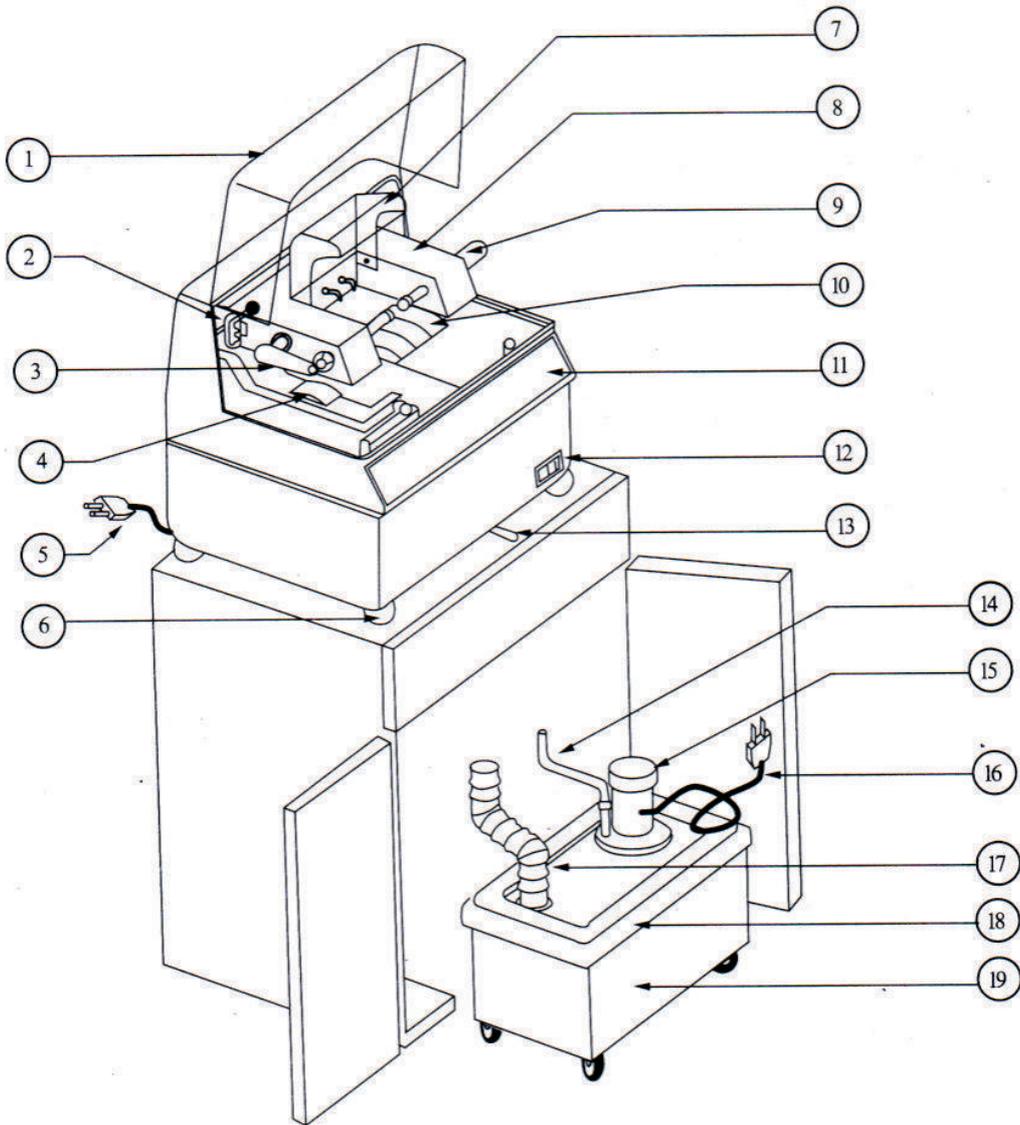


1

NOMENCLATURE

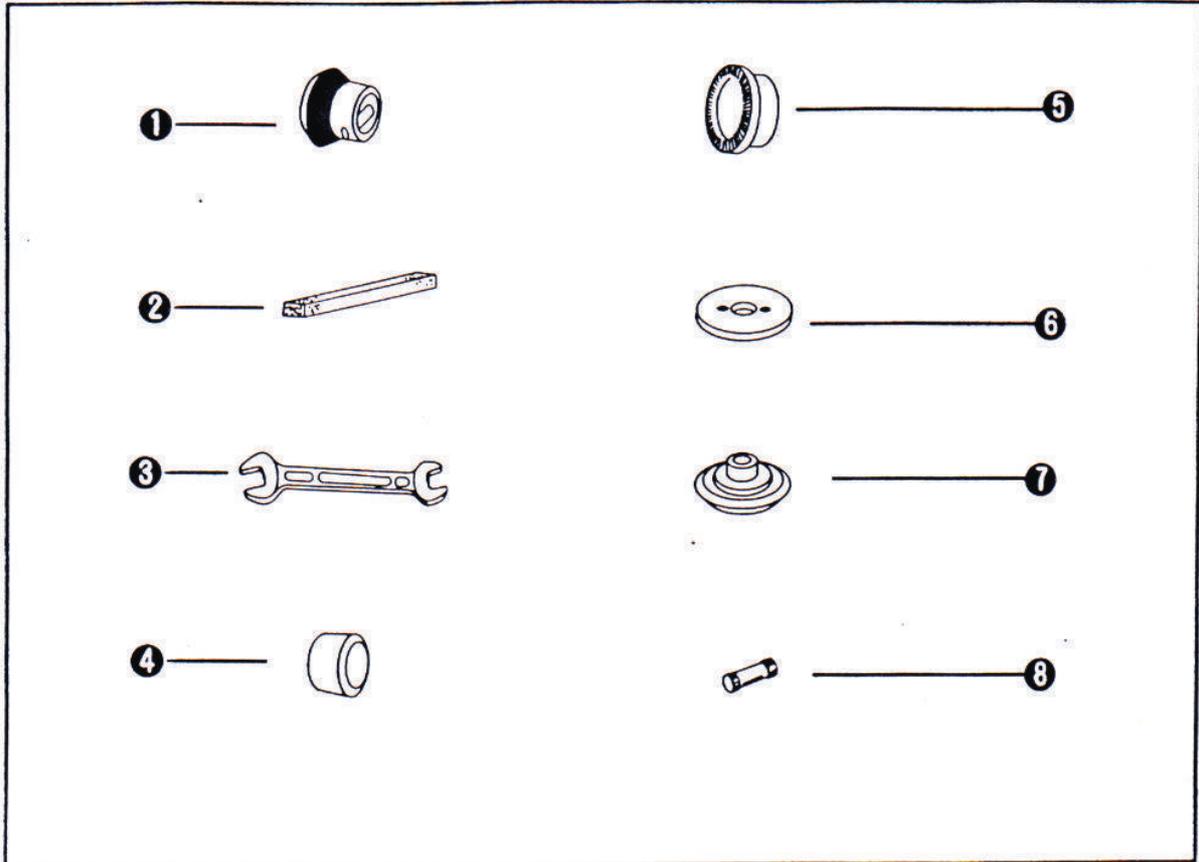


CONTENTS

1. NOMENCLATURE
2. ACCESSORIES AND TOOLS
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4. INSTALLATION
5. CHECKING THE LEVEL OF CARRIAGE
6. ASSEMBLING THE TANK AND CONNECTING
THE PIPES
7. SWITCH PANEL
8. OPERATION PROCEDURES
9. CORRECTING LENS SETTING, SIZE AND DIA
WHEEL POSITION
10. REGISTRATION OF LENS SIZE
11. MAINTENANCE AND A/S

- (1) Soundproof cover
- (2) Carriage weight-changing lever
- (3) Template retainer lever
- (4) Carriage backlash sensor
- (5) Power cord
- (6) Adjustable foot
- (7) Waterproof cover
- (8) Carriage
- (9) Lens clamp handle
- (10) Diamond wheel
- (11) Operation panel
- (12) On/Off switch
- (13) Water supply cock lever
- (14) Water supply pipe
- (15) Pump
- (16) Pump power cord
- (17) Drain Pipe
- (18) Cover
- (19) Tank

2 ASSESSORIES AND TOOLS



1. Suction cup

2. Dressing stick

3. Hex wrench

4. Rubber band

5. Tape cup

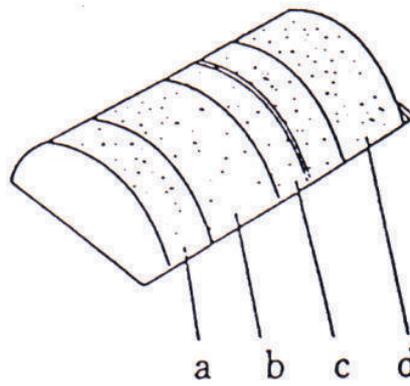
6. Standard template

7. Standard gauge

8. Fuse

3 DIA WHEELS

SJM-2004B



a: Roughing wheel (Polishing): used for roughing plastic lenses.

b: Roughing wheel (metal bonded): used for roughing glass.

c: Beveling wheel : used for normal and hold edging.

d: CR flat wheel: used for flat edging

4 INSTALLATION

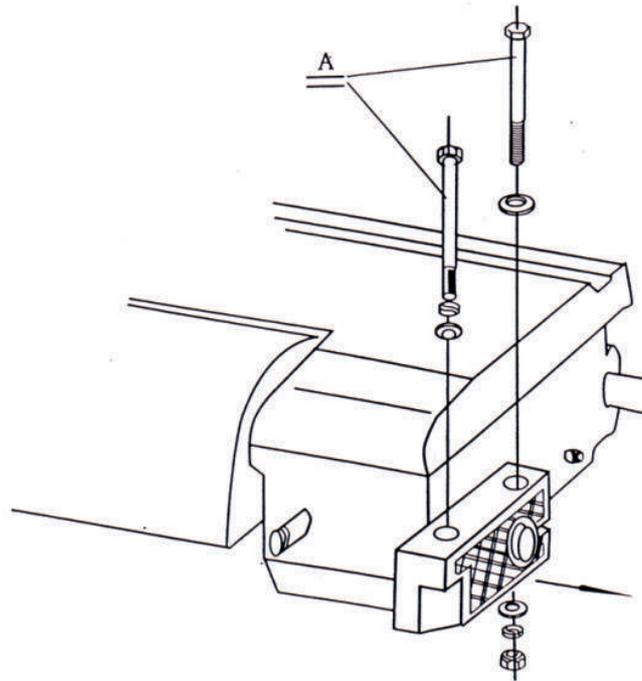
(1-1) Confirm that table is firm and place the instrument on it Use template or board (table adjusters) if table is not firm.

(1-2) Fix the machine on the table.

(1-3) Open the soundproof cover and remove two screws (A) and retainer with a screwdriver.

* Take two screws (A) and retainer into a drawer.

(1-4) Plug power cord into outlet and turn power switch on.



5 CHECKING THE LEVEL OF CARRIAGE

(1) Fix standard template to through pins and lower template retainer lever

(2) Fix carriage backlashing lever (B) to the second stage.

(3) Move manually carriage so that it comes just over diamond wheel.

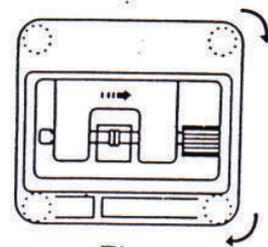
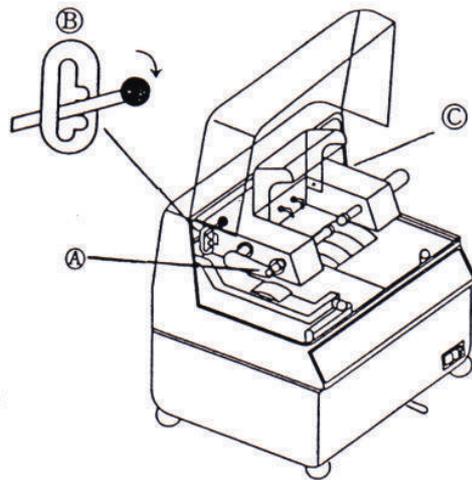
(4) With this, carriage is level if it does not move either left or right.

(5) If carriage moves right, turn the right adjustable foot clockwise.

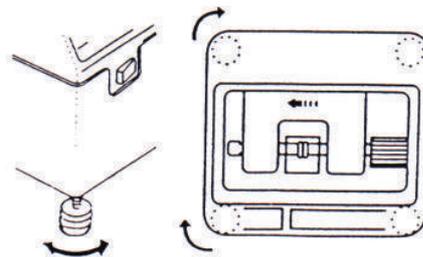
(See Fig. 1)

(6) If carriage moves left, turn the left adjustable foot clockwise.

(See Fig. 2)



(Fig. 1)

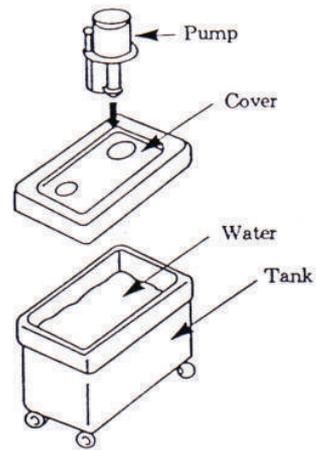


(Fig. 2)

6 ASSEMBLING THE TANK AND CONNECTING THE PIPES

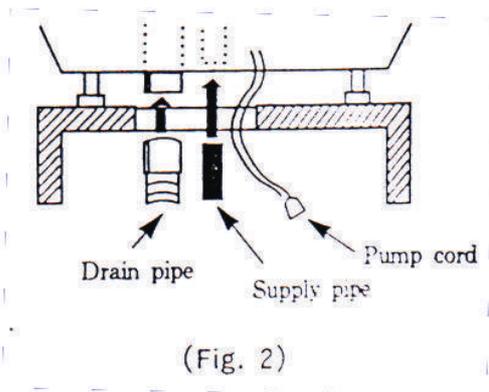
(6-1) Assemble the tank as illustrated.

(See Fig.1)



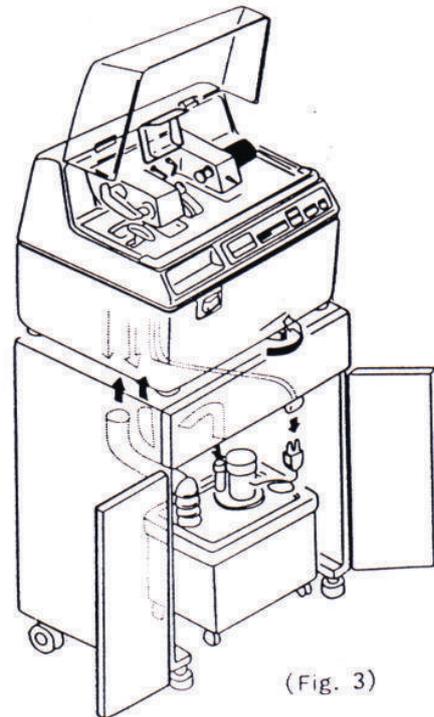
(Fig. 1)

(1-2) Connect drain pipe as in Fig.2



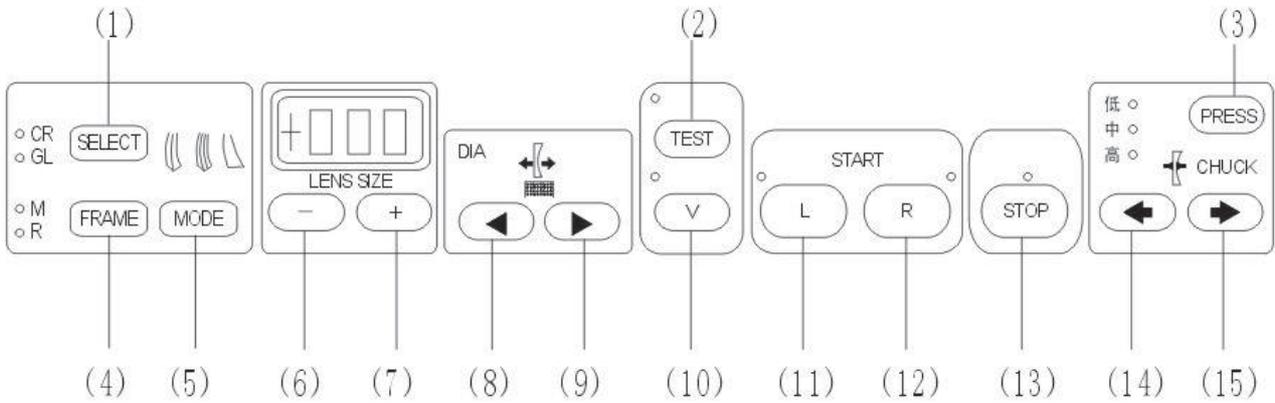
(Fig. 2)

(1-3) Connect supply pipe and pump cords as in Fig.3



(Fig. 3)

7 SWITCH PANEL



- (1) CR, GL Lens selector
- (2) Test switch
- (3) Chuck press selector
- (4) Frame selector
- (5) Beveling and frameless selector
- (6) Minus (-) switch
- (7) Plus (+) switch
- (8) Shift (left) switch
- (9) Shift (right) switch
- (10) Re-edging switch
- (11) Start switch (L):for edging of left lens.
- (12) Start switch (R):for edging of left lens.
- (13) Stop switch
- (14) Lens-clamping switch
- (15) Lens-loosening switch

8

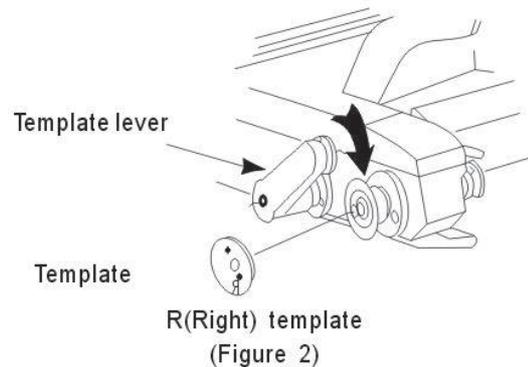
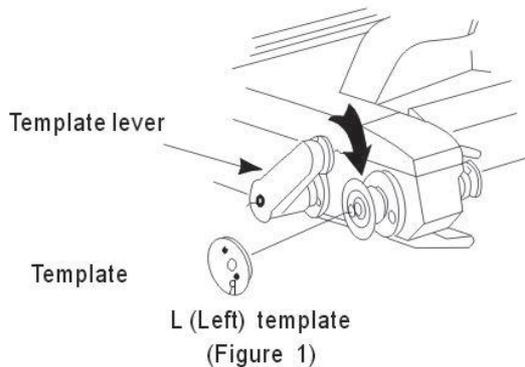
OPERATION PROCEDURES

(1) Preparations

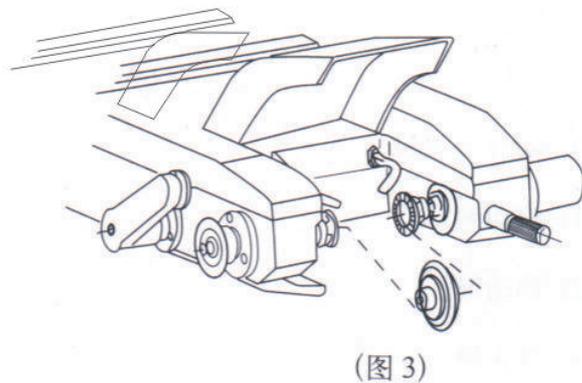
- <8-1-1> • Turn power switch on and open water supply cock.
- <8-1-2> • Press **TEST** switch and check that water is supplied.

(2) Fitting template

- <8-2-1> • Put a template through pins and lower template retainer lever.
(See Fig. 1 and 2)
- <8-2-2> • Put even the left and right templates as in 8-2-1

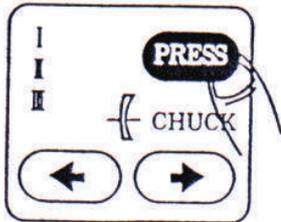
**(3) Fitting lens**

- Match the upper point of suction cup with the one of shaft.
- (See Fig.3)



(4) Clamping lens

<8-4-1>



(Figure 4)

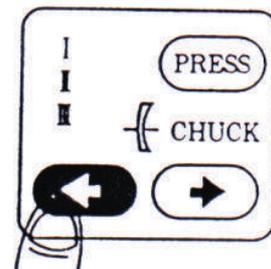
※ Select lens clamping with PRESS switch.

- See Fig.4.

- Selecting pressure
 - I (low):Glass high-refractive lens
 - II (medium):Glass,CR lens
 - III (high):CR lens

<8-4-2>

- Lock the lens with chuck switch.
- If pressing it lightly only one time,it is automatically clamped.
- Even in loosening lens,it loosens if pressing the switch lightly.(See Fig.5)



(Figure 5)

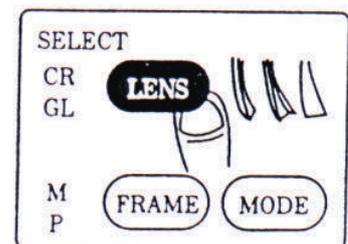
(5) Selecting lens

<8-5-1>

- Press lens selector to select GL lens or CR lens.
- It is possible to change mode though not pressing STOP switch on selecting GL again after selecting CR.

【Note】 It is initially set as CR Mode if turning on switch.

(See Fig.6)

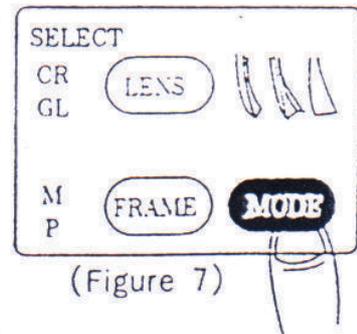


(Figure 6)

(6) Selecting bevel

<8-6-1>

- Whenever pressing MODE switch, bevel and rimless will be repeated.
- On selecting 'rimless', **SJM-2004B** is processed up to rimless lens polishing.
- PICHINA GOLD is for free curve, and so you don't need to use a forced curve. (See Fig.7)



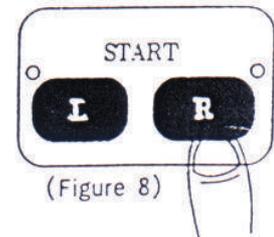
【Note】

- When not making a polish work at the time of rimless lens edging, it goes back to its original position it pressing STOP switch after the first and second edging.
- On selecting 'rimless' PM-9903, and 9907 do not polish.

(7) Start

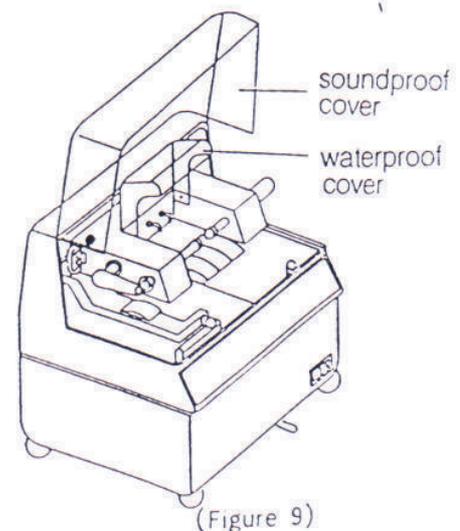
<8-7-1>

- Press L or R of START switch, and processing will be started. (See Fig.8)



☒ Note ☒

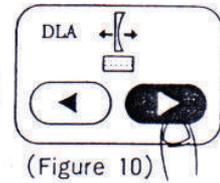
- Make sure to close waterproof cover when starting on lens edging. If not closing it trouble may be caused.
- Close soundproof cover when noise is intrusive. (See Fig.9)



(8) Shifting lens position

<8-8-1>

- Press ◀ or ▶ switch of DIA mode to make a shift as desired.
- If using it properly after being well aware of the use of<8-8-1>, dia wheel's life becomes long.(See Fig.10)

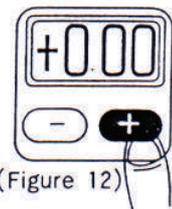


(9) Changing lens size

<8-9-1>

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

- Use(+)mode when making the lens size larger if its size is smaller after its test edging.(See Fig.12)

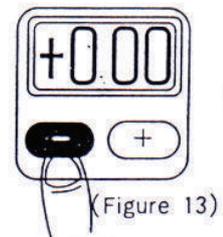


<8-9-2>

- Use(-)mode when making the lens size smaller if its size is bigger after its test edging.

(See Fig.13)

- 【Note】
- Minimum setting unit:0.05mm
 - Minimum size:-6.00mm
 - Maximum size:+6.00mm



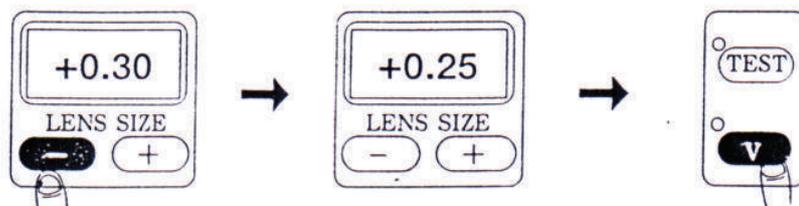
(10) Re-edging

- In case that the lens size is still bigger after edging of GL and CR lens.

①(Fig.14): Use it after resetting lens size with(-)switch.

②(Fig.14): Press(V)switch, and edging will be started as changing its size in the second-edging bevel groove.

(Fig.14)



9 INITIAL MAINFRAME INSTALLATION

(Position the lens and grinding wheel, and set the grinding wheels)

※ Warning about settings and operating time

- When the emery wheel is partially worn
- When the lens dimensions are much different from given specifications
- When changing the position of the lens on the left and right side of the grinding wheel

[Note] after the setting in chapter 9 is completed, before resetting, the previous data is cleared, and a precise setting will be done.

(1) Install standard template and gauge

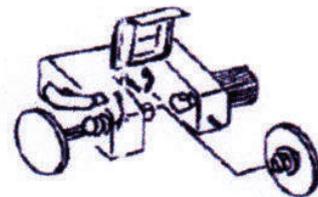
(These are included with the service items during the first transfer.)

- a) Switch on the power, affix the standard template and gauge and fasten them down
- b) Switch off the power

Fig(1)

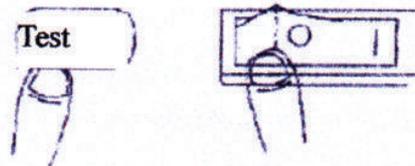


Fig (2)



(2) Press & hold the test key, and switch on the power

(Fig 3) Test key



- Under normal conditions, a buzzer will sound, and the grinding head will automatically rise and move towards the left until it arrives at the "resin lens wheel" position

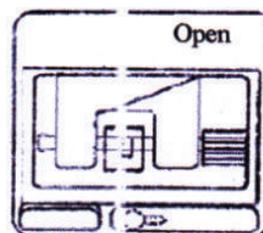
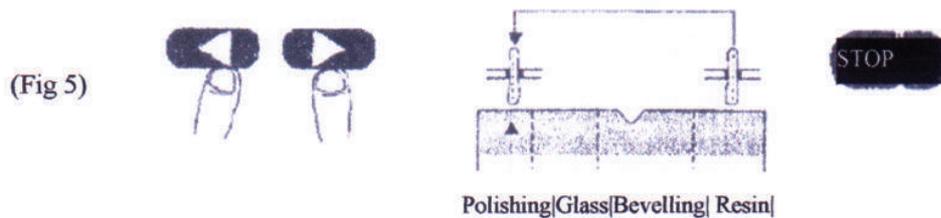
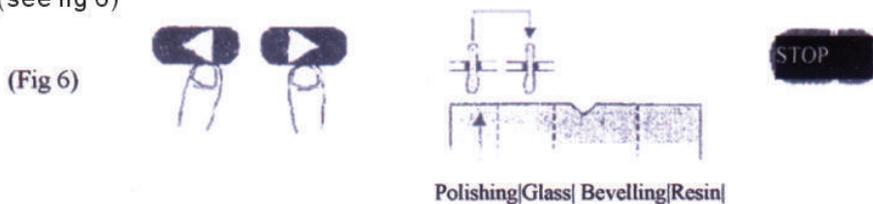


Fig 4

- (3) When the standard gauge is over the resin wheel, the relative positions of the gauge and the grinding wheel can be changed by pressing the ◀ or ▶ key. Press "STOP" key, the standard gauge will contact with the resin wheel, and automatically move to the leftmost polishing wheel. (see fig 5)

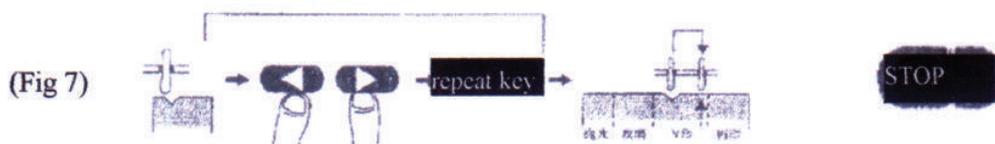


- (4) When the standard gauge is over the polishing wheel, it can be moved by pressing the ◀ or ▶ key. Press the "STOP" key, after making contact with the polishing wheel, the standard gauge will move over to the glass wheel. (see fig 6)



- (5) When the standard gauge is over the glass wheel, it can be moved to the desired position by pressing the ◀ or ▶ key. Press the "STOP" key, after contacting with the glass grinding wheel, the standard gauge will move over to the bevelling wheel.

- (6) When the standard gauge is over the bevelling wheel, it can be moved and aligned with the center of the "V" shaped groove by pressing the ◀ or ▶ key. Press the "V" key, and it will make contact with the bottom of the groove and then return to the top of the "V" shaped groove. Repeat this process to locate it exactly in the center of the "V" shaped groove. Assure it is properly placed in the middle through visual measurement, and press "STOP" key. The gauge will automatically move to the top for fine grinding (flat grinding) on the right side of the bevelling wheel. The gauge can be moved to the desired position by pressing the ◀ or ▶ key, then press "STOP" key (see fig 7)



The operation sequence of SJM-2001A, SJM-2001B, SJM-2003B, SJM-2004B is :resin, polishing ,glass, V shaped groove, and fine grinding.

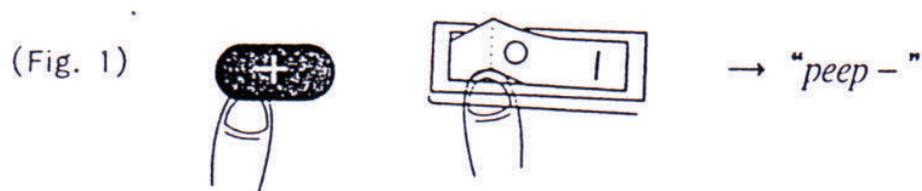
- (7) After steps (1) to (6) are completed, the grinding head will automatically return to the original position and stop. Please remember to switch off the power, the settings for positions and dimensions will be automatically stored. Switch on to activate it, otherwise the memory will be invalid.

10 REGISTRATION OF LENS SIZE

(1) Carry out the following procedure when wanting to fix a changed lens size by only ope-time setting

<10-1-1>

- Turn power switch on while pressing(+)switch. Make sure of beeping sound as peep.(See Fig.1)



<10-1-2>

- Use (+) or (-) switch to change the value displayed to desired size. And then, press STOP switch, and changed size will be stored

<10-1-3>

- Use it after turning power switch off.

11 MAINTENANCE AND A/S

Renewing water	<ul style="list-style-type: none"> ■ Renewing water periodically after about 100 lenses have been edged.
Cleaning water supply nozzle	<ul style="list-style-type: none"> ■ Water supply nozzle is readily clogged if supply continues with contaminated edging water. if it is clogged,remove from carriage and clean it using a clean water.
Dressing diamond wheel	<ul style="list-style-type: none"> ■ When grinding wheels are worn,more time for edging is required or bevel may not be well formed by normal edging. ■ In case of that,use a grindstone to sharpen diamond wheels. ■ Press TEST switch,and wheel begins to turn. ■ Then,press TEST switch again,and wheel will contivue turning by force of inertia though an electrical signal stops. ■ When diamond wheel is turning slow at this time,apply premoistened dressing stick to diamond wheel. ■ Rrpeat this operation 5 to 10 times. ♣ Don't dress the diamond wheel for plasticnens as said above.
Resharpeneing a diamond wheel	

♣ Cleaning ♣

Periodic cleaning	<ul style="list-style-type: none"> ■ Remove grinding chips from carriage using attached brush each day when it is used. ■ Don't flow too much water inside. Trouble may be caused.
--------------------------	--

♣ Before requesting service ♣

Water is not supplied and diamond wheel does not rotate, either.	<ul style="list-style-type: none"> ■ Check if power switch is turned on.
Continuous beeping sound as 'peep, peep, peep'.	<ul style="list-style-type: none"> ■ Push carriage slightly right side
Diamond wheel rotates, But water is not supplied	<ul style="list-style-type: none"> ■ Check that water supply cock lever is tightened up. ■ Check that water supply nozzle is clogged. ■ Check that tank is filled with water (to 80% mark). ■ Check if pump motor rotates well. ■ Check if pipes are connected well.
Bevel is formed at rear side when normal edging.	<ul style="list-style-type: none"> ■ Is carriage level? ■ Does grinding wheel work well as ever?
Miscentering occurs.	<ul style="list-style-type: none"> ■ Make sure that edging is done with moisture removed from suction cup. ■ Check that suction cup is not scratched or cracked.

User Manual of Model Forced Mill

I. Starting procedure of the forced mill

1. Press "MODE" button to light indicator of the forced mill, as shown in Figure L

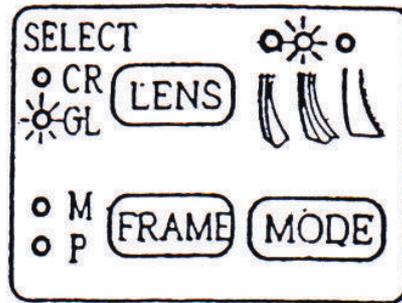
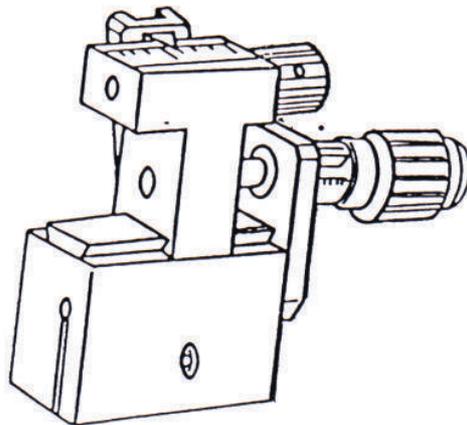


Figure I.

2. Assemble lens and press "R" button to conduct rough grinding.

3. After rough grinding, install forced milling device, as shown in Figure II

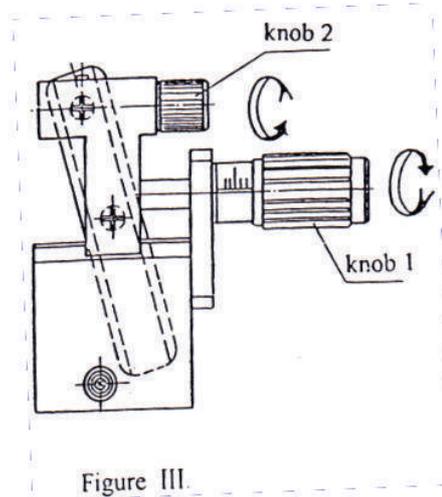


FigureII

II. Adjusting and grinding

1. Place wheel at right front side of grinding head into chute of the forced grinding device.

2. Press "MODE" button to let lens turn slowly, and observe location of grinding angle, then adjust knob 1 and knob 2, as shown in Figure III .



Knob 1: It is used for adjusting the right and left locations of the grinding angle.

Knob 2: It is used for adjusting inclination of the chute to make it coincident with external form of the lens.

Please adjust these two knobs until meeting the requirements.

3. Press "V" button to conduct the forced grinding.
4. After grinding, stop the grinding head at its highest position and push it into its most right side.
5. Disassemble the forced grinding device.

Attentions:

1. The right and left positions will be affected when adjusting knob 2, so it shall be done with coordination of adjusting knob 1.
2. For the lens difficult to be adjusted, please press "TEST" button to conduct trial grinding, then amend it to the best one via adjusting knob 1 and knob 2. Conduct final grinding via pressing "V" button.