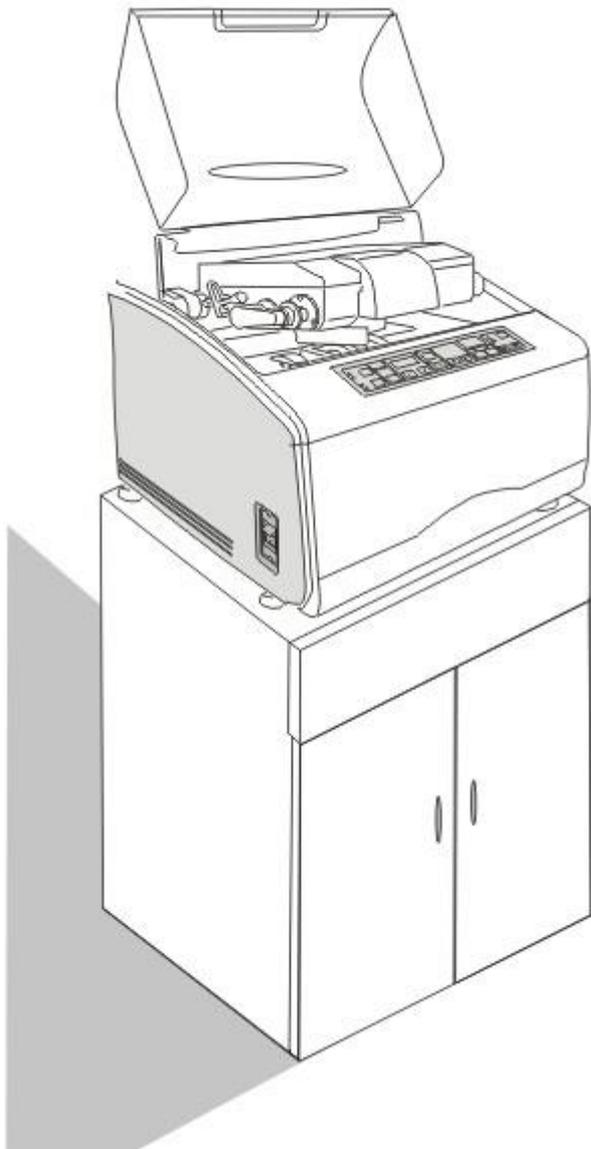




# AUTO LENS EDGER

## LE-520S/620S Operation Manual



**SHANGHAI SUPORE INSTRUMENTS CO., LTD.**



**[Http://www.supore.com](http://www.supore.com)**

REV.20200317

## PREFACE

### INTRODUCTION OF PRODUCTS

According to the material of lens(GL,CR,PC),size of lens,

lens type(square lens samll size,right angle lens etc.),

lens edge(flat,beveling)etc,

Control by the electronic circuit to edging lens same as the mould.

### Security information:

#### 1、 INTRODUCTION OF SECURITY SYMBOL

 This signal means the aim of alert(involving notes),and special alerts are marked in it.

 The signal means forbidden operations(forbidden matters), and special forbidden content is marked inside or near it.

 The signal means operations that must be carried out, and special explanations are marked in it.

#### 2、 ENVIRONMENT OF USE

(Avoid such harmful conditions below:)

- |                                    |                      |
|------------------------------------|----------------------|
| A.temperature out of desired scope | B.sharing wire board |
| C.violent shake                    | D.sunlight           |
| E. dust/fog                        | F.moisture           |

### 3、ATTENTION

A. Don't be suffered of violent struck

B. Don't press the button violently. A light pressure is ok.

C. Don't lean against the machine. The fallen of the machine may cause injury.

D. Use dry cloth or wrenched wet clothing liquid to clean the outside cover and keyboard. Cut off the power, and clean the fac of the machine after daily work.

E. Don't use any corrosive material or volatility liquid to clean the machine.

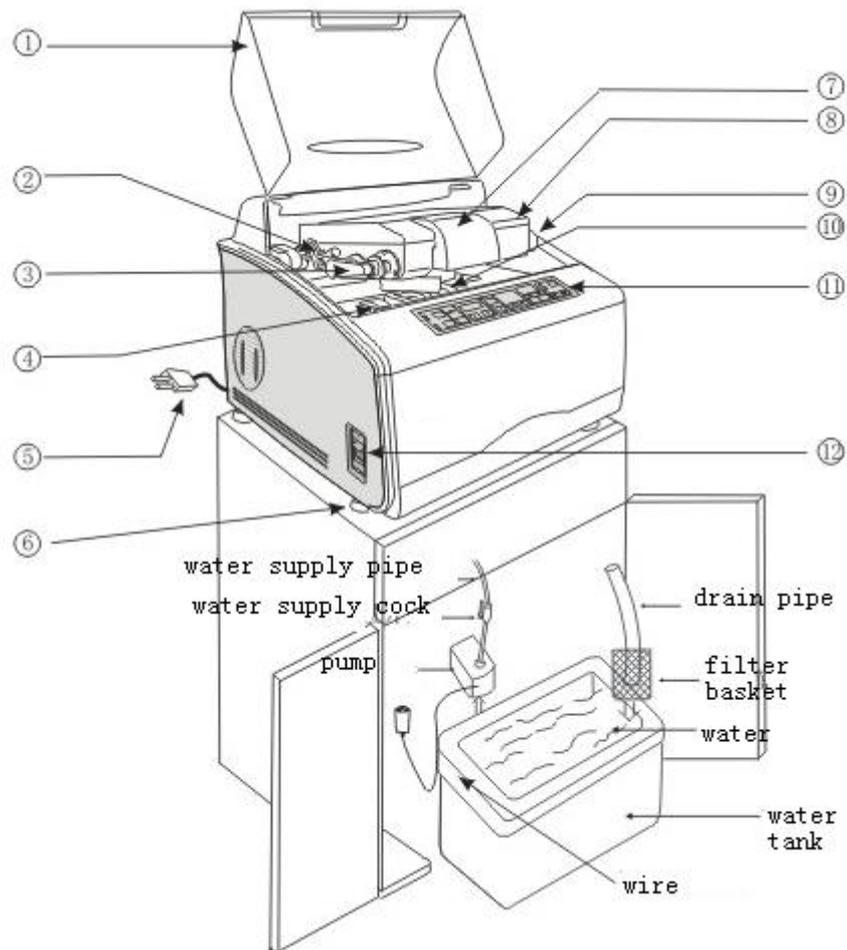
<p> Forbidden</p> <p></p> <p>■ Don't insert or remove power plug with wet hand. Or it may cause an electric shock.</p>	<p> Unformulated AC voltage is forbidden</p> <p></p> <p>■ No rating marked DC voltage is forbidden to use. Otherwise it may fire or electric shock.</p>
<p> Forbidden</p> <p></p> <p>■ If the machine shares one wire board with other high-power machines it may cause voltage fluctuation every time the machine used, which may cause malfunction to machine. Make sure one single wire board supplying electricity to the machine.</p>	<p> Forbidden</p> <p></p> <p>■ Metal and water container such as flower vase, flowerpot and cup are forbidden to put on the machine. Any metal or fluid entering the machine may cause fire or electric shock.</p>
<p> Grounding wire</p> <p></p> <p>■ Make sure the machine is well connected to the earth, and the same is the outside wire. The irrelevancy connection may cause fire or electric shock.</p>	<p> Forbidden</p> <p></p> <p>■ Don't abrade, damage or change the machine wire, and don't put heavy substance over power line. Over dragging or curving wire may cause fire or electric shock.</p>
<p> Remove the plug</p> <p></p> <p>■ If the machine falls down or the outside cover is broken, cut off the power firstly and remove power plug from wire board. Then, call Supore agency (or Supore post sales service center). If continually using the machine in such case, it may cause fire or electric shock.</p>	<p> Remove the plug</p> <p></p> <p>■ Longtime using of machine may cause abnormal cases, such as smoke, smell, fire or electric shock. The power must be cut off and the plug must be removed from wire board in such case. Then, call Supore agency (or Supore post sales service center).</p>
<p> Remove the plug</p> <p></p> <p>■ Make sure to hold the body of the plug while removing the plug from the wire board. Drawing the wire part may damage the wire or explore the iron inside, which may cause fire of electric shock.</p>	<p> No disassembling</p> <p></p> <p>■ Do not disassemble, repair or modify the machine without permission. High pressure, overheat or sharpen materials may cause injury.</p> <p>■ No modify without permission!</p>

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## Introduction

### 1. LE-520S/620S nomenclature



(1) soundproof cover

(2) carriage weight-changing lever

(3) template retainer

(4) carriage backlashing sensor

(5) power cord

(6) adjustable cover

(7) waterproof cover

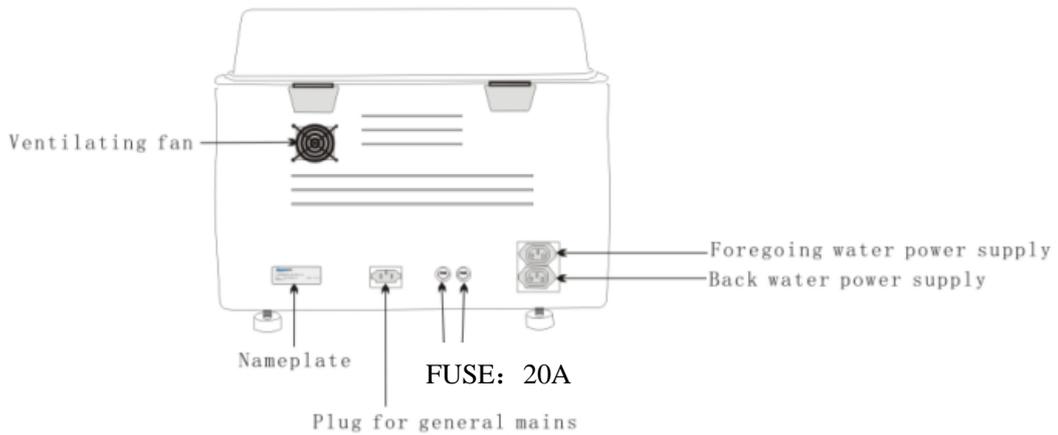
(8) carriage

(9) lens clamp

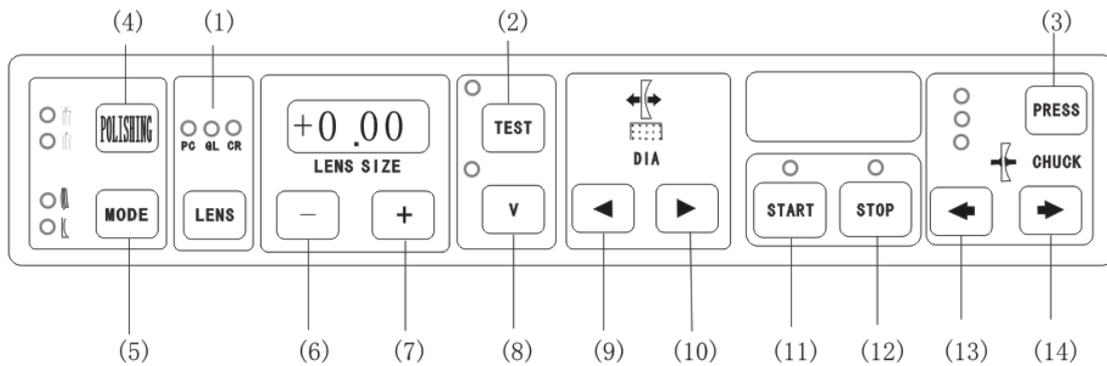
(10) gear wheel

(11) operation panel

(12) on/off switch



## 2. LE-520S/620S control panel

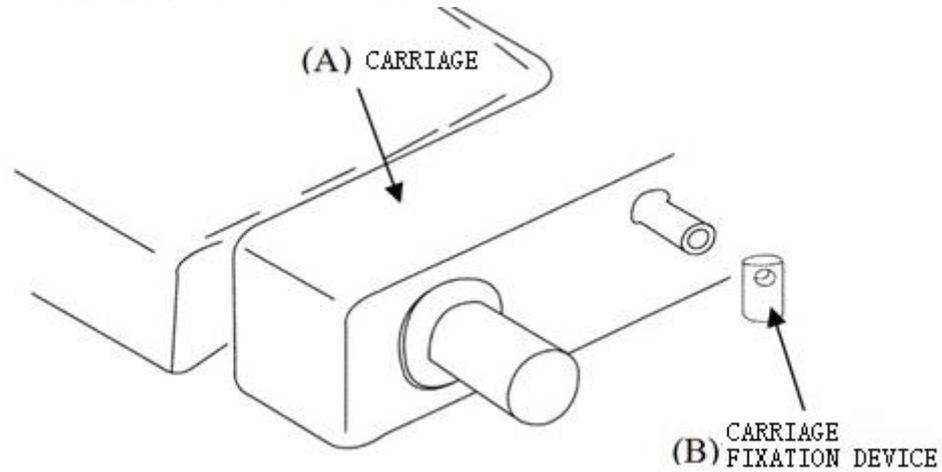


- |                                    |  |
|------------------------------------|--|
| (1) PC、GL、Cr lens selector         | (2) test button                        |
| (3)Clamp pressure selector         | (4) Polishing and impolishing selector |
| (5)Beveling and flat edge selector | (6) Minus(-) button                    |
| (7)Plus (+) button                 | (8) Re-edging button                   |
| (9) Shift (left) button            | (10) Shift(right) button               |
| (11) Start button                  | (12) Stop button                       |
| (13) Lens-clamping button          | (14) Lens-loosening button             |

## USE

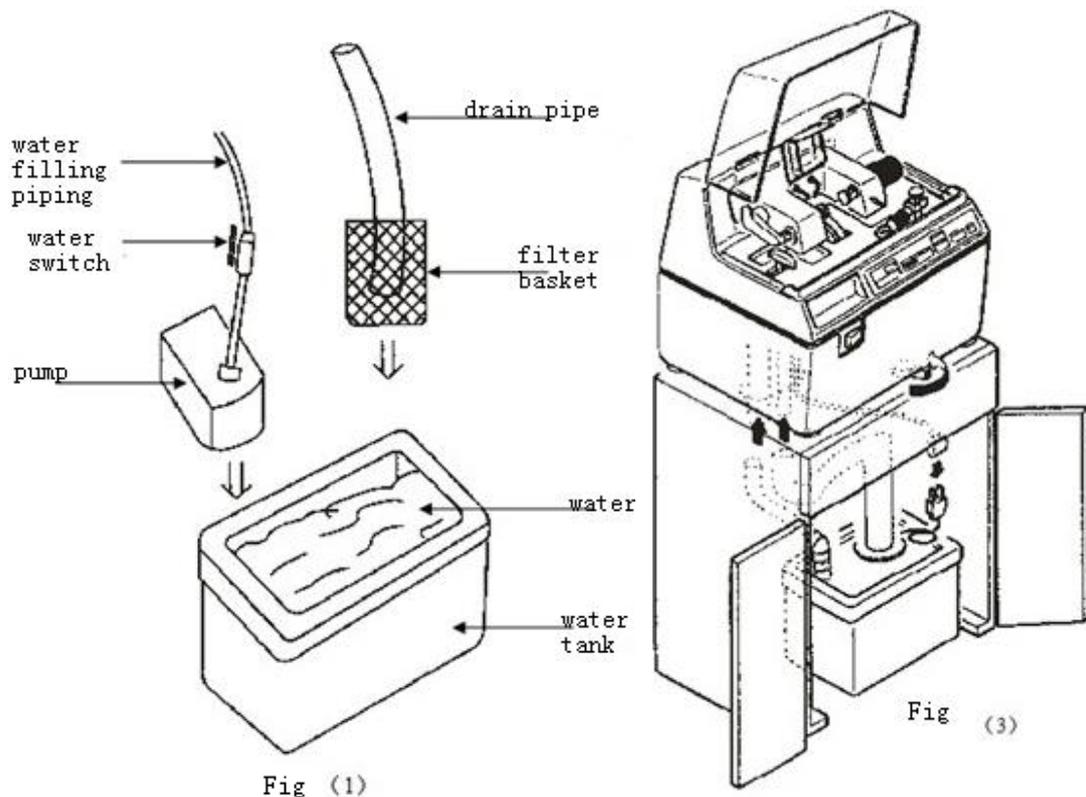
### 1. INSTALLATION

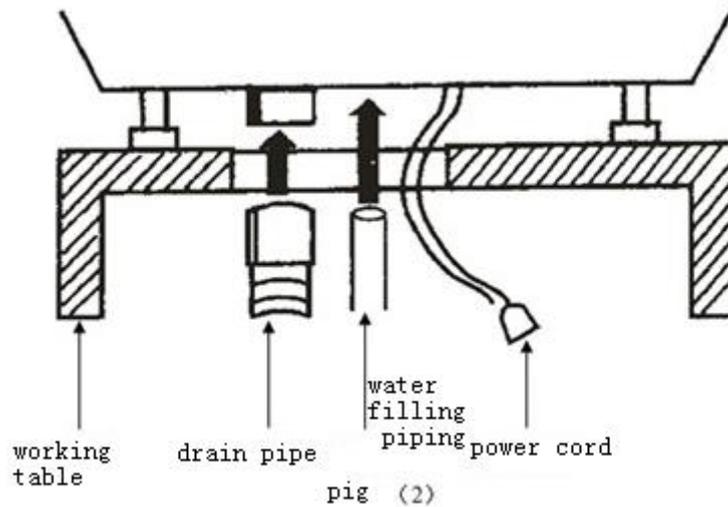
#### A. installation of main machine



- Choose a fixed, horizontal and rigidity platform, ensuring its stability and solidity
- Put the machine on the platform as mentioned above
- Open the outer casing and dismantle the screw, save the screw carefully.
- Plug the power cord and turn on the switch

#### B. INSTALLION OF WATER TANK AND PIPE





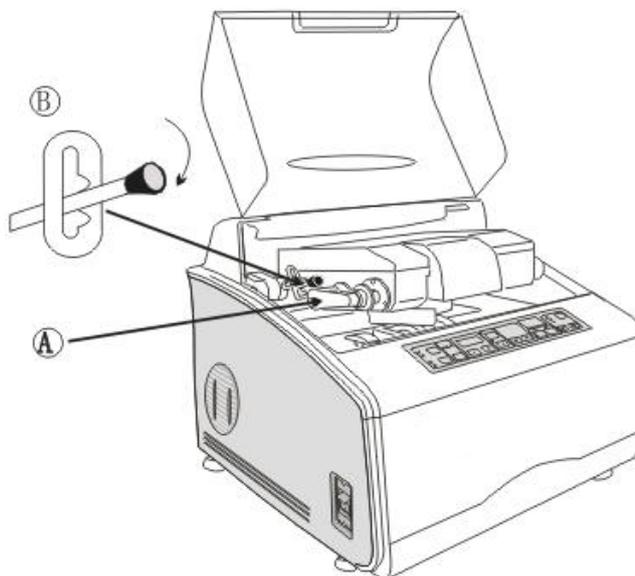
- a. Assemble the tank as illustrated.(see Fig 1)
- b. Connect drain pipe as in Fig2
- c. Show as Fig3 after installion.

**Please pay attention:**

- a.the filter basket should be cleaned regularly
- b.water in tank should be changed frequently
- c. avoiding the pump outlet blocked by the ddirty water
- d.Fix pump power cord outside the tank to avoid it slipping into the water
- e. Fix the pump entirely in the water

**Note: if it is a vertical water pump, please use the water tank specially arranged by our company to put the vertical water pump on the partition board.**

**2、DEBUGGING**



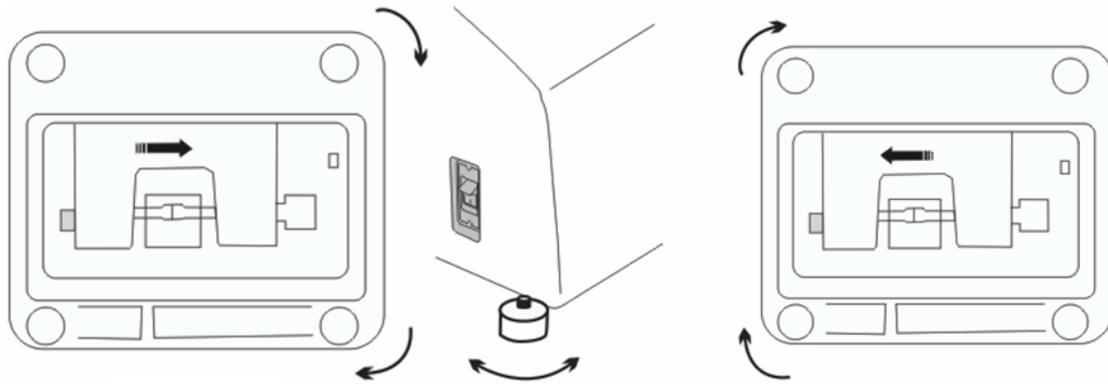


Fig1

Fig2

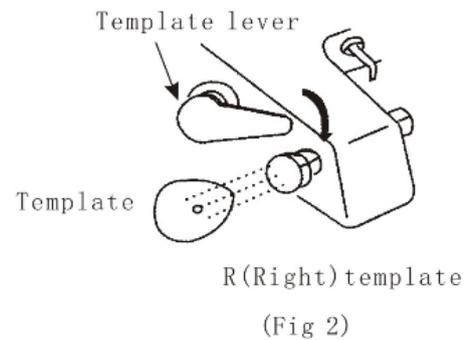
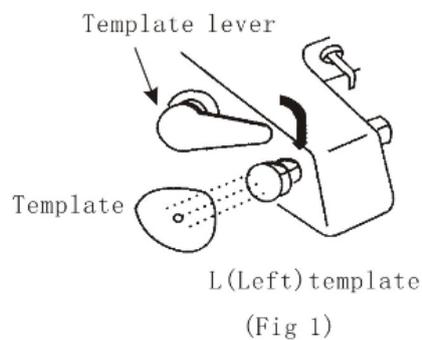
- A. Fix a standard template to template A
- B. Put the carriage backlash lever B to the second stage
- C. Move manually carriage so that it comes just over the gear wheel
- D. With this, carriage is level if it doesn't, move either left or right
- E. If carriage moves right, turn the right adjustable foot clockwise, as Fig1
- F. If carriage moves left, turn the left adjustable foot clockwise, as Fig2

### 3、 OPERATION PROCEDURES

#### A. Preparations

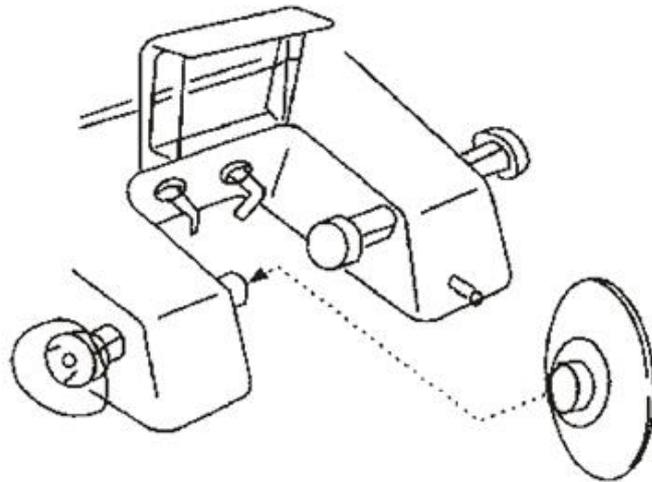
- a. Turn power switch on and open water supply cock.
- b. Press (TEST) switch and check that water is supplied

#### B. Fitting template



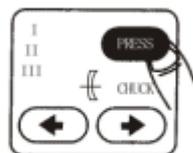
- Fix up a template as illustrated in Fig.1 and Fig.2
- Put left and right templates as illustrate in Fig.1 and Fig.2

### C:Fix the lens

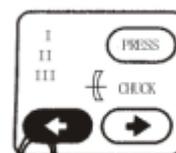


(Fig 3)

Match the upper point of sucker with the one of shaft. (see Fig.3)



(Fig 4)



(Fig 5)

### D. Clamping lens

1. Select lens clamping with PRESS button see Fig.4

- Select clamp pressure
  - I (low): For high-refractive glass lens
  - II (medium): For glass lens, and CR lens
  - III (high): For CR lens
- Clamp the lens with chunk button
- When press it lightly one time, it will automatically clamp lens
- When hold relax button lightly, clamp will loosen lens

### E. Selecting lens

Press the lens selector button to select the lens material, PC, carbonic acid polyester or GL glass or CR resin lens

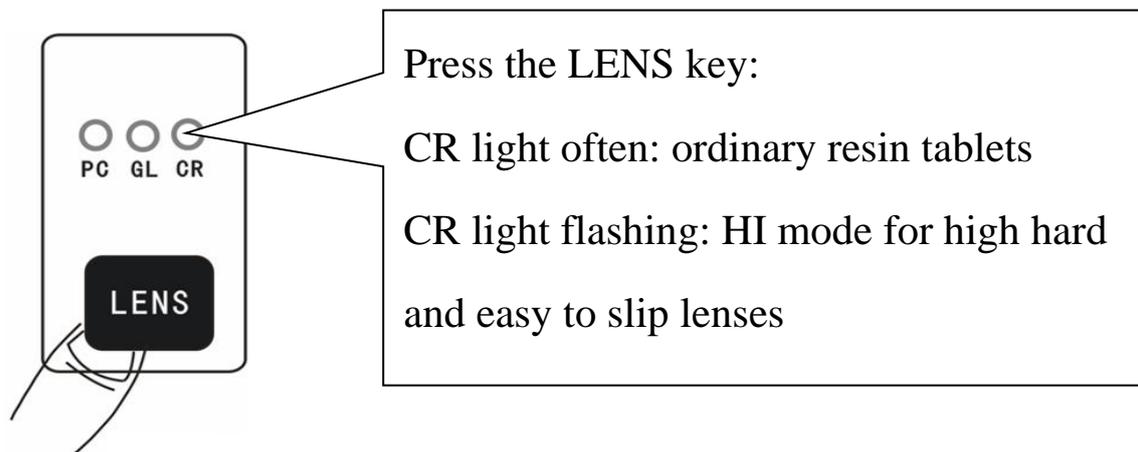


Fig6

## F. Selecting bevel

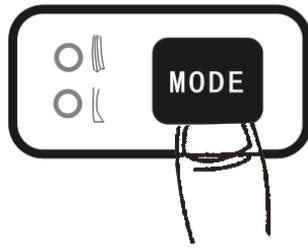


Fig7

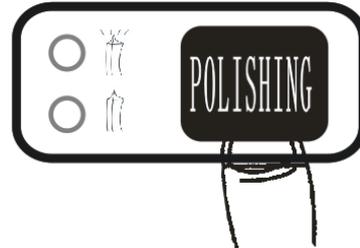


Fig8

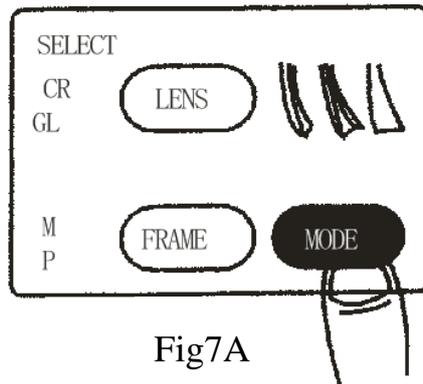


Fig7A

- a. Press MODE button to alternate modes between bevel and rimless. If it is a double sharp edge machine, press MODE (edge) button, sharp edge lights if has been flashing, with sharp edges on the left side of the grinding wheel, sharp edge lights if not flashing light, with sharp edges on the right side of the grinding wheel, grinding wheel position of this back section.
- b. When “rimless” or “bevel” is selected, you can also select polishing or not polishing functions(Fig 7 and Fig. 8)

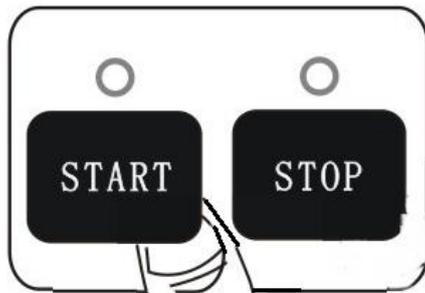
NOTE:

1. When the machine is polishing with “rimless” or

“bevel” , you can choose to turn on the light upside of the button “POLISHING” ,the machine will come back to the beginning position after finishing edging.

2. When the machine is not polishing while “rimless” or “bevel” ,you can chose to turn on the light under the button “POLISHING” . The machine will come back to the beginning position after finishing edging.

### **G. Start**



(Fig9)

Press START to start working, as shown in Figure 9

Note: the grinding machine of the waterproof cover is closed, otherwise it will be an accident, as shown in Figure 10

When the noise is too large, the soundproof outer cover should be closed, as shown in Figure 10

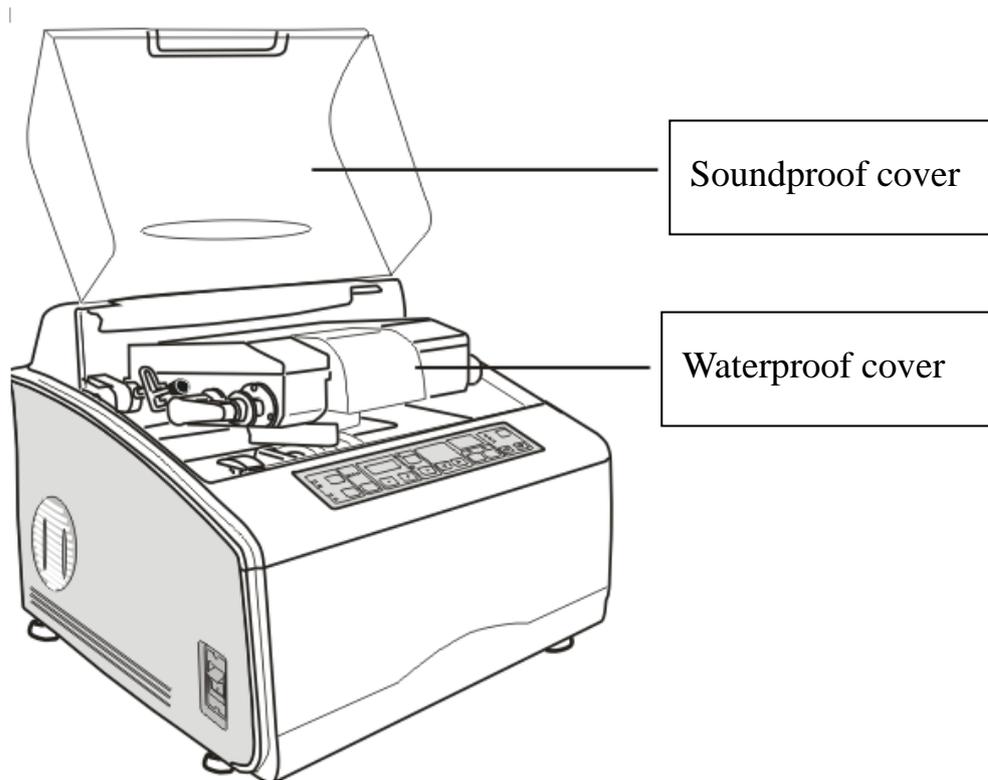
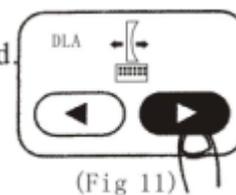


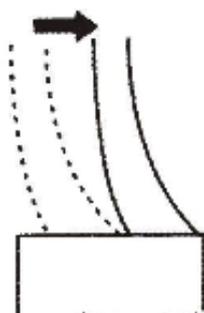
Figure 10

## H. Shifting lens position

- Press ◀ and ▶ button to move lens above gear wheel as desired.
- If using it properly to move lens as illustrated gears wheel's life becomes long.(see Fig.11\12)



(Fig 11)



(Fig 12)

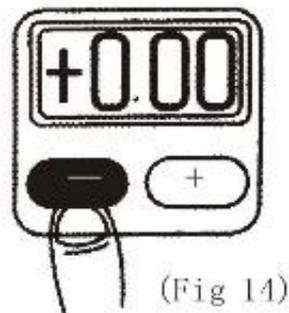
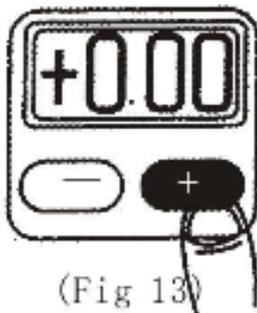
## I. Changing lens size

Check the size displayed on the panel if it is as desired

- Use + button to make the lens size larger if its size is smaller after its testing edging.(see Fig.12)
- Use - button to make the lens size smaller if its size is bigger after its testing edging.(see Fig.13)

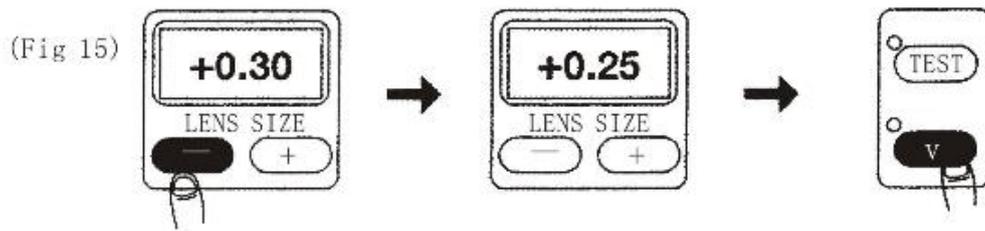
□NOTE□

- minimum setting size: 0.05mm
- minimum size: -6.00mm
- maximum size: +6.00mm



## J. Re-edging

- In case that the lens size is still larger after edging
  - ① (see Fig.15 ): Pressing - button to reset lens size
  - ② (see Fig.15): Press V button, and the machine will re-edging lens on the second wheel according the desired reducing size



#### 4. Wheel position emendation

(NOTE)

If making an emendation of Section 9, the prior date before emendation is deleted.

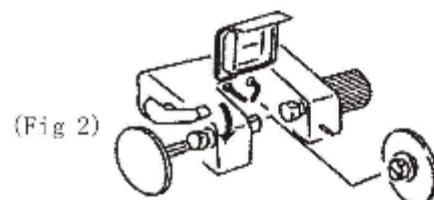
Therefore, an accurate setting should be made.

In case that:

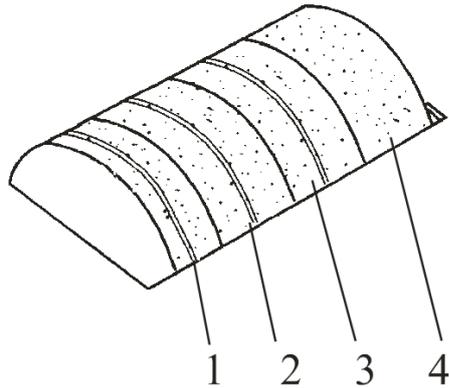
- Any part of gear wheel is worn
- There is a wide difference between lens actual size and the digital number
- The maintenance worker repair it

#### Preparation:

- (1) Fix standard template and gauge.(see Fig.1 and Fig.2)



## (2) Wheels



### NOTE:

1 is Polishing wheel

used for polishing of fiat and beveled style for resin and PC lenses.

The right half of the grinding wheel is used for CR or PC flat edge polishing.

2 is bevel 2 fine grinding wheel: used for bevel fine grinding ,

Bevel 2 Is suitable for presbyopic glasses and high curve lens wihch index of refraction is less than 1.61

3 is bevel 1 fine grinding wheel: used for bevel fine grinding ,

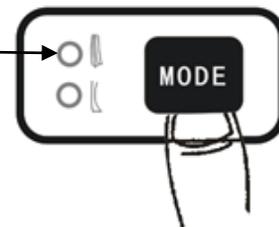
Bevel 1 Is suitable for high hard lens which index of refraction is more than 1.61

4 is CR rough grind wheel: used for roughly grinding PC or resin lens

Press MODE (sharp edge) key, loop button.

This light is often on the first edge of the V type fine grinding wheel (position 3 above)

This light flashes for the second pointed edge V type fine grinding wheel (position 2 above)



## Correction method

1. Press the button of moving left and right at the same time, then turn on the power.
2. Adjust the V gauge on the fourth wheel by pressing the button of moving left or right, usually it is on left side.
3. Press the button “STOP” to save.
4. Adjust the V gauge on the first wheel, make fine adjustment (The fine adjustment distance is 0.1mm) by Chunk buttons to let the V gauge at the deep of V groove.

NOTE: this step is very important and make sure it is correct.

5. Press Re-edging button to see if the gauge is in the deepest of V groove
6. Press the button “STOP” to save.
7. Adjust the V gauge on the right side of the V wheel by pressing the button of moving left or right, usually it is on left side.
8. Press the button “STOP” to save.
9. Adjust the V gauge on the second wheel, make fine adjustment (The fine adjustment distance is 0.1mm) by Chunk buttons to let the V gauge at the deep of V groove.

NOTE: this step is very important and make sure it is correct.

10. Press Re-edging button to see if the gauge is in the deepest of V

grove

11. Press the button “STOP” to save.
12. Adjust the V gauge on the right side of the V wheel by pressing the button of moving left or right, usually it is on left side.
13. Press the button “STOP” to save.
14. Adjust the V gauge on the third wheel, make fine adjustment (The fine adjustment distance is 0.1mm) by Chunk buttons to let the V gauge at the deep of V grove.

NOTE: this step is very important and make sure it is correct.

15. Press Re-edging button to see if the gauge is in the deepest of V grove
16. Press STOP button to save it.
17. Adjust the V gauge on the right side of the V wheel by pressing the button of moving left or right, usually it is on left side.
18. Press STOP button to save it.
19. Turn off the machine.

## Maintenance

Renewing water	<ul style="list-style-type: none"> <li>• Renew water periodically after about 100 lenses have been edged.</li> </ul>
Cleaning water supply nozzle	<ul style="list-style-type: none"> <li>• Water supply nozzle is readily clogged if longtime supplying water contaminated by edging dust. If</li> </ul>
Clearing gear wheels	<ul style="list-style-type: none"> <li>• When the gear wheel is worn, having been edging for longtime, or bevel is not well formed.</li> <li>• In case of that, use a whetstone to sharpen gear wheels.</li> <li>• Press TEST button, and the wheel begins to revolve.</li> <li>• Then, press TEST button again, and wheel will continue revolving.</li> <li>• Sink the whetstone in water for 2-3 minutes. Then press it onto the revolving wheel surface, when its speed is slow down.</li> <li>• Repeat this operation 5 to 10 times.</li> <li>• Don't clean the gear wheel for plastic lens as said above.</li> </ul>
Replacing wheels	<ul style="list-style-type: none"> <li>• Portion of the wheel will be destroyed during normal using.</li> <li>• In such a case, whetstone is no use to correct such a wheel.</li> <li>• In this case, replace it with a new one.</li> </ul>

Cleaning	
Periodic cleaning	<ul style="list-style-type: none"> <li>• Remove grinding chips from machine using a brush everyday.</li> <li>• Don't flow any water inside, or trouble may be caused.</li> </ul>

Moving machines	
ATTENTION	<p>Turn off the power and take the plug out of the plug-seat          Separate the water pipe from the machines          The machine needs re-adjustment after moving.</p>

After sale service	
Clean the machine	Contact with your sales agent every year after you buy the machine in case it breaks down or lead to other problems

## Before requesting service

Water is not supplied and gear wheel does not revolve either.	<ul style="list-style-type: none"> <li>• Check if power switch is turned on.</li> </ul>
Continuous beeping sound as ( peep, peep, peep )	<ul style="list-style-type: none"> <li>• Push carriage slightly right side.</li> </ul>
Gear wheel revolves , but water is not supplied.	<ul style="list-style-type: none"> <li>• Check if water supply cock is tightened up.</li> <li>• Check if water supply nozzle is clogged.</li> <li>• Check if tank is filled with water.(to 80% mark)</li> <li>• Check if pump motor revolves well.</li> <li>• Check if pipes are connected well.</li> </ul>
Bevel is formed at rear side when normal edging.	<ul style="list-style-type: none"> <li>• Is machine level?</li> <li>• Does grinding wheel work well?</li> </ul>
Offcentering occurs.	<ul style="list-style-type: none"> <li>• Make sure that the sucker center is set well, with moisture removed</li> <li>• Make sure that the sucker is not cracked.</li> </ul>

## Specifications

**size:** about 530×500×400mm

**weight:** about 50Kg

**Rated frequency:** 50~60Hz

**noise:** ≤50DB

**Voltage:** 220V±10% (The voltage is 110V :requires specific)

**Electric power consumption:** ≤500W

**Main motor power:** 380W

**Work environment requirements:** 5℃~40℃

## Accessories and Tools

NO.	Name	Number
1	Screwdriver	1
2	Hex wrench	1
3	Standard Template	1
4	V Calibration Board	1
5	Suction cup	4
6	Chuck	1
7	Template holder screw	1
8	Fuse	2
9	Warranty Card	1
10	Certificate of quality	1
11	Instruction Manual	1
12	Desiccant	2
13	Power line	1