line

- 5) Turn on the product. After connecting the power supply, turn on the power switch. The power indicator will light up, indicating the power is connected properly. The product will run a self-check, accompanied by a "DI" beep. After the check is complete, the product will enter standby mode.
- 6) Open the door by pulling the handle.
- 7) Take out all the accessories inside the chamber and keep them safely for future use.

Autoclave drainpipe installation requirement:

A. If the user has their own used water tank or drains the used water directly into the sewer:

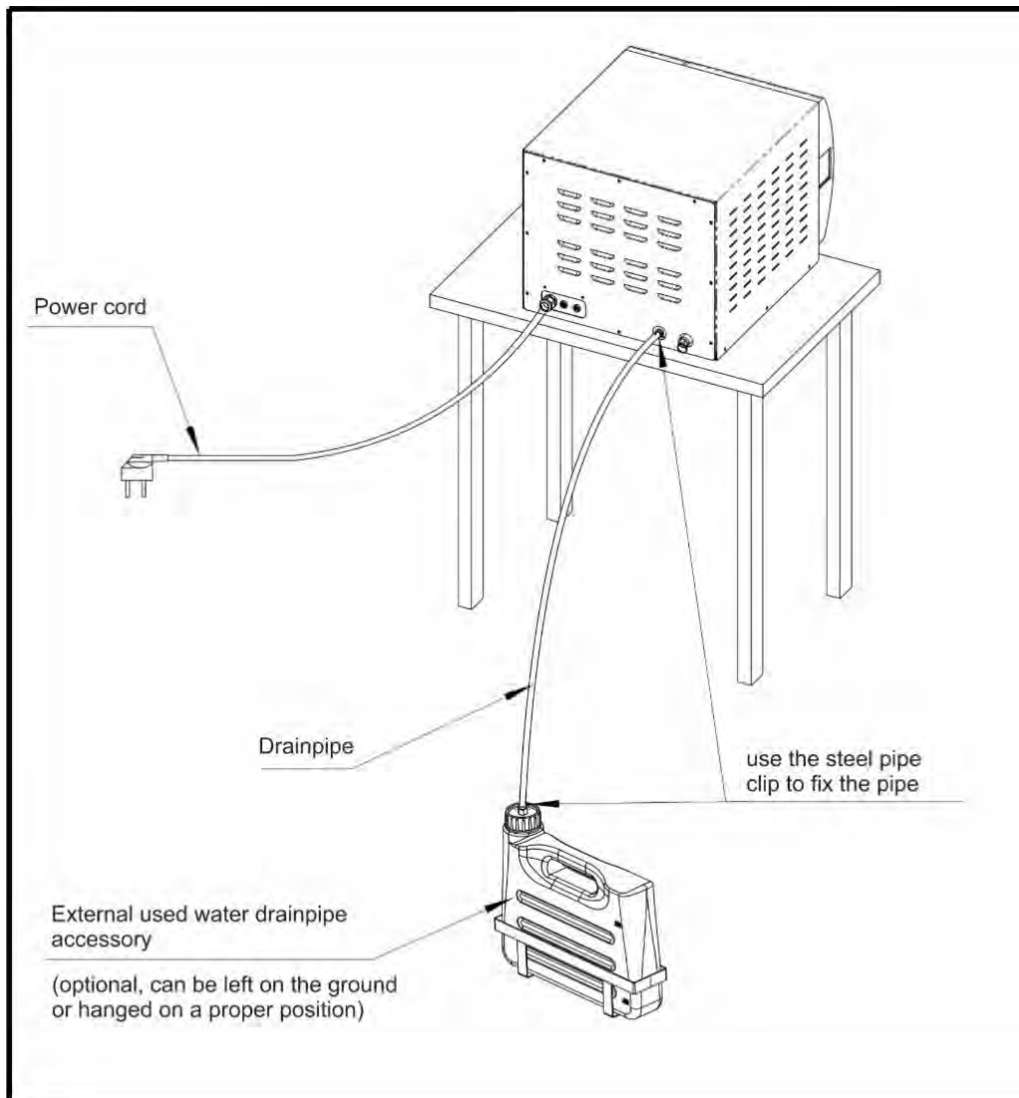
- 1) After placing the autoclave on the working surface, connect the drainpipe to the water outlet at the back of the autoclave, then secure the pipe to the outlet using a steel pipe clip.
- 2) The high-temperature water vapor drained during the sterilization cycle should be exhausted to an appropriate location. The drainpipe must be securely fixed in a safe position. If it is not properly fixed, the drainpipe may pop out of the water tank or sewer due to pressure, causing hot vapor to spill out and scald people nearby.
- 3) If you choose to use your own used water tank or drain the used water directly into the sewer, you must securely fix the end of the drainpipe to the tank or sewer pipe to prevent it from popping out and scalding people nearby.
- 4) Additionally, the used water should be drained from the used water tank frequently, or the sewer must be kept unobstructed. This will ensure that the end of the drainpipe is not submerged below the water level in the tank or sewer, preventing used water from being sucked back into the autoclave chamber due to negative pressure when the chamber cools down.
- 5) The installation is shown as below:



B. If the user uses the external used water tank provided by Runyes:

- 1) After placing the autoclave on the table, connect the drainpipe to the water outlet at the back of the autoclave. Then secure the pipe to the outlet using a steel pipe clip.
- 2) Connect the drainpipe to the used water tank and secure it with a steel pipe clip.
- 3) Place the tank on the ground or hang it in an appropriate location.
- 4) During daily use of the autoclave, you need to monitor the water level in the tank. If the used water exceeds the water level line, it should be emptied immediately.

5) The installation diagram is shown below:



8. Sterilization Operation Steps

8.1. Clean the instruments to put inside the chamber

Clean the instruments after surgical operation and dispose of the residues. We recommend cleaning the instruments using an ultrasonic cleaner, cleaning agent, or purified water. After cleaning, rinse the instruments and wait for sterilization. Unwrapped instruments can be loaded directly onto the tray for immediate sterilization.

8.2. Turn On the Autoclave

Before using the autoclave, ensure the power is properly connected. Turn on the power switch. When the power indicator is on, it means the power is connected. The autoclave runs a self-check with a “D” buzzing sound. After the self-check, it is ready for use.

8.3. Open The Door

Pull the handle slightly to open the door.

8.4. Adding Water

Before starting the program, please add enough water to the water tank. If the water level falls below the minimum water level, the LED screen will display “A01”. Please pour qualified water into the tank promptly.

8.5. Material Loading

After opening the door, place all trays loaded with instruments into the chamber.

Loading Warnings:

- 1) Materials must not touch the chamber walls.
- 2) For any kind of pipe, make sure both ends are open, without bending or twisting.
- 3) The open side of all the instruments need to be placed inverted or sidelong, avoiding any water there.
- 4) All the instruments should be loaded uniformly. There should be space between each instrument. Don't stack in one area.
- 5) Different types of instruments need to be loaded on different tray.
- 6) Load the rack with trays into the chamber, close the door.

According to the sterilization requirements of different category articles, choose the related sterilization cycle (you can refer to the cycle detail information).

8.6. Close The Door

Close the autoclave door by pushing it firmly, then pull the handle to securely latch it.

8.7. Program Choosing

Use the control panel to select the desired sterilization program.

8.8. Start Cycle

Press the "START/STOP" button to begin the selected cycle.

Note: During the process, the operator must not leave the machine unattended and must monitor its operation. If any abnormal condition occurs, exit the program or immediately shut off the power.

Before starting the cycle, the autoclave will automatically check the water level. Only distilled water must be used. Do not exceed the maximum water level when filling the tank.

8.9. Start Sterilization

The autoclave is fully automated; no operation is required during the sterilization cycle. For details, refer to Chapter 7.

8.10. Sterilization Ending

After the sterilization cycle is complete, rotate the handle to open the door and carefully unload the instruments.

Note: After opening the door, do not touch hot surfaces such as the door cover or door panel. Use the door spanner to remove the tray.

Warning: After opening the door, do not touch the sterilized materials with bare hands, as the load may still be hot. Wear protective gloves when unloading.

8.11. Stop Sterilization

Press and hold the "START/STOP" button for 3 seconds during the sterilization cycle to stop it.

If the instruments were not sterilized by whole cycle, it can't be used.

8.12. Attention During the Sterilization Operation

- 1) After the sterilization cycle, the chamber, door cover, instrument racks, and trays will be very hot.
- 2) It is suggested to have sterilization testing strip or sterilization roll which can show the sterilization result, to check the reliability of the autoclave.

8.13. Instrument Storage

Sterilized instruments should be stored in a sealed, dust-free, dry area with a stable ambient temperature.

Storage time: The sterilized instruments should be used within 4 hours.

8.14. Operation After Sterilization

Sterilized instruments should be stored in a sealed, dust-free, dry area with a stable ambient temperature. After sterilization is complete and the buzzer sounds “Di -Di”, immediately rotate the handle and slightly open the door.

9. Daily Maintenance and Safeguard, Verification After Repair

Follow the maintenance chart below. All maintenance tasks listed can be performed by the operator unless otherwise specified.

The responsible entity must ensure that operators are trained to carry out these procedures.

Item	Parts Name	Maintenance Frequency	Maintenance Requirement	Remarks
1	Chamber	Daily	Keep clean, no dirty	
2	Chamber drain filter	Weekly	Keep clean, no dirty	
3	Water tank	Weekly	Keep clean, no dirty	
4	Door gasket	Weekly	Keep clean, no dirty	
5	Water tank water filter	Weekly	Keep clean, no dirty	
6	Instrument tray/rack	Daily	Keep clean, no dirty	
7	Entire machine	Weekly	Keep clean, no dirty	

Users should assess actual conditions and adjust the maintenance schedule accordingly. Adjust the maintenance frequency as needed to maintain optimal performance.

Note: Before performing maintenance, turn off the power, allow the unit to cool down, and ensure adequate lighting.

9.1. Cleaning The Door Gasket Regularly

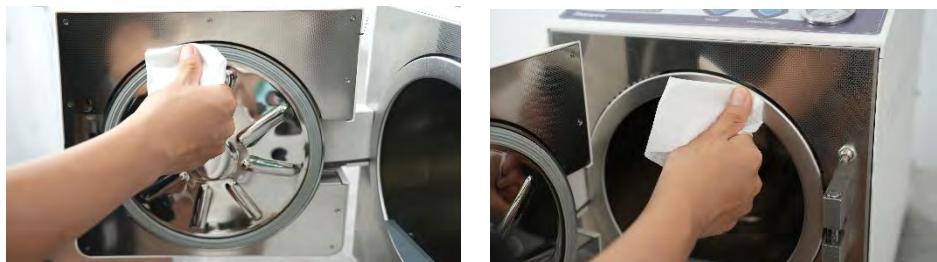
Over time, the surface of the door gasket may accumulate scale and other impurities, which can affect the autoclave's performance. Regular cleaning is therefore necessary.

Take the following steps:

Cleaning methods are as follows:

Use a lint-free cloth dipped in distilled water to gently wipe the gasket and sealing surfaces.

If the door gasket is damaged or the autoclave has completed 2000 cycles, it is strongly recommended to replace the gasket.



9.2. Replace The Door Gasket (Changed by Authorized Person)

Tools: Prepare a small slotted screwdriver. Make sure that the tip is not sharp. Please follow the steps below to replace the gasket:



- 1) Hold the edge of the seal with one hand and insert the screw driver beneath the seal with your other hand, and then pull out the seal slowly.
- 2) Once a section of the seal is removed, you may continue to slowly pull out the entire gasket. Clean the groove and check if the gasket is damaged. If so, replace it with a new one.
- 3) After cleaning, evenly reinstall the seal back into the groove.

Attention:

- 1) The seal must be embedded evenly into the groove.
- 2) When putting the seal back into the groove, the inner edge may bend upward. You can use a screwdriver to press the edge tightly into the groove.

9.3. Safety Valve Inspection and Replacement

To prevent the safety valve from being blocked, it is recommended to release it once a month to allow steam pressure to pass through.

- 1) First, run a sterilization program.
- 2) When the sterilizer pressure reaches 100 kPa, rotate the knurled part and unscrew the top. Then pull the safety valve and keep it open for around 2 minutes. If steam is discharged, it indicates the safety valve is working properly.
- 3) Please contact your dealer or manufacturer for a replacement if you found the safety valve not work properly.

Attention:

When you pull the safety valve, the steam will be discharged, so it is recommended to adopt a tool such like a screwdriver, instead of using your fingers directly. Besides, the operator should stay away from the machine as possible to prevent from being hurt.

Users need check the safety valve. If there is any question, contact the manufacturer and replaced by authorized engineers.

9.4. Clean The Whole Machine

Instructions: Use a lint-free cloth dipped in distilled water to gently wipe the sterilizer housing. Remove any dirt from the surface, then use a dry cloth to wipe the surface dry.

9.5. Check Protective Earth Reliability (Performed by Authorized Engineer)

Check whether the protective earth and protective bonding screws are loose or corroded.

9.6. Check Power Cord Reliability (Performed by Authorized Engineer)

Check whether the power cord is loose.

9.7. Replacement Of Hoses (Performed by Manufacturer)

Please inspect and replace the hoses and liquid-carrying parts every two years.

9.8. Cleaning Water Tank

The water tank of autoclave needs to be cleaned regularly. The detailed procedure is as follows:

- 1) Drain all the water. For details, please refer to the next chapter.
- 2) Rotate the plastic screw on the top, open water tank cover.



- 3) Use a lint-free cloth to clean the water tank with alcohol, then flush it with clean water.
- 4) Drain the water out through the draining connector, and dry the water tank.
- 5) Take out the water filter and clean it. If the water filter has been used for a long time or its mesh is damaged, please replace it with a new one.
- 6) Install the water filter back in place.

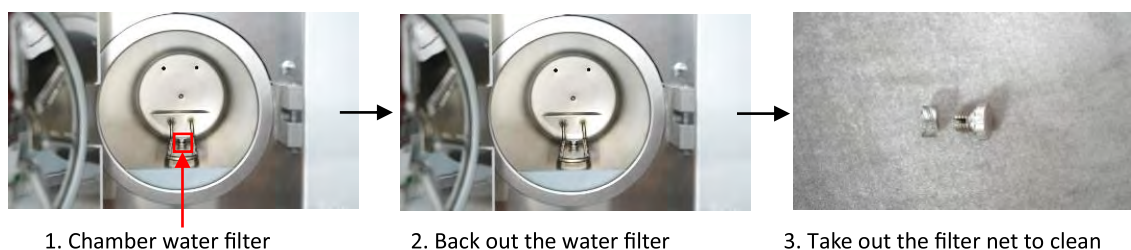
9.9. Empty Water Tank

To empty the clean water tank, use the draining valve as shown in the figure below. Insert the silicone tube into the drain, and turn it counter clockwise to drain.



9.10. Water Draining Filter Cleaning

After repeated use, impurities may accumulate in the drain filter. To prolong the service life of the drain filter, unscrew the drain filter monthly, remove the internal filter, and clean it with a soft brush.



10. Most Frequently Encountered Failure

When a failure occurs, an error code will be displayed on the time display area, accompanied by a "Di Di" sound. Please contact your dealer or manufacturer promptly.

Please follow these steps to remove the items from the chamber:

- 1) Turn off the power switch.
- 2) Turn on the power switch again,
- 3) Remove the items from the chamber by opening the door in the usual way.

Take the items out from the chamber in same method as operation of opening the door.

#	Code	Error	Solution
1	E1	Sensor invalid	Check sensor
2	E2	Door failure	Check door
3	E3-1	The first pressure boost is overtime	Check the solenoid valve, door gasket and check whether there is leaking
4	E3-2	The second pressure boost is overtime	Check the solenoid valve, door gasket and check whether there is leaking
5	E3-3	The third pressure boost is overtime	Check the solenoid valve, door gasket and check whether there is leaking
6	E4	Over temperature	Check inner temperature sensor
7	E5	Low temperature	Check heating rod
8	E6	The water pump or flow sensor is damaged	Check water pump or flow sensor
9	A1	Low water level	Check the water tank

11. Transportation And Storage

Transportation and storage environmental conditions:

Temperature: -40°C to +55°C

Relative humidity: ≤85%

Atmospheric pressure: 50 kPa to 106 kPa

Warning for transportation and storage:

- 1) Remove the draining pipe, empty the waste water tank.
- 2) After chamber cool down, empty all pipes and clean water tank. Dry the clean water tank and chamber.
- 3) Turn on the power switch, after self-checking, close the door.

12. Waste Disposal

- 1) In accordance with Directives 2002/95/EC and 2012/19/EU, which regulate the reduction of hazardous substances in electrical and electronic equipment, such equipment, its accessories, and packaging must not be disposed of as normal urban waste and must be separated accordingly.
- 2) When purchasing a new, equivalent piece of equipment, the old equipment that has reached its end-of-life must be handed over to the reseller for proper disposal.
- 3) Regarding reuse, recycling, and other forms of recovery of such waste, the manufacturer complies with the requirements of applicable national legislation.
- 4) The proper collection and separation of such equipment for recycling, treatment, and disposal help avoid possible negative effects on the environment and health and facilitate the recycling of materials used in the equipment.

- 5) The crossed-out wheeled bin symbol indicates that the product must be collected separately from other types of waste at the end of its life.

13. Door Adjustment

Under normal circumstances, the chamber door lock requires no readjustment. If steam leakage occurs (indicating the seal has failed), you may use the attached spanner to turn the door seal adjuster.

- 13.1. Open the door first.
- 13.2. Insert the spanner into the gap beneath the plastic cover, and engage it with the adjusting nut (Fig 13-2). Turn the nut counterclockwise as shown in Fig 13-1. This will tighten the sealing plate to improve the seal.
- 13.3. Turn the nut until the sealing plate is tight. If the door knob is too tight, you may also turn the nut clockwise to loosen it as long as the seal does not leak.

Caution:

Never try to readjust the door gasket while the door is locked.

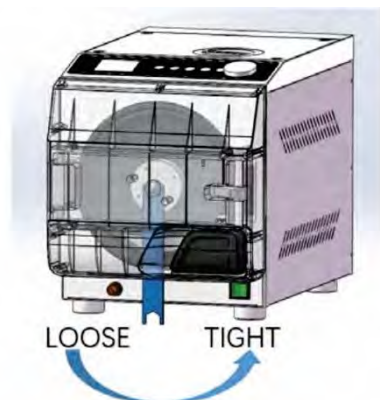
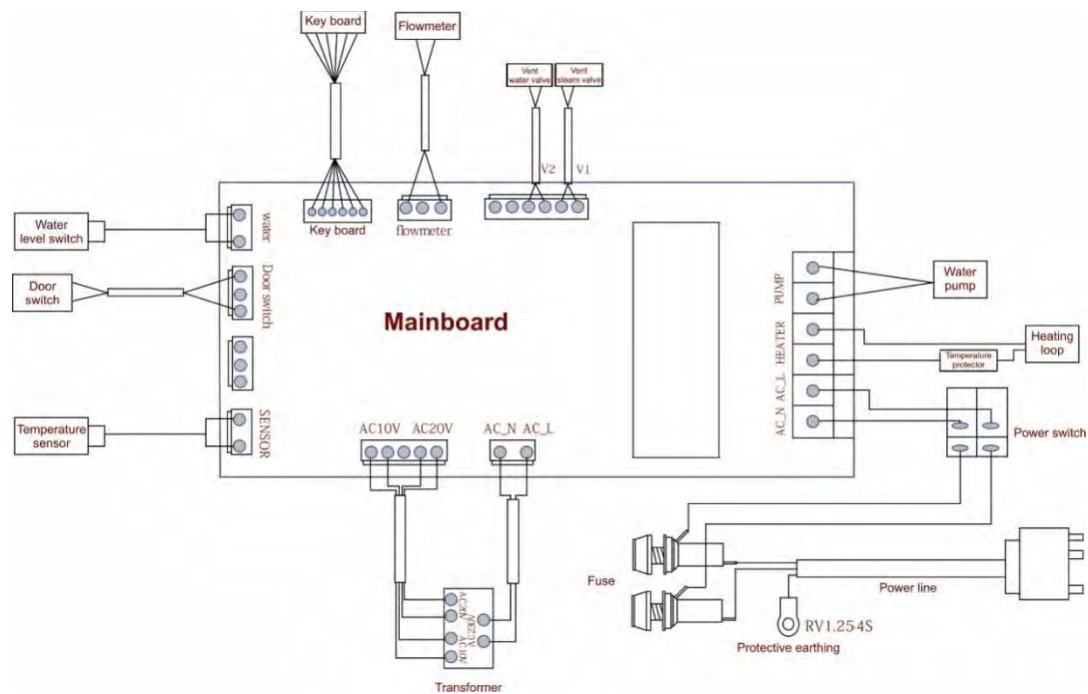


Fig. 13-1

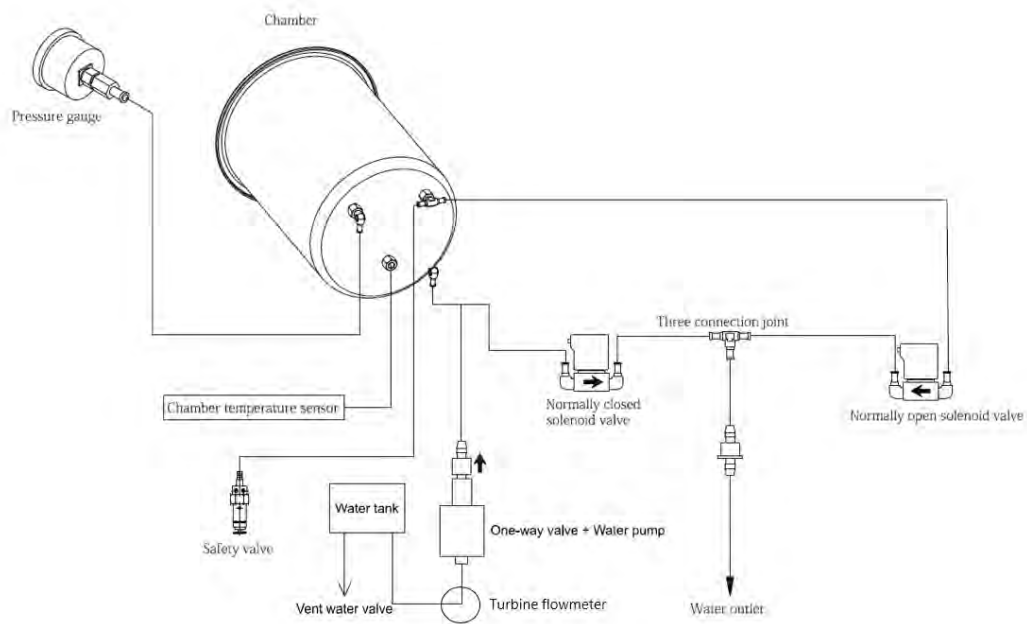


Fig. 13-2

Appendix 1: Schematic Diagram



Appendix 2: Pipeline Diagram



Appendix 3: Small Steam Sterilizer Operation Instructions

1. Preparation Before Use

- 1) Fill the clean water tank with distilled water as required.
- 2) Connect the power supply to turn on the sterilizer and prepare it for operation.

2. Sterilizing Operation

- 1) Place the sterilizing instruments into the chamber, ensuring there is space between the packages. Avoid contact with the chamber walls and the door gasket;
- 2) Close the sterilizer door. Select the sterilization program based on the instruments. Verify that the sterilization parameters are correct, then start the sterilization cycle.
- 3) During the sterilization cycle, the operator should stay close to the equipment and monitor its operation. Take prompt action to handle any abnormal situations to prevent accidents.
- 4) Monitor the sterilization results and keep records for future reference.
- 5) After the sterilization cycle is complete, wait until the chamber pressure is fully released before opening the door and removing the instruments.
- 6) After removing the sterilized instruments from the sterilizer, inspect them and carefully store them in a proper place to avoid contamination.

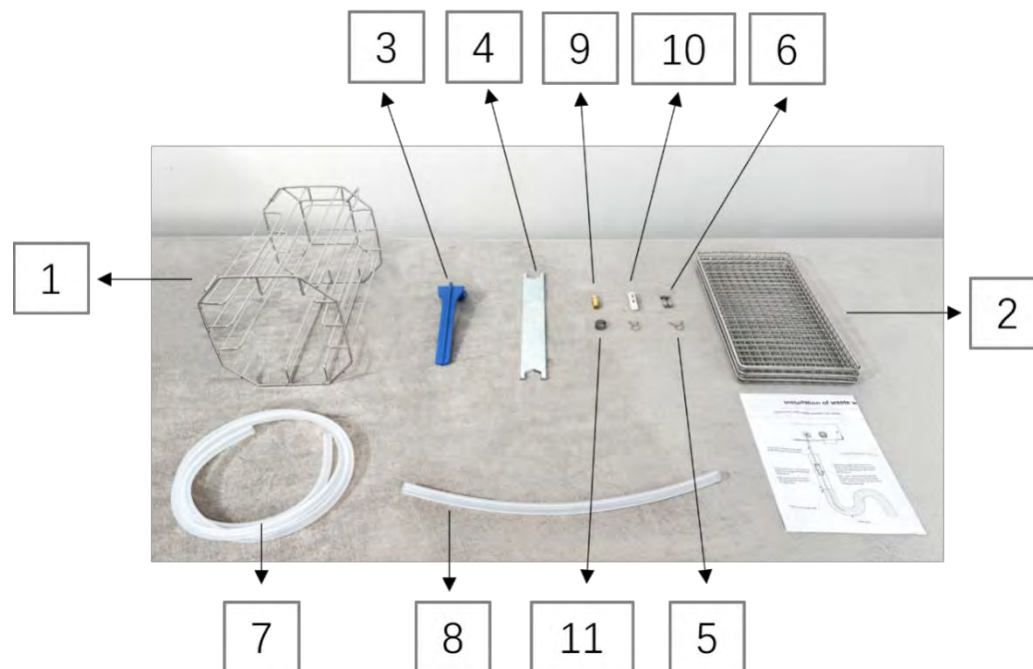
3. After-Use Procedures

- 1) Open the door and switch off the power to disconnect the sterilizer from the power supply.
- 2) If the device indicates poor water quality, replace the water accordingly. At the end of each day, clean the sterilizer thoroughly —both inside and outside. Use a soft, clean cloth with water to remove any residue from the chamber.

4. Precautions:

- 1) Do not mix sterilized items with non-sterilized items;
- 2) Clearly mark the sterilization date and pass status on each qualified sterilized item.
User Company Name Year Month Date

Appendix 4: List of Parts



When replacing any of the following parts, be sure to use original components supplied by the manufacturer:

- 1) Instrument tray support (1 unit)
- 2) Instrument trays (3 units)
- 3) Instrument tray handle (1 unit)
- 4) Regulating wrench (1 unit)
- 5) Collars (2 units)
- 6) Fuses (2 units)
- 7) Long silicone tube (1 unit)
- 8) Short silicone tube (1 unit)
- 9) Connector for anti-siphon (1 unit)
- 10) Water tank knob (1 unit)
- 11) Drain valve filter screen (1 unit)



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