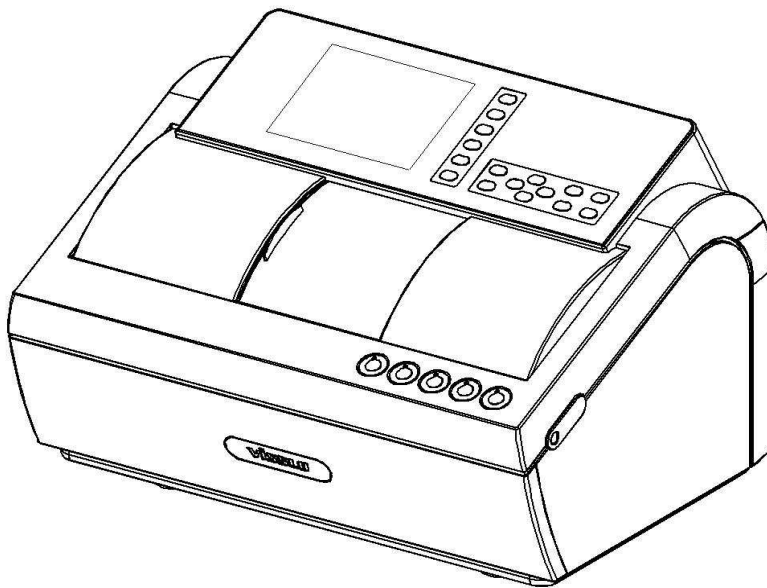


OPERATION MANUAL

3D PATTERNLESS LENS EDGER/ F8 premier



VISSLO

VISSLO Inc.

WWW.VISSLO.COM

#301, Apollo Town, 18-36, Sanbon-Dong, Gunpo-City, Korea Tel+82 31 349 8693 Fax+82 31 349

3D PATTERNLESS LENS EDGER/F8 premier

INDEX

1. Introduction

- 1.1 Product outline & Intended use
- 1.2 Lens materials and edging modes
- 1.3 Accessary and locking / unlocking procedure

2. System components

- 2.1 System Layout
 - 2.1.1 Overview
 - 2.1.2 Front View
 - 2.1.3 Rear View
- 2.2 Main Panel
- 2.3 Edger key switch
 - 2.3.1 Sub Panel 2 (Right)
- 2.4 edging unit

3. Edgering data input

- 3.1 material selection
- 3.2 Edging data input
 - 3.2.1 Standard lens
 - 3.2.2 Bi-focal lens

4. Edgings

- 4.1 Standard(Beveling)
 - 4.1.1 Automated edging
 - 4.1.2 Controlled edging (Decenteriged Edring)
- 4.2 Optional edging
 - 4.2.1 Classifications by frames
 - 4.2.1.1 Flat (Rimeless) edging
 - 4.2.1.2 Grooving
 - A) Automated
 - B) Controlled (Decenteriged)
 - 4.2.2 Classifications by lens
 - 4.2.2.1 EX lens edging
 - 4.2.3 Edging by the function
 - 4.2.3.1 Frame exchange edging
 - 4.2.3.2 Safe mode lens Edging
- 4.3 Check and adjust lens size

5. Save and retrieve data

5.1 Save and retrieve data

5.1.1 Save data

5.1.2 Retrieve data

5.1.3 Adjust the parameters

6. Installation and maintenance

6,1 Installation

6,2 check

6,3 maintenance

6,4 cleaning

7. Safety

7.1 Caution while use

7.2 Transfer

7.3 Wiring

8. Error codes

9. Usable environmental conditions

10. Symbol Description

Chapter 1. Introduction

1.1 Outline of the Product & Intended use

The lens Edger (Model:F8 premier) is edging the optical lens according to the tracing data which is imported from the tracer unit (Moder st-88)

The lens edger (Moder:F8 premier) consists of Edger unit, display and electronic unit.

The lens edger (Model: F8 premier) can be equipped with OMA compliances for laboratory operation

1.2 Lens materials and edging modes

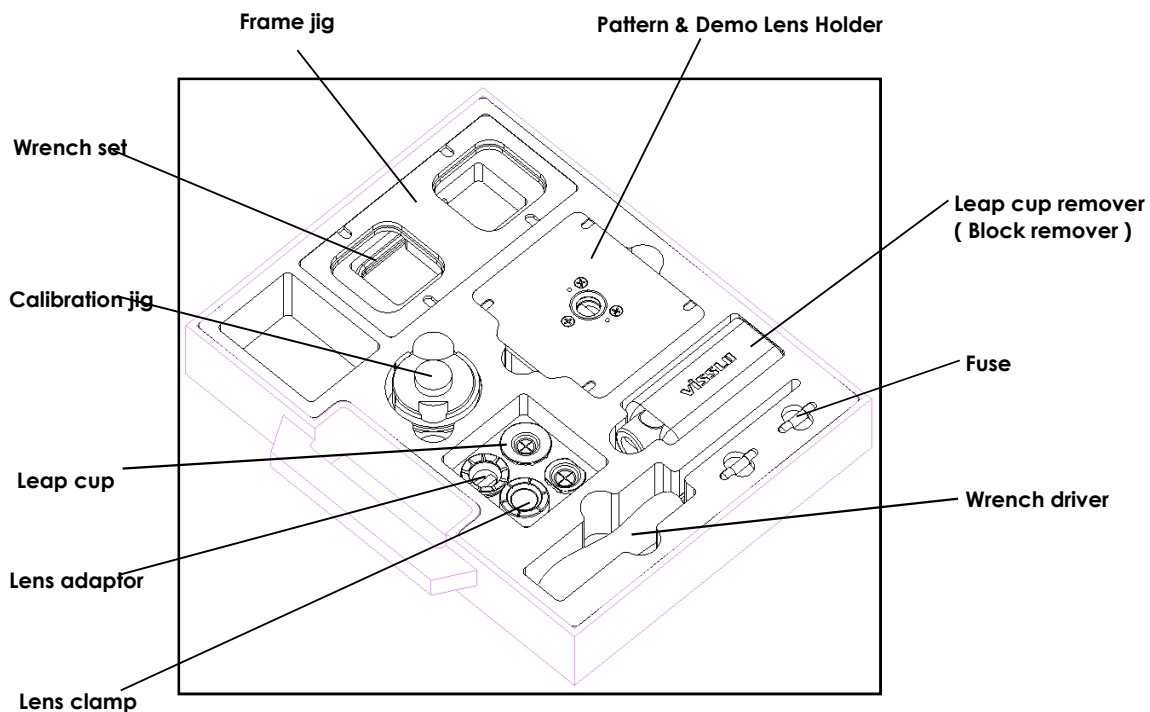
x : Edging is not available

		Edging mode					
		Beveling	Grooving	Flat	Chamfering	Polishing	
						Flat	Bevel
Lens material	PLA (Plastic)	o	o	o	o	o	o
	HPA (Hi-index plastic)	o	o	o	o	o	o
	PC (Polycarbonate)	o	o	o	o	o	o
	GLS (glass)	o	x	o	o	x	x
	ACR (Acrylic resin)	o	o	o	o	o	o

1.3 Accessories & locking & unlocking procedure

1.3.1 Composition

- 1) Main body 1 Unit
- 2) Manual blocker 1 Unit (Optional)
- 3) Power cable
- 4) Leap tape -- 100 pcs for 28mm, 100 pcs for 18mm
- 5) Operation manual
- 6) Dressing stick -- #100, #400, #3000 each 1 pc
 - #100 -- Glass wheel
 - #400 -- Finishing wheel , Chamfering wheel
 - #3000 -- Polishing wheel
- 7) Tool Box
- 8) Pump Unit (Optional)



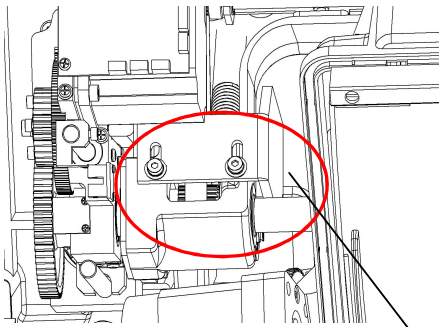
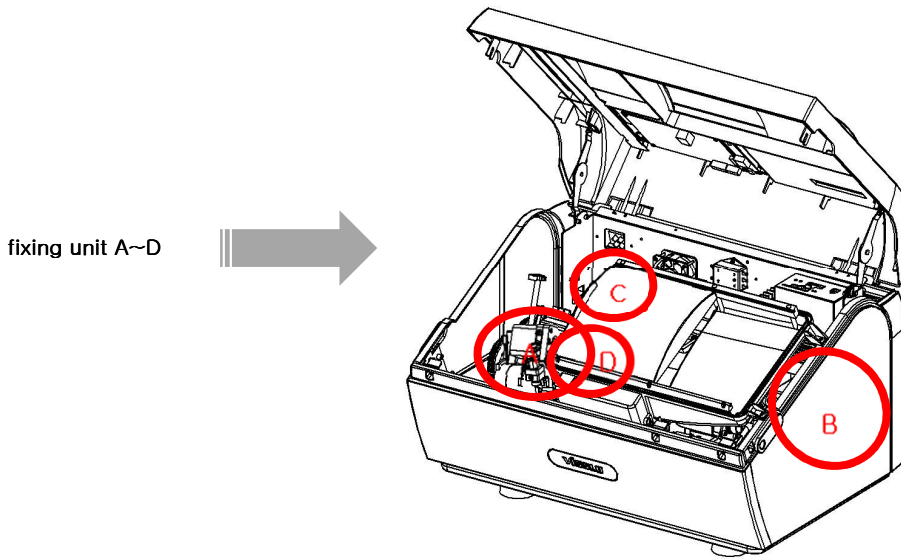
Tool Box Composition

1.3.2 Accessories and Locking & unlocking procedure

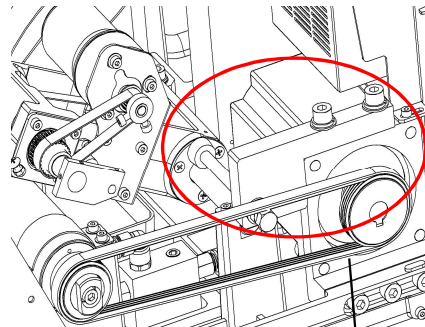


Be sure to take fixing unit out before turning on certainly since fixing unit are installed to prevent the damage during transportation

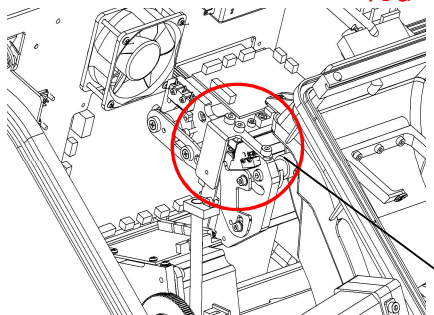
1) Open cover upside after taking the bolts out both sides of the cover upside



red-colored

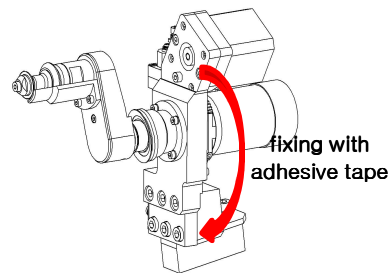


red-colored



red-colored

Feeler Locking C



fixing with adhesive tape

Groove Locking D

Edger fixing unit location

*check any interference with movement

Locking units should always removed with turn off condition.

locking units should always be placed when the transportation is necessary.

improper handling could cause the damage which is not covered under warranty.

3)Edger fixing lockerA ,B, C, D is limited.

Chapter 2. System components

2.1 System Layout

2.1.1 System Overview

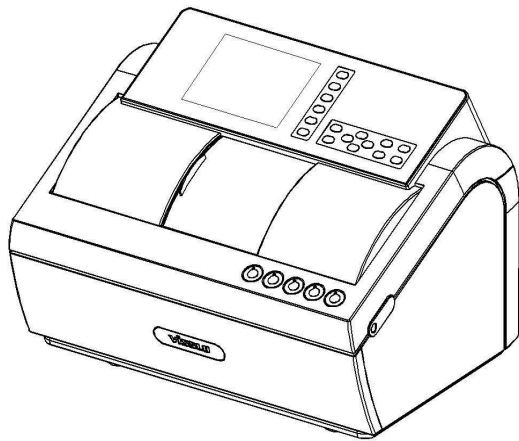
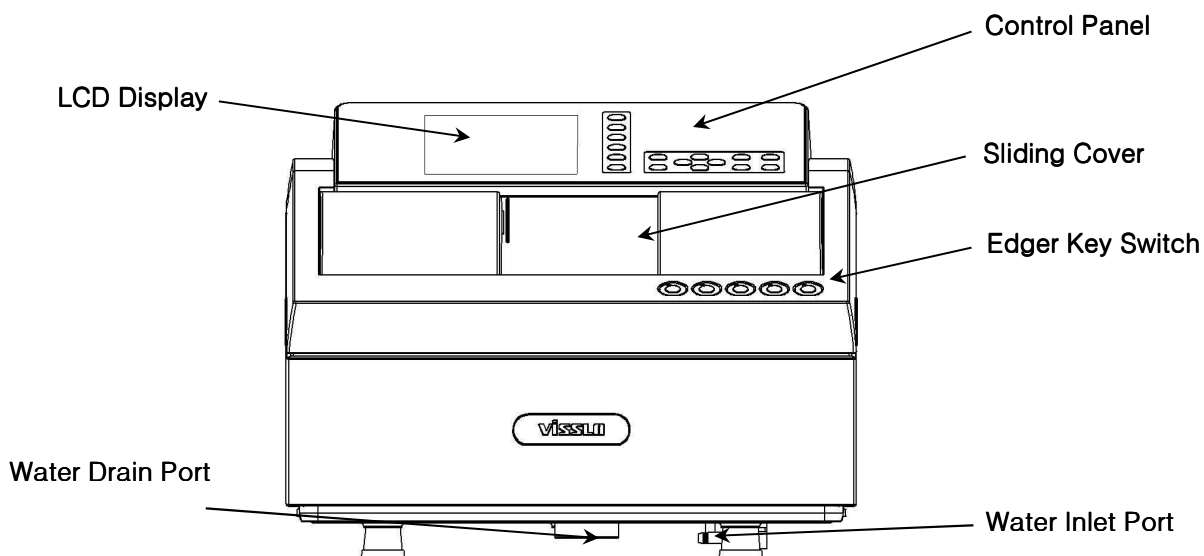


Fig. 1

WxLxH (Approx.) : 800 x 430 x 410 (mm)

2.1.2 Front view



- * Control Panel : Shows and control all menu
- * Edger Key switch : Controls conditions before edging
- * Sliding Cover : Shields the noise and filthy water while edging
- * Water Inlet Port : Outside nozzle to deliver water while edging
- * Water Drain Port : Outlet to release water after edging

2.1.3 Rear view

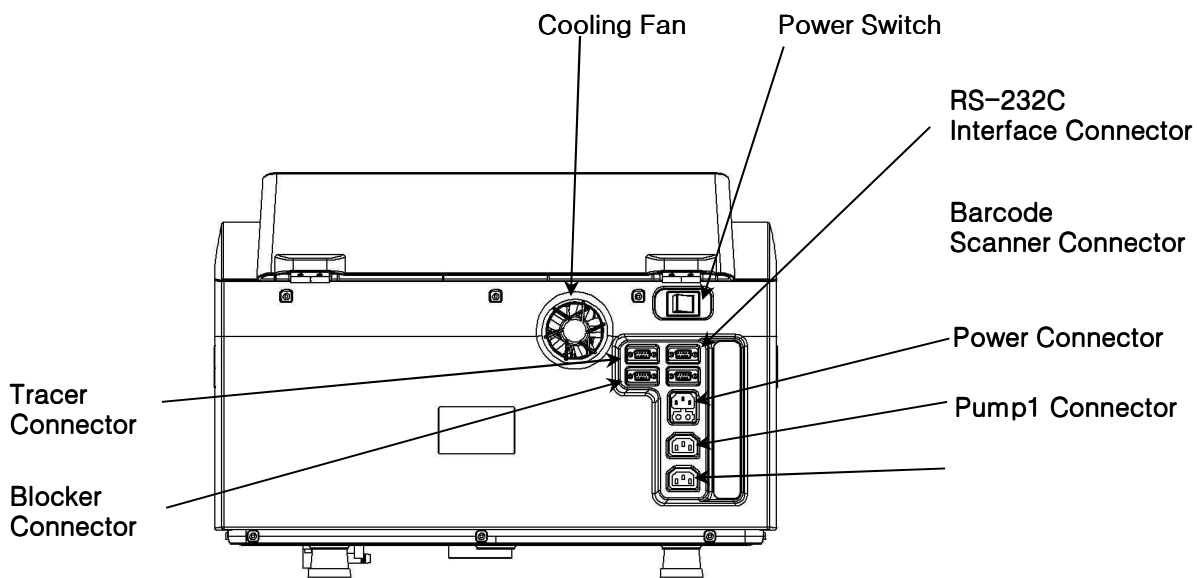


Fig. 3

- * **RS-232C Connector** : Connector to interface with equipment outside.
- * **Barcode Scanner Connector** : Connector to interface with bar code scanner

2.2 Control Panel

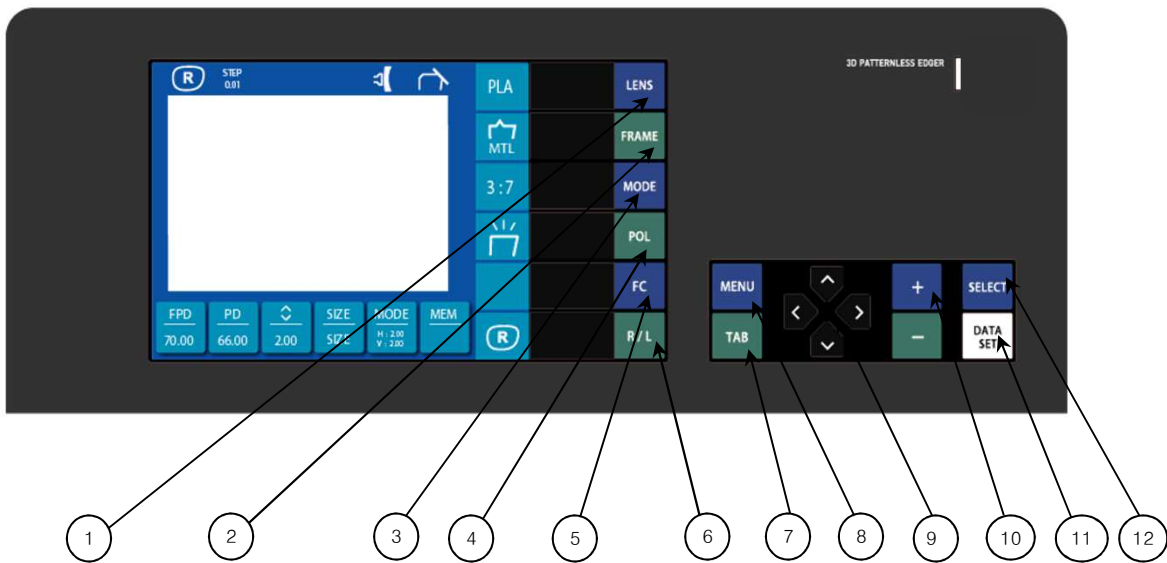

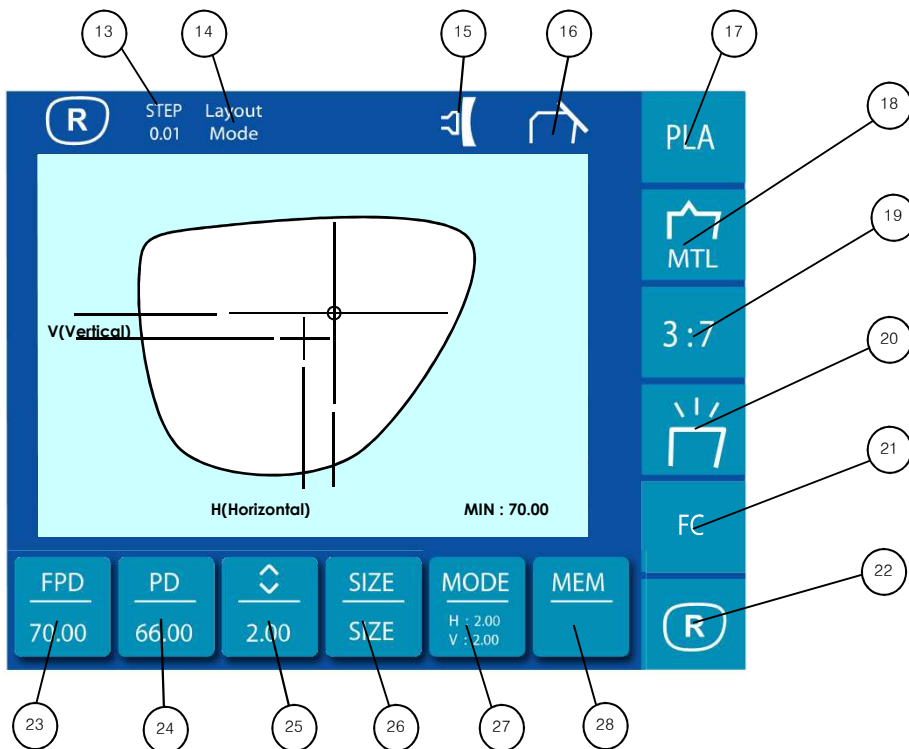


Fig. 4

1. **LENS** : Lens material --- Choose PLA(Plastic), HPL(High index plastic), PC(Polycarbonate),GLS(Glass),or ACR(Acrylic resin)
2. **FRAME** : Frame material --- Choose MTL(Metal), CEL(Celluloid)/ZYL, PNT(two-point), or NYL(Nylor)
3. **MODE** : Edging mode - 3:7(Auto), 4:6(Auto), 5:5(Auto), CTR(Manual), EX(EX lens) are available.

Edging mode	FRAME	MODE
Automated beveling	MTL CEL	AUT
Controlled beveling	MTL CEL	CTR
EX lens edging	MTL CEL	EX
Rimless(Flat)edging	PNT	
Automated grooving	NYL	AUT
Controlled grooving	NYL	CTR

4. **POL** : Use when choose rimless polishing mode.
{(This key is not working in Type GLS(Glass)}
5. **FC** : Use when choose frame switching mode.
6. **R / L** : Use when choose the sides of lens or right(R) or left(L)
7. **TAB** : Use when choose in setting up the steps of the figures if change edging data.
8. **MENU** : Use when choose specific menu.
9.  : Use when move cursors
10. **+** **-** : Use when regulate the increments and decrements of edging data
11. **DATA SET** : Use when transmit the traced data to screen panel.
12. **SELECT** : Use when change input shape of designed data



13. Indicate changed volume of the figures to enter

Use  key and shows by 0.01, 0.1, 0.5(mm)

14. Indicate process steps

Layout Mode : steps to enter edging conditions



Measure process : steps to measure the thickness of lens



Controlled edging ,EX lens edging: Controlled edging,EX lens edging



Rough process : steps to edger roughing wheel



Bevel process : steps to bevel



Finish process : steps to edge delicate



Polish process : steps to polish



Groove process : steps to groove



Chamfer process : steps to chamfer

15. Shows the clamp is locked or not.



: chuck



: unchuck

16. Shows chamfered or not



: no chamfering



: Chamfering

17. Lens materials



: Plastic



: High index plastic



: Polycarbonate

*Front or Rear

*Both



: Glass



: Acrylic resin

18. Frame materials



: Metal




: Celluloid


 : Nylon

 : two-point (drilled)

19. Edging mode

 : Auto mode


 : Controlled mode

 : EX lens mode


* (Blank) indicates the flat edging without grooving.

20. Shows polishing mode.

 : Polishing

 : No polishing

21. Frame changing mode

 : Frame changing mode

22. the selected side of a lens to be edged(R/L)

 : Right

 : Left

23. Optical center

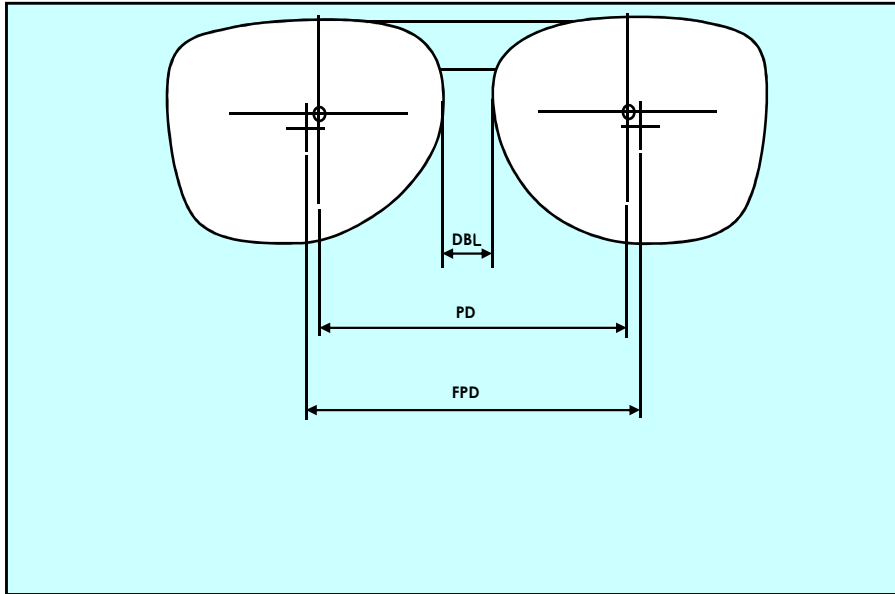


fig.6

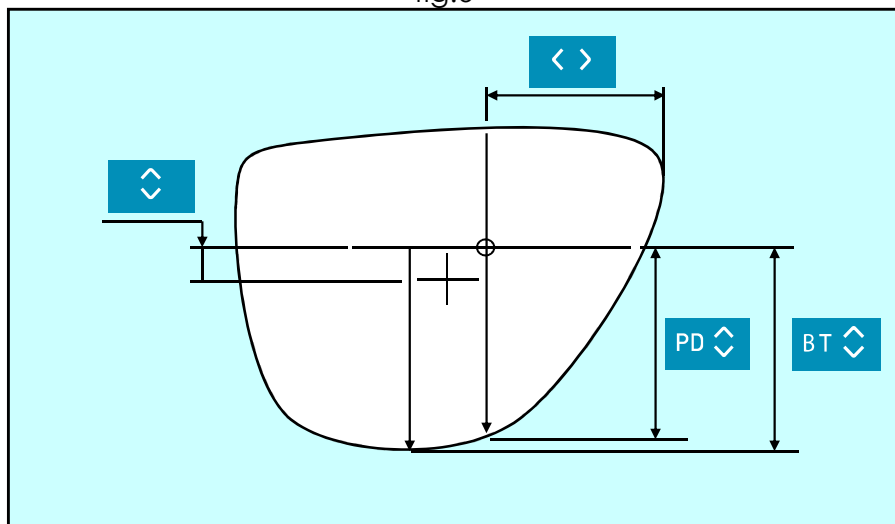


Fig. 7

< > : Distance between rim center and optical center by the steps of 0.1mm

PD < > : Crossing distance from optical center to lens vertically

BT < > : Crossing distance from optical center to the bottom of lens vertically

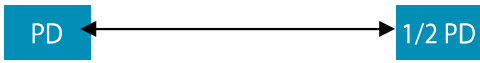
24. FPD (Frame pupil distance) - Pupil distance of glasses frame

DBL (Distance between nasal points) - Distance between nasal points and frame.

(Fig.6,7)

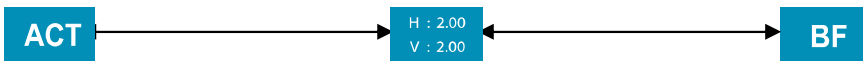


25. PD (Pupillary distance)
(30.00mm~99.50mm by the steps of 0.5mm)



26. SIZE (Size compensation value)
Indicates the compensation value for the complete lens size required from diameter, which is originated from traced size of the frames or patterns(0.00)

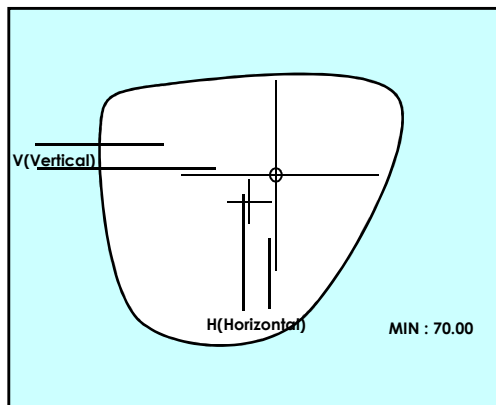
27. Layout mode



ACT : (Optical center)

H : 2.00
V : 2.00 : (Frame center)

Indicate horizontal and vertical distance between optical center and frame center



BF : Bi-focal lens mode

27. Memory address(MEM)

Store or read the traced pattern data while use memory function and may be able to store up to 120 addresses.

2.3 Edger key Switch

2.3.1 Menu



: Retouch -- minor adjusting



: Safety Bevel -- chamfering mode on/off



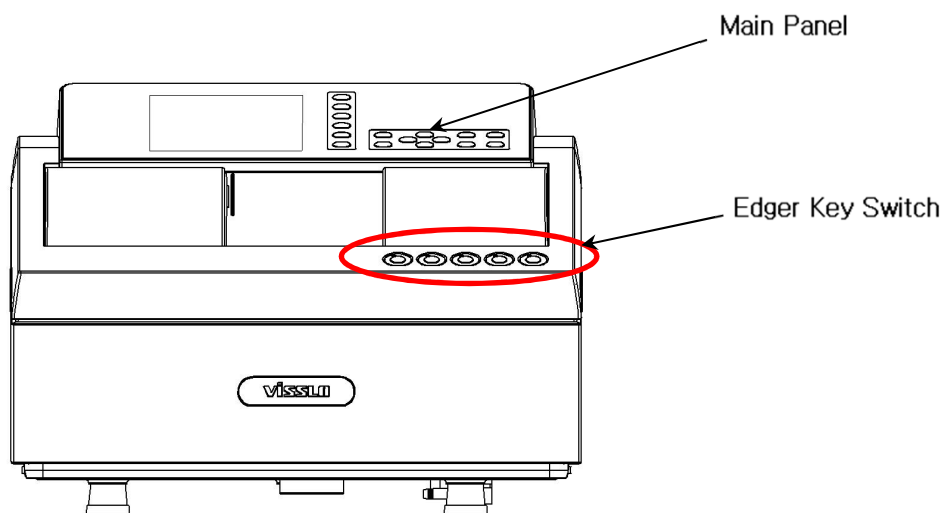
: CHUCK



: START -- Start Edging



: STOP -- Stop Edging



2.4 Edging unit

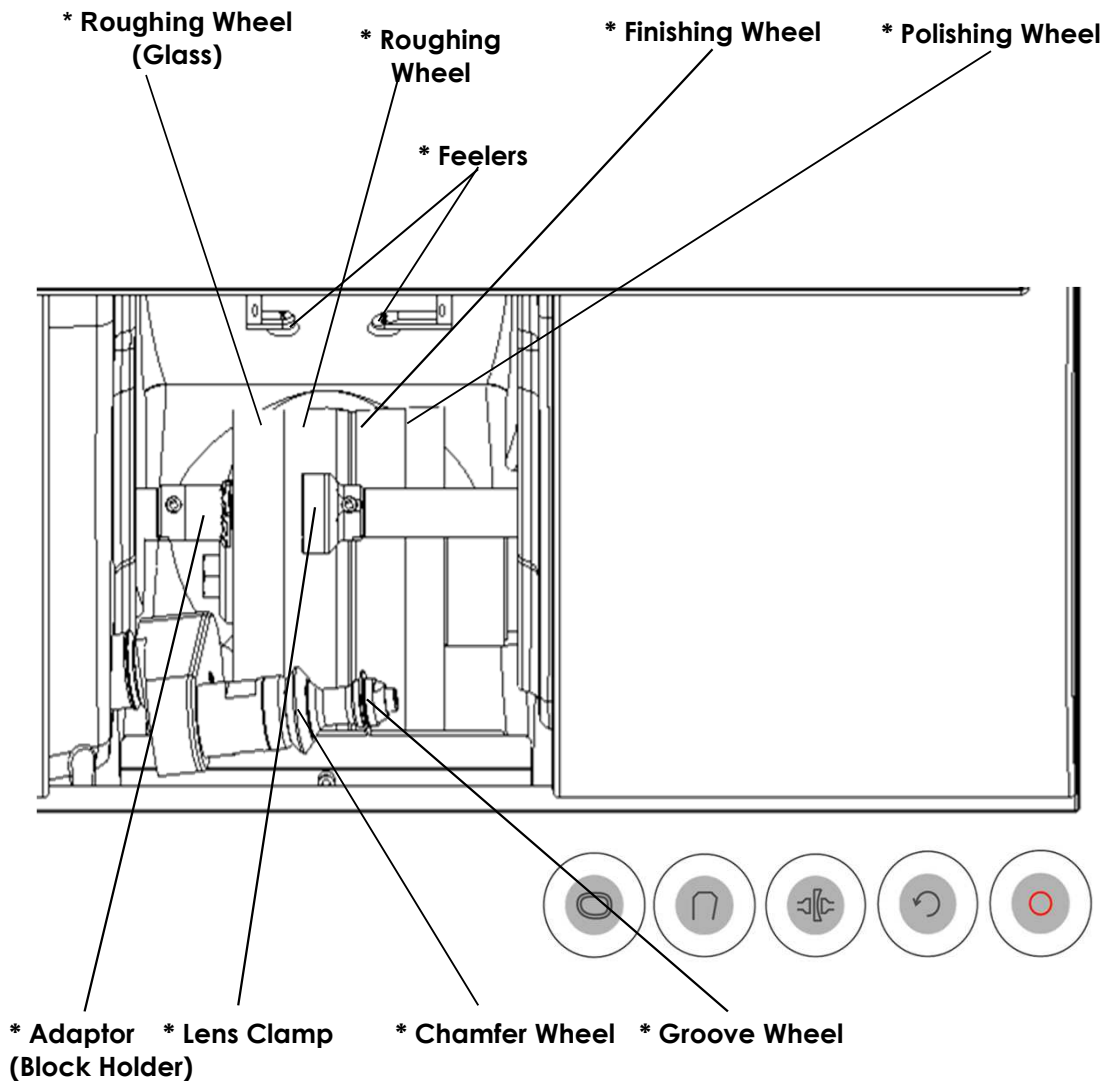



Fig.9 Edging unit


- *Roughing wheel for glass lens
- *Roughing wheel for plastic lens
- :Roughing wheel for plastic,poly carbonate, acrylic resin lens
- *Finishing wheel : wheel to finish lens edging
- * Rimless polishing wheel
 - : Wheel for polishing the edge of rimless lens
- * Chamfering wheel
- * Grooving wheel
- * Adaptor (Block Holder)
- * Lens clamp
- * Feeler
 - : Measuring apparatus of the thickness of lens

Chapter 3. The input of edging conditions

3.1. Choose edging conditions

1) Choose lens materials

 : Plastic

 : High index plastic


 : Polycarbonate

 : Glass


 : Acrylic resin

2) Choose frame materials

 : Metal

 : Celluloid

 : Nylon

 : two-point

3) Choose edging mode


 : Auto mode

 : Controlled mode

 : EX lens mode

4) Choose polishing mode

 : Polishing mode


 : No polishing

5) Choose edging side










 : Right

 : Left

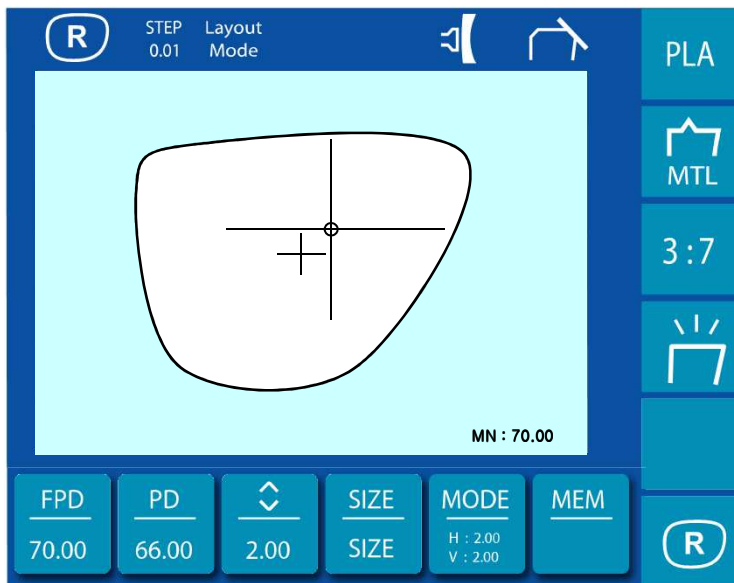
6) Choose Chamferring

 : no chamferring

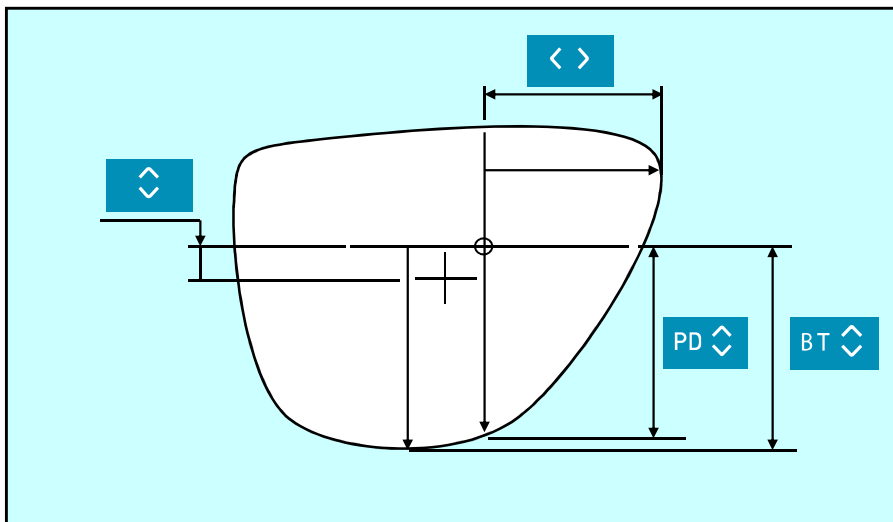
 : Chamferring both

Edging mode	FRAME	MODE
Automatic beveling	 	AUT
Controlled beveling	 	CTR
EX Lens edging	 	EX
Rilmelss(flat) edging		
Automatic grooving		AUT
Controlled grooving		CTR


3. 2. The input of grinding conditions





3.2.1 Standard lens



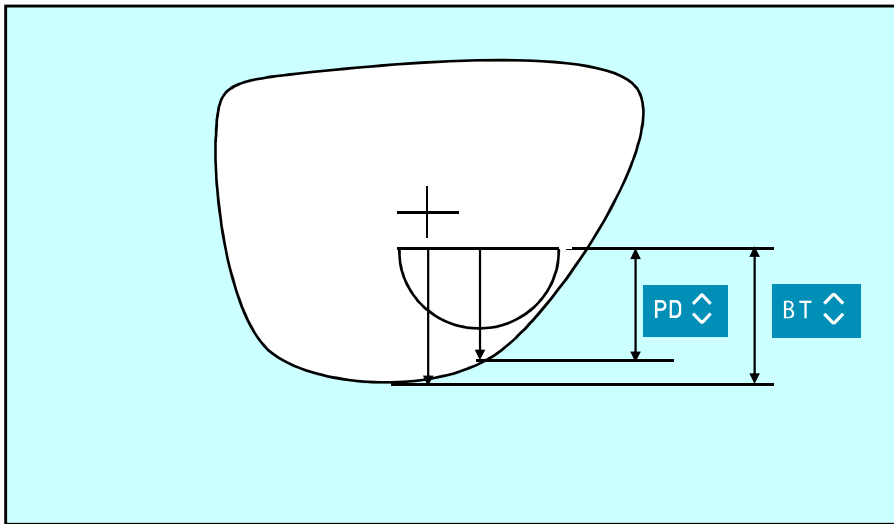
 : The vertical distance between optical center and frame center

 : The shortest vertical distance from optical center to outline of lens shape

 : The crossing distance from optical center to the lowest point of the bottom of lens shape

 : The crossing distance from optical center to the lowest point of the bottom of nasal points

3.2.2 Bi-focal lens



PD : The distance between straight line point downside of lens shape and center point of distinguished line upside

BT : The center level height from the lowest point of lens shape to center level height of distinguished line upside

Chapter 4. Edging

4.1 Standard edging(Beveling)

4.1.1 Automatic edging

1) Choose edging conditions



2) Fix the lens to adaptor

Push leap cup and push  and

fix the lens, as keeping the standard point of leapcup to the standard point of adaptor.

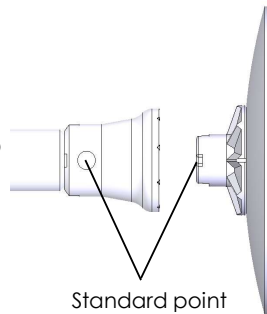
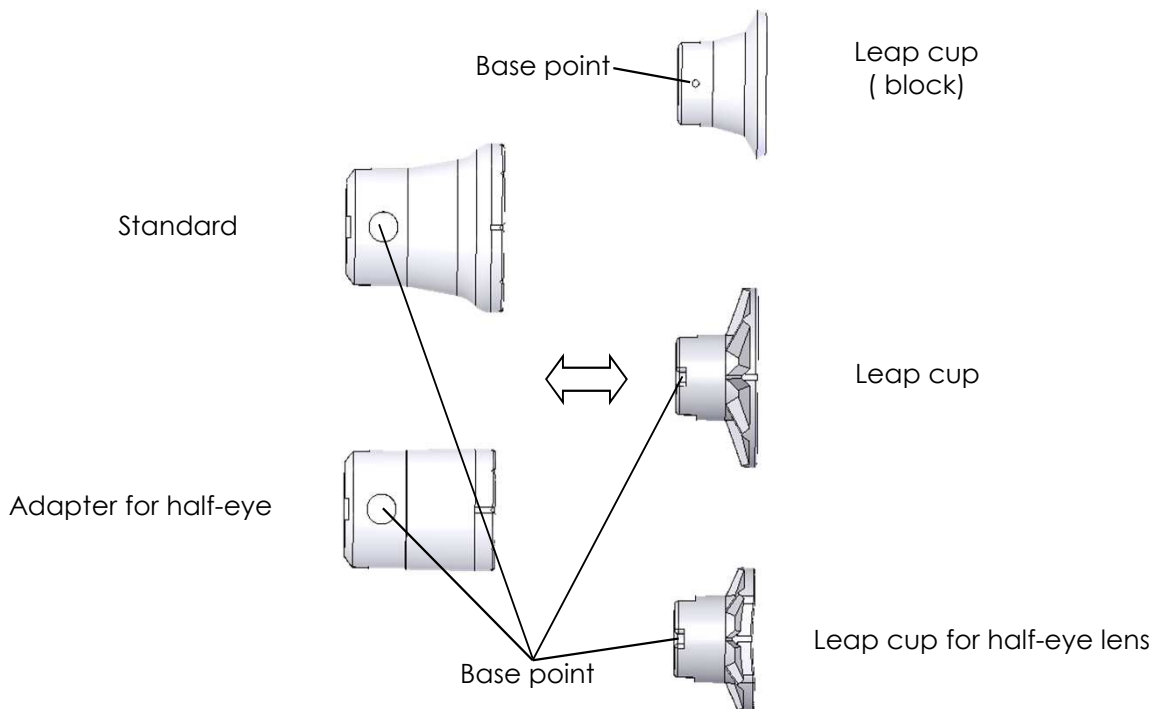



Fig.14 Fixing lens

Note) Edge the lens after keeping the standard points always ,otherwise precise edging may not be able to be made.



3) Push  and start edging

Measure lens thickness



Rough edging

(Switched to the screen of beveling shape)



Delicate edging



When choose  polishing)



When choose ( Chamfering)



Edging is done(switched to home)

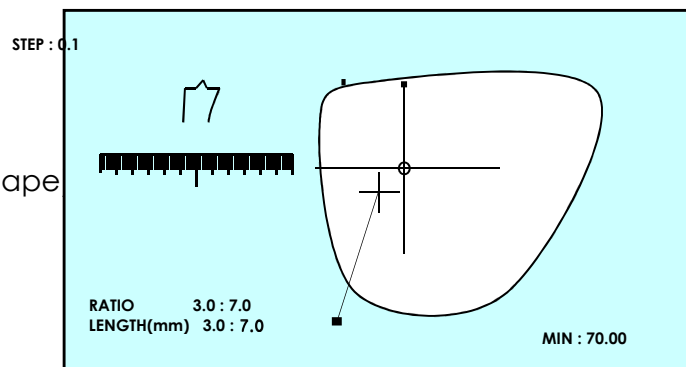



Fig.15 Screen of beveling shape

4) Pull complete lens out

Open sliding cover and take the lens , push  key and pull lens out.



Warning

Pull lens out after opening sliding cover and the wheel is stopped throughly. The operator may be able to be injured by the breakage or broken frictions when lens is fallen to wheel if take the chuck off on condition that wheel is not stopped throughly.



Warning

Be sure to close sliding cover certainly before start edging.

Edging may not be able to be worked as sliding cover is not closed.

Don't open sliding cover during edging.

The operator may be able to be injured eye by the edging frictions simply because the edging is not to be stopped though sliding cover is open during edging.


4.1.2 Data Controlled Edging

1) Choose edging conditions



2) Fix lens to adaptor

Ref.) Article 2 of 5.1.1. Automatic edging

3) Push  and start edging

Measuring the thickness of lens and switched to simulation screen and system is to be stopped.

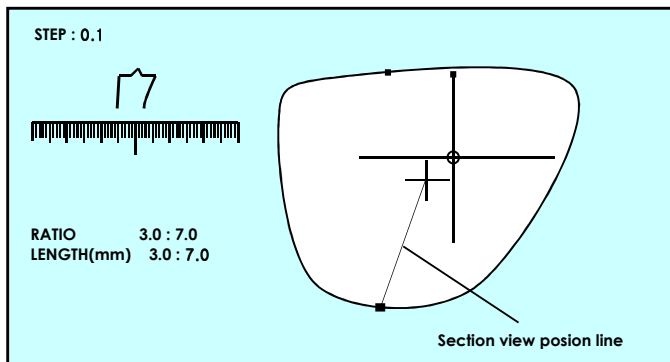


Fig.16 Screen of beveling shape

*The steps on screen indicates the volume of increments, decrements to enter

and may be able to be switched to 0.01, 0.1, 0.5 by pushing  key

* MIN means minimum sized lens to be edged.


Ratio : Bevel ratio

Scale : "A" thickness

Total : ?

Section "B" : lens thickness (minimum / maximum)

4) Simulate beveled section

 : Position line of section viewing is rotated clockwise.

 : Position line of section viewing is rotated unclockwise.

Push  or  again to stop the position line of section viewing

Move the position line of section viewing to the thinnest place of 

lens edge and to the thickest place of lens edge in turns by pushing

5) Regulate beveling position

Beveling position may be able to be regulated in RATIO and LENGTH both.

RATIO means the rate from lens thickness to beveling position.

LENGTH means the distance from lens inside to beveling.

To begin with, confirming the position line of

section viewing, push  and activate screen

and push  or  and then the figures

may be able to be changed.

RATION and LENGTH may be able to be switched

by  

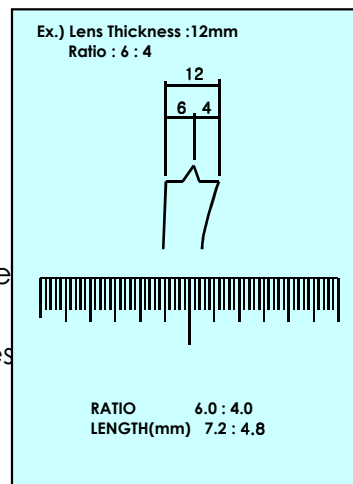


Fig. 17

Be sure to be careful to use LENGTH function simply because it is only useful for describe delicate functions, which RATIO function may not be able to describe.


6) Push  again and start edging.

Rough edging




Delicate edging



Polishing (When choose )




Chamfering (When choose )



Edging is done(switched to home)

7) Pull complete lens out

Open sliding cover and take the lens , push  key and pull lens out.



Pull lens out after opening sliding cover and the wheel is stopped throughly.
The operator may be able to be injured by the breakage or broken frictions
when lens is fallen to wheel if take the chuck off on condition that wheel
is not stopped throughly.

4.2 Optional edging

4.2.1 Edging by the frames

4.2.1.1 Rimless standard

1) Choose edging conditions



* No need selecting AUTO mode and CONTROLLED mode.


2) Fix lens to adaptor

Ref.) Article 2 of 5.1.1. Automatic edging



Warning

Be sure to close sliding cover certainly before start edging.
Edging may not be able to be worked as sliding cover is not closed.
Don't open sliding cover during edging.
The operator may be able to be injured eye by the edging frictions simply because the edging is not to be stopped though sliding cover is open during edging.

Push  and start edging

Measure lens thickness




Rough edging



Delicate edging



Polishing (When choose )



Chamfering (When choose )



Edging is done(switched to home)



Warning

Pull lens out after opening sliding cover and the wheel is stopped throughly.
The operator may be able to be injured by the breakage or broken frictions

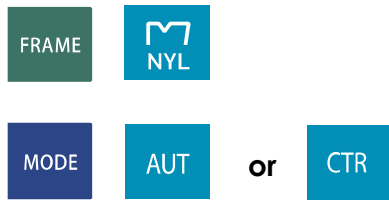
when lens is fallen to wheel if take the chuck off on condition that wheel is not stopped throughly.

* Additional grooving

Grooving may be able to be supplemented additionally for the edged lens of rimless standard.

However eliminating leap cup from lens or changing R/L or change FPD/PD or paging data of the other frames may not be worked.

1) Choose edging conditions



2) Fix lens to adaptor

3) Push  and then switched to simulation screen.

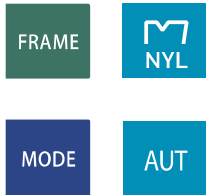
4) Check the section out and regulate length or width.

5) Push  and start edging.

4.2.1.2 Grooving

(A) Automatic edging

1) Choose edging conditions



* Glass edging is not available in grooving.

2) Fix lens to adaptor

Ref.) Article 2 of 5.1.1. Automatic edging

3) Push  and start edging.

Measure lens thickness




Rough edging

(Switched to the screen of beveling)



Delicate edging



Polishing (When choose )



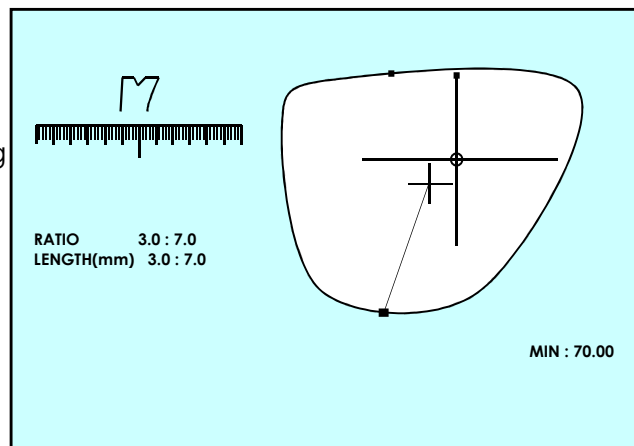
Grooving




Chamfering (When choose )



Edging is done (switched to home)



Openign sliding cover and seizing lens, push  and pull lens out.



Pull lens out after opening sliding cover and the wheel is stopped throughly. The operator may be able to be injured by the breakage or broken frictions when lens is fallen to wheel if take the chuck off on condition that wheel

is not stopped throughly.



Be sure to close sliding cover certainly before start edging.

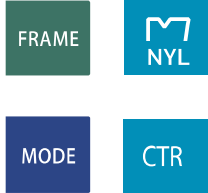
Edging may not be able to be worked as sliding cover is not closed.

Don't open sliding cover during edging.

The operator may be able to be injured eye by the edging frictions simply because the edging is not to be stopped though sliding cover is open during edging.

(B) Controlled Edging

1) Choose edging conditions

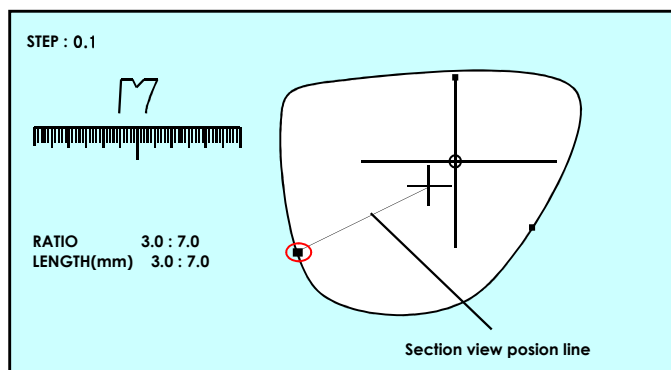



2) Fix lens to adaptor

Ref.) Article 2 of 5.1.1. Automatic edging

3) Push  and start edging.

Screen is to be switched to simulation screen after measuring the thickness of lens and then system is to be stopped.




*The steps on screen indicates the volume of increments,decrements to enter and may be able to be switched to 0.01, 0.1, 0.5 by pushing  key

* MIN means minimum sized lens to be edged.

* Base ratio is 3:7 under controlled mode.

4) Do simulation of bevel section.

 : Position line of section viewing is rotated clockwise.

 : Position line of section viewing is rotated unclockwise.

Push  or  again to stop the position line of section viewing.

Move the position line of section viewing to the thinnest place of 

lens edge and to the thickest place of lens edge in turns by pushing **SELECT**

5) Regulate beveling position

Beveling position may be able to be regulated in RATIO and LENGTH both.

RATIO means the rate from lens thickness to beveling position.

LENGTH means the distance from lens inside to beveling.

To begin with, confirming the position line of

sectional part , push **SELECT** and activate screen

and push **+** or **-** and then the figures

may be able to be regulated.

RATIO and LENGTH may be able to be switched

by  

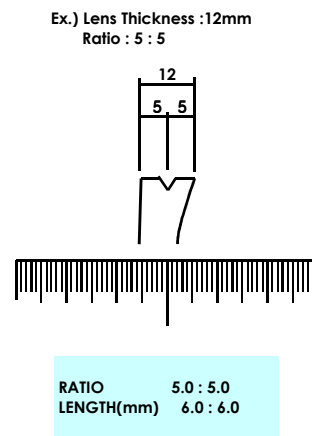


Fig. 17

Be sure to be careful to use LENGTH function simply because it is only useful for describe delicate function ,whch RATIO function may not be able to describe.

6) Push  again and start edging.

Roughing



Finishing edging




Polishing (When choose )



Grooving



Chamfering (When choose )



Edging is done (switched to home)

7) Pull complete lens out

Open sliding cover and take the lens , push  key and pull lens out.



Pull lens out after opening sliding cover and the wheel is stopped thoroughly.
The operator may be able to be injured by the breakage or broken frictions

when lens is fallen to wheel if take the chuck off on condition that wheel is not stopped throughly.


4.2.2 Classifications by lens

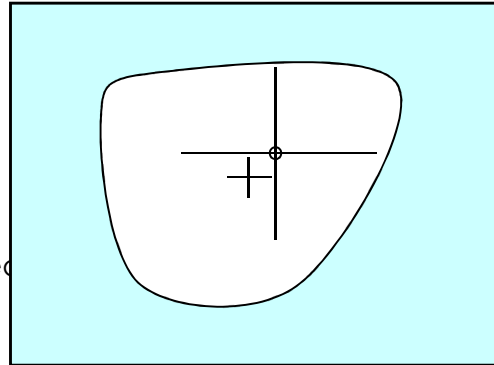
4.2.2.1 EX lens edging

1) Choose edging conditions



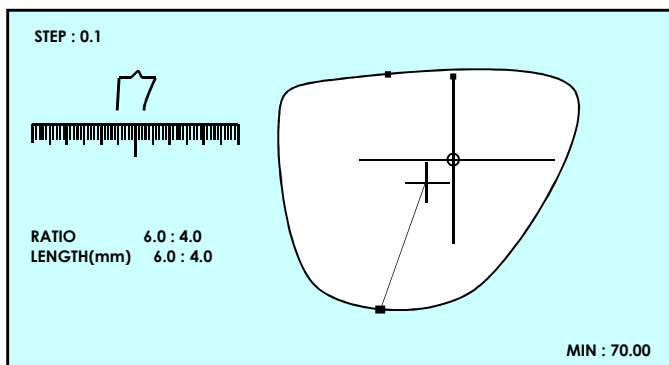
2) Fix the lens to adaptor

Push leap cup forward and push  and fix the lens, as keeping the standard point of lens to the standard point of adaptor.



3) Push  and start edging

Screen is to be switched to simulation screen after measuring the thickness of lens and then system is to be stopped.



 : Position line of section viewing is rotated clockwise.

 : Position line of section viewing is rotated unclockwise.

Push  or  again to stop the position line of section viewing

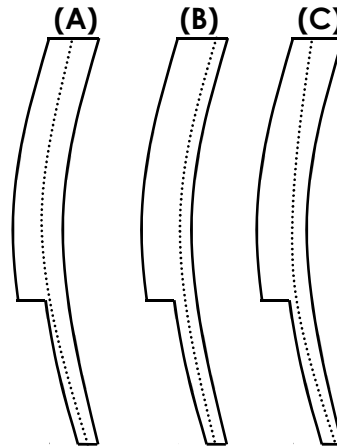
Move the position line of section viewing to the thinnest place of



lens edge and to the thickest place of lens edge in turns by pushing **SELECT**

It is not available to get good shape of lens by standard bevel edging because of level differences between near point and far point like Fig.18 in case of EX Lens. FIG.17(A)

Therefore it is necessary to regulate the curves voluntarily like Fig.17 (B),(C) and may be able to get the curve of desired shape.



1) Choose conditions

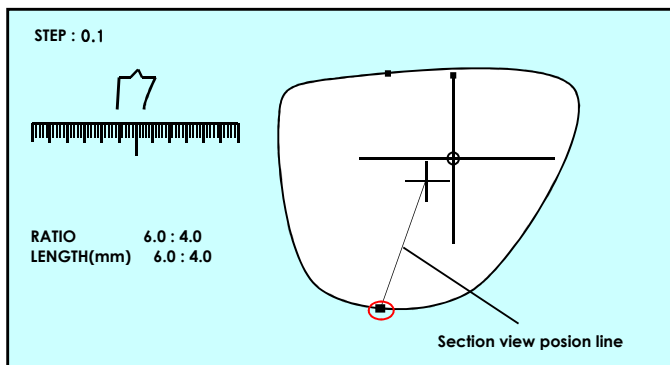
Choose **EX**

2) Fix the lens to adaptor

3) Push  and start edging

Fig.17

Screen is to be switched to simulation screen after measuring the thickness of lens and then system is to be stopped.



Position section viewing line at the thickest place of lens.

Push **SELECT** and switch to LENGTH by   and try to regulate with



Push **SELECT** again and try to rotate  or  section viewing line

and check bevel position is off the track from lens.

Section viewing line is supposed to be stopped at the position off the track automatically if bevel position is off the track.

Try again to get the desired shape by regulating RATIO or LENGTH and do over

again.

Position section viewing line at the thinnest place of lens.

4.2.3 Edging by the functions

4.2.3.1 Frame change edging

This job is worked for using existing lens to new frame.

1) Trace new frame

2) Page new traced data

Traced frame turns up in dotted line at the screen

3) Push frame change mode **FC**

4) The lens by suction cup

4-1) Mark optic center and horizontal direction with lensmeter.

4-2) Fix lens to leap cup with blocker

5) Trace lens

Refer to 3.6 dummy lens tracing

Traced lens shape turns up in thick line at the screen.

6) Check lens size is larger enough than frame out and regulate data in order that lens and frame may not be crossed.

Ref.

Regulating data are available in PD,SIZE.

Scale change of whole size, size change of left/right, size change of up/down are available in SIZE.

7) Take lens off from lens setting part and fix lens to edging unit.

8) Edges lens

Ref.

DATA SET key is not working while frame change mode is going on.

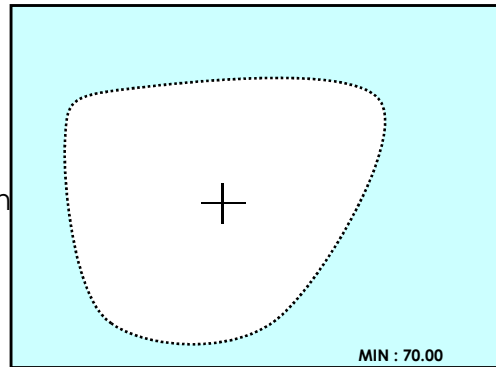
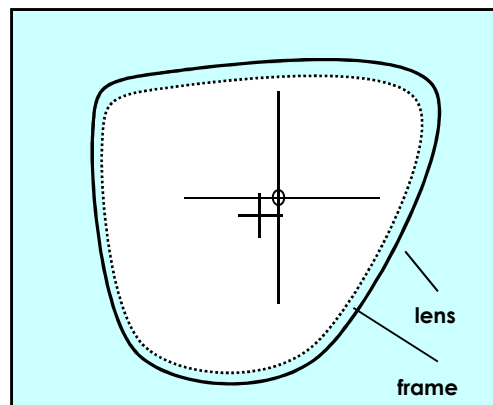
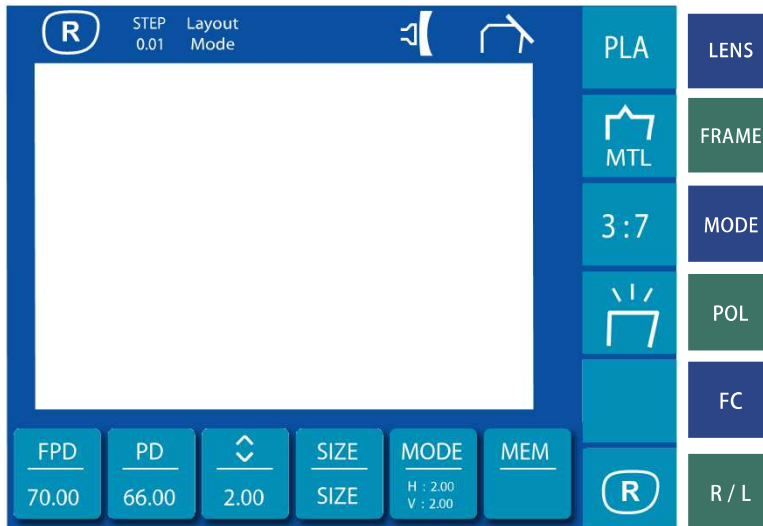


Fig.19



4.2.3.2 Safety mode edging

Fast mode is to be switched to safety mode if press **LENS** key for 3 seconds. Safety mode may be able to edge more safely.

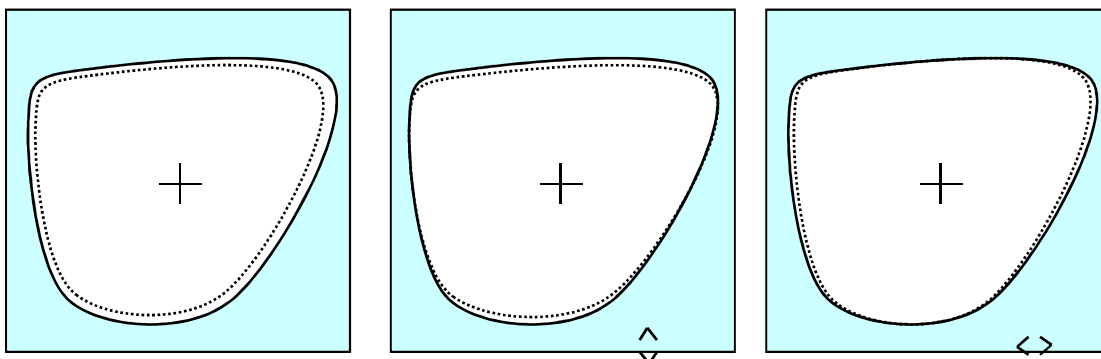


4.3 Checking lens size out and correction

- 1) Check lens size out after edging.
- 2) It is requested to correct size if lens size is larger.
- 3) Correcting lens size

Be able to try versatile size change after position the cursor on SIZE of

main screen and push **SELECT**



(SIZE)

(SIZ)

(SIZ)

Chapter 5. Store data and use

5.1 Data store and use



5.1.1 Store data

Push  and transmit traced data to screen.



Position cursor at , enter address to store by   (1~120)



Push  and store also push  to eliminate data.


5.1.2 Use of data

Position cursor at , enter address to store by   (1~120)

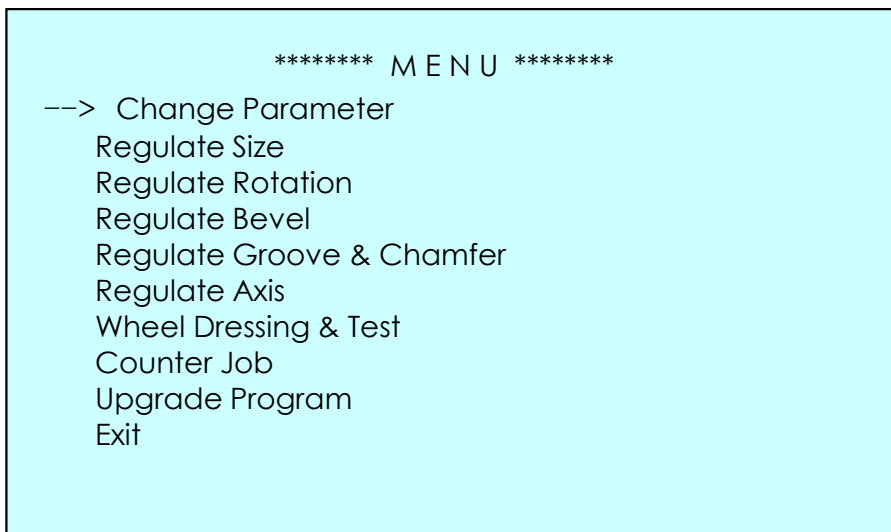


Push  and transmit traced data to screen.

5.1.3 Parameter Setting

Important data change may be able to made at 

Refer to MENU hereinafter specifically.



MENU Early screen

Use  to choose functions always.

1) Change Parameter

***** Change Parameter *****		
--> Initial Value of FPD	69.00	
Initial Value of PD	62.00	<--
Height of Optical Center	2.0	
BiF Chuck Layout Hor	5.0	
BiF Chuck Layout Ver	5.0	
Bevel Polish	Yes	
Chamfering Mode	F&R	
Barcode Memory	No	
Check Cover Sensor	Yes	
Text Display	Yes	
Rework : Start from grooving	No	
Rework : Remove chamfering	No	
Tracing Mirror Image	R	
Network Address	No	
Exit		

* Initial Value of FPD : Means FPD value, early assigned

* Initial Value of PD : Means PD value, early assigned

* Height of Optical Center : Means vertical distance between optical center and frame center

* BiF Chuck Layout Hor : Horizontal distance at near part side from bi-focal lens

* BiF Chuck Layout Ver : Vertical distance at far part side from bi-focal lens

* Bevel Polish : Means bevel polishing is available or not

* Chamfering Mode : Means chamfering is available or not

* Barcode Memory : Means bar code function is working or not

* Check Cover Sensor : May check cover sensor is working and may not begin edging if chose YES and cover is open.

* Text Display : Shows text menu.

* Rework : Start from grooving :

If YES, rework begins from grooving and if NO, only last process are repeating.

* Rework : Remove chamfering : Choosing chamfer or not in case rework

2) Regulate Size : Necessary compensation value for regulating lens size

***** Regulate Size ***			
--> Finish Size	(PLA --> Bevel)	0.00	<--
	(PC --> Bevel)	0.00	
	(GLS --> Bevel)	0.00	
	(HPL --> Bevel)	0.00	
	(PLA ---> Flat)	0.00	
	(PC ---> Flat)	0.00	
	(GLS ---> Flat)	0.00	
	(HPL ---> Flat)	0.00	
		0.00	
	Finish Wheel Size Compensation	0.00	
	Polish Wheel Size Compensation	18.90	
	Minimum lens size for edging		

* Finish Size : Compensate finish edging values per lens materials

* Finish Wheel Size Compensation : Compensate if finish wheel is abraded

* Polish Wheel Size Compensation : Compensate if polish wheel is abraded

* Minimum Lens Size for Grinding

3) Regulate rotation : Necessary compensation value for regulating rotation

***** Regulate rortation *****			
	Roughing extra rotation		
-->	Finishing extra rotation	0	<--
	Polishing extra rotation	0	
	Grooving extra rotation	0	
	Chamfering extra rotation	0	
	PC lens extra rotation	0	
	Rotation limit	0	
	Exit	2	

*** Fundamentally roughing wheel is to be moved after edging and but in finish wheel edging the head is to rotated one more and finally in polishing the edgeing could be completed after 4 more rotations.

* Roughing Extra Rotation : Could add more head rotations

* Finishing Extra Rotation : Could add more head rotations

* Polishing Extra Rotation : Could add more head rotations

* Grooving Extra Rotation : Could add more head rotations

* Chamfering Extra Rotation : Could add more head rotations

* PC Lens Extra Rotation : Could add more head rotations

* Rotation Limit : Edge as much as rotations if edging is not done

4) Regulate Bevel : Necessary compensation values for regulating beveling

***** Regulate Bevel *****			
-->	Bevel Height Constant	0.98	<--
	Bevel Finish Position	0.00	
	Bevel Polish Position	0.00	
	CEL Frame SIZE (H/V)	0.00	
	CEL Frame SIZE (V)	0.00	
	Exit		

- * Bevel Height Constant : Grooving depth of bevel wheel
- * Bevel Finish Position : Compensate finished beveling position
- * Bevel Polish Position : Compensate finished polishing position
- * CEL Frame SIZE (H/V) : Compensate whole size of celluloid frames
- * CEL Frame SIZE (V) : Compensate vertical size of celluloid frames

5) Regulate Groove /Chamfer : Necessary compensation value for regulating beveling/chamfering

***** Regulate Groove & Chamfer *****			
Minimum lens width for Groove			
	Groove Depth	0.40	<--
	Groove Position	0.00	
	Groove Width	0.60	
	Chamfer Depth	1.50	
	Chamfer Position	0.00	
	Chamfer Width	< F >	0.00
		< R >	0.00
		<BVL, F>	0.00
		<BVL, R>	0.00
		<FLT, F>	0.00
Exit		<FLT, R>	0.00

- * Minimum Lens Width for Groove :
- * Groove Depth :
- * Groove Position : Compensate position of grooving wheel
- * Groove Width :
- * Groove Compensation Parameter : Compensate depth
- * Chamfer Depth :
- * Chamfer Position <F>, <R> : Compensate front /rear position

* Chamfer Width <BVL, F>, <BVL, R> : Compensate width

* Chamfer Width <FLT, F>, <FLT, R> :Compensate width

6) Regulate Axis : Necessary compensation value for regulating angle of axis

***** Regulate Axis *****		
-->	Groove Wheel Axis Compensation	0 <--
	Chamfer <F> Axis Compensation	0
	Chamfer <R> Axis Compensation	0
	Finish Wheel Axis Compensation	0
	Polish Wheel Axis Compensation	0
	Feeler <F> Axis Compensation	0
	Feeler <R> Axis Compensation	0
	Calibration Axis Compensation	-500
	Exit	

* Groove Wheel Axis Compensation :

* Chamfer <F>, <R> Axis Compensation :

* Finish Wheel Axis Compensation :

* Polish Wheel Axis Compensation :

* Feeler <F>, <R> Axis Compensation :

* Calibration Axis Compensation :

7) Wheel Dressing : Whell dressing mode

***** Wheel Dressing & Test *****		
-->	Water Feed ON/OFF	<--
	Wheel Dress ON/OFF	
	Groove Wheel ON/OFF	
	Movement Inspection	
	Exit	

* Water Feeding ON/OFF : Confirm pump is working

* Wheel Dressing ON/OFF : Confirm wheel is working

* Groove Wheel ON/OFF : Confirm wheels of groove and chamfer

* Movement Inspection : Contact Sensor Check

gauge encoder values check

head chuck pressure check

How to check

- ① " Movement Inspection" select
- ② "Head Contact Sensor Status --> 0 ON" are turned up and head is going down.
Contact sensor is OK if 4090 off turns up when you lift head up by hands.
Go to next step by pressing "select"
- ③ "Arm Contact Sensor Status --> 0 ON" turns up and chamfer wheel is going down.
Head sensor is OK if 4090 off turns up when you lift chamfer wheel down by the hands.
Go to next step by pressing "select"
- ④ "Check Encoder Values ---> 0 " turns up and gauge is going down.
Checking the figures by moving gauge to left and right by hands.
It's normal if more than "3000" turns up when moved to the end of left and right.
Go to next step by pressing "select"
- ⑤ "Did you install a Lens? (Yes->[+], No->[-])" turns up and head goes back to original position.
That's the MODE to check pressure by inserting pressure guage in to the middle of head.
Pressure differs from what lens are chosen from first MENU.
When press "No->[-]" and moves to MENU mode.

**8) Counter Job : Indicate the number of edged lens for each lens material
the number of polished,grooved,chamferd one too**

***** Counter Job *****		
--> Exit		
Glass	-->	00000 PCS
Plastic	-->	00002 PCS
Polica	-->	00000 PCS
Polish	-->	00002
Groove	-->	00000
Chamfer	-->	00000
Total	-->	

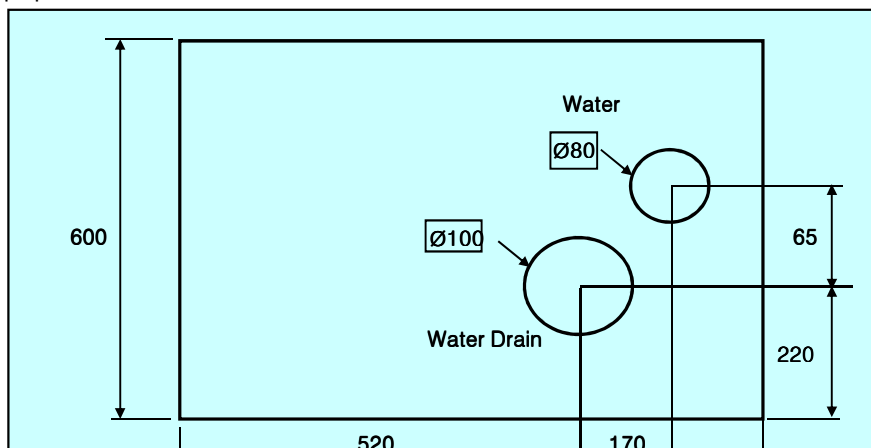
9) Upgrade Program

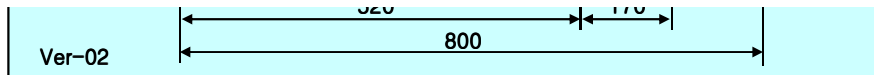
***** Upgrade Program *****	
--> Exit	
Waiting . . .	

Chapter 6. Installation and check, maintenance, cleaning

6.1 Installation

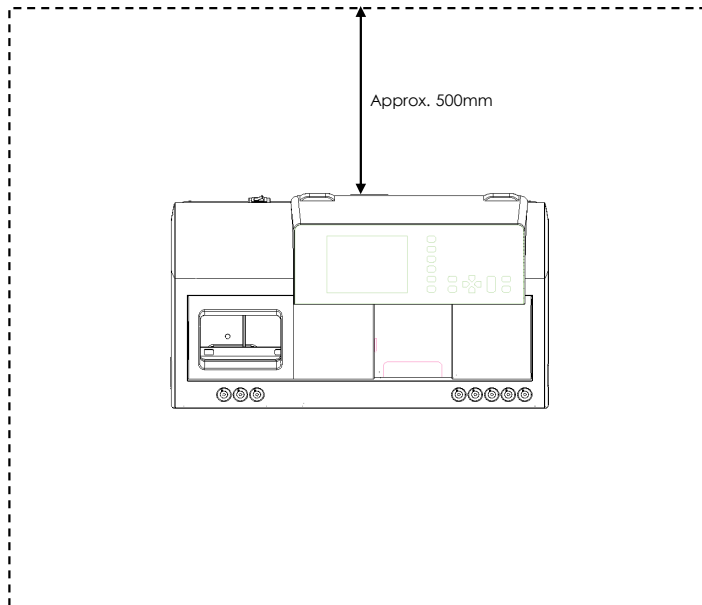
- 1) Temperatures to install : 5~40 , to store:-25~80
Humidity : 50~80%
- 2) Please be sure to avoid open place to sun light or in the place of high temperatures or humidity.
- 3) Please do not install or store in the palce near chemical materials or explosive materials.
- 4) Please do not install or store in the place near hot air baloon.
- 5) Please do not install or store in the place near water and do not handle with wet hands.
- 6) Please do not install or store in the place near with excessive shock or vibration.
- 7) Please do not install or store in the place with excessive dusts.
- 8) Please keep the distance more than 10Cm from wall not to shield the fan of rear side of the equipment.
- 9) Please be sure to place the equipment on the table which may be able to sustain the equipments' weight(40kg)
- 10) Please be sure to other materials like metals are not be gotten in the equipment inside.





6.2 Check

- 1) Be sure to check the equipment is off certainly before working and after.
- 2) It is necessary to check the equipment over all every two years.
- 3) It is necessary to secure enough space for check.



- 4) It is necessary to use rated fuse.(capacity 6.3A)
If not, not rated fuse could cause fire incidentally.
Make fuse holder free by using small-sized driver and switch fuse and then put holder back.
Please be sure to turn off power before switching fuse.If not it could cause electric shock.
- 5) Appropriate dressing sticks should be used otherwise may be able to give damage to wheels.
- 6) Never dress roughing wheel for edging plastic.
May be able to give damage to wheels.
- 7) It is necessary to change filthy water to clean water not later than 30days.
Filter or water delivery pipes may be able to be stuck.

6.3 Maintenance



Caution

- 1) Unplug if the machine is not working for a long period.
- 2) Cover tracing unit and edging unit unless the machine is not working to avoid dusts. Piled dusts may affect the accuracy and cause trouble.
- 3) Please be sure to do starting check before operation and finishing check after operation.
- 4) Please be sure to use appropriate dressing stick for wheel dressing. If not, it may cause damage for the wheel and not operate properly.
- 5) Please be sure to wear protection spectacles to do wheel dressing.
- 6) Keep enough water storage, 70%~80% of the tank capacity.
- 7) Replace dirty water with clean water.
- 8) It is recommended to replace wheels at every two years or after edging 2,500 pairs lenses. It is required to contact the authorized agency who handle this machine
- 9) Check tension of belts and make it tight.
- 10) Replace wheels when it is regarded worn out.
- 11) Replace water proof seals if the condition of seals are bad.
- 12) Put more grease on lens clamp axis, lens rotating axis.
- 13) Replace pipes if the pipe is cracked or stucked.
- 14) Put the accessories in the designated place not to lose or not to give damage.
- 15) Check adaptor of outlet is not be stucked with impurities.

6.4 Cleaning

- 1) Clean pins of power plug with dried fabrics from time to time.
- 2) Keep local wastes handling regulations when dispose wastes.
- 3) Clean edging unit with soft brush and clean water after operation.
Be careful the water is not be soaked or penetrated into machine inside.
- 4) Take dusts off from the accessories after operation.
- 5) When outside panels or the surface of machine became dirty ,
clean dirty part with soft fabrics with neutral detergent.
Don't use organic chemistry detergents like solvent at all.
- 6) Cover the machine well to prevent from live small-sized animals like rats.

Chapter 7. Safety



Warning : Means the risk which may cause dead or serious wound if the operator doesn't care.



Caution : Means the risk which may cause light injury or financial loss if the operator doesn't care.



Warning : Means the risk of electric shock

7.1 Caution while using



Warning

- 1) Do not touch the wheel absolutely while the equipment is working.
May be able to occur serious injury.
- 2) Do not open noise-proof cover certainly while the equipment is working.
Sludges edged may give serious hazard on eye.
- 3) Release chuck after the wheel is stopped thoroughly.
Sludges edged may give serious hazard if the lens is to be fallen on wheel and to be broken.
- 4) Stop the equipment right now if the cracks are found in wheels or lens.
- 5) Use the equipment only for the edging of lens.
Other uses may cause lowering the performance of the equipment or got damage by the broken wheels.



Caution

- 1) Do not dismantle or check it out without consent of experts .
May be able to cause damage by electric shock or breakdown.
- 2) System is down when abnormal condition is detected , at the same time, error message is turned up.
Turn off the power switch after confirming the error code.

- 3) Be careful to decide lens materials.
Wrong choice may break the lens and leesen the use expectancy of the wheels.
- 4) Be sure to chamfer both sides of lens otherwise it may be able to give hazards to hands.
- 5) Do not give excessive power to the stylus of tracing unit.
Stylus may be able to be bent or brocken and cause brakdown.
- 6) Be sure to fingers not to be held when you fix the lens to chuck.
- 7) Be sure to use cup remover from VISSLO when you take leapcup off lens and take the leap cup with soft fabric if take it by naked hands to avoid hazard against hands.
- 8) Be sure to the part of the body or other garbages not to be held in the working part of stylus while tracing.It may cause breakdown.

7.2 Transfer



Caution

- 1) Be sure to seize the metal part of the equipment bottom certainly and transfer by more than two persons.
- 2) Be sure to hands are not stuck between table and the equipment when put down the equipment.
- 3) Be sure to transfer after fixing the equipment fixing unit certainly like before installing.
Shock during transfer may be able to cause breakdown.
- 4) Be sure to use rated packaging materials to pack and then transfer.

7.3 Wiring



Caution

- 1) Do not take code wire but plug itself when take the plug off from power inlet.
Impaired code may be able to occur electric leakage or fire.
- 2) Contact the authorized personnel if the wires are peeled off after turning off.
- 3) Contact the authorized personnel after turning off if wire becomes too hot.
- 4) Be careful wires are not bent by heavy materials.
Damages on wire may cause electric leakage or fire.
- 5) Clean the pins of plug regularly.
Much dusts on the pins may cause electric leakage or fire.
- 6) Connect cord accurately till pin is fitted into the socket throughly.
Damages on wire may cause electric leakage or fire.
- 7) Turn off power right now if smells or smokes, sparks or sounds.
- 8) Do not load much to the one power cord.
Overloading may cause heat and fire.
- 9) Use suitable rated socket. If not it may cause electric leakage or fire.
- 10) Be sure to install earth.
If not it may cause electric leakage or fire.
- 11) Please be sure to keep to use LAN port in the building inside only.
- 12) If the equipment is used in a manner not specified by the manufacturer,
the protection provided by the equipment may be impaired.

Chapter 8. Error code

This system provide self-analysis functions by watching and checking always. Abnormal condition is detected,systeme is stopped automatically and following error codes turned up on the screen.
















Error code	Meanings
10	Head transfer(left/right) sensors or motor error
20	Head rotaing axis sensors or motor error
30	Head transfer(up/down) sensors or motor error
40	Chamfer load motor or standard sensor error(up)
41	Chamfer load motor or standard sensor error(down)
42	Chamfer load motor or standard sensor error(down)
50	Chamfer load motor or standard sensor error(up)
51	Chamfer load motor or standard sensor error(down)
52	Gauge sensor error
55	Gauge rotating sensor
60	Chuck motor error(Unchuck)
61	Chuck motor error(Chuck)
74	Main head gap sensor error
75	Main head gap sensor error
84	Chamfer arm gap sensor error

* Please refer to service manual how to handle the errors specifically.

Chapter 9. Usable environmental conditions

- Indoor use only
- Altitude up to 2000 m
- Operating temperature up to 40 °C
- Maximum relative humidity up to 80°C
- Mains supply voltage fluctuation up +/- 10% of
-The nominal voltage
- Transient over voltage category II
- Applicable rated pollution degree 2
- Degree of protection IPX0

Chapter 10. Symbol Description

Number	Symbol	Reference	Description
1		IEC 60417 - 5031	Direct current
2		IEC 60417 - 5032	Alternating current
3		IEC 60417 - 5033	Both direct and alternating current
4			Three-phase alternating current
5		IEC 60417 - 5017	Earth (ground) TERMINAL
6		IEC 60417 - 5019	PROTECTIVE CONDUCTOR TERMINAL
7		IEC 60417 - 5020	Frame or chassis TERMINAL
8		IEC 60417 - 5021	Equipotentiality
9		IEC 60417 - 5007	On (Supply)
10		IEC 60417 - 5008	Off (Supply)
11	IEC 60417 - 5172	Equipment protected throughout by DOUBLE INSULATION or REINFORCED INSULATION	
12			Caution, risk of electric shock
13		IEC 60417 - 5041	Caution, hot surface
14		ISO 7000 - 0434	Caution, risk of danger (See note.)
15		IEC 60417 - 5268	In position of a bi-stable push control
16		IEC 60417 - 5269	Out position of a bi-stable push control