

USER'S MANUAL | SILT LAMP

SL 1100



LUXVISION®
PRECISION INSTRUMENTS

Notification

Dear Users,

Thank you for your purchase of SL 1100 Slit Lamp. Please take time to read our user's manual carefully before use.

This guarantees you to make full use of this unit and prolongs the operation life of this unit.

Precautions

If you have detected abnormal heat, smoke, noise or smell, immediately stop using the product.

In the event of an abnormality, turn off the power and disconnect the power plug from the power socket. Continuing to use the product may result in electric shock or fire.

Observe the instructions given below regarding the power cable:

- Be sure to use the supplied or specified power cable.
- Do not modify, forcibly bend, kink or pull the power cable.
- When disconnecting the power cable from the AC outlet, be sure to hold the cable by the plug.
Pulling the cable may cause wire breakage or short circuit, resulting in fire or electric shock.
- Do not connect or disconnect the plug of the power cable to/from the AC outlet using wet hands.
Doing so may result in electric shock.
- Do not touch the product with wet hands while the power cable is connected to the AC outlet.
Doing so may result in electric shock.
- If the product will not be used for a long period, disconnect the power cable from the power source. Leaving the cable connected to the power socket for a prolonged period will consume electricity and may result in heating.

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1. Name of Parts

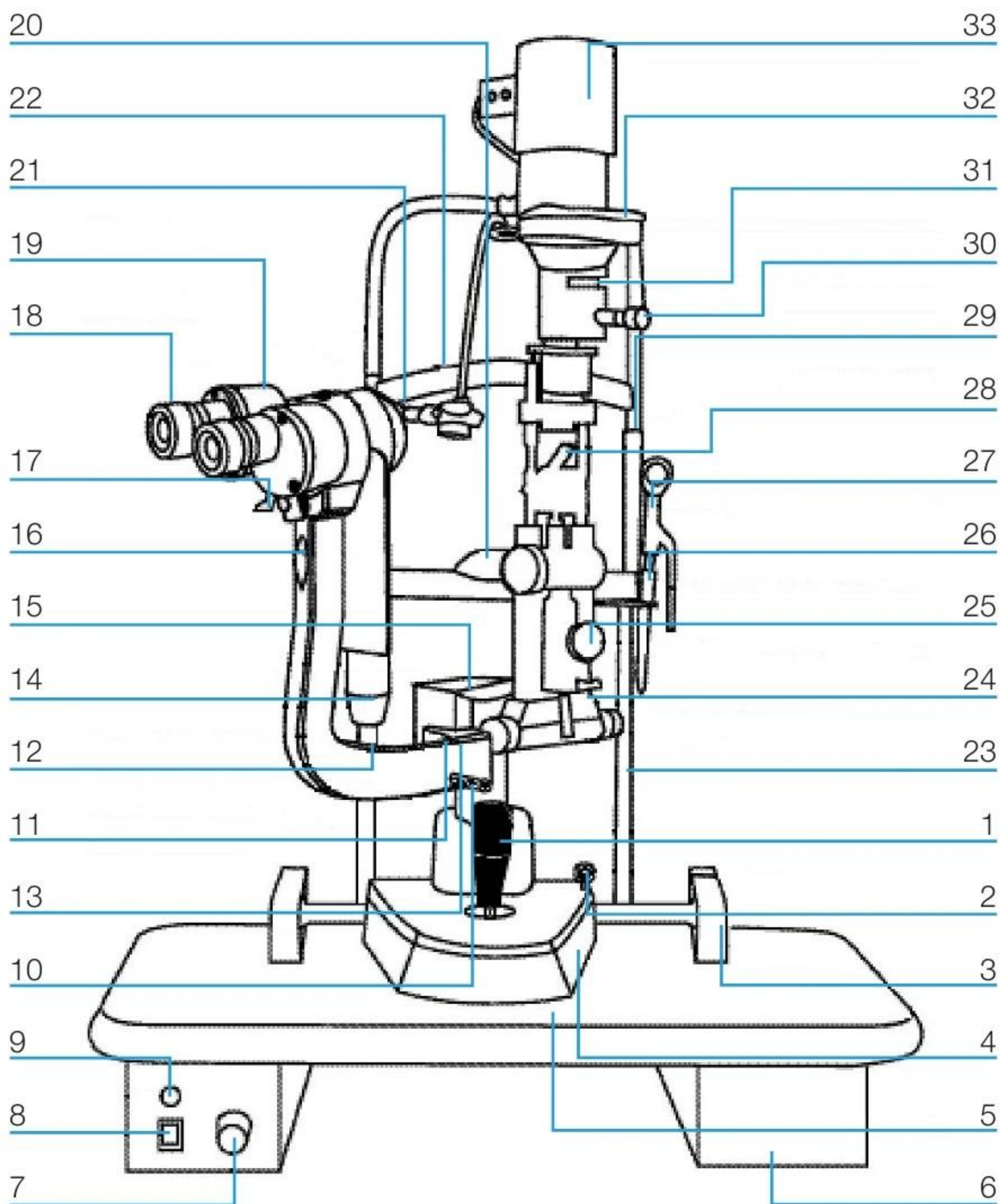


Fig. 1

1. Joystick

Incline joystick to move the instrument slightly on the horizontal surface and rotate it to adjust the elevation of the microscope.

2. Base Locking Screw

The base will be locked when fastening this screw.

3. Rail Cover

Protect the rail surface

4. Base

Support the microscope and the illumination arms with the joystick controlling its movement.

5. Work Table

6. Accessory Drawer

Store the focusing test rod and other accessories.

7. Brightness Control Switch

Three levels are available – H (HIGH), N (NORMAL), L (LOW). Avoid working continuously at high setting, as the service life of the bulb will be shortened.

8. Main Power Switch

9. Pilot Lamp

10. Microscope Arm Locking Knob

Lock the rotational movement of the microscope arm.

11. Angle Mark Ring

Marks on the angle mark ring of the illumination arm, which relates to the long mark of the microscope arm, represent the two arms angle. When the 0 on the ring relates to the short mark at one side of the user, the right eyepiece may be blocked, and the side of the patient the left eyepiece.

12. Chin-rest Elevation Adjustment Knob

Rotate the knob to adjust the elevation of the chinrest

13. Location Roller

When it is in the middle, it stands for included angle of 0 between the microscope arm and the illumination arm. And the right or left side the included angle of 10.

14. Microscope and Illumination Arm Couple Bolt

Fasten this bolt and the illumination arm and the microscope arm could rotate together in couple state. Loosen it and the illumination arm then can be rotate separately.

15. Hruby Lens Guide Plate

Also used as an assembly plate for the applanation tonometer.

16. Microscope Fixation Screw

17. Magnification Changer Lever

18. 10x Eyepiece

A 16x eyepiece is supplied as a standard accessory.

Pull out the eyepiece for changing .

19. Diopter Adjustment ring

Adjust the eyepieces diopter to obtain a sharp image before using the instrument.

20. Chin-rest

21. Fixation target

Two kinds of fixation targets are available. One is for diopter adjustment to help the patient to see the target clearly while the other is an illuminated fixed spot.

22. Forehead Belt

23. Slit Width Control Knob

The slit width is continuously adjustable within the range from 0 to 9mm.

The marks on the left knob stand for the approximate value of the width

24. Illumination Inclination Lever

Four 5 inclination stops are available – up to 20°.

25. Centering Knob

Loosening the knob allows the illumination light to be moved from the center of the vision field for indirect retro-illumination. Fastening the knob brings the illumination light back to the center.

26. Hruby Lens Holder

Used for observation of fundus and the posterior segment of vitreous body.

27. Hruby Lens Holder

28. Reflecting Mirror

Both long and short reflecting mirror are provided. The long mirror is routinely used for most examination procedures. The short mirror is used when the long mirror interferes with the observation pathway, such as during funduscopy.

29. Horizontal Mark

When the horizontal center of the patient's eye is in line with the mark, the elevation of the microscope controlled by joystick is also in its center position.

30. Aperture and Slit Height Control Knob

Rotate this knob to adjust the spot and the slit height. Swing the knob horizontally to revolve the slit.

31. Filter Selection Lever

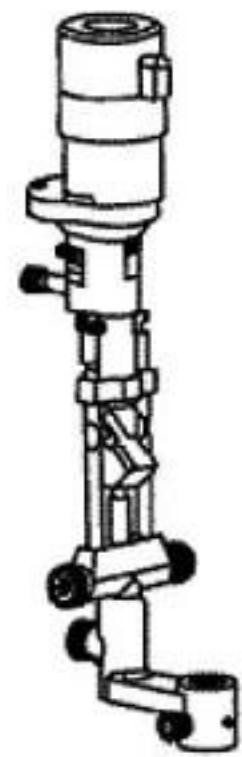
There are four filters for selections

32. Aperture Slit Height and Display Window

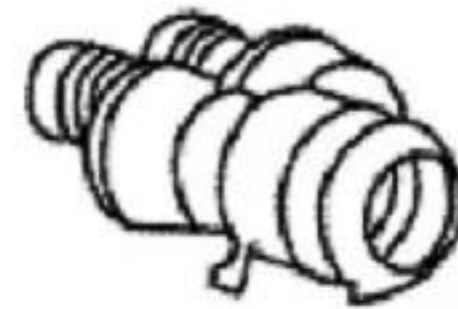
33. Lamp Cap

2. Assembly

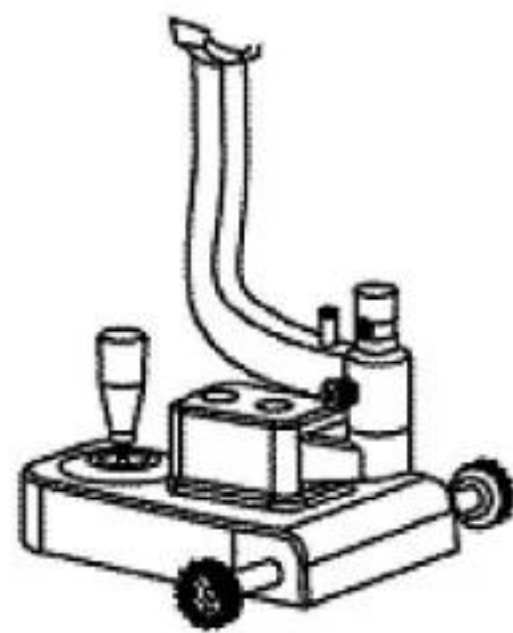
2.1 Components



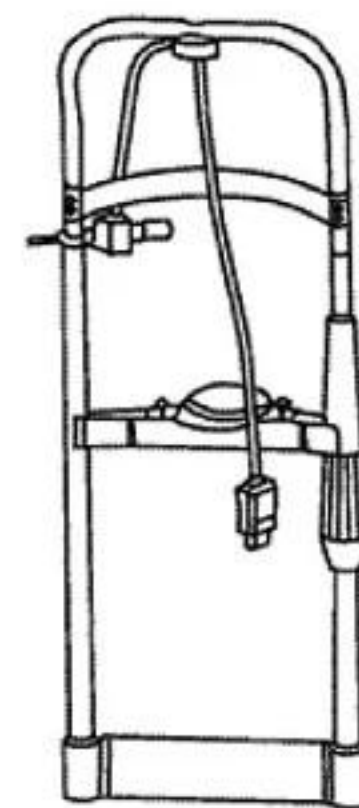
A



B



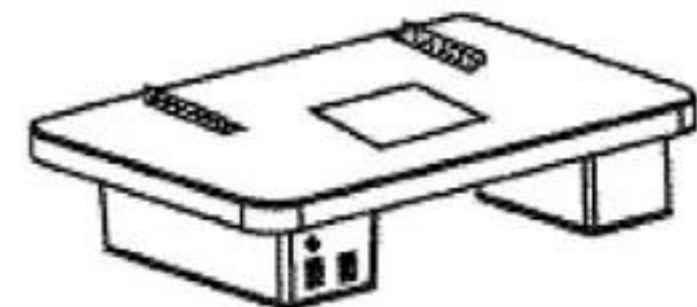
C



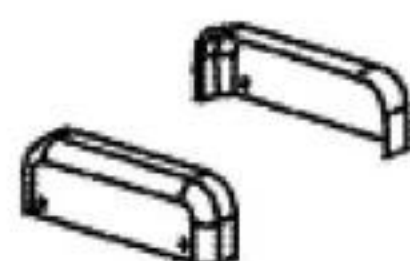
D



E



F



G



H



I



J



K



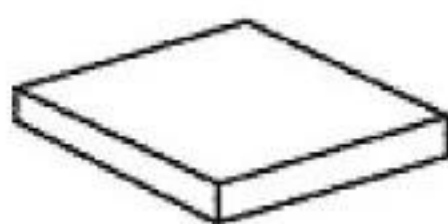
L



M



N



O



P



Q



R



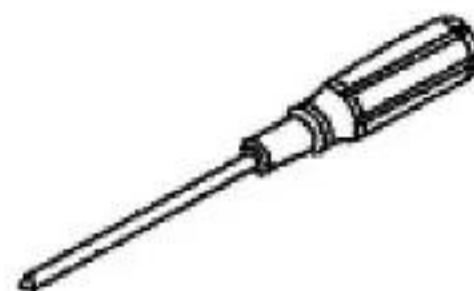
S



T



U



V



W



X



Y



Z

	Name	Quantity
A	Illumination Part	1
B	Microscope (with 10x eyepieces)	1
C	Base Part	1
D	Head-Rest Part	1
E	Breath Shield	1
F	Worktable with Power Box	2
G	Rail Cover	1
H	Input Power Cable	1
I	Hruby Lens	1
J	Hruby Lens Guide Plate	2
K	Spare Main Illumination Bulb	1
L	Chin-Rest Paper	1
M	Focusing Test Rod	1
N	16x Eyepieces	1
O	Dust-Proof cover	1*
P	Fixation Target	1
Q	Spare Long Reflecting Mirror	1
R	Spare Short Reflecting Mirror	1
S	Protection Cap	1
T	Spare Fuse	2
U	Brush	1
V	Watch Screw Driver with wood handle	1
W	Cross Screw Driver with wood handle	1
X	Watch Screw Driver (big)	1
Y	Watch Screw Driver (small)	1
Z	Spanner	1

(*Optionally available in some region)

2.2 Assembly Procedure

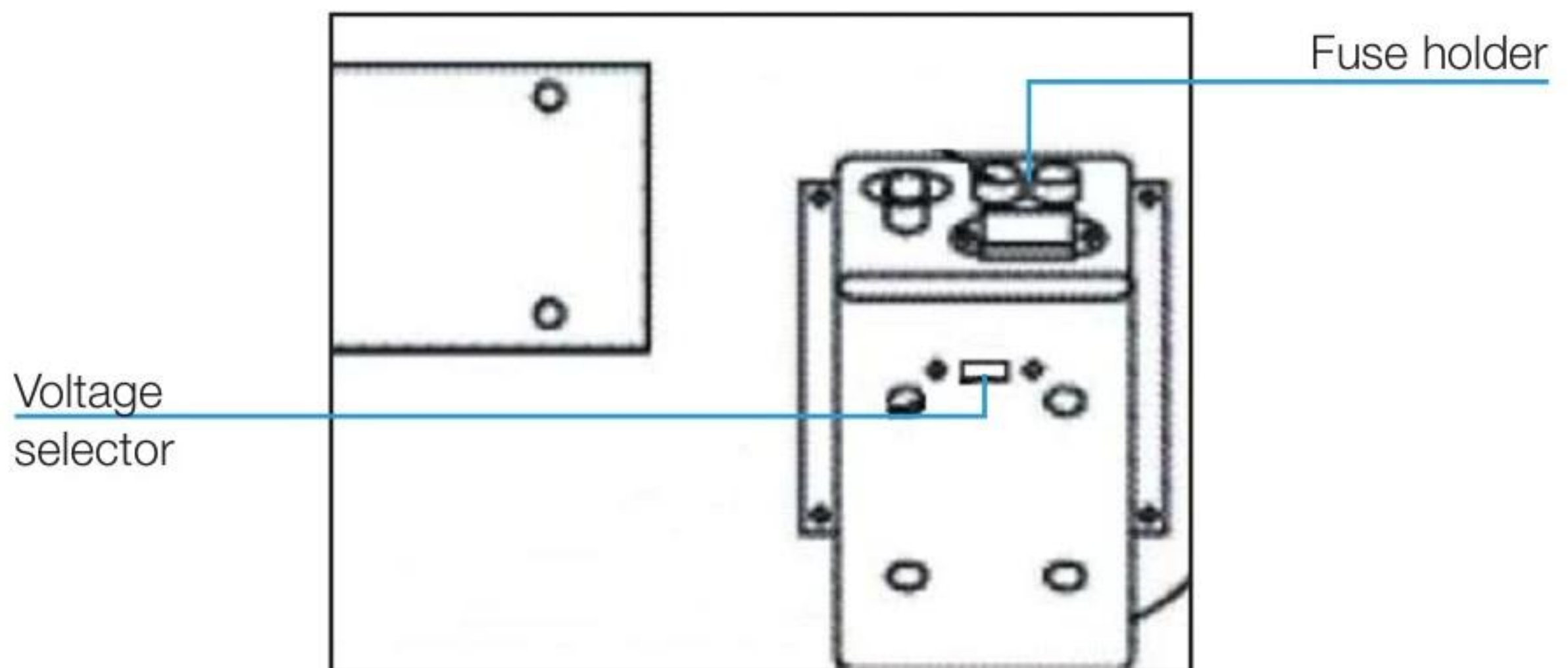
Necessary tools are as follows:

Phillips Screwdriver with wood handle (V)

Watch screwdriver (X)

Wrench (Z)

1. Selecting voltage and fuse



Selector voltage and fuse

- Check the setting on the voltage selector located on the bottom of the power box. If it doesn't match with the input voltage, slide it to the proper position with screwdriver (X).
- Open the fuse holder with screw driver (W) and take out the fuse, check and ensure that its rated value is corresponding to the mains voltage:

110 Volt.....1A
220 Volt.....0.5A

The 220 V- 0.5 A is installed by the factory.

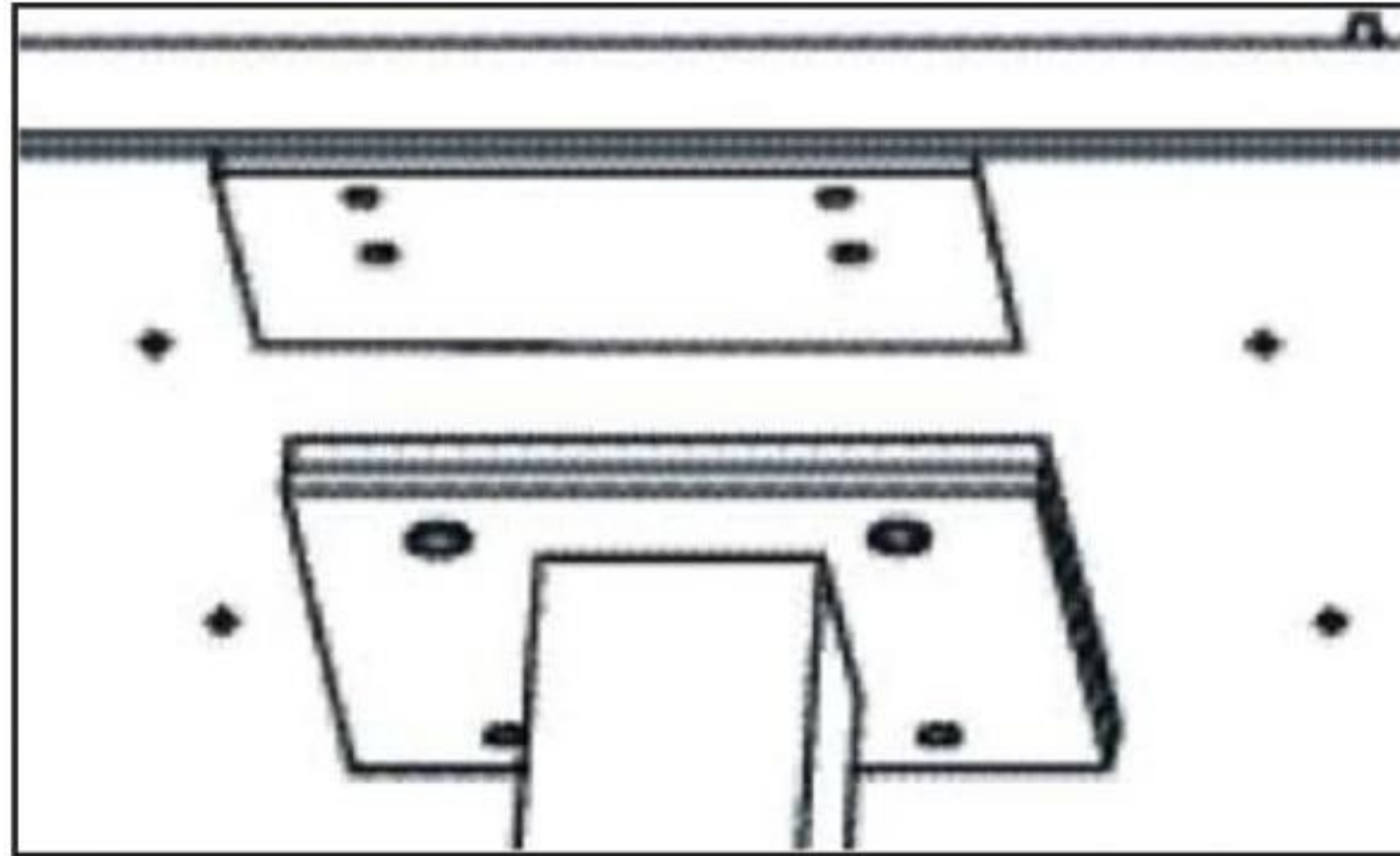
Important Matters

Set the input voltage and frequency of the instrument according to that of the mains.

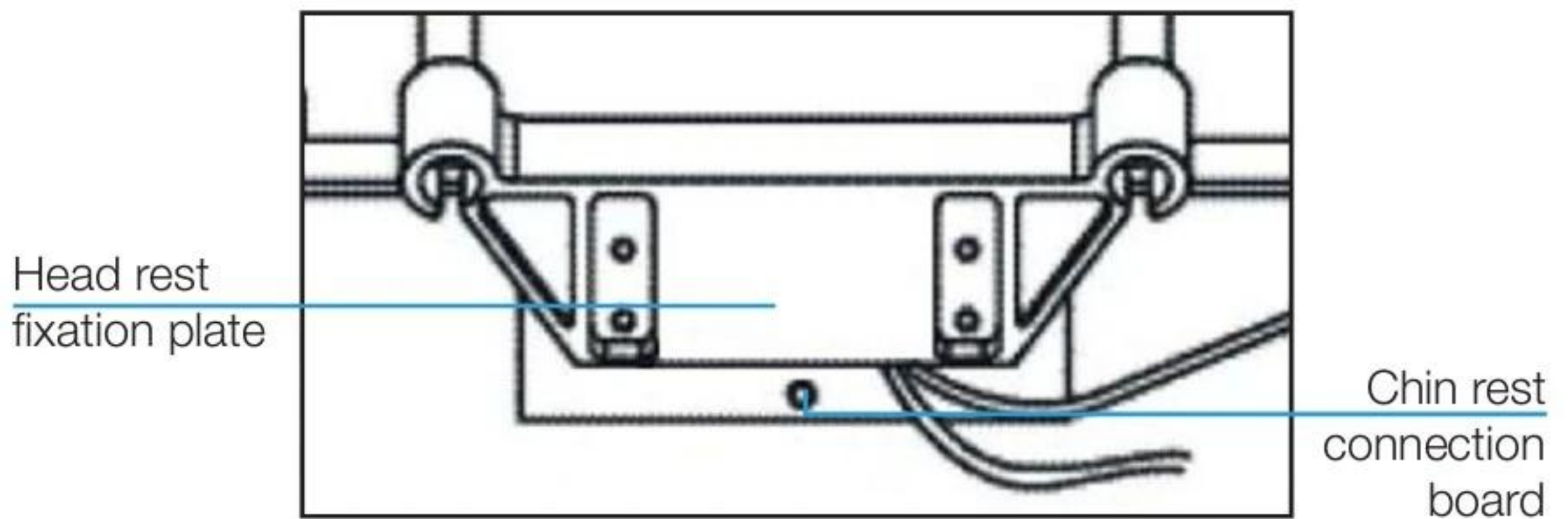
2. Assembling the worktable (F)

- To attach the worktable on the LSL1100 motorized instrument table, please unscrew the four M8x20mm bolts with spring washers with the wrench (Z).
- Align the worktable screw hole to the assembly hole of the instrument table.

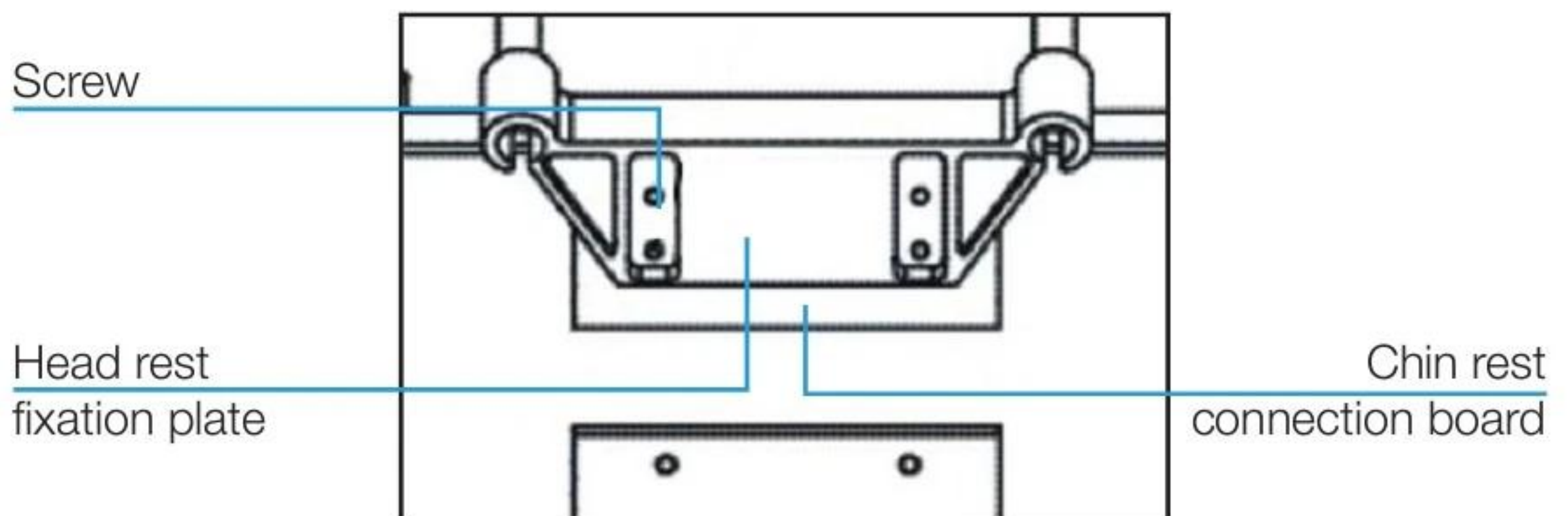
- Place the worktable so that the power panel faces the user, then refasten the bolt securely with the wrench.



3. Assembling the Head-rest Part (D)

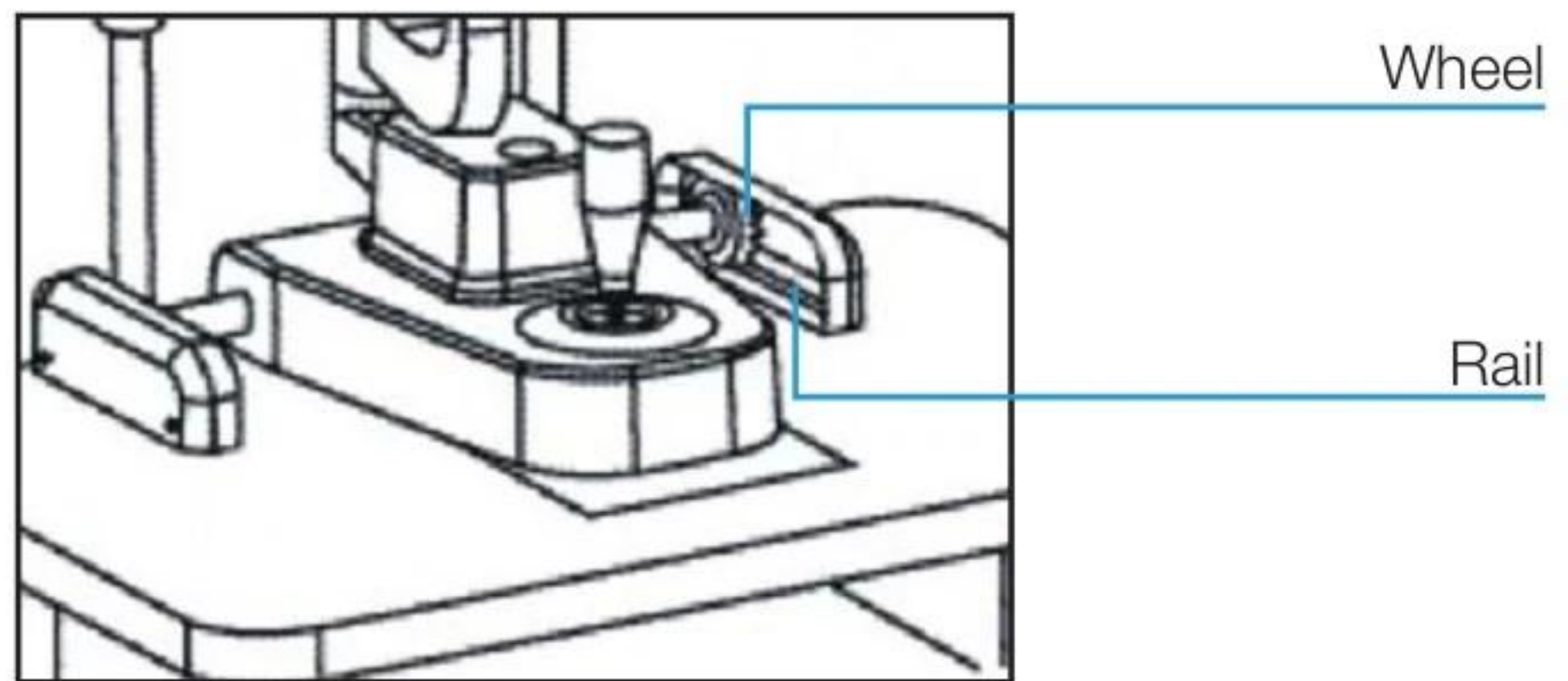


- Remove the four screws attached to the chinrest connection board with the screw driver (W).



- Put two cables in the gap between the headrest fixation plate and the chinrest connection board (Fig 5.)
- While ensuring they are not clamped, retighten the previously removed screws (Fig 6).

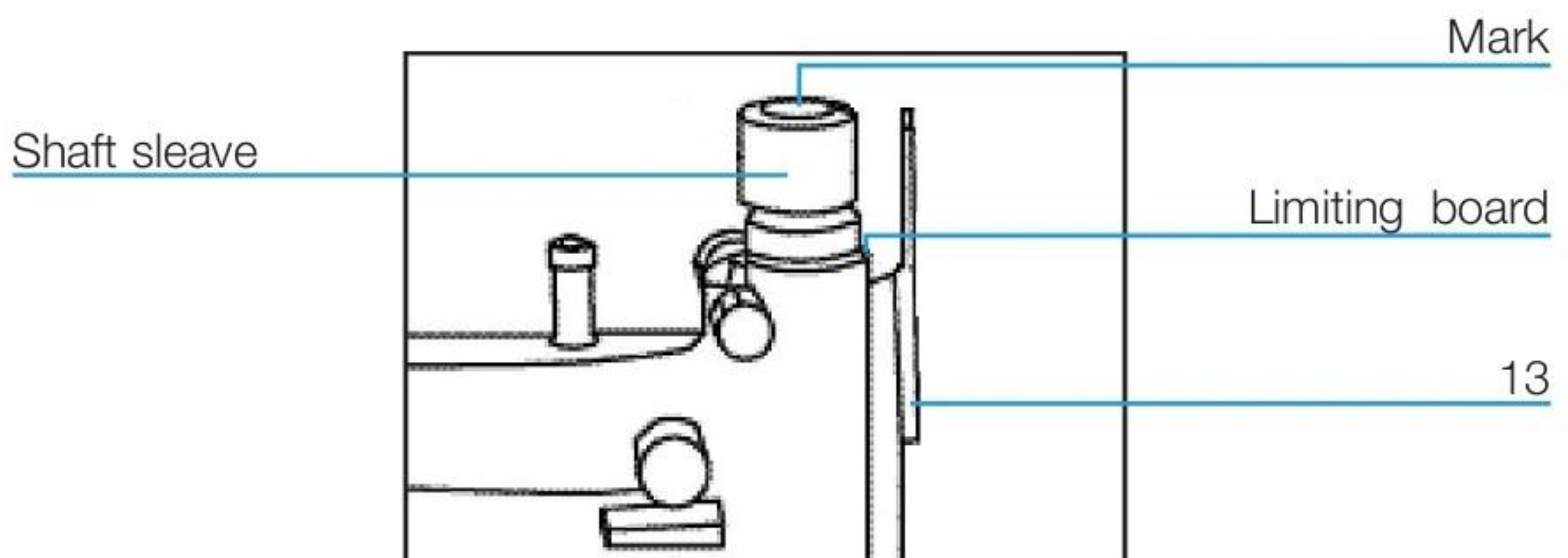
4. Assembling the base part (C) and the rail covers (G)



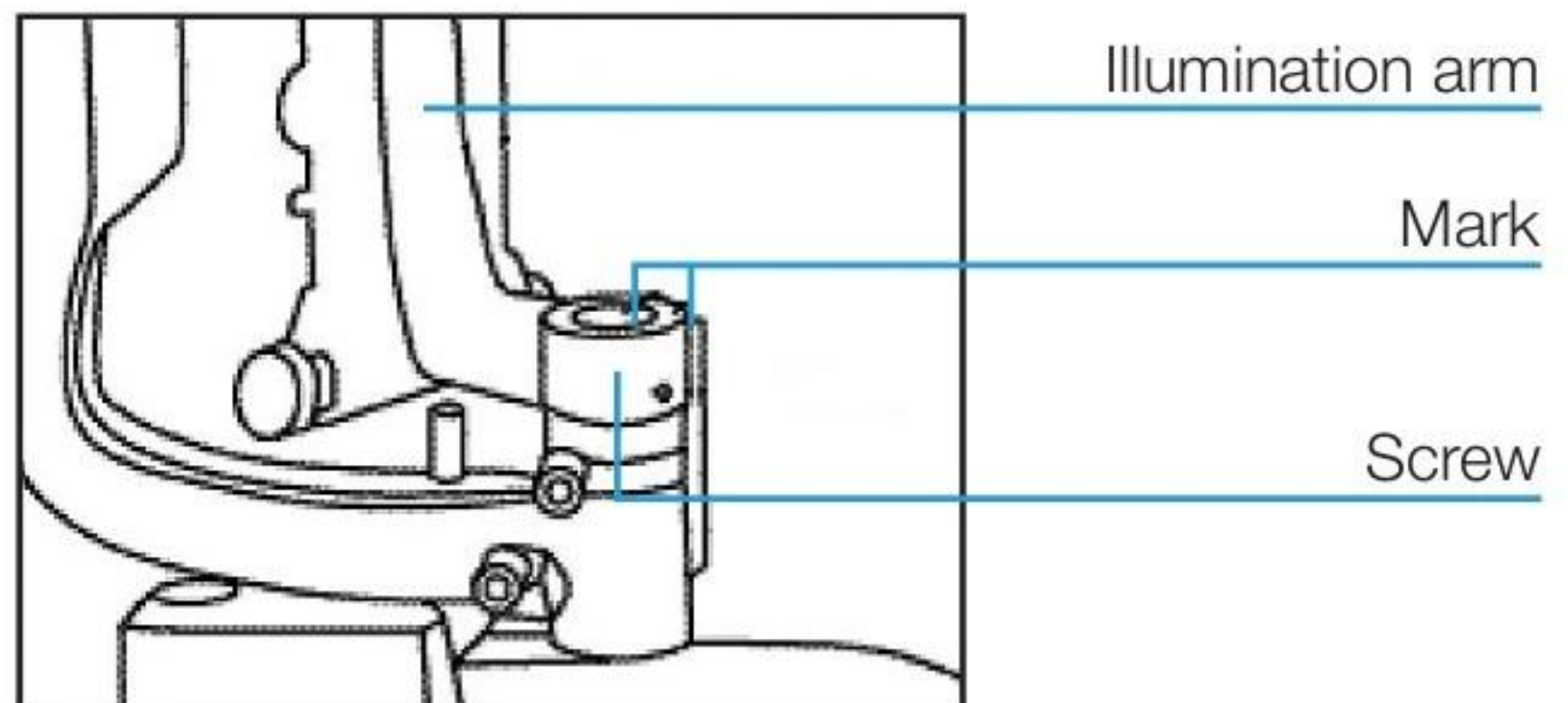
- Place the wheels of both sides of the base (C) on the rails on the worktable
- Check whether the wheels can be rolled smoothly on the rails.
- Remove the four screws attached to the rail with the screw driver (W).
- Place the rail cover (G) to the rail and retighten the previously removed screws.

5. Assembling Illumination part (A)

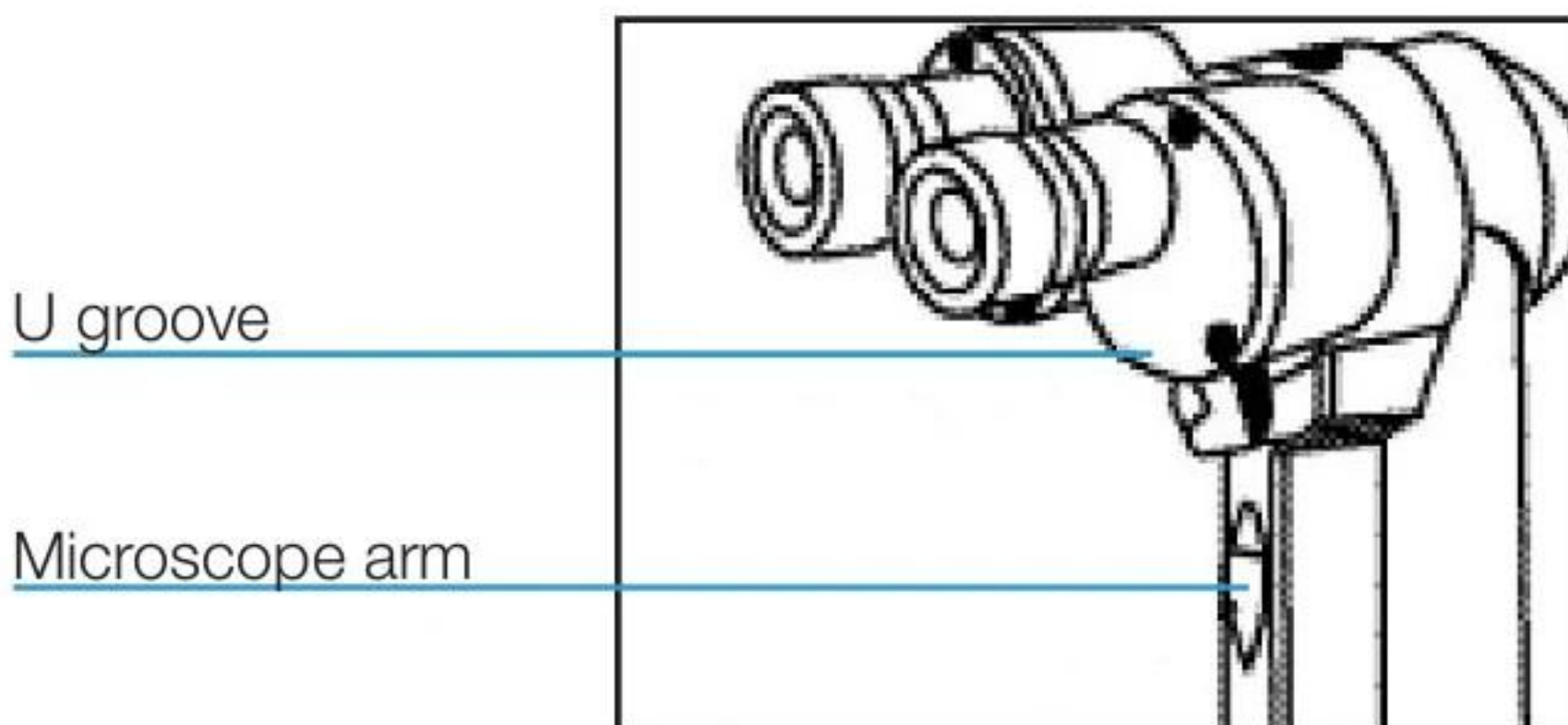
- Loosen the illumination arm bolt (13).



- Rotate the brass shaft sleeve to make the angle of the red mark and the illumination arm between 30° and 90°.
- Loosen the screw on the illumination arm with the screwdriver (R). Align the assembly hole of the illumination arm to the brass shaft sleeve and lower carefully, while simultaneously aligning the two red marks.
- After the two red marks are accurately aligned, retighten the screw.



6. Assembling the binocular tubes (B)

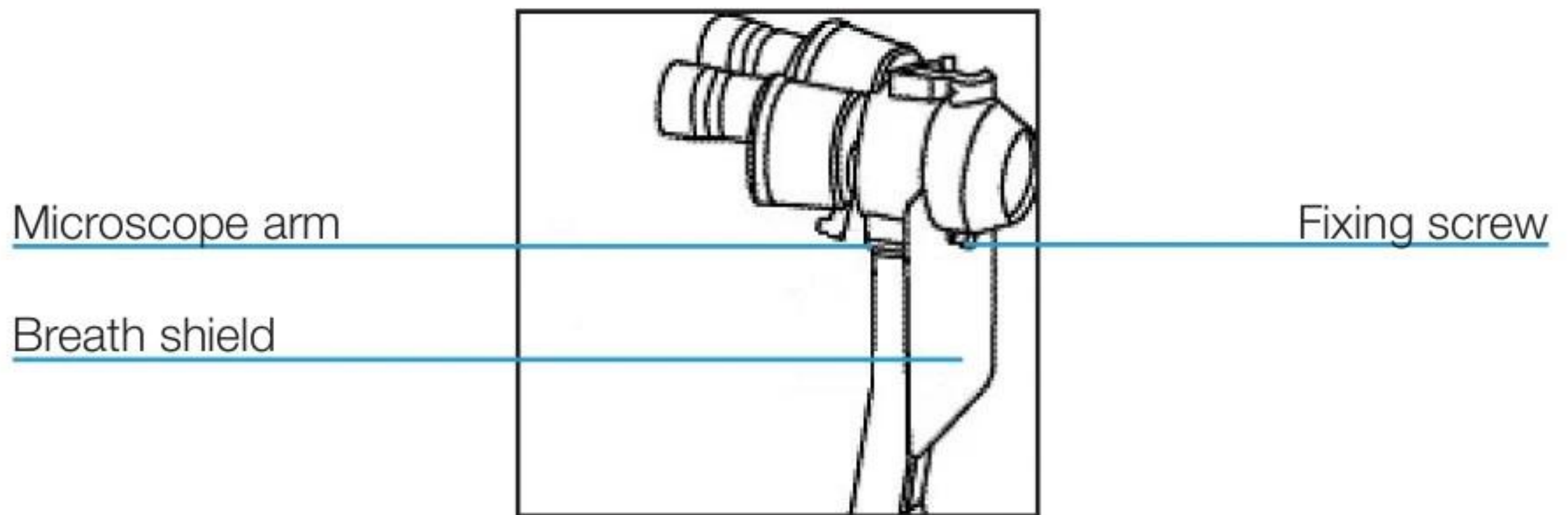


- There is a U-shape groove on bottom side of the of the of the microscope head. Hold the microscope and align it to the arm with the U-shape groove aligned to the location block on the microscope arm.
- Tighten the fixation screw (16) with the large screw driver (V) to fix the microscope.

7. Assembling the breath shield (E)

Important Matters

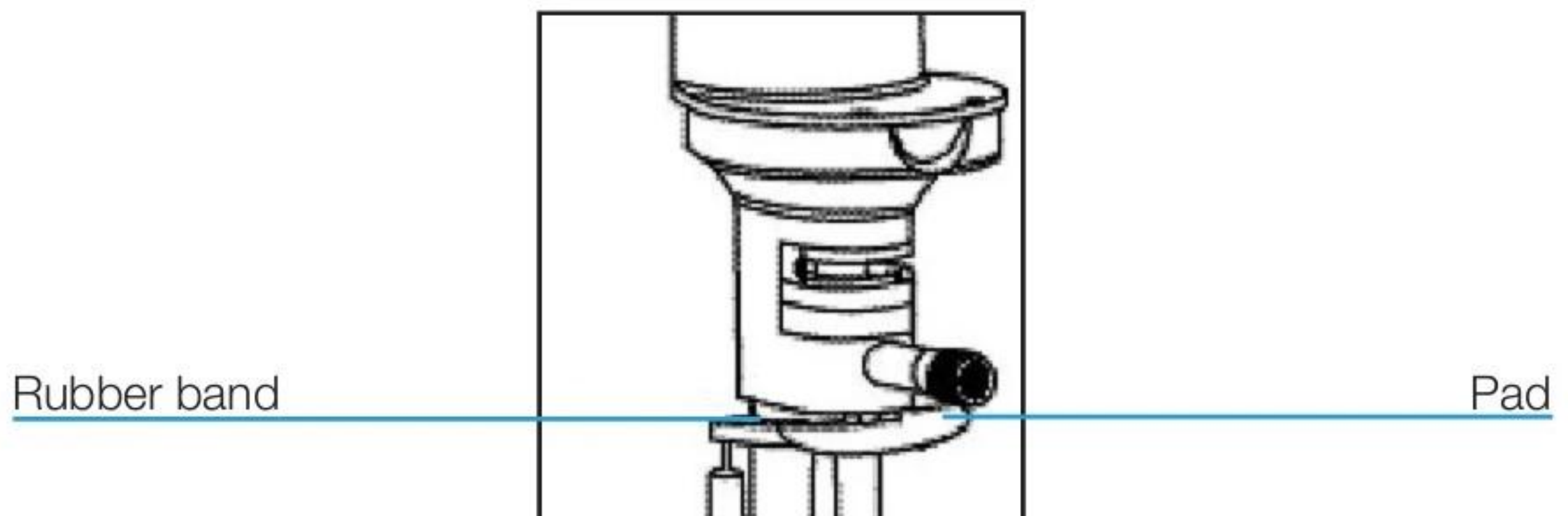
Avoid touching any lens surface while assembling the breath shield (E)



- Remove the breath shield fixation screw from the microscope arm.
- Pass the removed screw through the hole of the breath shield then re-screw it into the arm.

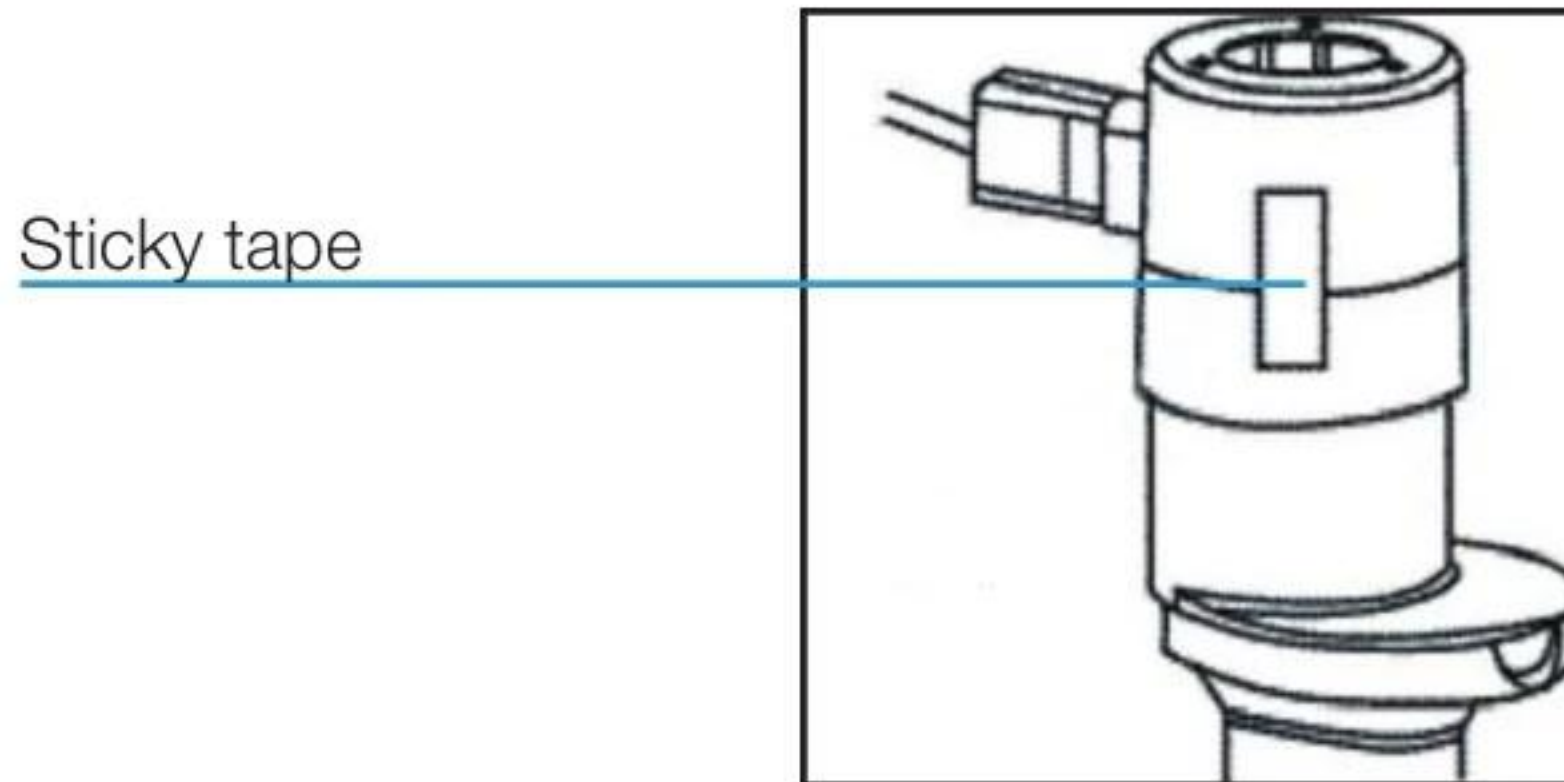
8. Removing the illumination part shipping pad

- This pad is used to protect the slit mechanism of the illumination part during shipping.
- Remove the rubber band and gently pull the pad out.

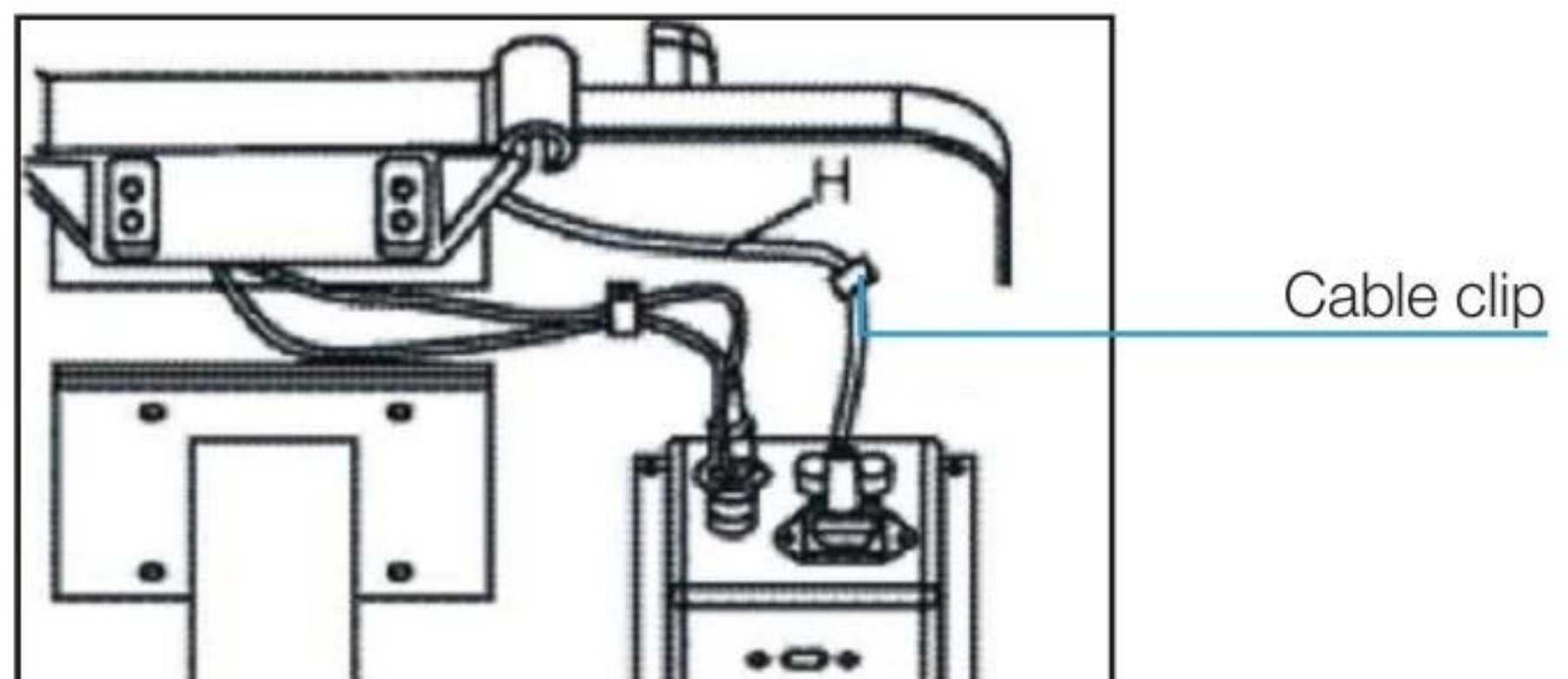


9. Connecting Plug

- Remove the sticky shipping tape from the cap. The tape ensures that the cap remains fastened to the lamp base during transportation.

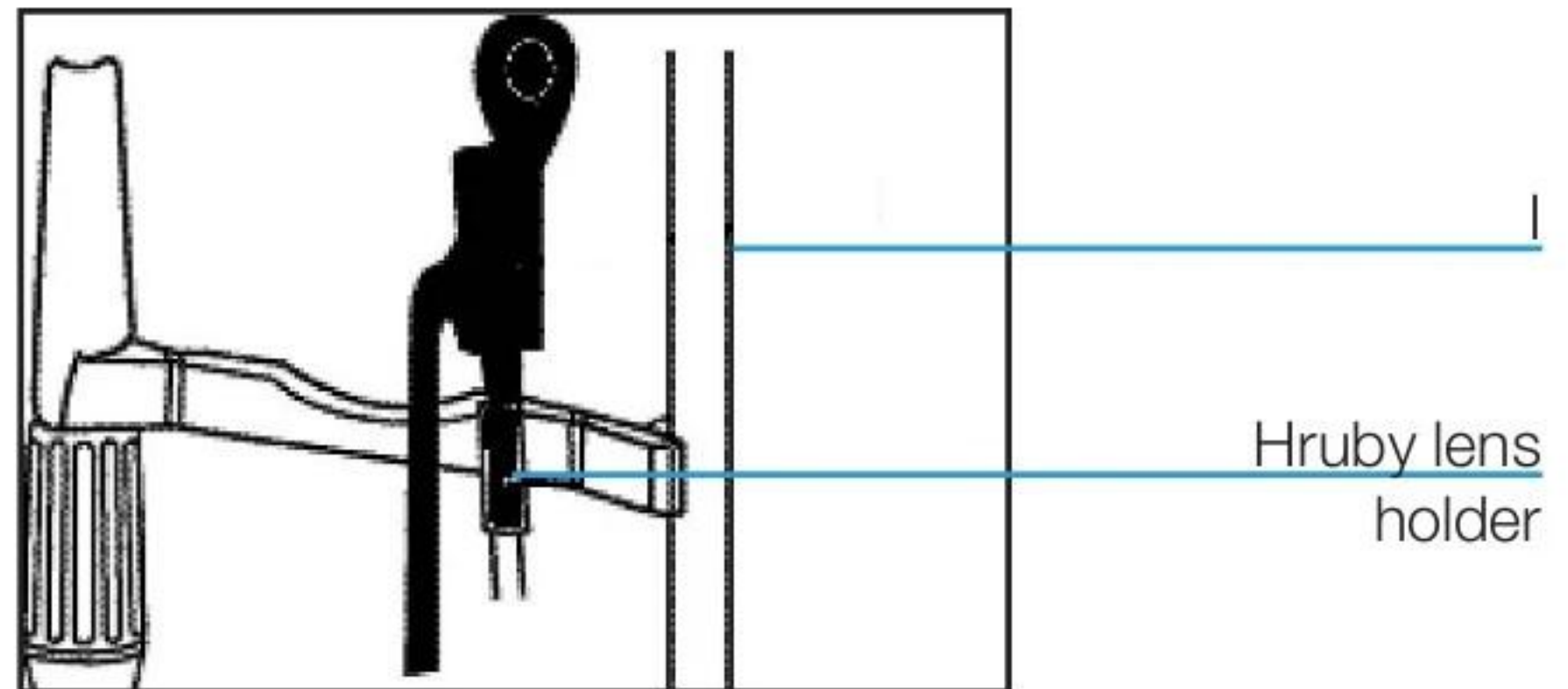


- Insert the plug on the top of the headrest part (D) into the socket of the lamp cap (26) on the illumination part (A).
- Connect the two plugs below the headrest part with the corresponding output sockets of the power box.
- Insert the plug of the input power cable (H) into the input socket of the power box.
- Remove the cable clips from the bottom of the worktable with screwdriver (W) and route the output and input cables through them, then re-attach them to the bottom of the worktable.

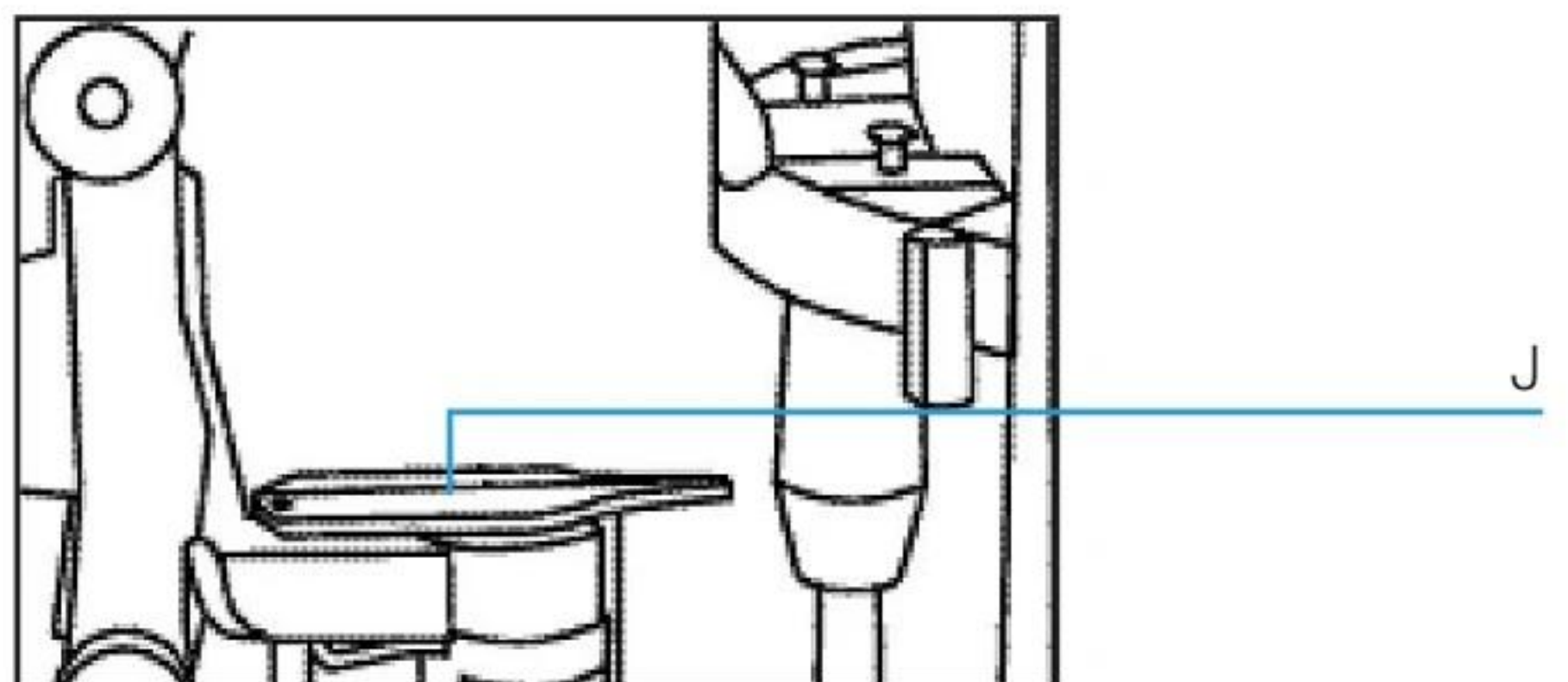


10. Assemble the Hruby Lens (I)

- Insert the Hruby lens (I) into the Hruby lensholder (26) on the headrest part. Be careful not to touch the lens surface.

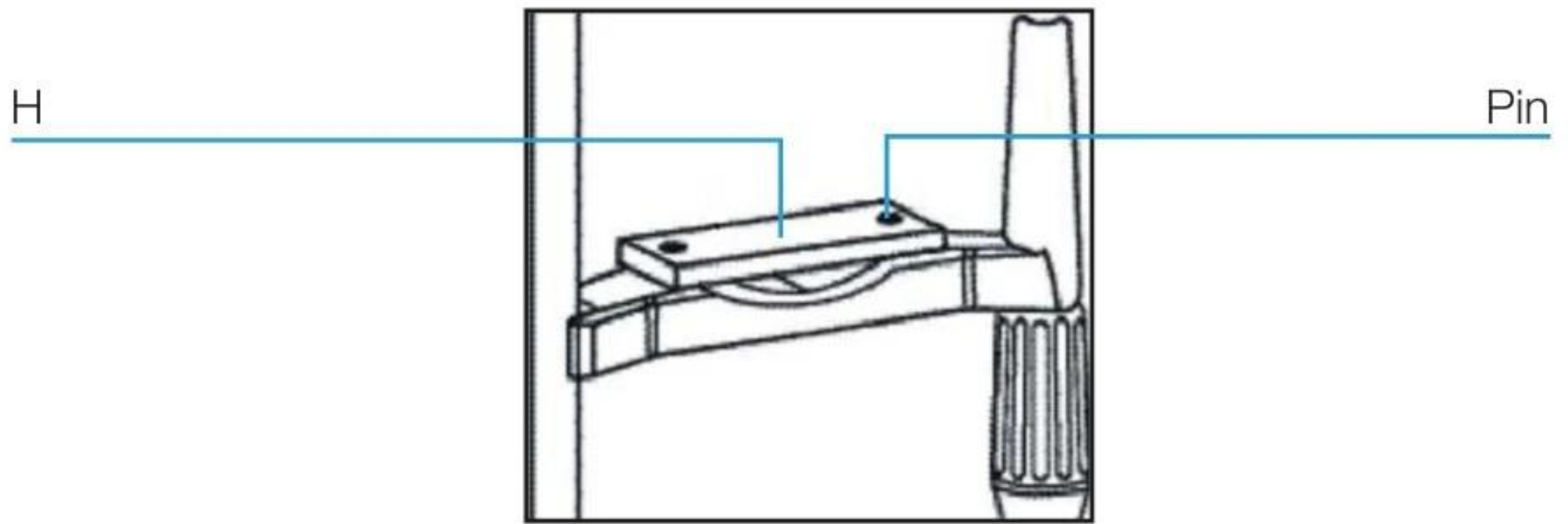


- Place the Hruby lens guide plate (J) into the main shaft hole of the base part with the small end pointed at the headrest part.



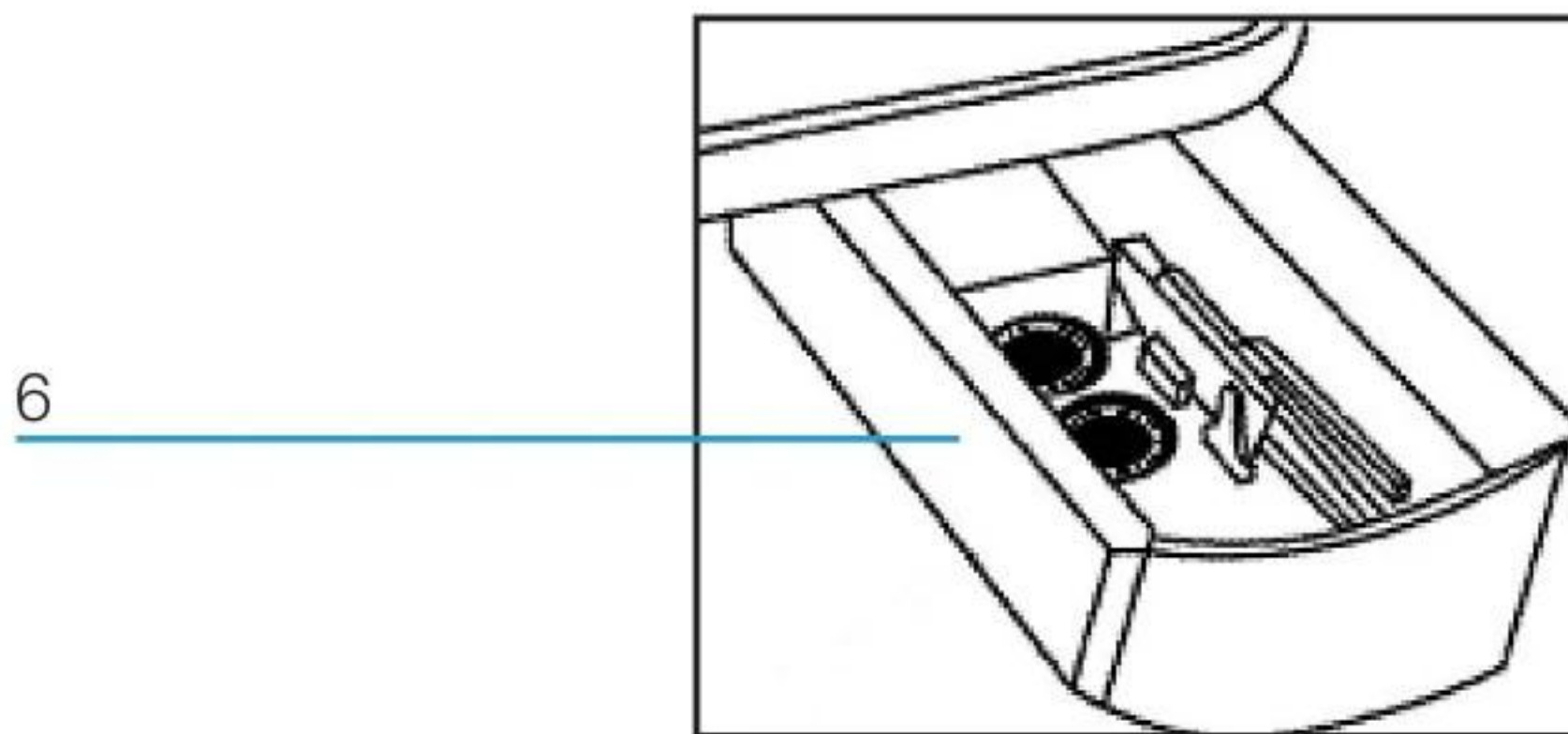
11. Assembling the chin-rest (H)

- Pull out the two fixing pins from the chinrest.
- Remove and discard the packaging for the chin-rest paper and position the paper.
- Insert the fixing pins through the holes.



12. Storing spare parts

Spare parts may be stored in the accessory drawer.



2.3 Inspection procedure after assembly

1. Power plug

- This instrument supplied with a 3-wire grounded line cord. Do not remove or disconnect the ground. Please select proper power sockets and plugs
- Always ensure that the instrument is well grounded.

Important Matters

Please use the special cable supplied with this instrument.

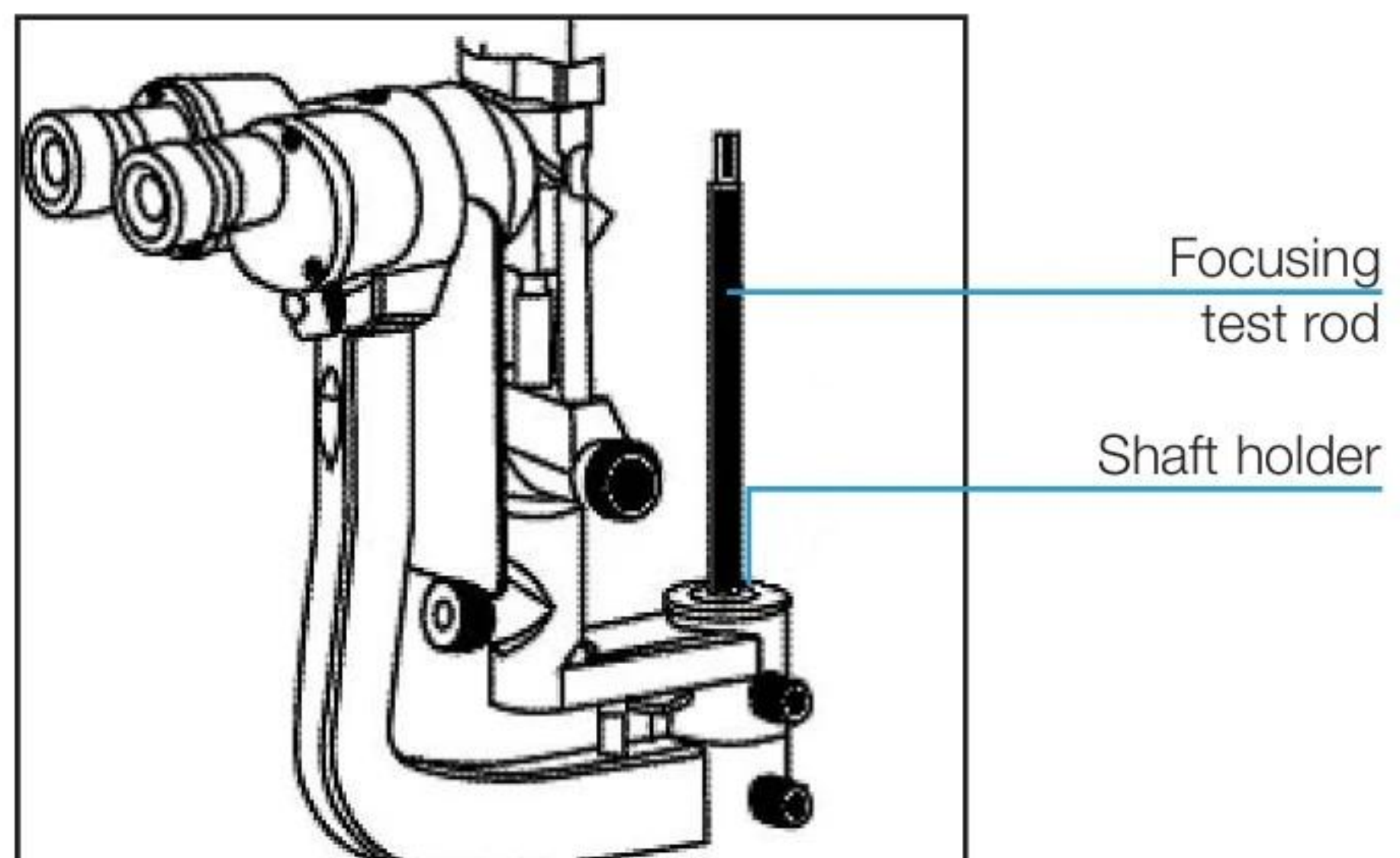
2. The power box and the illumination part

- When the main power switch (8) of the power box is placed at “1” it turns on, and when located at “0” it turns off. The main power switch should be set to the “0” position before connecting the input cable with the power socket.
- Turn on the main power switch, and the pilot lamp (9) will illuminate. Open the slit width control knob (23) to examine the illumination.
- Press the brightness control switch (7) in each of the two positions, the brightness should be change accordingly.
- Check the fixation target device to confirm it is lit.
- Check all the movable parts such as aperture and slit height control knob (30), filter selection lever (31), and magnification lever (17), etc. move freely.
- After inspection, turn off the main power and cover the instrument with the dust cover (O).

3. Operation

3.1 Diopter compensation and pupillary distance adjustment.

1. Use of the focusing test rod (M)



The focusing test rod is used to confirm that the microscope is adjusted correctly. Insert it into the main shaft hole with the flat surface facing the objective lens in the direction of the user.

Important Matters

After adjustment, remember to remove the rod and insert the protective cap.

2. Brightness adjustment

Turn on the main power switch and set the brightness control switch (7) at the “N” position. Turn the slit width control knob (23) to make the slit width between 2 and 3mm.

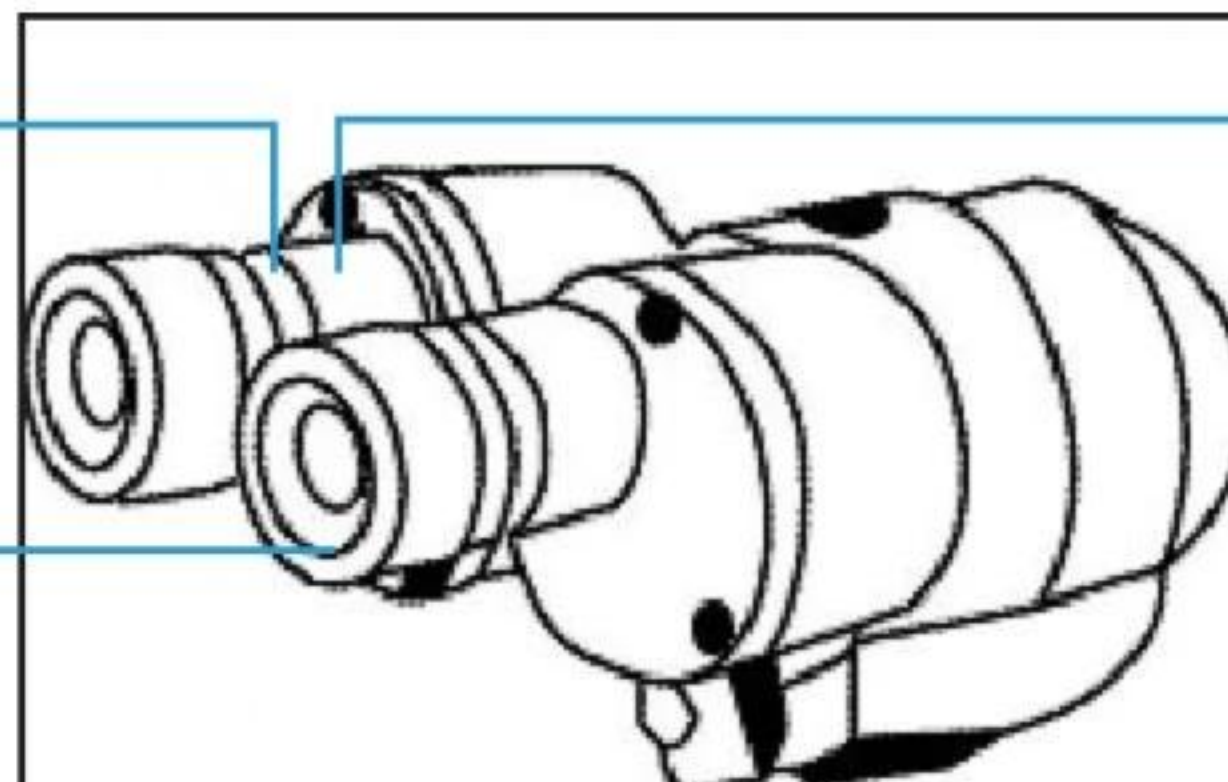
3. Diopter compensation

The focus of the microscope is calibrated according to the emmetropia. If the user is ametropic, he should adjust the eyepiece diopter. Adjustment should be performed as follows:

- Rotate the diopter adjustment ring (19) counter clockwise until it stops.
- Rotate the ring clockwise until a sharp slit image appears on the focusing test rod.
- Adjust the other eyepiece using the same procedure.
- Record the diopter value on each eyepiece for future reference.

Diopter scale

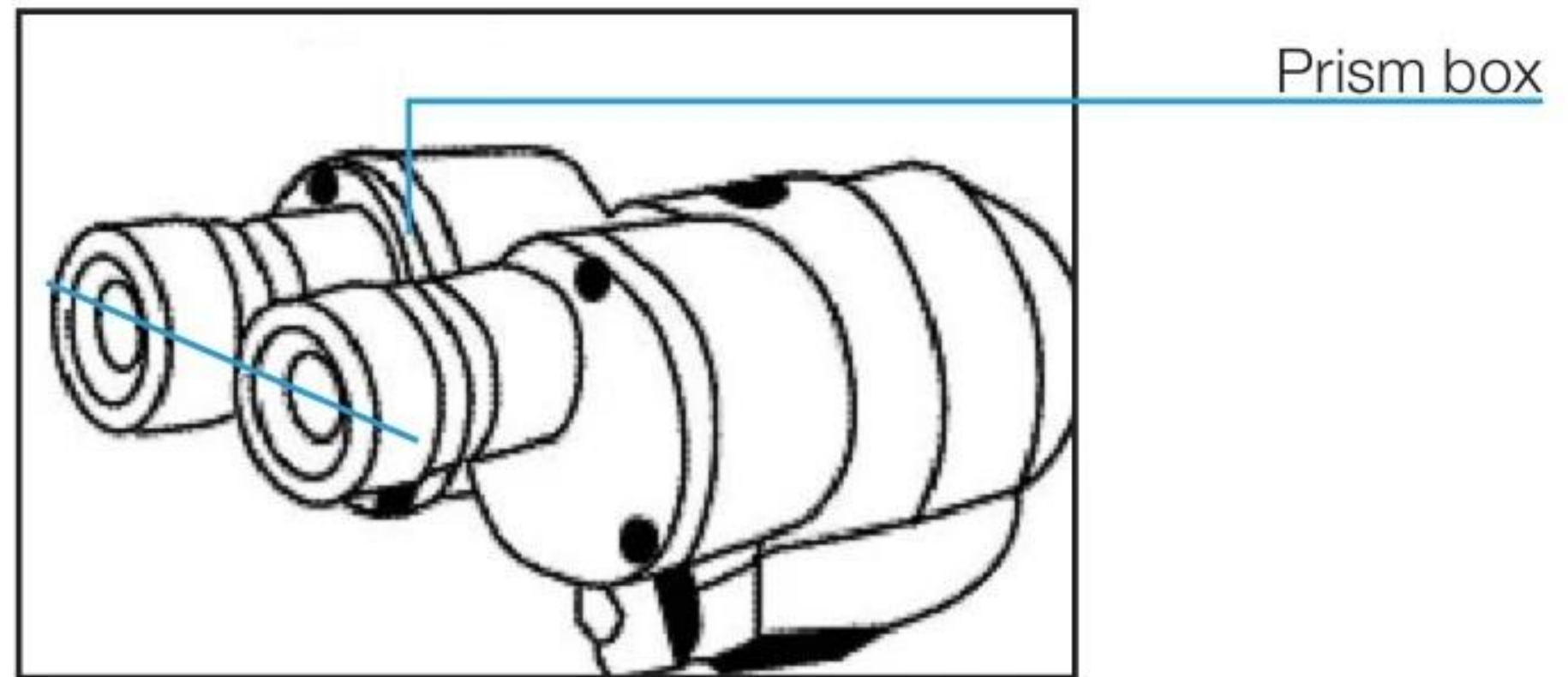
18



19

4. Pupillary distance adjustment

Separate the prism boxes of the microscope with both hands to adjust the pupillary distance until both eyes can stereoscopically see the same image on the focusing test rod.



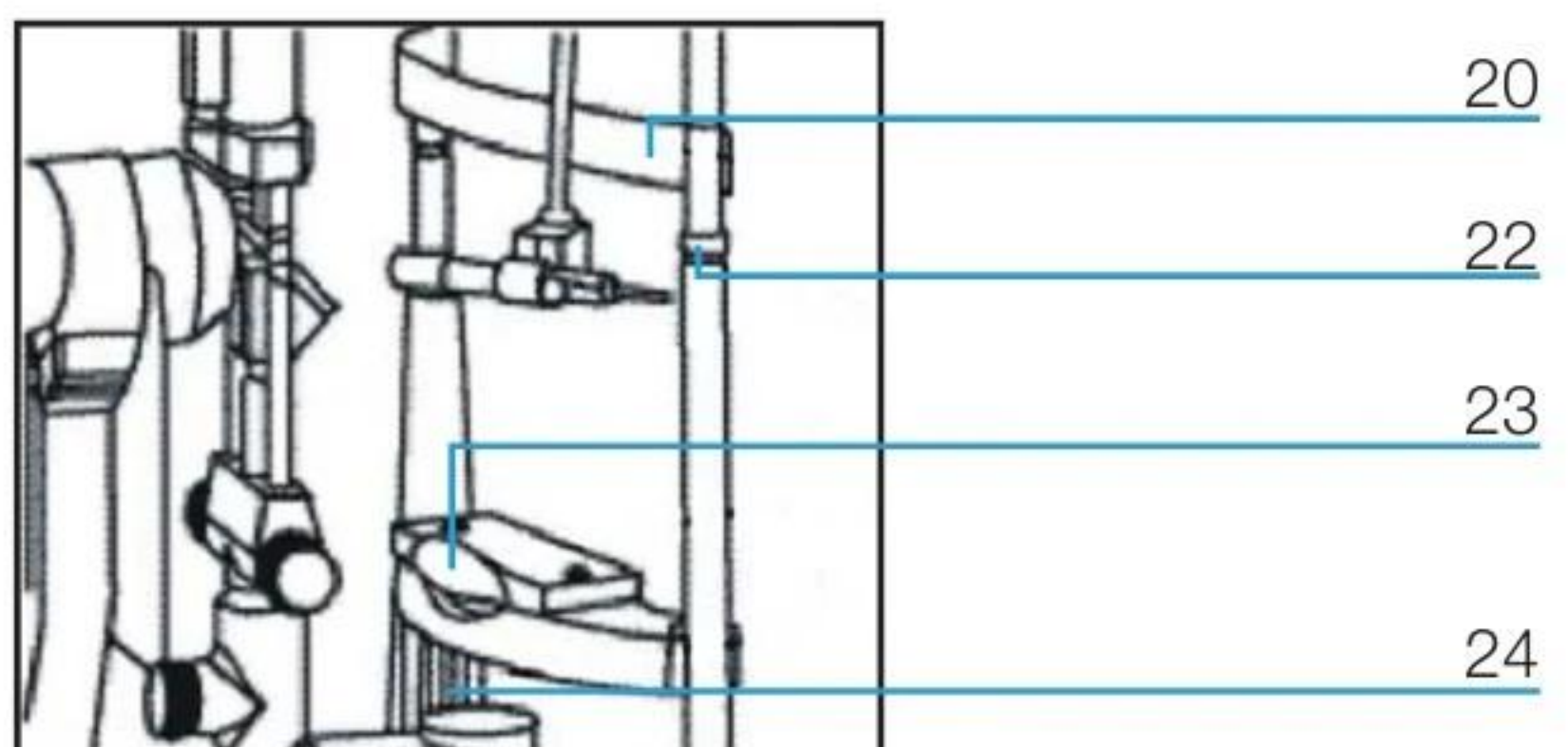
Important Matters

While adjusting the pupillary distance, ensure that both eyepieces are at the same height.

3.2 Patient position and fixation target

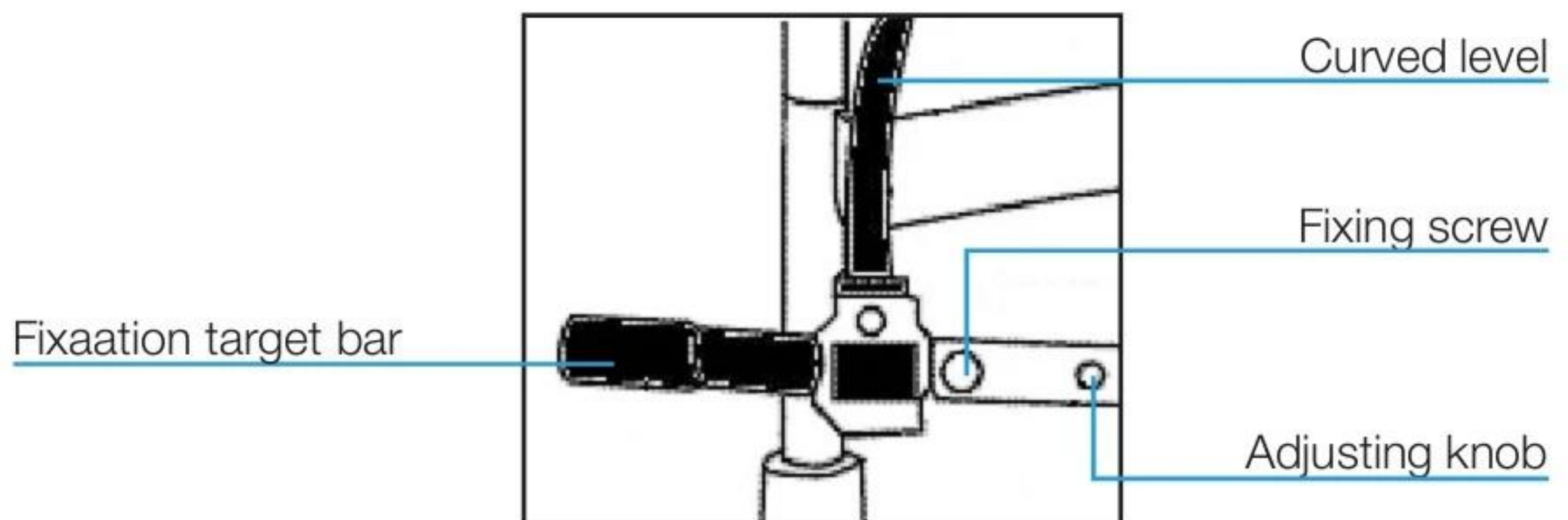
1. Positioning the patient's head

Have the patient place his chin on the chin-rest (20) and the forehead against the forehead belt (22). Adjust the chin-rest elevation adjustment knob (14) below the chin-rest until the patient's canthus aligns with the horizontal mark (29).

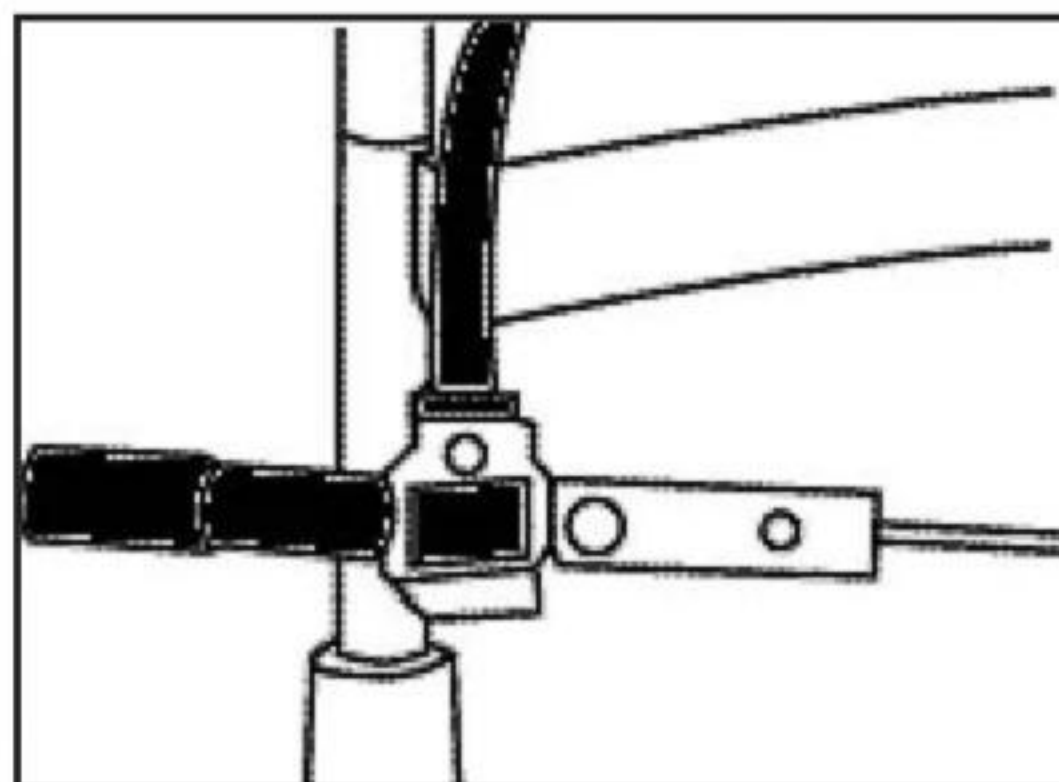


2. Use of the fixation target

- Direct the patient to look at the fixation target (21) with the eye not to be examined. To change the fixation position, move the lamp bar and curved lever around the headrest.
- The fixation target with diopter compensation supplies a dot and concentric circles target. Slide the knob to adjust the diopter compensation from $-15D$ to $+10D$.



The fixation target with the spot light is intended for the patient whose diopter exceeds $-15D$. When changing, just loosen the fixation screw, replace the fixation target with the spot light source and tighten the fixation screw.



3.3 Base operation

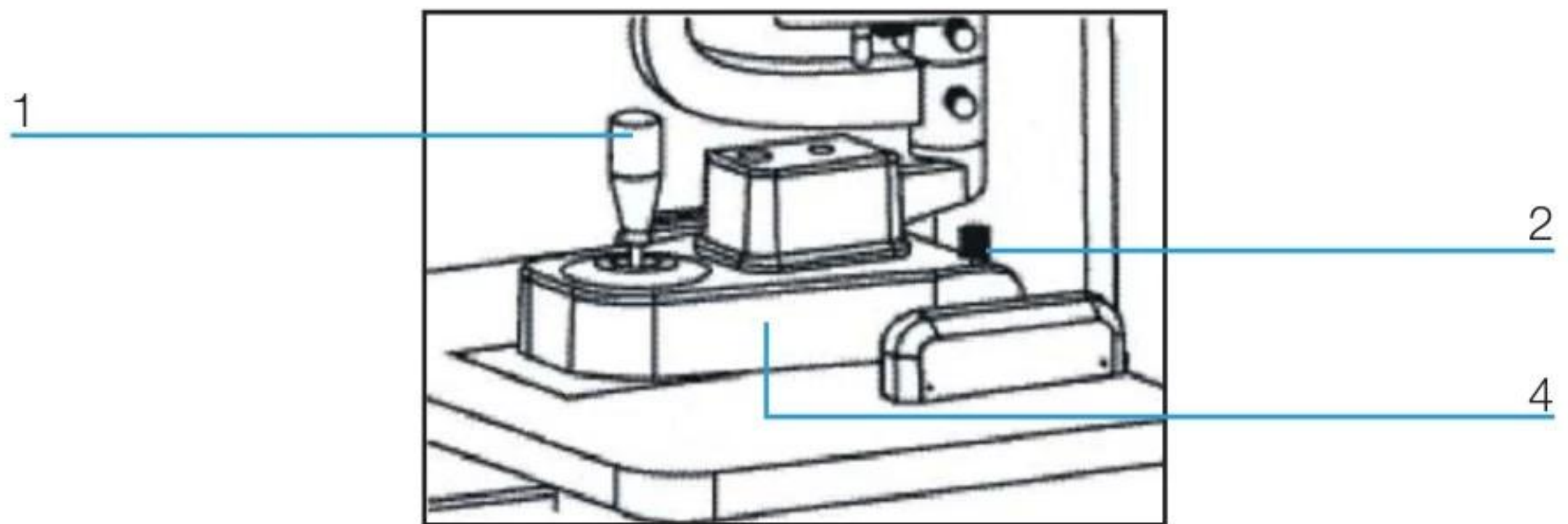
1. Horizontal coarse adjustment

Keeping the joystick (1) straight up, move the base (4) to coarsely align the

microscope in the horizontal plane.

2. Vertical adjustment

Rotate the joystick to adjust the microscope's height until it aligns with the target. Turn the joystick clockwise to raise the microscope and counter clockwise to lower it.



3. Horizontal fine adjustment

Tilt the joystick to make the microscope move slightly in the horizontal plan. While watching through the eyepieces, tilt the joystick to align the microscope at the object for a sharp image.

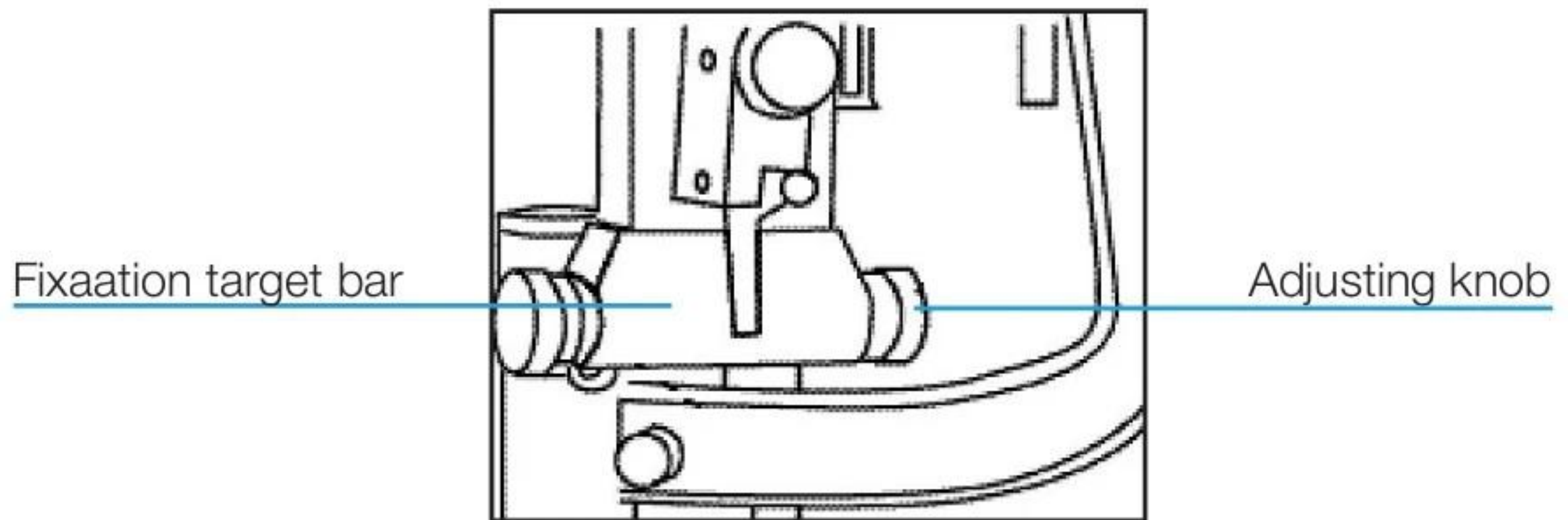
4. Locking the base

When finishing the adjustment, fasten the base locking screw (2) to lock the base (4) and prevent it from sliding.

3.4 Illumination parts operation

1. Changing the slit width

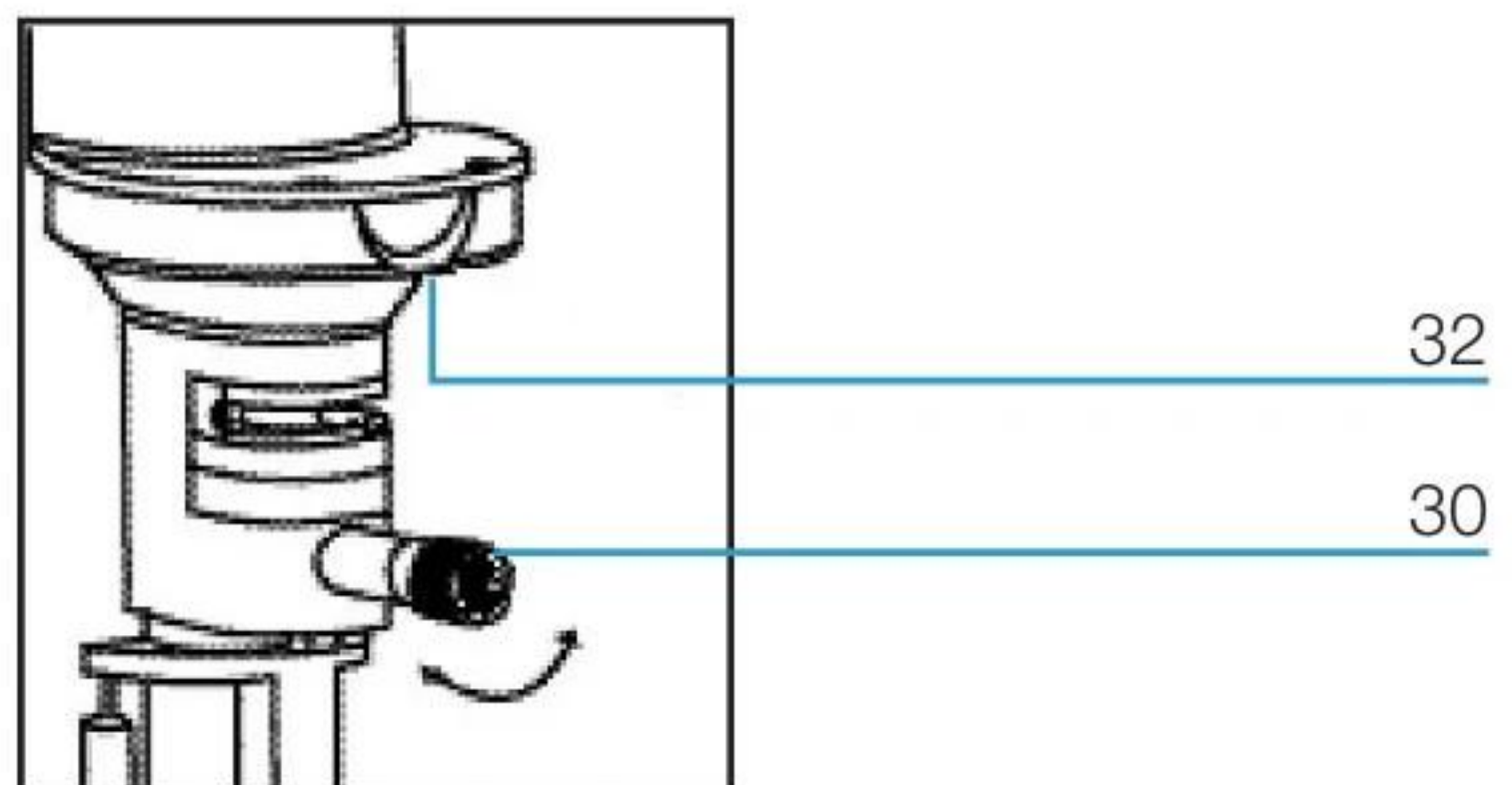
Turn the slit width control knob (23) to adjust the slit width from 0 to 9mm. The slit becomes a circle at the 9mm size.



2. Changing the aperture and slit height

Turn the aperture and slit height control knob (30) and 6 different circular beams of light are available at full aperture: 9, 8, 5, 3, 1, 0.2mm diameters respectively.

With a slit image, the slit height can be changed continuously from 1 to 9mm, which is indicated by the display window (32).



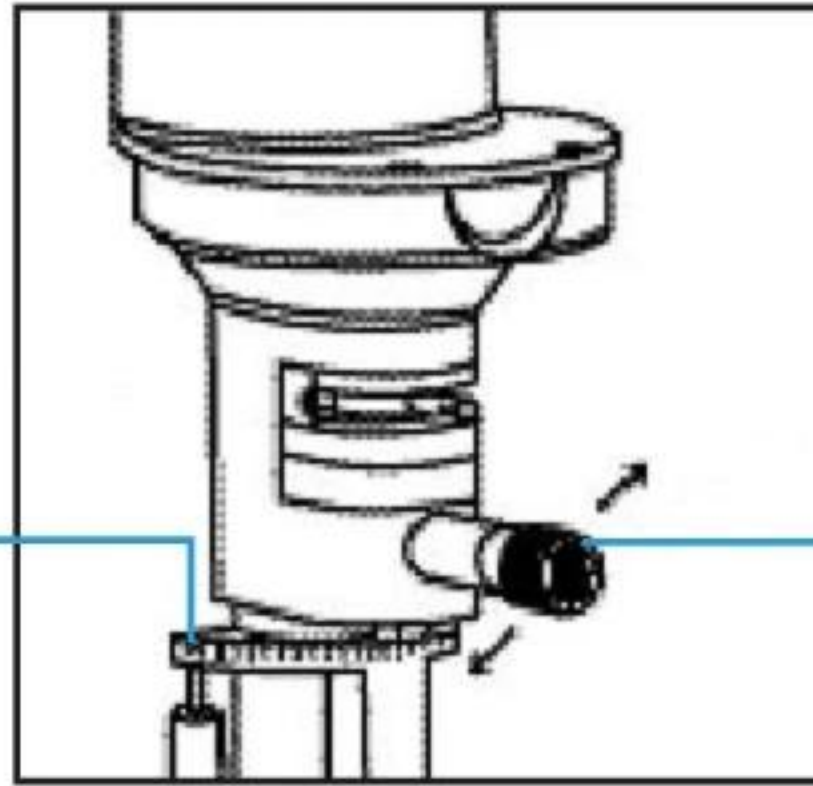
3. Rotating the slit image

Swing the aperture and slit height control knob (30) horizontally to revolve the slit image at any angle from vertical to horizontal. The rotation angle scale indicates the angle of image rotation with small divisions for 5° and large divisions for 10° .

4. Deflecting the illumination light

Loosen the centering knob (25) and swing the slit width control knob (23) in the shown direction, so the light spot moves away from the center of the microscope's field of vision.

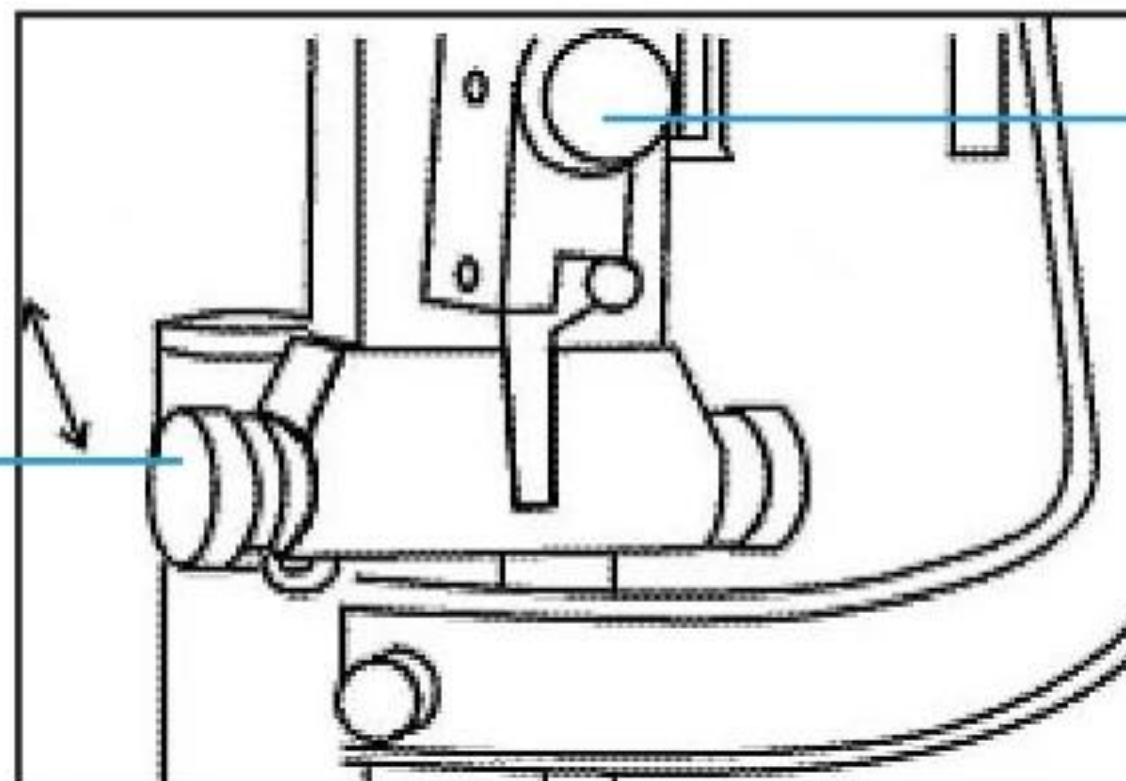
Scale



30

This feature is used primarily for examination by indirect retro-illumination. Tighten the centering knob and the slit light will return to the center of the microscope's field of vision.

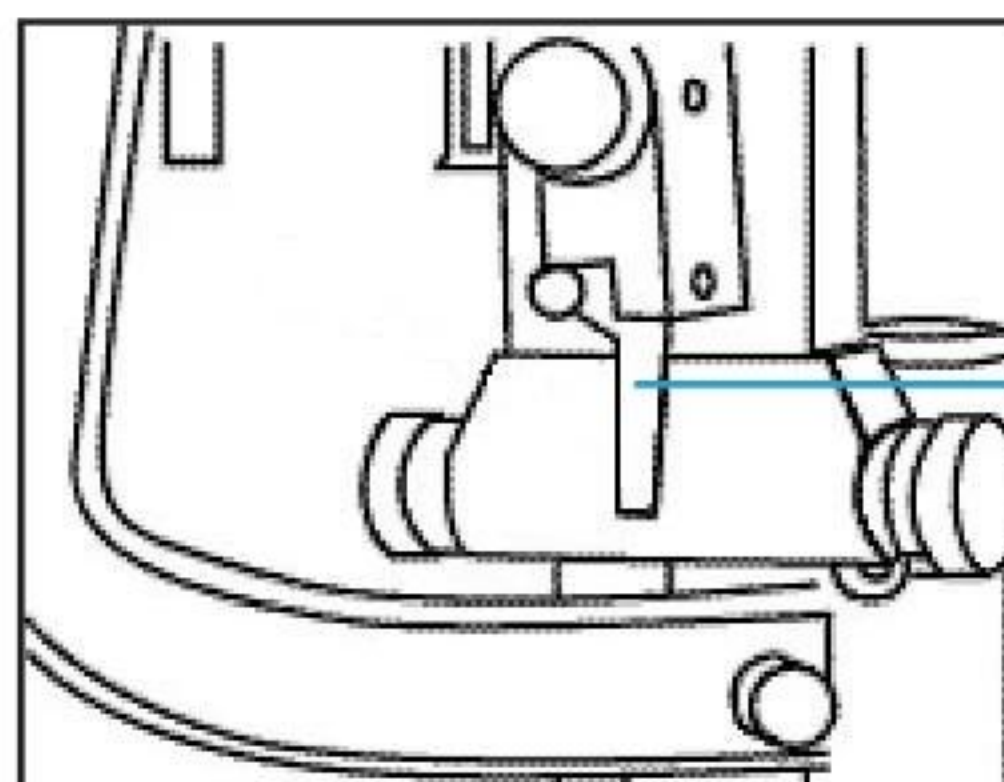
23



25

5. Oblique Illumination

Oblique illumination is used for sectional or fundus examination by use of a contact lens. Press down the inclination lever so that the illumination part may inclined to 20° (5° of each division). Since the illumination part may touch the patient's head, operate carefully.

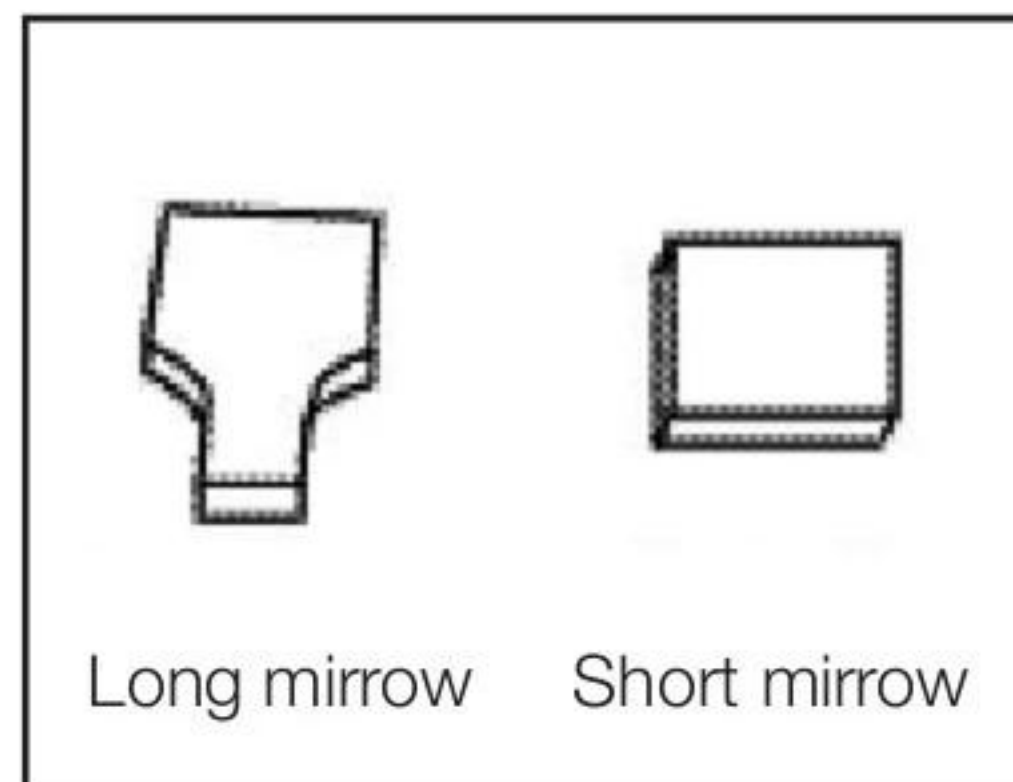


24

6. Reflecting Mirror

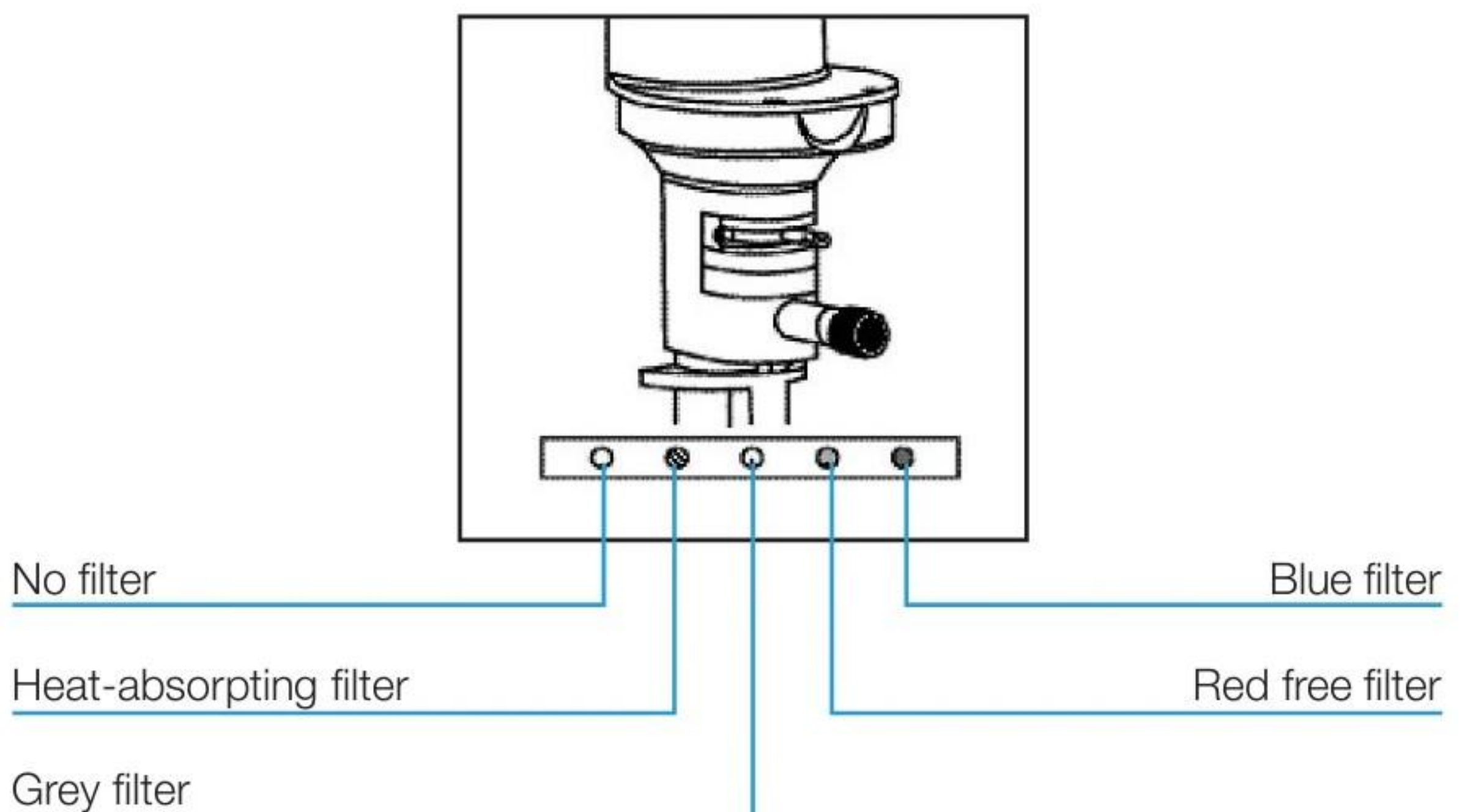
Both short and long reflecting mirrors are supplied with this instrument. Use the long mirror for normal examination. When the angle between the illumination part and the microscope is between 3° to 10° the image may become obstructed.

The short mirror is also used when the illumination part is inclined over 10° .



7. Filter selection

Move the filter selection lever (16) in the horizontal plane to add or remove the four filters in the illumination path. Usually the heat absorption filter is used so that the patient may feel more comfortable during a long examination.



3.5 Fundus observation with the Hruby lens

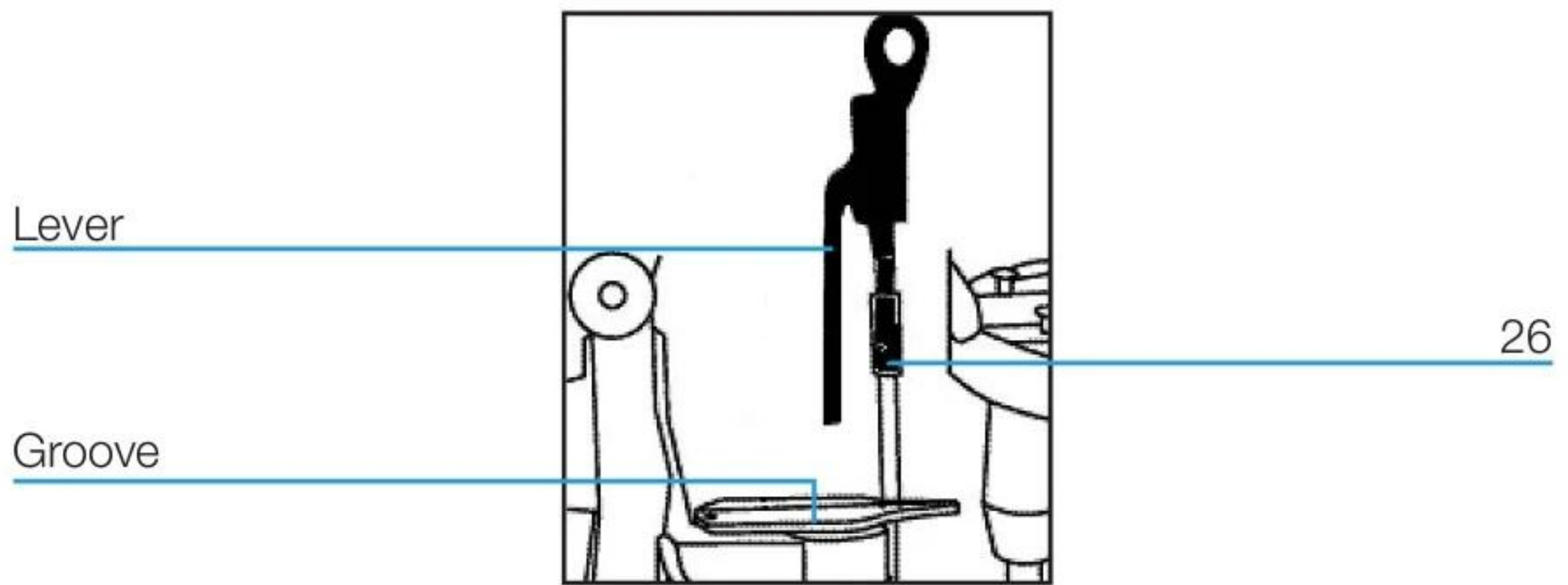
In routine use, observation of the eye is limited to the area from the cornea to the anterior portion of the vitreous body. This is because of refraction effects of the cornea and crystalline lens. However, with the Hruby lens (I) in the front of the microscope, the posterior part of the vitreous body and fundus can be observed.

To use Hruby lens proceed as follows:

1. Dilate the patient's pupil for about 20 minutes.
2. Insert the Hruby lens guide plate (15) into the main shaft hole of the illumination arm and the microscope arm.
3. Pull out the Hruby lens holders from one side of the headrest. Move the Hruby lens holder toward user so that it can slide freely to the left and right below the chin-rest. Insert the lower end of Hruby lens lever into the groove on the guide plate.
4. Focus the illumination light and the microscope on the patient's eye.
5. Move the lever to locate the Hruby lens at the center of the field of vision and near the patient's eye.
6. Move the lever to focus the Hruby lens at the fundus, and then adjust the slit height and width to reduce the unnecessary interference light in the field of view.
7. To examine different parts, either turn the microscope and the illumination arm or change the patient's fixation by manipulating the fixation target.
8. If the long mirror interferes in the examination, just replace it with a short mirror.
9. After examination, move the Hruby lens back to the original position on one side of the chin-rest.

Important Matters

Before moving the Hruby lens to the right and left, first have the patient's head move away from the chinrest to avoid his nose touching the Hruby lens



7. Filter selection

Move the filter selection lever (16) in the horizontal plane to add or remove

4. Maintenance

Important Matters

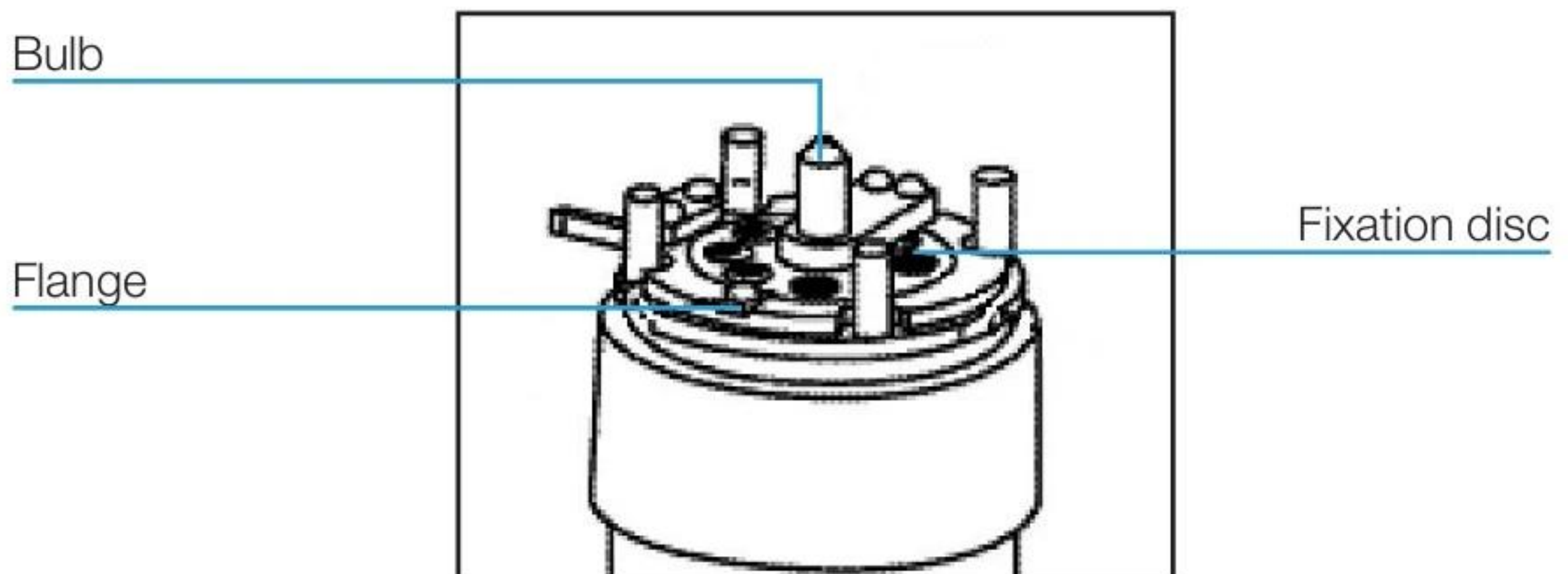
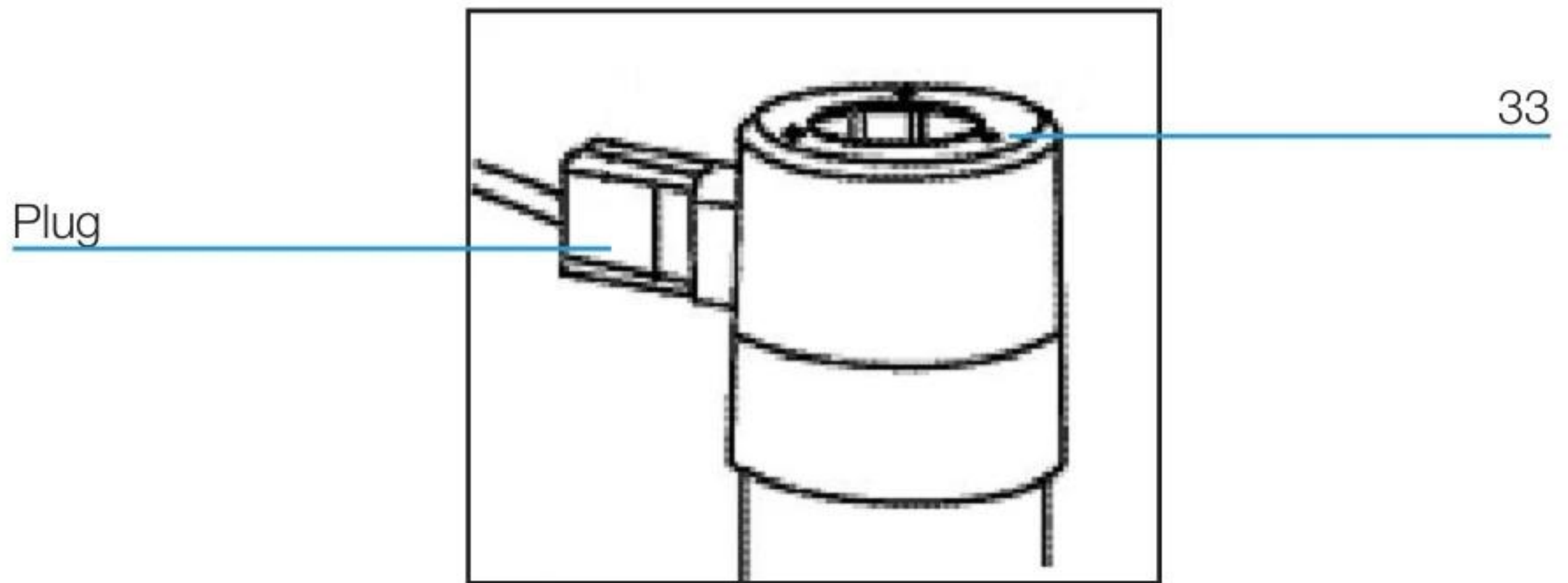
Dispose of replacement parts in accordance with local regulations.

4.1 Replacing the illumination bulb

- Turn the main power switch (8) off.
- Unplug the connector on the lamp housing.
- Rotate the lamp cap (33) counter clockwise and remove it from the illumination part (A).
- Remove the old bulb and replace it with a new one. The groove in the bulb fixation disc should be aligned with the flange of the lamp base. Improper alignment may cause uneven illumination.

Important Matters

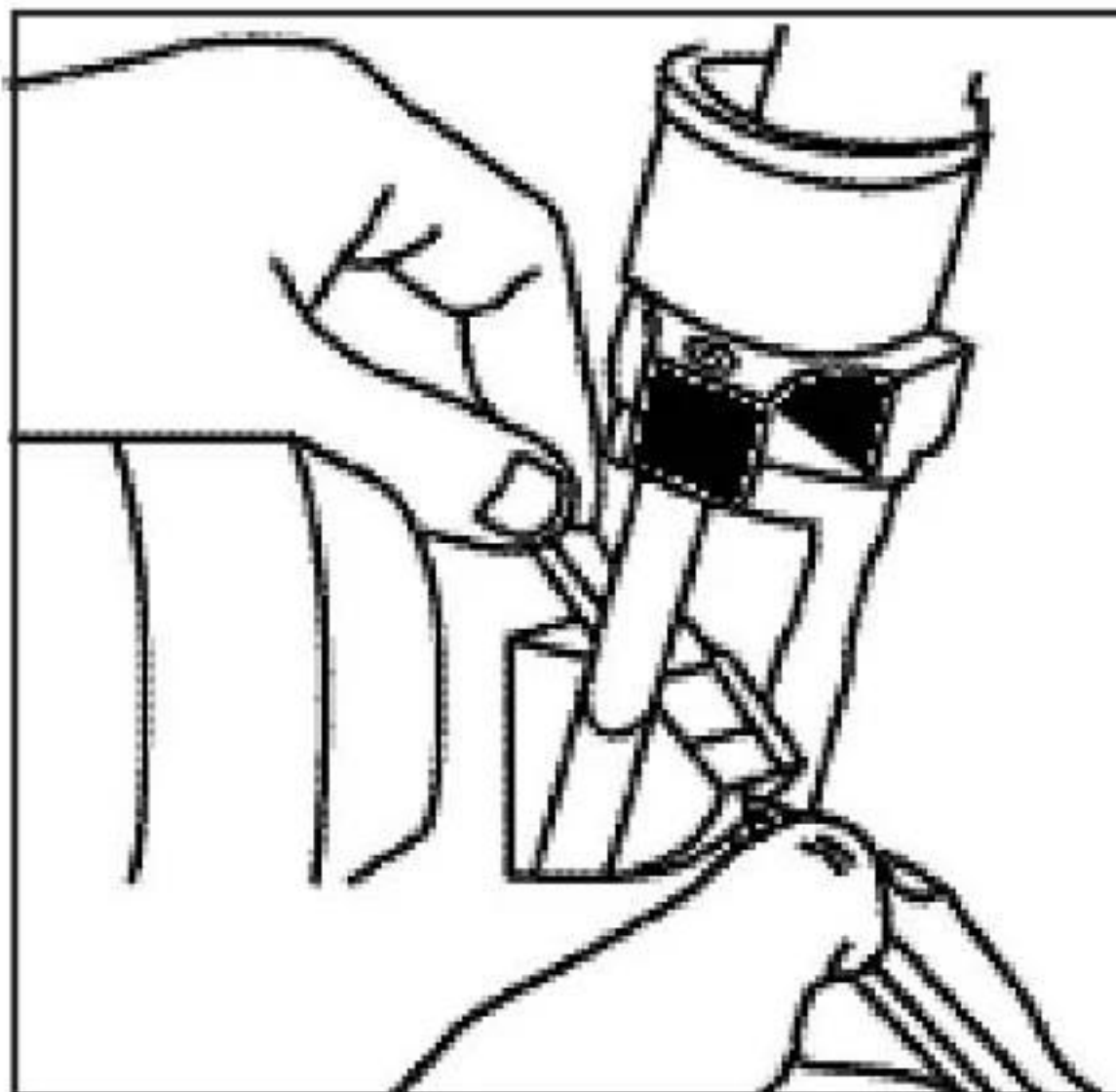
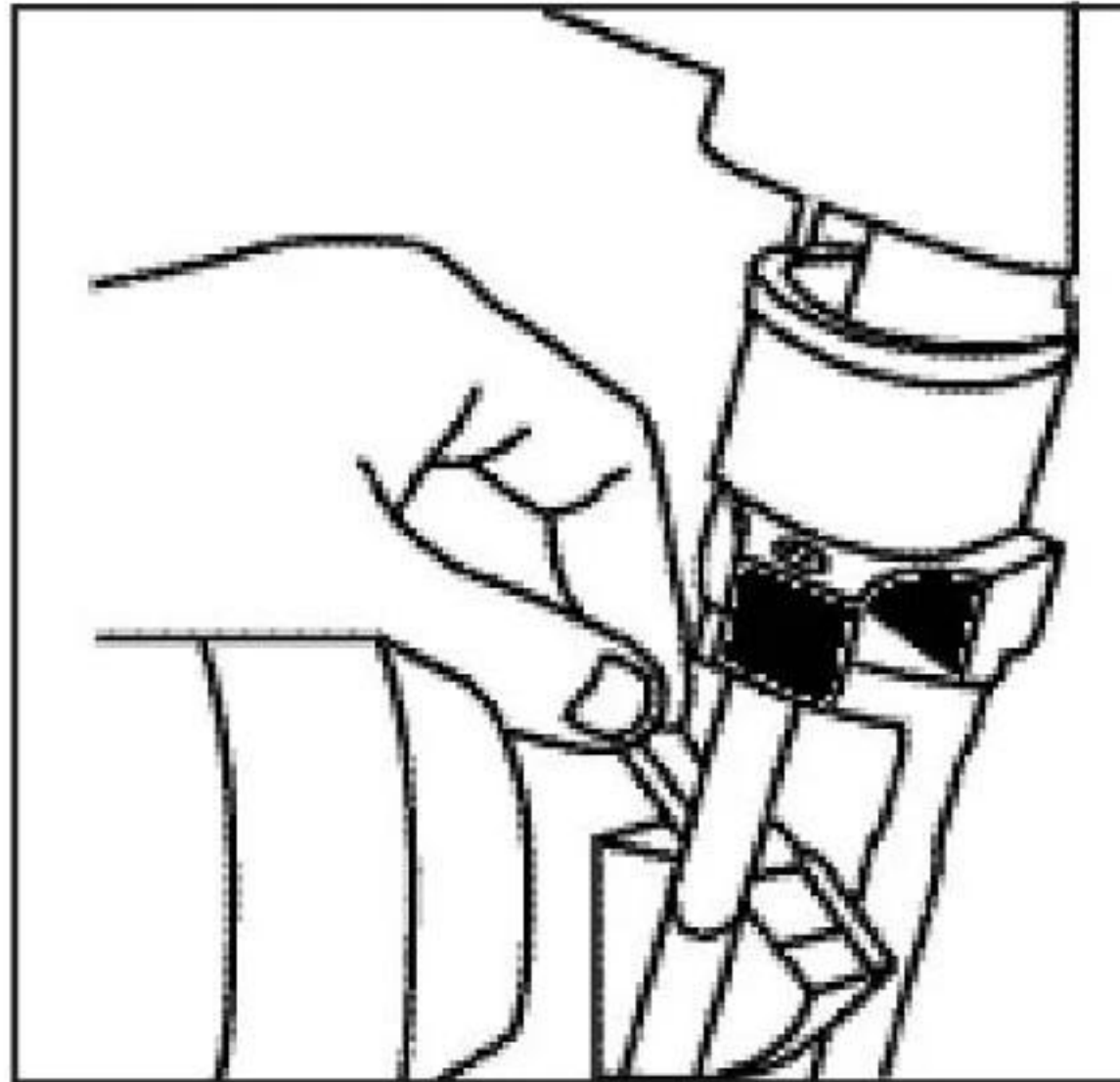
The bulb is hot



- Place the lamp cap in the original position and rotate it clockwise and insert the connector.
- Turn on the main power switch and ensure that the new bulb illuminates.

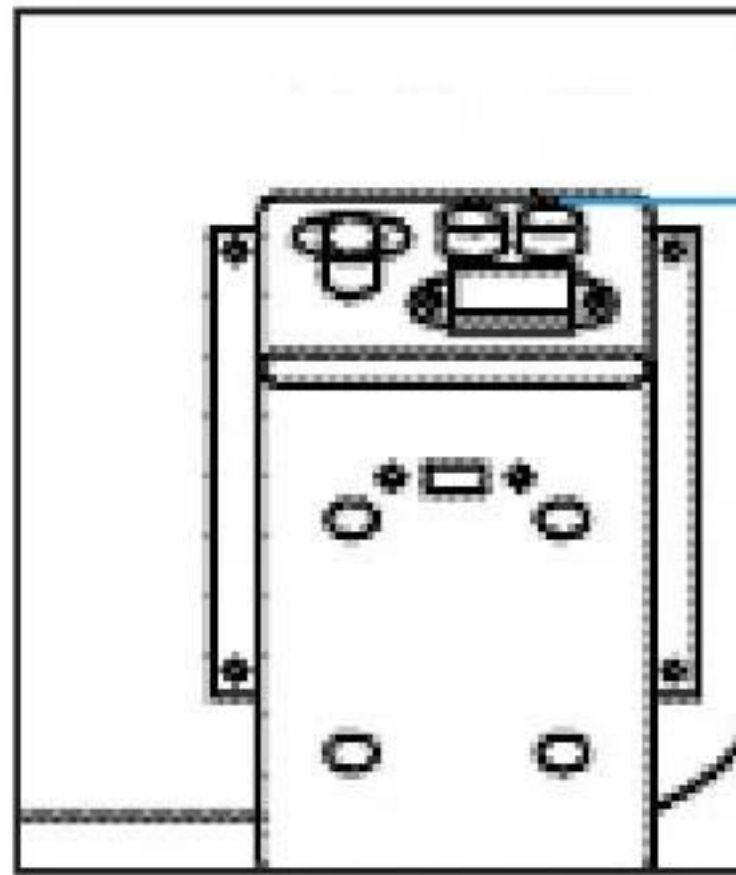
4.2 Replacing the reflecting mirror

- Set the angle between the microscope and the illumination arm to exceed 30° .
- Incline the illumination arm more than 110° .
- Remove the long mirror by holding the extended surface.
- Insert new long or short reflecting mirror.



4.3 Replacing the fuse

- Turn off the main power switch (8) and unplug the power cord from the power socket.
- Unscrew the fuse holder cover with the screw driver (X).



Fuse holder

- Remove and replace the fuse, replace the fuse cover.
- The fuse specifications are as follows:

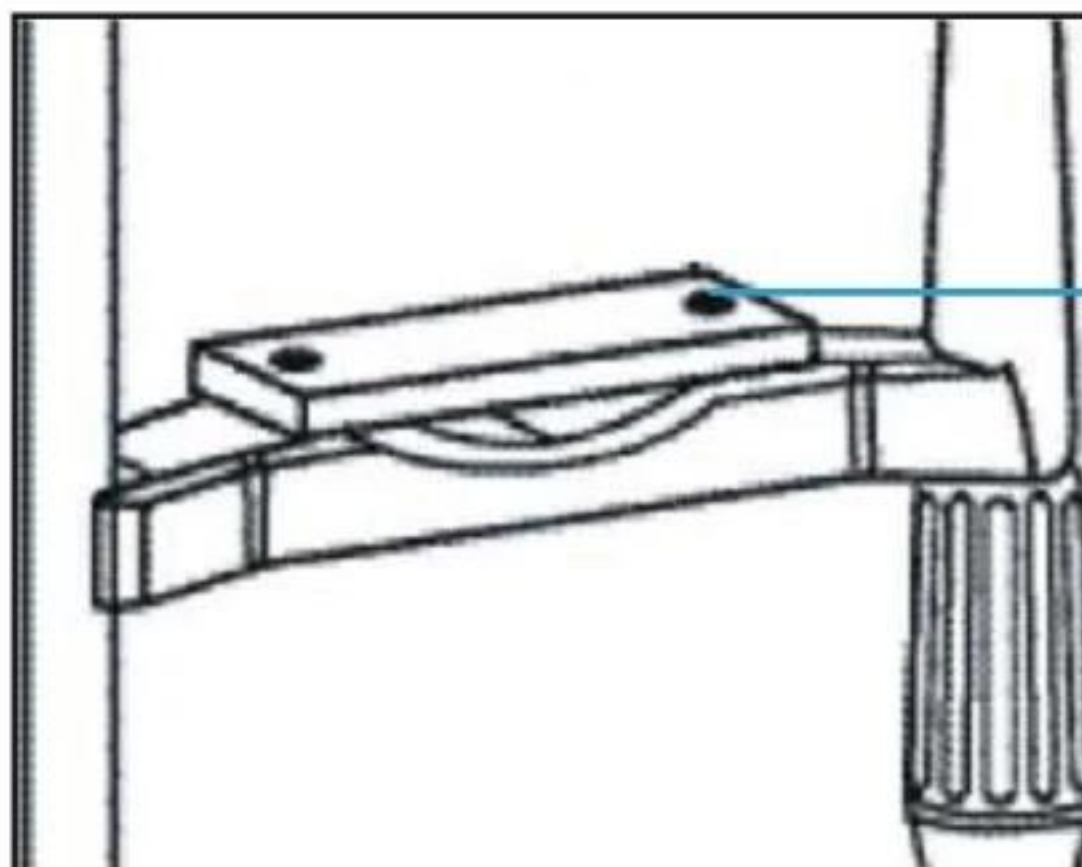
110V	1A, 250V
220V	0,5A, 250V

Important Matters

Please select the fuse of the same type, specification and rated value.

4.4 Replacing the chin-rest paper

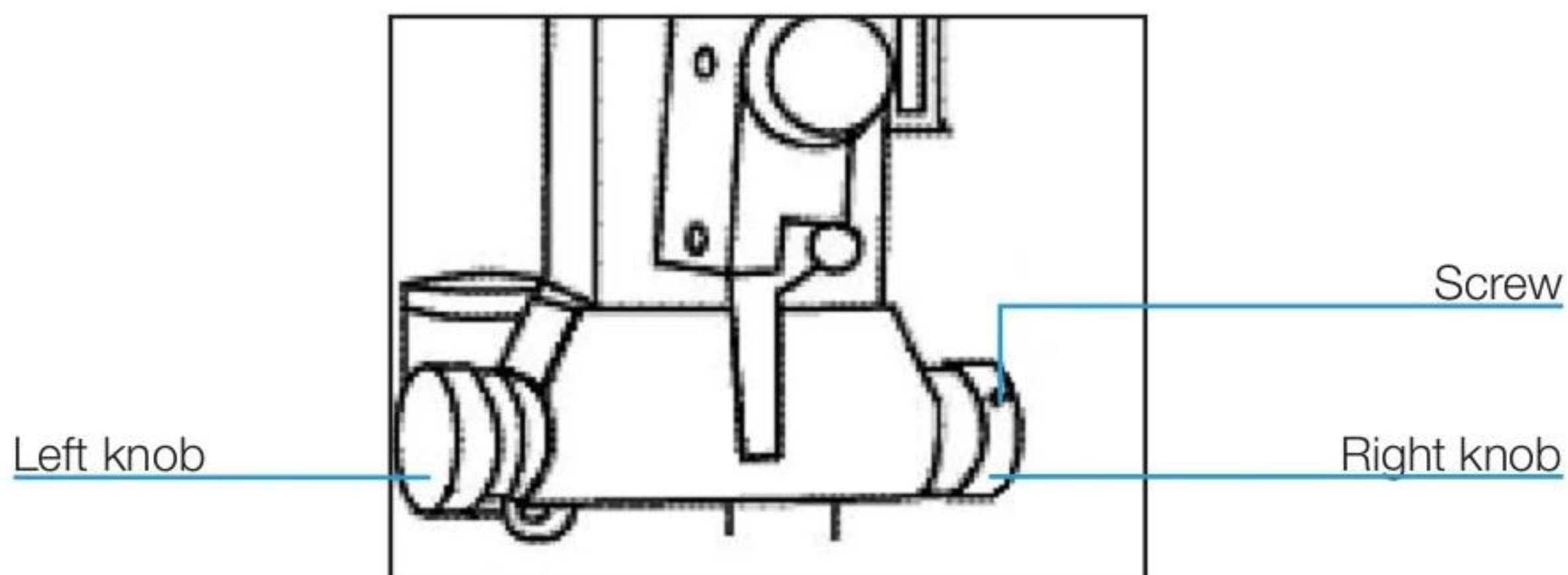
When the paper is exhausted, remove the pins by pulling them upward out of the chin-rest. Install a new package of paper and replace the pins.



Pin

4.5 Adjusting the tightness of the slit width knob

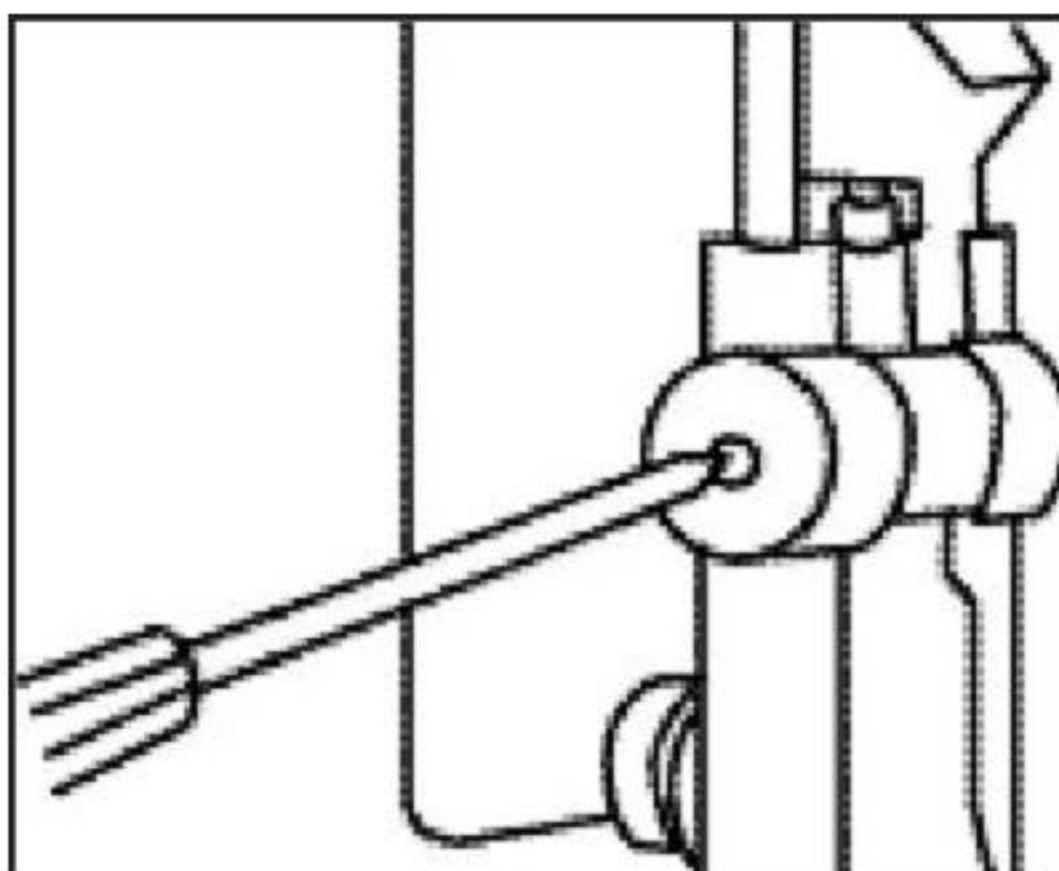
If the slit width control knob is too loose, the slit width may change. Loosen the screw on the right knob with the screw driver (Y), and then hold the left knob firmly with one hand, while rotating the right knob clockwise for tightening.



When the desired tightness has been achieved, tighten the locking screw on the right knob.

4.6 Cleaning Adjusting the inclination of the illumination part

If the inclination mechanism of the illumination part is too loose, tighten the screws on both sides of the pivot point with the screw driver (W).



4.7 Cleaning

1. Cleaning the lenses and mirrors

Remove any dust on the lenses or reflecting mirrors by brushing them with the supplied brush (M). If any dust remains, remove it with soft cotton moistened with absolute alcohol.

Important Matters

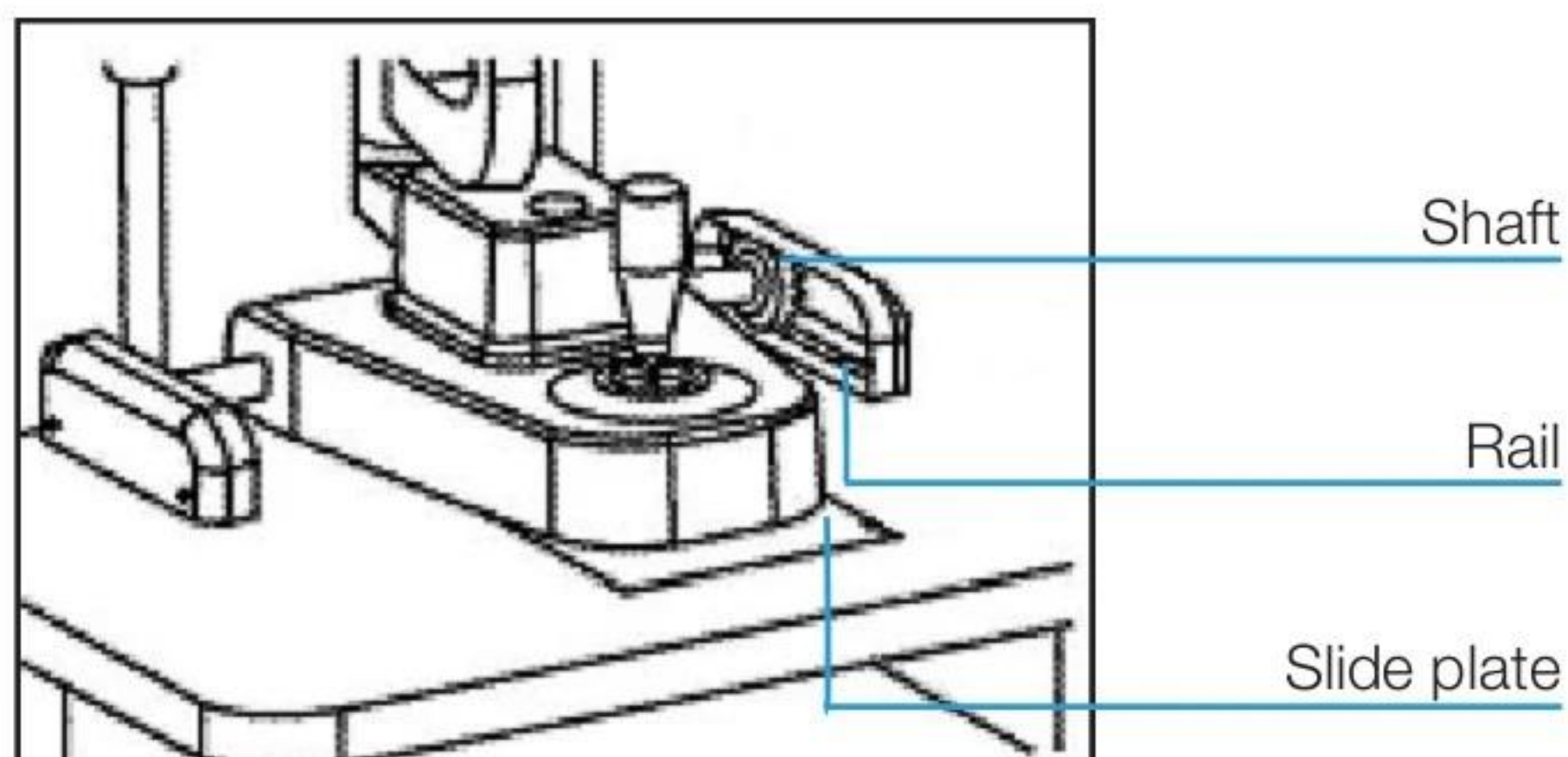
Never touch the lenses of mirrors with your fingers or any hard materials.

2. Cleaning the slide plate, rail and shaft

Wipe the dirty segment with clean soft cloth.

3. Cleaning the plastic parts

Clean the plastic parts such as the chin-rest bracket and forehead belt with soft cloth moistened with a mild detergent or water. Disinfect patient contact surfaces with isopropanol.



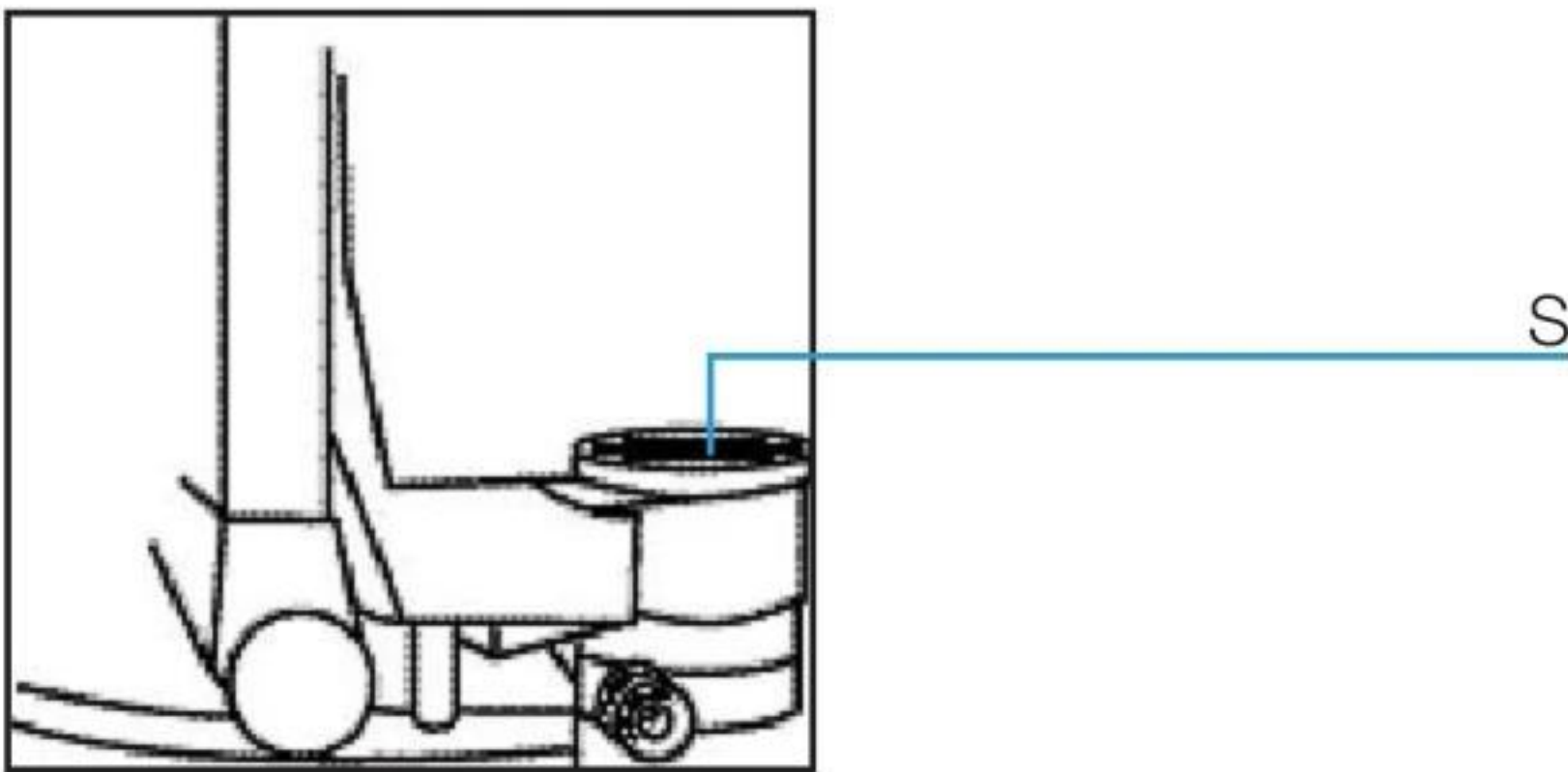
Important Matters

To prevent damage to surfaces do not use corrosive cleaners.

4.8 Protection of Equipment

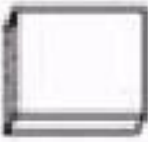
Always ensure that the protective cap (S) is installed over the main shaft hole during operation. This will prevent the ingress of dust and physiological fluids that could cause improper operation. Only remove the dust cap when assembling, disassembling, or repairing the instrument.

When not in use always cover the instrument.



4.9 Consumable Parts

Please specify names and quantities when ordering following consumable parts.

SL 1100 Slit Lamp	Part name	Outlook
	Illumination Bulb	
	Short Mirror	
	Long Mirror	
	Chin-rest paper	
	Fuse 1 A (110 V) Fuse 0,5 A (220V)	

5. Common Trouble Shooting

In case there is any trouble, please check according to the following table for reference. If it still cannot work, please contact the Repair Department or an authorized distributor.

Trouble	Possible Cause	Remedy
No illumination	The cable isn't connected correctly with the power socket.	Connect the power cable correctly.
	The main power switch is on the "O" position.	Place the switch on "I" position.
	The plug on the power box is loose.	Insert the plug firmly.
	The plug in the lamp cap is loose.	Insert the plug firmly.
	The bulb has burnt out.	Change the bulb.
	The fuse has blown.	Change the fuse.
Slit is too dark	The bulb is not assembled properly.	Assemble the bulb properly.
	The filter lever is in the middle position or in the position of gray filter.	Set the filter lever to the correct position.
	Voltage selector is wrongly set.	Set the voltage selector correctly.
	The coating of the reflecting mirror is oxidized.	Change the reflecting mirror.
	Too much dust on the reflecting surface.	Clean the surface with the brush.
Fuse has blown	Voltage selector is wrongly set.	Set the voltage selector correctly.

Trouble	Possible Cause	Remedy
	The fuse doesn't comply with the specification.	Replace it with a suitable fuse.
Slit closes automatically	The slit width control knob is too loose.	Adjust the tightness of the control.
Fixation target position	The output plug is loose.	Insert the output plug firmly.

6. Responsibility

We will supply the circuit diagram, electrical component list, drawing annotation and calibration instructions according to each customer's needs. If additional information is required please contact us.

7. Transportation

During transportation, the instrument must be protected it from moisture and strong vibrations. Do not transport the instrument upside down. Relative humidity should be maintained between 10 to 90% RH. Temperature should be maintained between -25°C and 40°C.

This instrument should be stored in a well ventilated room free of corrosive gasses where the relative humidity is between 10 to 80% RH and the temperature is between -10°C to 40 °C.

If the assembled instrument is to be moved or transported a short distance, please lock all the moveable parts. Move the instrument carefully. If the instrument is to be moved a long distance it must be repacked in its original packaging.

8. Optional Accessories (purchase in addition)

8.1 10x measuring eyepieces

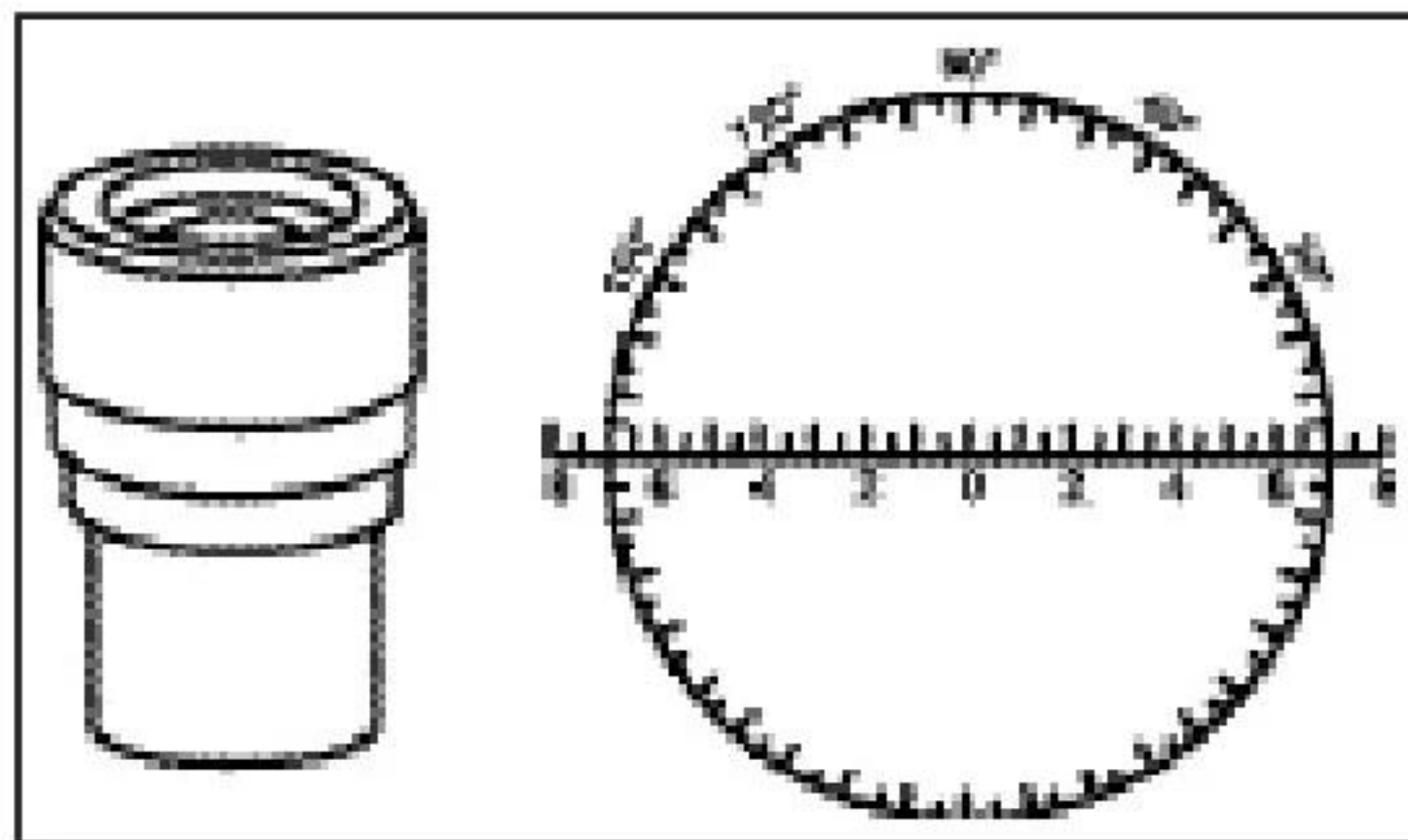
You may replace the standard eyepieces the optional eyepieces that include reticles for measurement of length and angle.

Scale specification

Length scale	16mm (0.5mm minimum graduations)
Angle scale	360° (5° minimum graduations)

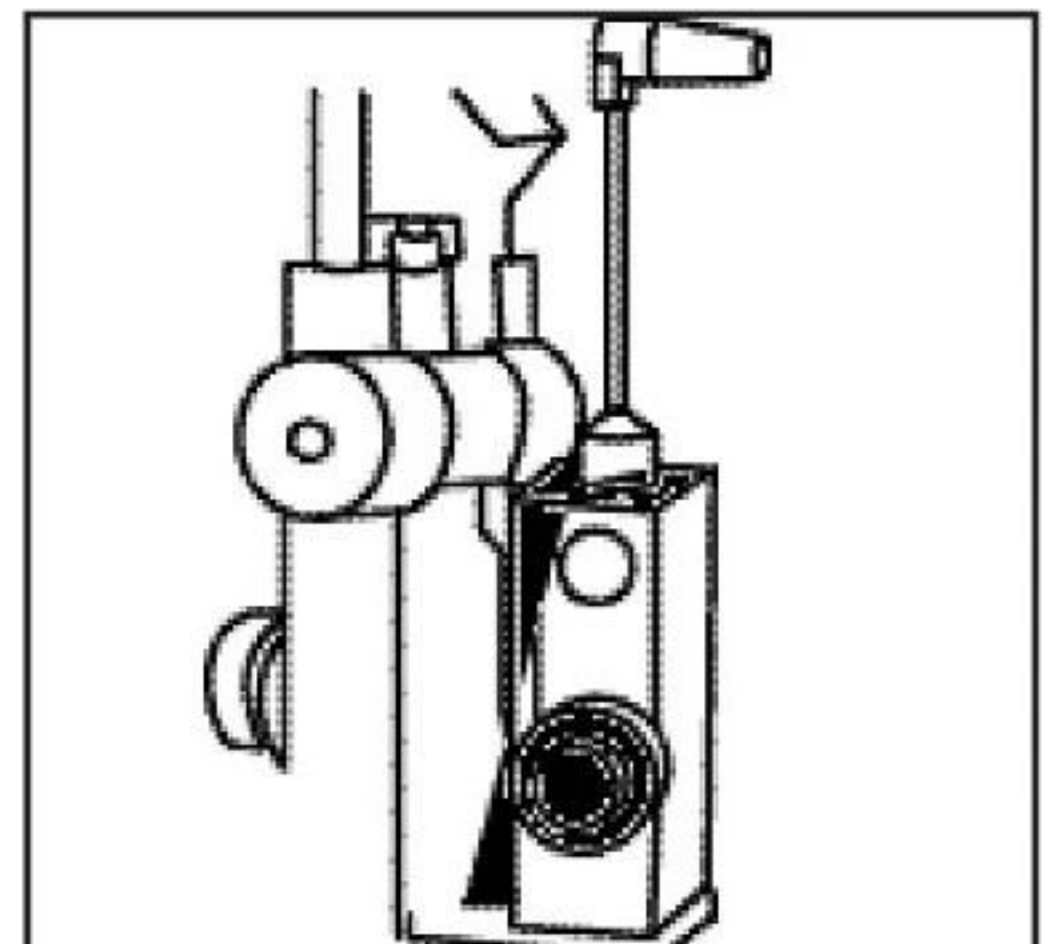
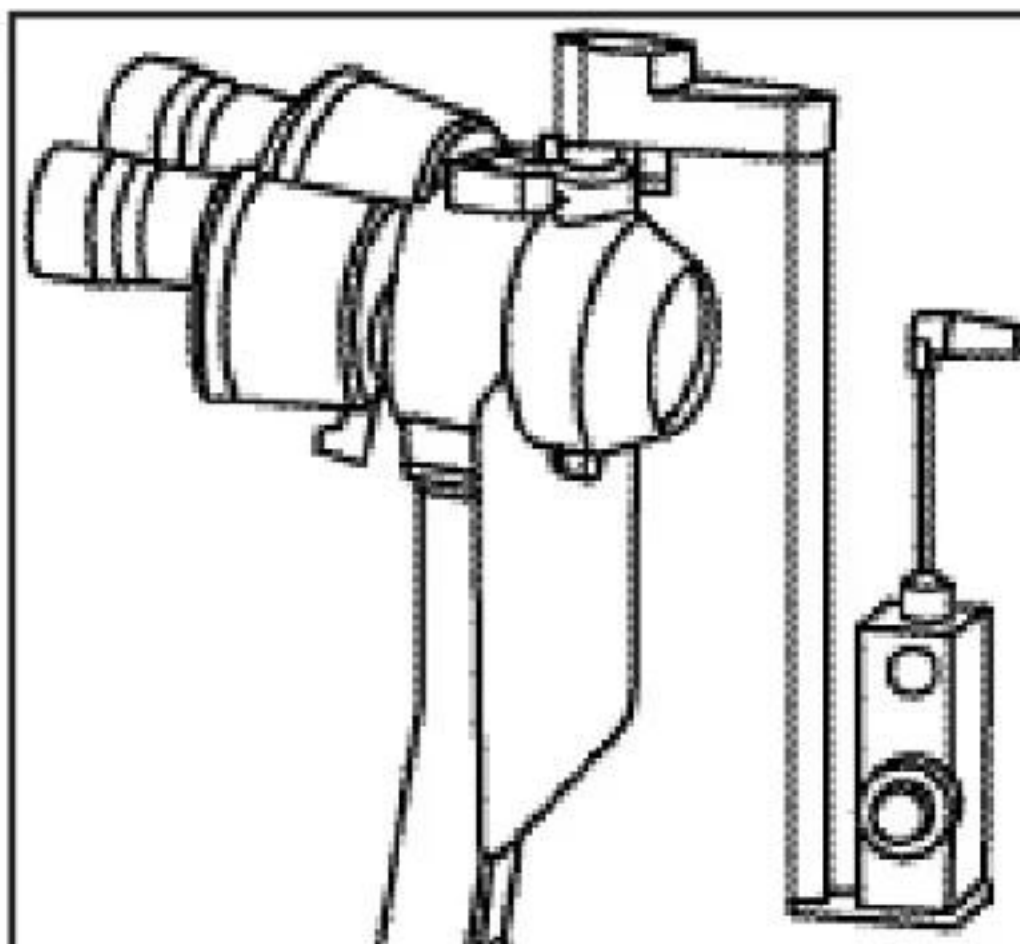
Measuring parameters

Length scale	To be used at 10x only
Diopter compensation	-5D to +3D
Angle scale	No limitation



8.2 Applanation tonometer

The LSL 1100 slit lamp can be equipped with YZ30R, Haag-Streit AG Model R-900 or model T- 900 applanation tonometer for measuring intraocular pressure.



9. Specifications

Microscope				
Type	cross angle stereovision			
Model of magnifying	change the objective for 2 grades magnification			
Eyepiece	10X			
Total magnification	objective x eyepiece = magnification rate/vision field.			
	1X	10X	10X	18mm
	1.6X	10X	16X	14,5mm
	1X	10X	16X	11,25mm
	1.6X	10X	25,6X	9mm
Range of PD adjustment	10x eyepiece		55mm to 82 mm	
Diopter adjustment	10x eyepiece		+- 8D	
Illumination				
Slit projection magnification	2/3X			
Slit width	continuous from 0mm to 9 mm. (at 9 mm, slit becomes a circle)			
Slit height	continuous from 1 to 8 mm			
Aperture diameter	9mm, 8mm, 5mm, 3mm, 2mm, 1mm, 0,2mm			
Slit angle	0° to 180° with horizontal scanning capability			
Slit inclination	5°,10°,15°,20° four steps			
Filter piece	Heat absorption, 13%ND, red-free, and blue			
Illumination bulb	12V30W halogen bulb			

Movement base	
Fore and back movement	90mm
Left and right movement	100mm
Fine movement	15mm
Vertical movement	30mm
Chin – rest parts	
Vertical movement	80mm
Fixation target	Red Led
Power source	
Input voltage	100/220V + 10%
Input frequency	50/60 Hz
Input power	58 VA
Output voltage	Illumination bulb 9.8V, 11.6V
Fixation target	7,2V
Electreical safety standard	Conform to Standard IEC601- 1, Class I Type B
Dimension and Weight	
Packing box	720mm x 495 mm x 480mm
Total weight	24 Kg
Net weight	21 Kg

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