



Steam Sterilizer XRD STE23 LCD



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For Veterinarian instruments sterilization use only

Ver. US - 01

Operation Manual



Operation manual

User Registration

On the serial number plate at back of the machine, you may find the unit's model number, serial and reference number. Please double check the numbers and fill in the form with and quote the reference number, when you are in contact with your distributors:.

Product name:

Product model:

Serial number:

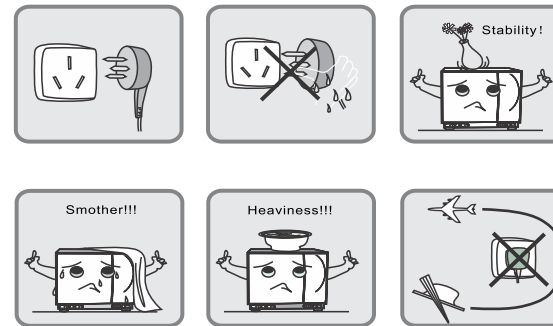
date of manufacture:



This product is for Veterinarian use only.
Manufactured by Youjoy for
XRD - United States of America.

- * Before operating the sterilizer, please read carefully all safety cautions and instructions for operation. This operation manual will help you understand all functions of sterilizer as far as possible.
- * Please follow carefully the instructions in this operation's manual while servicing and maintaining the units.
- * Please keep the manual safe for your future references.
- * Should error occur during operation of the machine, please get in touch with your local distributor, or us for your best qualified services and assistance.

Important information on Safety



1. Please plug the power in a correct voltage(according to nameplate) electrical socket. Don't use electrical outlets other than the correct voltage; otherwise it might cause fire or electric shock.
2. Don't wet your hand before plugging or unplugging the power cord.
3. Don't place your sterilizer on an unstable table top, moving desk, tilted and shaking surface
4. Please don't cover or block the door, ventilation or radiation openings on the sterilizer.
5. Please don't put heavy stuff or liquid containers that might spill on the top of the machine.
6. Please unplug the power cord when the machine isn't used for a long while or when you travel etc.

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1.Description & Usage

This design and make pressurized steam autoclaves especially to meet the needs for sterilization of instruments and devices in clinics,departments in a hospital and laboratories. Operators include doctors or his/her assistant under doctors supervisions.The autoclave is computerized, user friendly and easy to operate. Its real time display shows all data during the sterilization cycle. The software program provides auto diagnose, protection against over heating or over pressurizing, and thus ensures reliability of the sterilization results. Build- in condenser water collecting system prevents discharge of waste steam and keeps the machine clean and safe.

Steam Sterilizer XRD STE23 LCD

The XRD STE23 LCD uses the advanced technology of 3 times pre-vacuum and vacuum drying. It enables the hot steam to penetrate in thin tube and porous material. This product is suitable for dentistry ophthalmology, surgical surgical instruments, dressing theatres and laboratories to sterilize dental and other 135°C autoclavable stuffs.

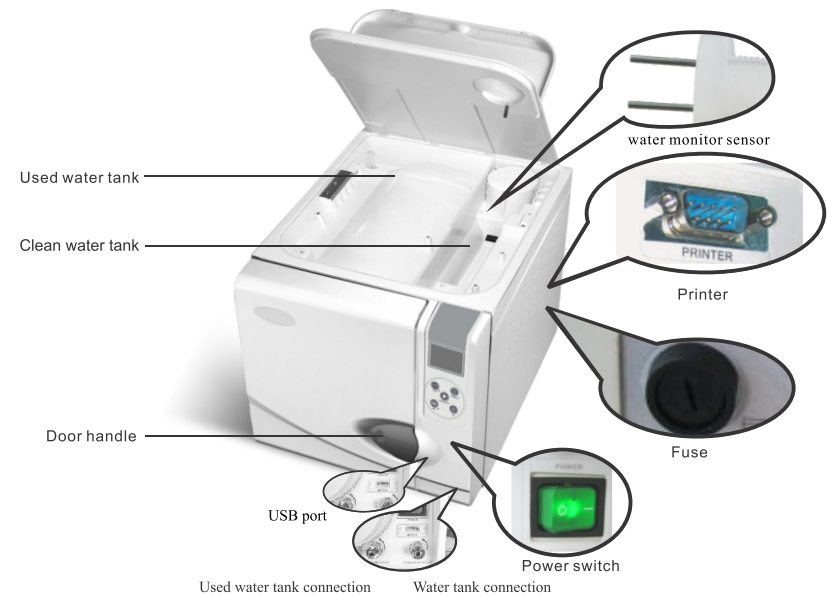


Fig 1-1

2. Specifications









Product composition:
 Chamber inner dimensions (Diameter X Depth).....23L:247mm x450mm
 Power supply:120 V
 Sterilizing temperature /pressure...121°C/(90 ~ 130)Kpa(Under standard atmospheric pressure)
134°C/(200 ~ 230)Kpa (Under standard atmospheric pressure)

⚠ Cautions

Note: Temperature/Pressure here means the chamber temperature and pressure during the phase of sterilization. The value varies under different atmospheric pressure.

Power Fuse ----- F20AL 250V/F12AL 250V
 Water tank capacity.....3.5L
 Minimum water level.....1.3L
 Environment temperature.....+5°C ~ +40°C
 Relative Humidity Range..... ≤85%

Figures

- | | | |
|---|--|--|
|  Last cycle/ Up |  Fast / Down |  Caution & Warning |
|  Menu / Cancel |  Start |  Grounded correctly |
|  OK |  Water leakage connection | |

Tip:

Tips Standard atmospheric pressure: It the atmospheric pressure at sea level. It refers to 1 Standard atmospheric pressure. The value is 0.1Mpa= 100Kpa=1000Hpa Atmospheric pressure decreases by higher altitude. An increase of altitude of 1000 meters will result in a decrease of ATM PR .of approximately BAF. decreases by about

3. Installation

The Autoclave should be installed in a drafty place allowing minimum of 10 cm space at all sides and 50 cm at the top. The dimension of machine as the following Fig 3-1:

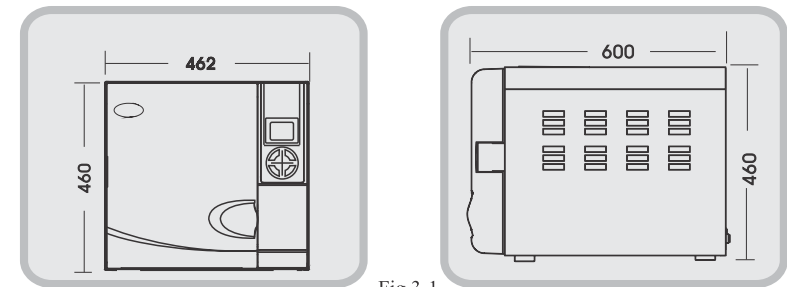


Fig 3-1

⚠ Caution

If the front of the machine is lower than the back the control will display “E3” (E3 means it does not dry completely) There fore,you may be possible to adjust the height by adjusting foot pad of the frount of Autoclave. And you can adjust the balance according to the Horizon.

Preparation before use

We settled the draining filter before the device leaving factory.(See fig 3-3). Water Draining filter needs to be cleaned once per month. For cleaning details, please see page 18:9.3 Water Draining filter cleaning.

Before using the device, you should make electrical connections by using the power cord that comes with the unit. Insert the hollowed end of the power cord in to the inlet of the machine and plug the other end on a power outlet.(See fig 3-5).

If you choose the effluent type steam sterilizer, you need to follow the steps shown below before starting up:

- 1.Put steam sterilizer in place, connect drain pipe to drain outlet. Use steel pipe clamp to fix drain pipe and drain outlet.(see fig 3-5)
- 2.Connect the attached external waste water tank to the drain pipe. Use steel pipe clamp to fix drain pipe.(See fig3-6)
- 3.Put external waste water tank on the floor or hang in place,like wall.
- 4.Installation: fig 3-7.

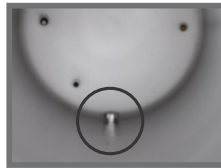


Fig3-3



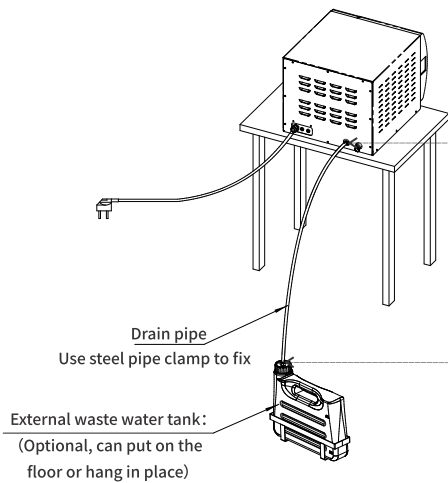
Fig3-4



Fig3-5



Fig3-6



⚠ Caution

The power supply must be able to afford 2300 VA
 Tips: Before starting the Autoclave, please check on the local atmospheric pressure. If the pressure is lower than 0.095 Mpa or the Altitude is higher than 500 meters, you will need to contact your distributor who should reconfigure the controller in the device.

4.Control panel

1.LCD screen (Figure 4-1)

Letter row 1: Working state, show temperature and pressure data
 Menu state, show menu row or page layout name
 Ready to work state: show sterilizer cycle name

Letter row 2: Working state, show pressure curve
 Menu state, show menu row
 Ready to work state, show selected cycle parameter

Letter row 3: Working state, show pressure curve
 Menu state, show menu row
 Ready to work state, show selected cycle parameter

Letter row 4: Show key help information

2.Menu/ C key

Menu/Cancel key. Press the key to enter menu when the device ready to work. There are 7 kinds of different cycles as Fig 4-2 show.You can choose the correct working cycle you need by pressing STEP▲ or QUICK▼ button.

Universal B cycle: 134°C Three times vacuum,4 min sterilization time.

18 min B cycle: 134°C Three times vacuum,18 min sterilization time.
 It is suitable for the instrument need long time sterilization.
 It can achieve the ideal sterilization effect.

Unwrapped cycle:134°C one time vacuum,4 min sterilization time.

Rubber & Plastic cycle: 121°C Three times vacuum,16 min sterilization time.

B & D Testing cycle:BOWIE & DICK,Leak Test.

Vacuum test cycle:It is used to test the chamber's sealing property during the vacuum test cycle.

Cleaning steam generator: Clean the steam generator and steam pipe,the specific operation refer to P18.

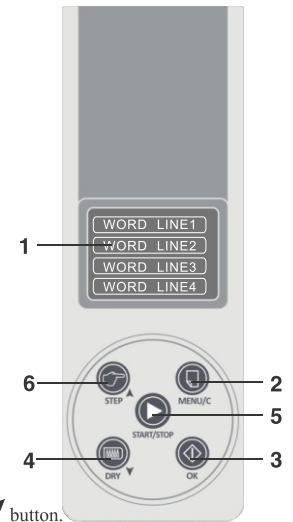


Fig4-1

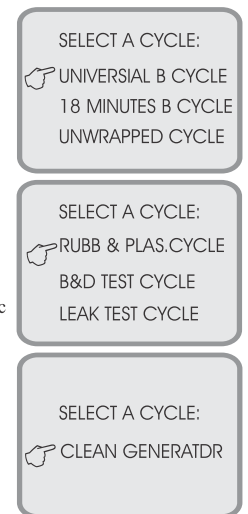


Fig4-2

3.OK key:

Menu state means OK, others keys means invalidation.

4.Quick▼ key:

Fast/Down key. It means quick sterilization cycle when the device ready to work. It means down key when the device at menu state. The fast key is used to choose the dry time(1 min or 5 min).This can reduce the time of whole sterilization cycle.

5.START/STOP key:

Start/Stop key: After selecting sterilization program ,press this key, then sterilization cycle will start. When you need to end the cycle during the working state, you should press this button for 3 seconds, then there are two different exit mode of two phase. One is that you press this button for 3 seconds during Pre-heating. Pre-vacuum or sterilization it will enter Exhausting phase. After 3 min drying it will end the whole cycle. If you need to end the cycle immediately please press this button for 3 seconds again. The other is that press this button for 3 seconds during drying or balance period , it will end cycle directly.

6.STEP▲Key:

Last cycle/ Up key. This key is used to choose end working or continue working after cycle is over. If the display is "last cycle"after you press this button, the chamber will cool down automatically after the cycle is over. If the display is "keeping warm",the chamber will keep the temperature. This will reduce the heating time of next cycle. If user didn't do any operation. the system will enter "last cycle"automatically after one hour. It means up key when the device at menu state.

5.Operation

Please connect the power cord before you start the operation. Press the main power switch at right lower corner of the front panel. The power switch light turns on indicating that electric power is connected. The screen no display, automatically examine. 1 s later, enter to ready to work state after automatically examine. LCD display as fig5-1 shows.

Created by love
Please Sel. a cycle

Fig5-1

5.1 Select cycle

Press Menu/C key, enter cycle select page layout (Look at fig 5-2), choose cycle you need. Press OK key for confirmation, it will enter cycle selected.

UNIVERSAL B Cycle
KEEP WARMING
Please close door

Fig5-2

5.2 Fill water

Turn on the power switch, select cycle, press OK key, if the water level is lower than the lowest level, It will enter to this page layout (Look at fig5-3) with alarming sounds. You should add water now. Open the tank cover at the top of sterilizer to fill water. During refilling the water, please pay attention to the water level. When the water level is closing with the red pole please stop to fill water.

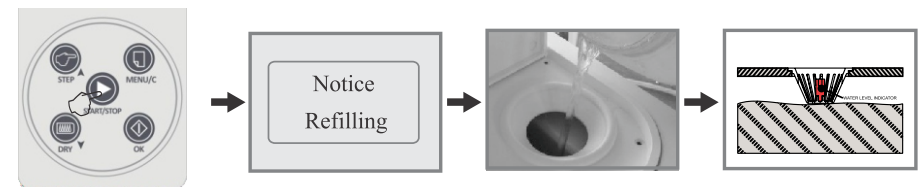


Fig5-3

⚠ Caution

In case of faults, please contact your distributor or the manufacture immediately.

- Caution:**
1. Distilled water must be very beneficial for prolonging life of the machine.
 2. Don't tilt the autoclave where there is water in the water reservoir.
 3. The used water tank should be emptied frequently. You should evacuate the used water reservoir usually when water reservoir is empty.

5.3 START cycle

Close the door after loaded the instruments, press START key. 0.5S later, electrical lock will work, with “KA” sounds. If the electrical lock did not achieve expect position will show door fault. It will start sterilization cycle after locked the door successfully. Look at fig 5-4. During sterilization cycle, press MENU/C key for 3S, it will exit cycle. If you want to stop the cycle before drying cycle, it shall need another 3 min to do drying cycle. During this cycle, press MENU/C key again, it will exit drying cycle. If press MENU /C key during drying cycle between normal cycle, it will exit cycle directly.



Fig5-4

Caution

To ensure sterilizer's on the safe side, when water level low alarm sounds. Please be advised fill water first. When you fill the water, please don't forget to let used water out.

5.4 Sterilization end

After sterilization, the display will show as fig 5-5 and with alarming sounds, then you can open the door, unload the Instruments been sterilized.

Caution: If you decide to stop using the autoclave for a while, please turn the main power switch off, or unplug the power cord should you not want to use the machine for a long time.

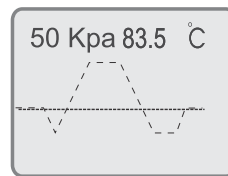


Fig5-5

Caution

Caution: Never try to open the chamber door if and when the pressure display doesn't show “0.0” . It is suggested that chemical indicator or bio-indicator be used for each and every cycle to ensure the reliability of each sterilization cycle run.

5.5 the instrument rack should be put inside the boiler as the following diagrammatic sketch shows

The first way: (fig1,fig2)

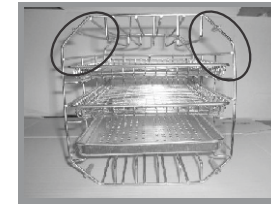


Fig1

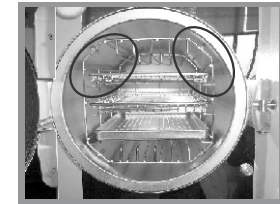


Fig2

The second way: clockwise rotate the instrument rack by 90 ° , based on the first way (fig3,fig4)

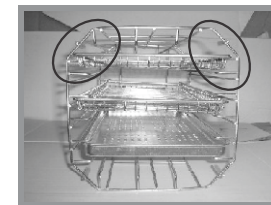


Fig3

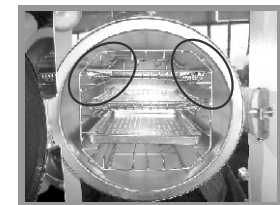


Fig4

notes: the circle stamped angle is up along

6. Door Adjustment

- 1、 Through adjusting tie rod, located inside door cover, could be seen from bottom window of door cover. (Fig 6-1、 Fig 6-2)
- 2、 Pull down the tie rod, meantime,turn the sealing cover to some angle,not too much. (Fig 6-3)
- 3、 Loose tie rod, then continue to turn sealing cover slightly till tie rod automatically back to lock sealing cover;then adjustment is done.

Caution:

- 1.Do not make sealing cover too loose, it may cause steam leakage when sterilization.
- 2.Do not adjust until the sealing door get gooling.

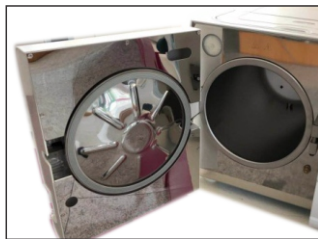
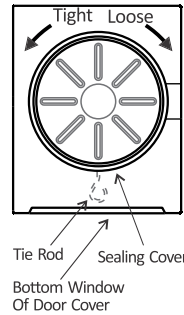


Fig 6-1



Bottom Window Of Door Cover

Fig 6-2



Tie Rod Sealing Cover
Bottom Window Of Door Cover

Fig 6-3

7 Printer installation and use(Optional)

The XRD sterilizer can be equipped with an external printer or built-in printer according to customer needs.
Connect the external printer to the lower left side of the sterilizer with the matching printer cable, as shown in Figure 7-1. Turn on the power switch and the two lights on the front panel of the printer are on, indicating that the printer has been installed. The built-in printing is integrated into the sterilizer operator panel, no need to connect the printer cable, as shown in Figure 7-2.
Whether it needs print after the sterilization cycle is completed, it can be set in setting. For details, see page 14: 8. Function setting. The built-in printer and the external printer operate in the same way.

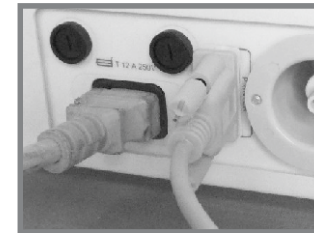


Fig7-1



Fig7-2

Sterilization Records	
Date:	Y11M05D11
Cycle:	00001
C.N.:	134 2.10
-B-SP=	6mDP=10m

C.S.T.:	13:05:30
Vp1:	13:11:27
	0.00 048.9
Pp1:	13:12:57
	-0.81 050.2
Vp2:	13:16:33
	0.29 107.5
Pp2:	13:18:01
	-0.81 072.1
Vp3:	13:20:36
	0.30 112.4
Pp3:	13:22:14
	-0.81 081.4
H.S.T.:	13:27:55
Max:	2.14 134.6
Min:	2.02 134.5
Ave:	2.08 134.5
H.E.T.:	13:34:06
D.S.T.:	13:34:43
	0.30 115.5
C.E.T.:	13:45:32
Result:	Passed
Operator:	
=====	
Thanks	

Fig7-3

7.1 Print information explaining

Date:Date
C.N: Cycle name
C.S.T: Cycle start time
Vp1、 Vp2、 Vp3: Pressure strengthen
Pp1、 Pp2、 Pp3: Vacuum
H.S.T: Sterilization start time
Max、 Min、 Ave: Max. Min and average pressure or temperature of chamber
H.E.T: Sterilization end time
D.S.T: Drying cycle start time
C.E.T: Cycle end time
Result: Result
Operator: Operator, you can sign your name if it needed.

⚠ Caution

The XRD sterilizer can only be selected with external or built-in printers provided by our company.
External printers can only use thermal paper with a width of 57mm and a maximum diameter of 50mm.
The built-in printer can only use thermal paper with a width of 57mm and a maximum diameter of 40mm.

7.2 USB module function

7.2.1 Main function:

Storage of printed data of sterilization
 Built-in FLASH memorizer
 U-disk. Download

7.2.2 Basic parameters:

Storage Capacity: 2M bytes
 Quantity of printed data could be stored: 2048
 Support FAT files

7.2.3 Operation instruction:

1. Turn on the power, the mode of USB will start automatically. After self-test, it goes into alert with the indicator flickering-1 time.
2. After the sterilization cycle ends, the data of sterilizer is sent to the USB mode(The printer program should be turned on). Indicator will flicker-1 time after the data-transfer finish.
3. During the alert, insert U-disk. The mode indicator will be on, with the U-disk indicator flickering. And now, it is in the process of data-download. Don't turn the power off or draw out the USB-disk, which will cause the data lose.
4. After the download finish, USB mode indicator will flicker twice, reminding the user to draw out the U-disk.
5. During the sterilization cycle, avoid data download, or else, the data will lose.
6. Connect U-disk to computer. You will see files like _2000_, where the downloaded data is kept, following turns of Year, Month and Day. Easy to print it out.
 USB mode terror(According to the flickering times of USB mode indicator) and solution:

Times	Definition	Solution
1	Self-test passed	Normal
2	Operation finish	Normal
3	No definition now.	No definition now.
4	U-disk needs formation	Format U-disk in FAT files
5	Not enough capacity	Delete the files in U-disk
6	U-disk needs formation	Format U-disk in FAT files
7	USB mode error	Contact us

Caution: This function is optional to the demand of customer.

8. System setup

When the device on the ready to work state, press MENU/C key for 3 S, it will enter into system setup, as fig 8 -1. It has 4 options for select. Press STEP key and QUICK key to select, Press OK key to enter sub-menu to setup system.



Fig8-1

Option1 Date setup

With 3 sub-menus (fig 8 - 2). Press STEP and QUICK key to select. Press OK key enter this sub-menu. Press STEP and QUICK key to setup the valve. Press OK key to save the setup and back to upper level of menu. Press MENU/C key back to upper level of menu directly..



Fig8-2

Option2: Time setup

With 2 sub-menus (fig 8 -3). Press STEP and QUICK to select sub-menu. Press OK key to enter this sub-menu. Press STEP and QUICK key to setup valve. Press OK key to save the setup and back to upper level of sub - menu. Press MENU / C key back to upper level of menu directly.



Fig8-3

Option3: Printer setup

Press STEP and QUICK key to select on or off. Press OK key to save the setup and back the upper level of menu. Press MENU/C back to upper level menu directly. As fig 8-4.

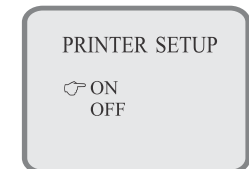


Fig8-4

Option 4: Language setup

With 2 sub-menus(fig 8-5). Press STEP and QUICK key to select language. Press OK key to save the setup and back to upper level of menu. Press MENU/C key back to upper level of menu directly.



Fig8-5

Option 5: time setup

It is designed to setup or extend the sterilization time, ranging from 0~3 minutes, can meet different needs. Time setup. LCD shows " S-T". You can setup the value of this option; and the sterilizer will add this value onto original sterilization time by 0min, 1min, 2min, or 3min.



Fig8-6

Option 6: temperature setup

Temperature setup. LCD shows " D-P". It is designed to correct the disparity between displayed temperature and real one, ranging from -2~+3. Advise to setup this value under technician's instruction.

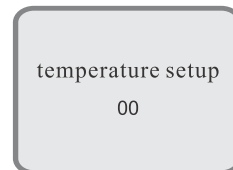


Fig8-7

Caution

After whole cycle, show curves as fig 8 - 8, and with alarming sounds. Now, you can open the door, unload the sterilized instruments. At mean time, run printing cycle. If printer off, it will not print out. Please refer to the item 8 "System setup" to know how to turn off printer.



Fig8-8

9. Service and Maintenance**9.1 How to clean the water tank.**

9.1.1 Please clean the sterilizer water tank and waste water tank regularly. The process is following:

- 1) Empty the tanks water, please refer to item 9.2 draining the water.
- 2) Open the tank cover board, you can use screw driver to loose the five screws just as fig9-1 indication.
- 3) Pull up the water tank cover board by one hand, just, as fig9-2 indication.
- 4) Pull up the tank cover completely and you can disassemble the tank cover. As fig9-3 indication.
- 5) Now you can start to clean the tank, use cotton to dip in some alcohol or medical disinfectant to scour the tank wall, wash it by distilled water, then empty the tank and dry the tank. After it you should take out the filter net to clean.
- 6) After you cleaning the tank, assembly the tank cover and tighten the screws.



Fig9-1



Fig9-2



Fig9-3

9.2 Draining of water from the machine Drain the condenser water collector and water reservoir. Connect the water outlet using the one end of the tube without a connector and the other end of the tube to a drainage sink. Then turn the draining knob anti- clock wise to drain the water from the machine.(Fig 9-4)

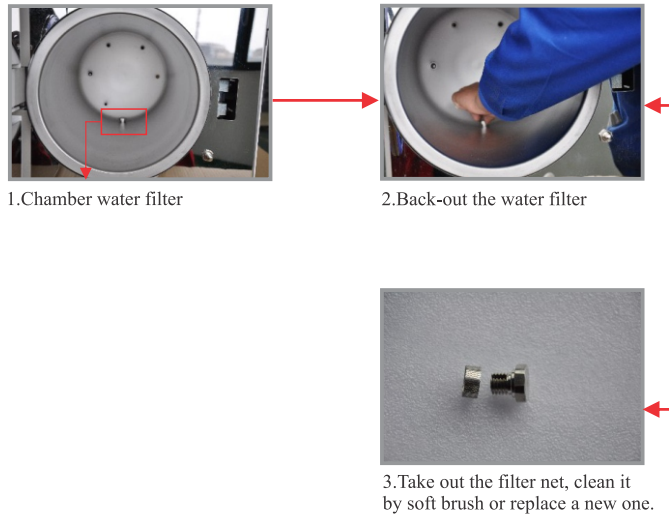


Fig 9-4

Caution: Below each kind of maintenance must be operated after cut off the power and cool down the autoclave. Using the qualified distilled water. The instrument putting into the chamber must be cleaned. Regarding some instruments with oil or impurities, please pack it with sterilization bag.

9.3 Cleaning chamber water filter

After the machine used for a while, there may be some tiny impurity block the chamber water filter, it will affect sterilizer performance. To prolong the lifetime of chamber water filter, back-out the water filter, take out the filter net, clean it by soft brush every month.



9.4 Change fuse (Fig 9-5)



Fig9-5

1. Unplug the autoclave before changing the fuse
2. Unscrew the fuse holder with a screw driver counter clockwise.
3. After screwing the fuse holder, pull the fuse out.
4. Make sure to replace the faulty fuse with a correct fuse.
5. Put the correct fuse back to the fuse holder, plug into the holder lightly.
6. Put back the fuse holder and screw it on clockwise with a screw driver, make sure it will not pop-up.

9.5. Clean the seal plate periodically.

After using some time, the seal plate might have some scale build-up that might cause leaking. You should clean the seal plate periodically, using a soft cloth soaked with distilled water to wipe the rubber seal and the seal plate clean (Fig 9-7 & 9-8). If there is still leaking, you may need to take the rubber seal out for cleaning. Should the seal be broken, you need to change with a new one.



Fig 9-7



Fig 9-8

Remark: providing with seal packing collar for life.

9.5.1 Change of the seal

You will need a flat screw driver without a sharp tip. Pay attention about head of the flat screw driver. The install step according to Fig 9-9.



Fig 9-9

- 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 out, you may pull the whole seal out slowly with both of your hands. You can now clean the seal groove and the seal. If the seal is broken or damaged, you must replace it with a new one.
- 3). After the groove and the seal are cleaned, you may remount the seal back in place
Caution: The seal should be mounted evenly inside the groove with first 4 positioning points in place. You may use your hand to press the seal in place evenly.
- 4). Attention: When inserting the seal, the inner edge might evaginate. You may use a screw driver to press the edge down in the groove.



Caution: Power the machine off and let it cool down before you change the seal and avoid any burning injuries.

9.6 Cleaning Steam generator

9.6.1 Aim: Clean the steam generator and steam pipe, to avoid the furring block the pipe.

9.6.2 Description: 20 min cleaning + 10 min drying

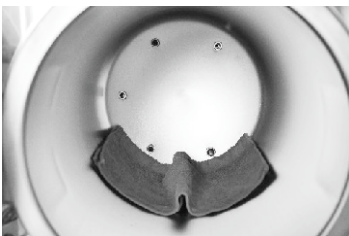
9.6.3 Purpose: to clean the steam generator furring, take it out of the machine through pre vacuum.

9.6.4 Operation : Please push the MENU/C button to select the cycle of Clean Generator as fig 9-10&9-11. Then push the START/STOP button to start the cycle. After the cleaning ,it will recover to standby status and with 3 times indicating sound.

9.6.5 Cleaning remind: After every 100 times cycle it will remind user to clean the steam generator as 9-12 shows. User can do operation as above instruction.

9.5.6 Please keep regular cleaning of steam generator to prolong the service life of the steam generator.

9.5.7 Before executing clean steam generator program, we suggest to mat a wet towel on the buttom of the chamber (As shown in below picture), prevent excessive impurities adsorption on the draining filter, which may influence pre-vacuum and dry effect.



Friendly remind: Cleaning function will not affect the autoclave cycle, only remind message.

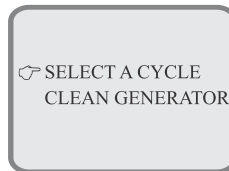


Fig 9-10

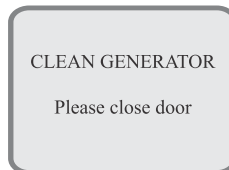


Fig9-11



Fig9-12

10. Transportation & Storage

10.1 Preparation for transportation and storage. Power the machine off, unplug the power cord and let the chamber cool down.

10.2 The autoclave should be transported and stored in the follow conditions:
 Temperature: -40 ~ +55 °C
 Humidity: ≤ 85%
 Atmospheric pressure: 500hPa~1060hPa

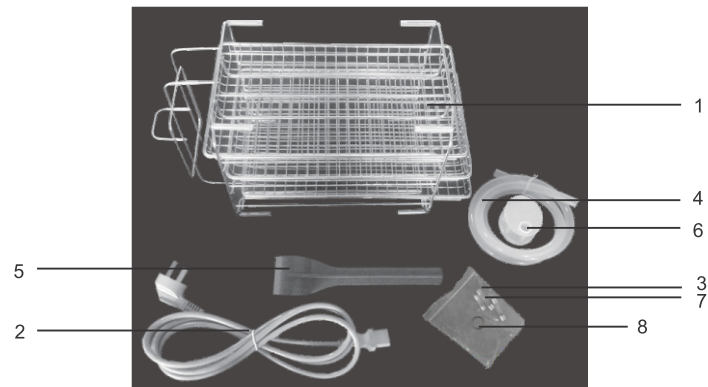
Caution: Don't drag the machine while moving.

11. Warranty

The XRD provides a repair warranty for the period of one year from the sale Invoice date. Following are the disclaimers:

- 11.1 Damage due to improper moving, installing and operating the machine;
- 11.2 Damage due to dismantling the machine by unauthorized personal;
- 11.3 Don't have guarantee of end user.
- 11.4 Inappropriate operation on the machine without following the operator's manual
- 11.5 Damage caused by power surge, fire or other external matters.

12. Accessories



- 1). Tray rack, trays(3piece) 1set
- 2). Power cord 1piece
- 3). Fuse for main board(F3AL 250V)1piece
- 4). Draining pipe 1piece
- 5). Tray holder 1piece
- 6). Water filter in water tank 1piece
- 7). Fuse ((F12AL 250V) 2pieces
- 8). Chamber water filter 1piece

Caution: The picture of spare parts in the attachment may be a little different. Please check according to the spare parts we equipped with autoclave.

13. Appendix.

Form 1 Work mode chart

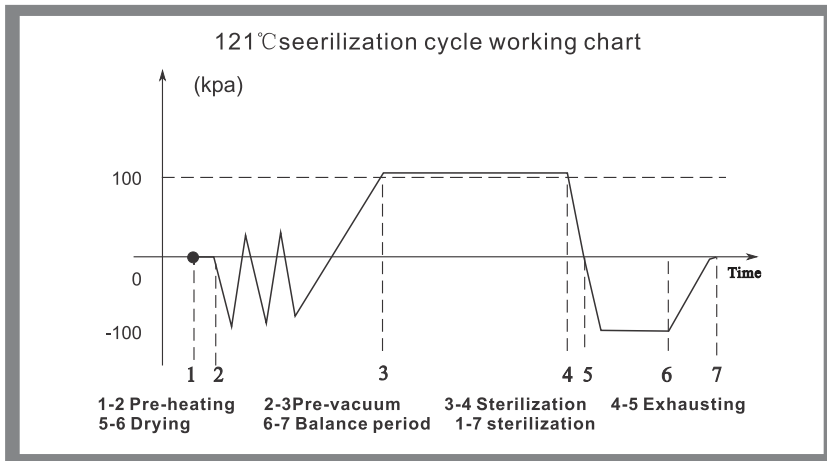
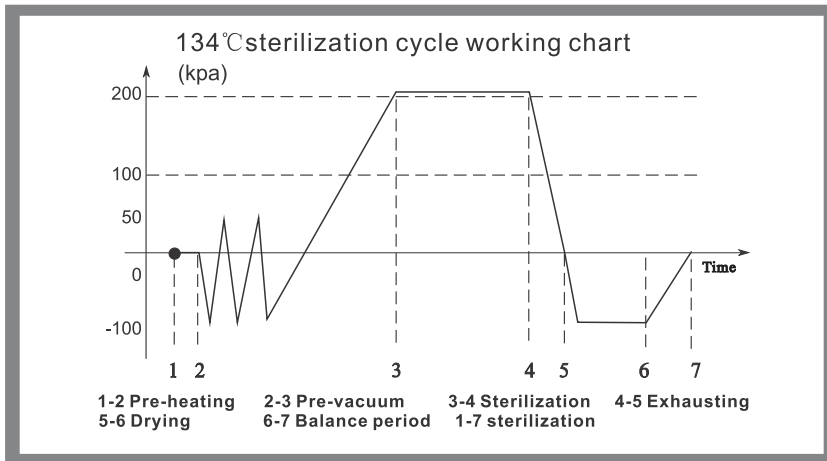
Program	temperature/pressure	Pre-heating time(min)	Vacuumize times	Sterilizing time(min)	Drying time(min)	total time(min)
134°C package	134°C/210kpa	10	3	6	15	60
134°C non package	134°C/210kpa	10	1	4	10	45
121°C package	121°C/110kpa	10	3	20	15	75
134°C B+	134°C/210kpa	10	3	18	15	75
BD test	134°C/210kpa	10	3	3.5	1	45
Liquid	121°C/110kpa	10	-	30	-	50
Vacuum test cycle	Vacuum+Balance period:9min test time:10min				-	19
CLEAN	Cleaning time:20min				10	30

Note: the figures in the chart are only for reference.

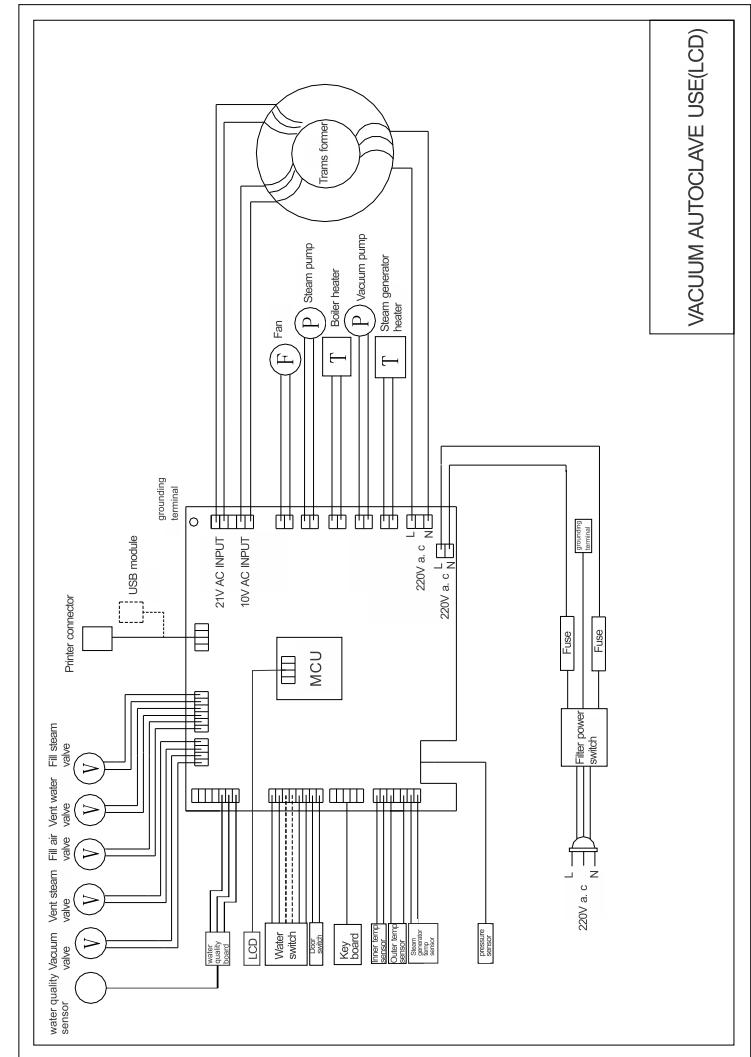
Form 2 Error code chart

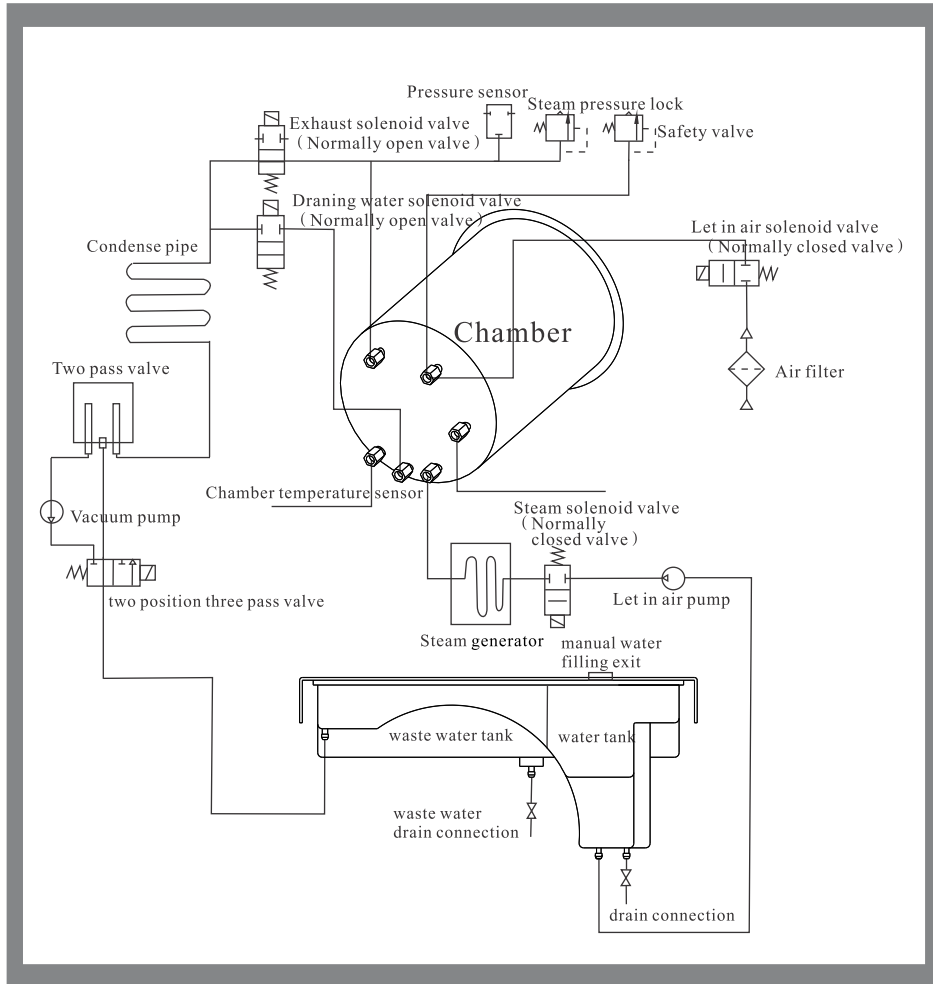
Item	Error	Solution
1	sensor error	examine sensor
2	super pressure >2.6Bar	Examine inner temperature sensor or pressure sensor
3	super temperature >145°C	examine outer temperature sensor
4	Constant temperature fails	Return parameter autoadjust program
5	block of steam pipe (20S<0.3Mba)	Examine the steam output valve or vacuum valve
6	failure of the door	examine the door switch
7	Steam generator over temperature (>230 C)	Check steam generator temperature sensor
8	heating overtime (>20 min)	examine the electronic connection of heat ring and heat stick
9	pressurization overtime (>30 min)	examine the steam input pipe

working chart



Circuit connection chart





piping

14. Trouble shooting

1. During venting or drying, the thump sounds. It means that the Condensed water collector is full. You must drain the water from the collector.
2. During a cycle, a banging sounds and large steam leaks from the chamber door and displays "E6" code. Please verify whether the door knob is properly turned and locked. If the steam leaks at the beginning of a cycle, you need to change the seal according to instructions at page 16.
3. When a cycle completes, there are water drops on the instruments.
You may correct the problems by:
 - 1). Please check the drain filter.
 - 2). Reduce the load of the instrument in the chamber, especially the porous and dressing and other water absorbent materials.
 - 3). You may also wait for a while at the end of a cycle "Ed" for better drying result. The autoclave will continue heating the chamber until you open the door.

15. Important information

1. The autoclave must be installed on a leveled counter top.
2. When operated at a higher elevation of more than 500 meters, the machine must be reprogrammed. Please get in touch with your distributor for instructions.
3. Distilled water must be used for prolonging the life of the machine.
4. The radiation openings in the machine must not be blocked or covered.
5. Instruments should be placed on the tray allowing space between one another and thus allowing steam to pass through.
6. Condensed water collector must be emptied from time to time. It should be emptied when refilling the water reservoir. (Draining of the collector can be followed as per item 9.2)
7. To avoid burning injuries, power off the machine and let it cool down before replacing the seal.
8. No dragging when the machine is moving.
9. Power connection must be grounded properly.
10. Must be provided enough power - 2300 VA
11. While the temperature of outside is lower, please pre-heating the machine without instruments for 30 minutes before sterilize.
12. It is normal if the machine alarms when it starts for the first time. If it alarms again, please contact us.

