

BEFORE USE

1. Notice

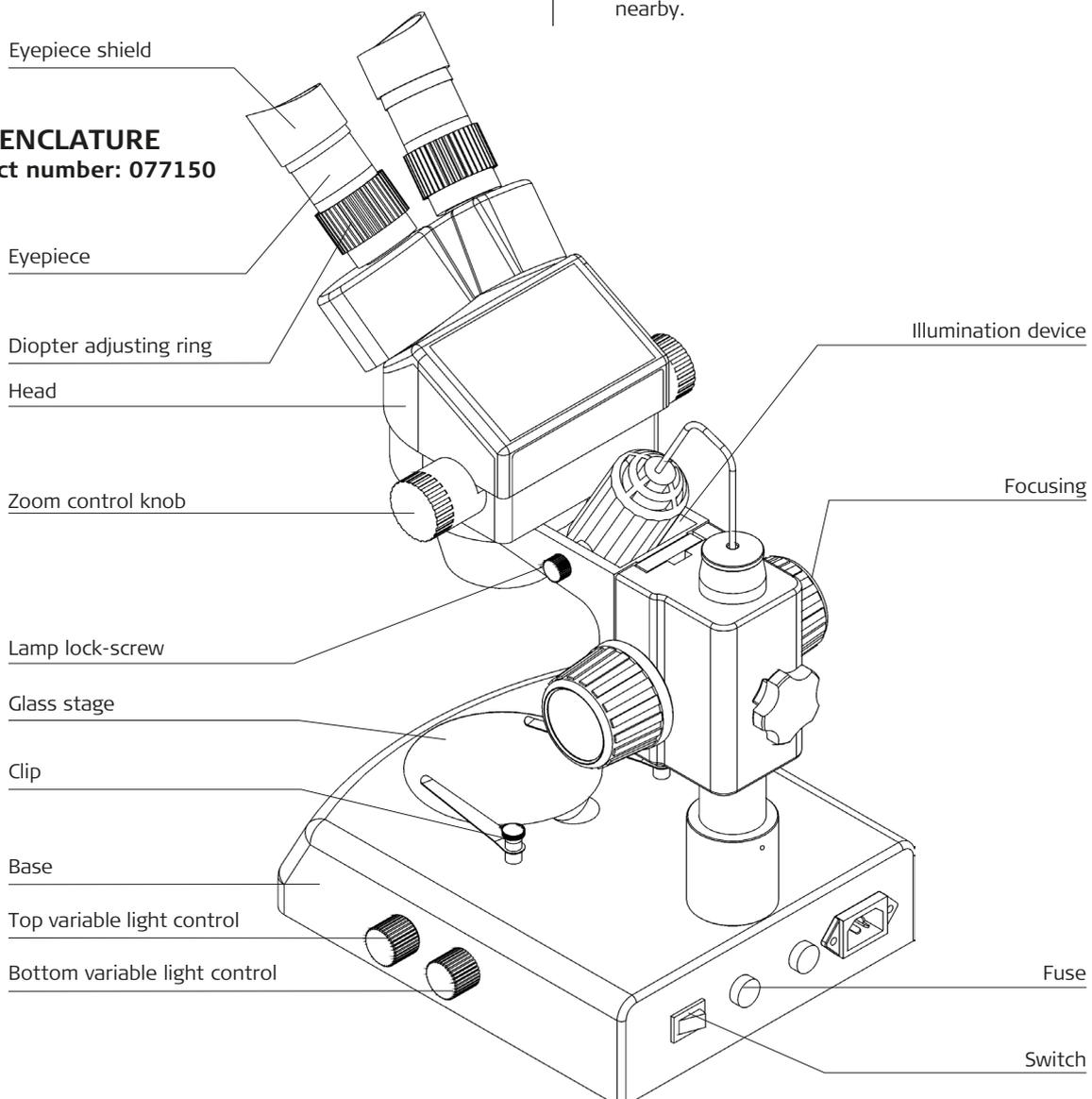
- 1.1) Stereomicroscope ought to be placed in a dry and clean place. Do not expose the microscope in the sun directly. Avoid high temperature and violent vibration.
- 1.2) As stereo microscope is a precision instrument, handle with care, avoiding impact or abrupt movement during transportation.
- 1.3) To keep the image clear, do not leave fingerprints or stains on the surfaces of the lens.
- 1.4) Never turn the left and right focusing knob in the adverse direction at the same time, otherwise the stereo microscope will be damaged.

2. Maintenance

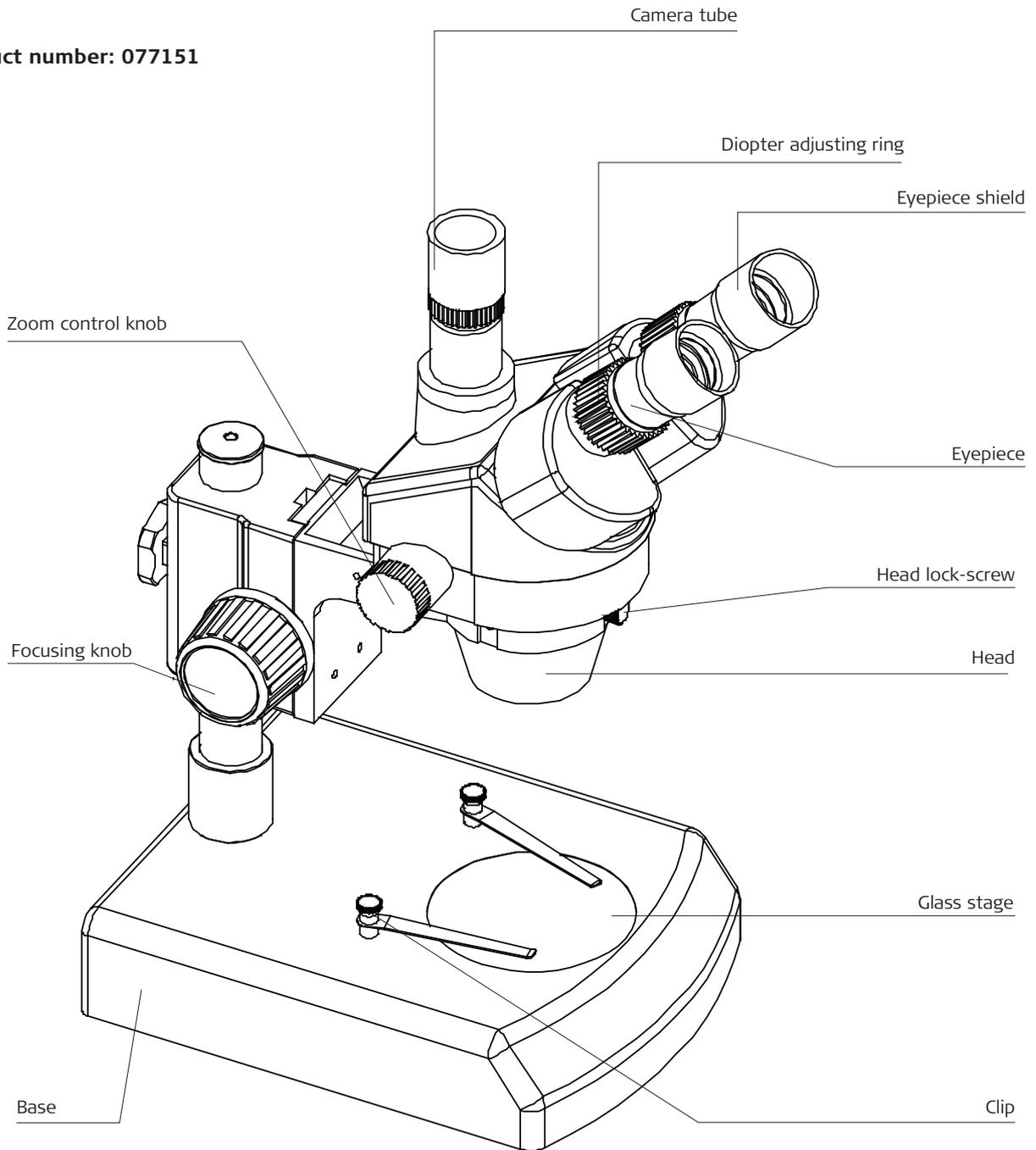
- 2.1) All lenses must be kept clean. Fine dust on the surface of the lens should be blown off with hand blower or wiped off gently with a soft lens tissue; Fingerprints or oil marked on it should be wiped off with a tissue moistened with a small amount of xylene.
- 2.2) Never use the organic solution to clean the other surface (especially the plastic surfaces). If necessary, please choose the neutral detergent.
- 2.3) Do not take the microscope apart for fearing that it is damaged.
- 2.4) After using, cover the microscope with the dust-cover provided and store it in a dry and clean place free from moisture to prevent rust.
- 2.5) To keep the performance of the microscope, please check it periodically. The detail can be gotten from the agent nearby.

NOMENCLATURE

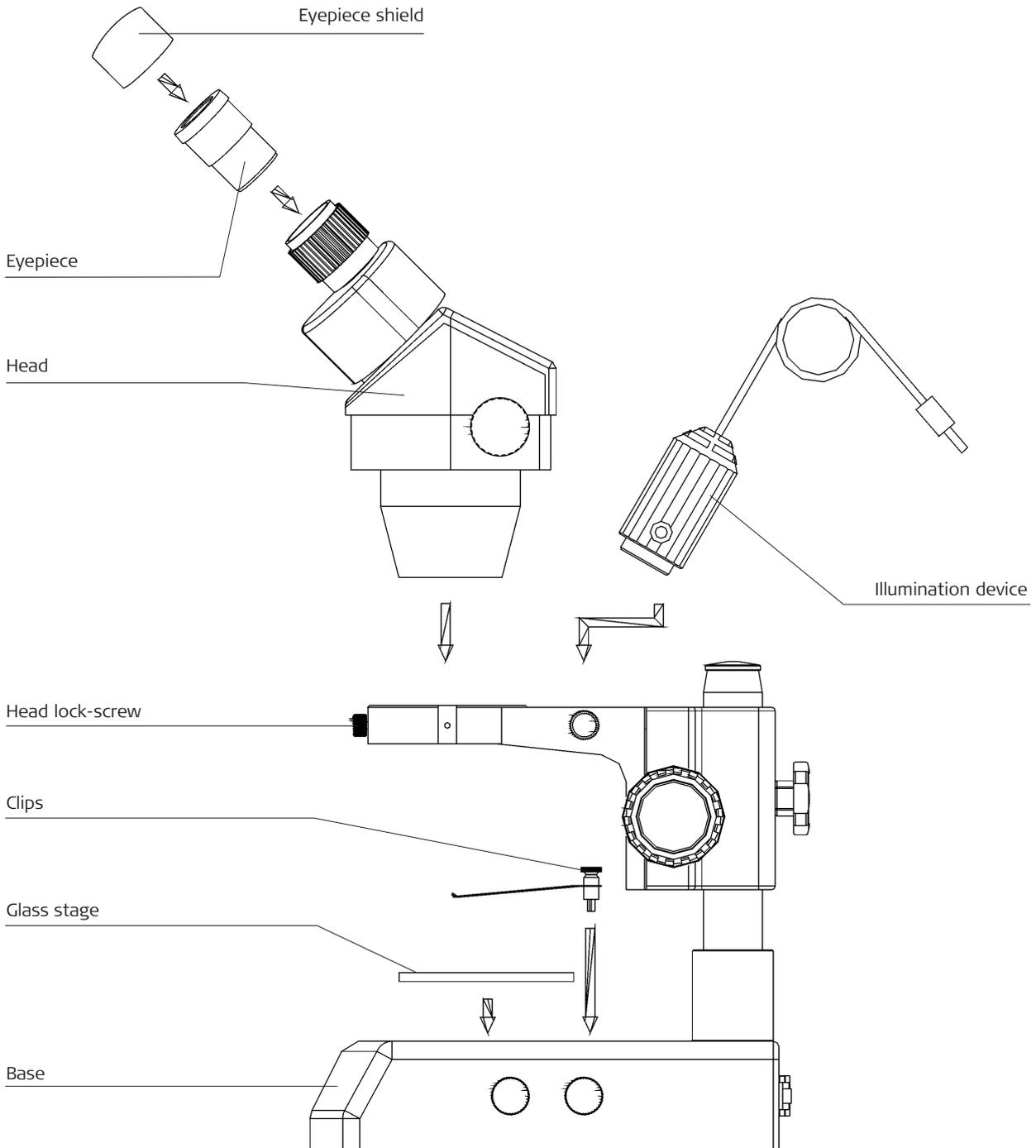
Product number: 077150



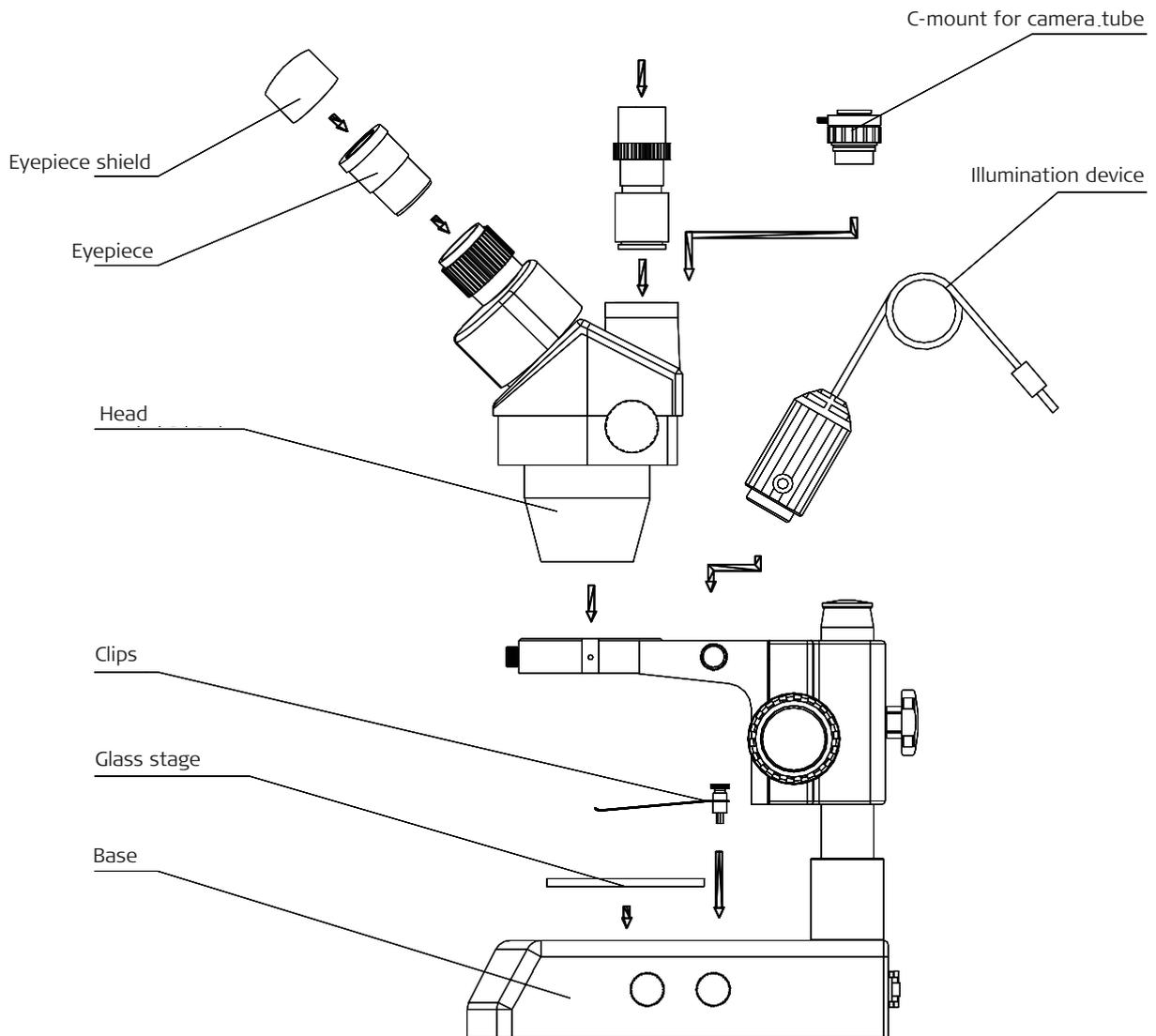
Product number: 077151



ASSEMBLAGE
Product number: 077150



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OPERATION

1. Use the glass stage

- 1.1) Press the glass stage on the sunken place then the other side of the glass stage will be lifted. (Fig. 1)

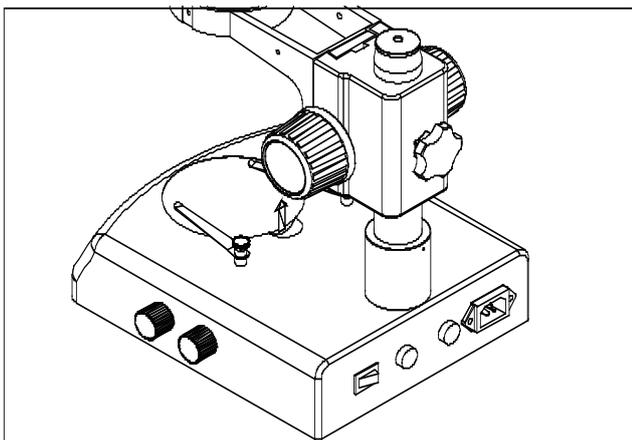


Fig. 1

2. Adjust the degree of tightness of the focusing arm

- 2.1) If you want to adjust degree of tightness of the focusing arm, you can hold one of the focusing knobs and turn another one to attain a suitable position. The degree of tightness relies on the direction to be turned. The clockwise direction is tight, otherwise, is loose.
- 2.2) The suitable position of tightness can make the adjustment more comfortable and prevent the focusing bracket from slipping down by its weight during the observation. (Fig. 2)

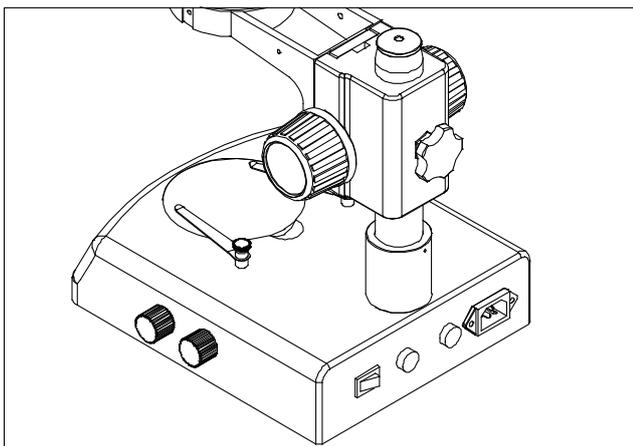


Fig. 2

3. Set the specimen slide

- 3.1) Set the specimen on the center of stage plate. If necessary, clamp the slide with the clips.
- 3.2) Turn on the light.

4. Adjust the specimen slide

- 4.1) Turn the zoom control knob to the maximum magnification.
- 4.2) Turn the diopter adjusting rings to the zero.
- 4.3) Observe the specimen through the right eyepiece and make the image clear by turning the focusing knob.
- 4.4) Rotate the zoom control knob to the minimum magnification.
- 4.5) Observe the specimen through the right eyepiece and make the image clear by turning the right diopter adjusting ring.(Fig.3)
- 4.6) Redo the step (1), (3), (4) and (5) till the right adjusting ring is more precise.
- 4.7) Do the step (4) and make the image clear which is observed through the left eyepiece by turning the left diopter adjusting ring. (Fig. 3)

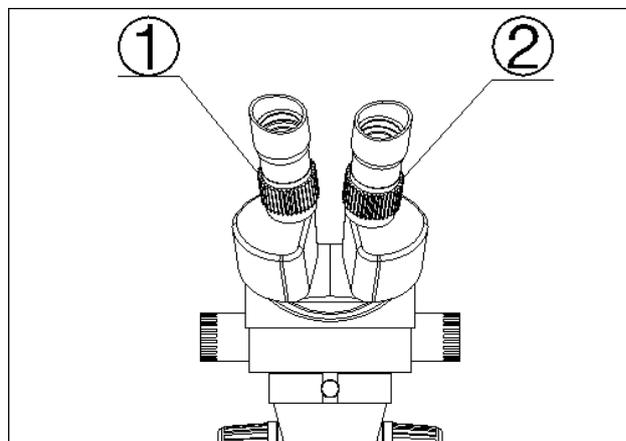


Fig. 3

5. Adjust the interpupillary distance

- 5.1) Adjust the prism housing along the direction of arrowhead of the Fig. 4 till the observation is comfortable.

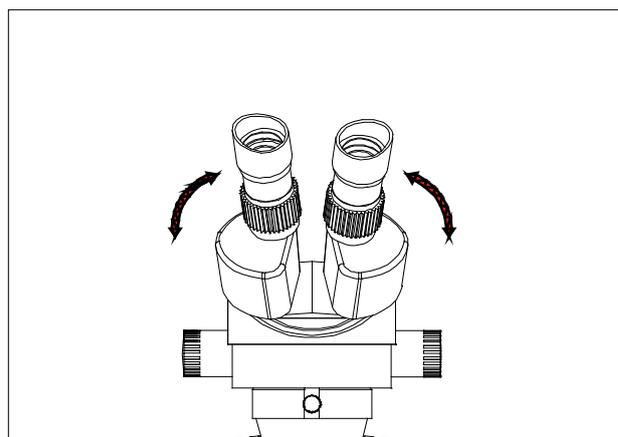


Fig. 4

6. Use Eyepiece shields

- 6.1) For user who does not wear glasses, hold the diopter-adjusting ring to prevent them from rotating and turn the eyepiece till the eyepiece shields fit the observer well.
- 6.2) For user who wears glasses, take the eyepiece shields off before observation.

7. Install the illumination device

- 7.1) Insert the illumination device in the bracket with the protrudent side toward the lock-screw and tighten the lock-screw. (Fig. 5)
- 7.2) Put the plug into the socket of the pillar stand. (3)

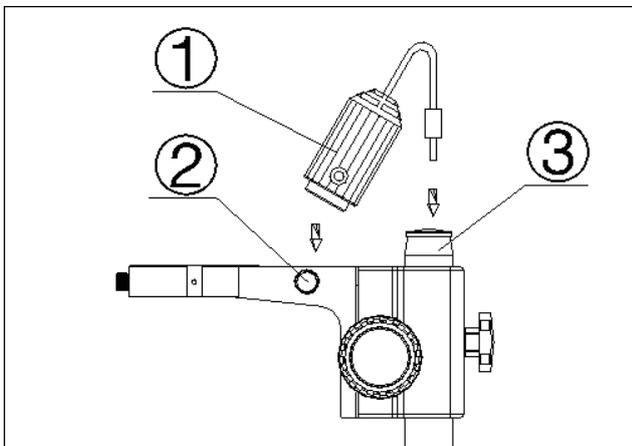


Fig. 5

8. Mount camera (optional) at C-mount.

9. Adjust the brightness of the bottom light

- 9.1) Turn the adjustable light knob according to the sign marked on the base, along the clockwise the brightness will be added, otherwise it will be weakened. (Fig. 7)

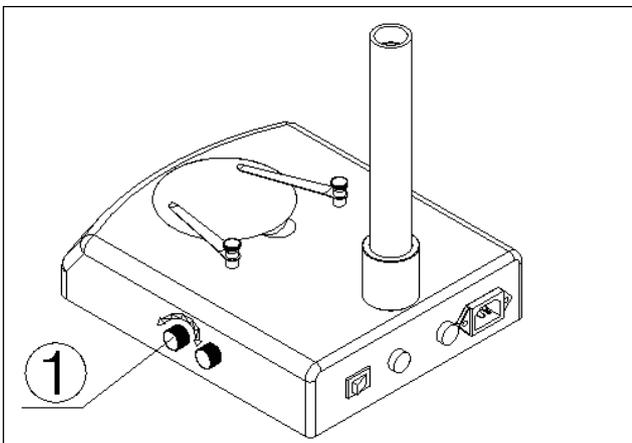


Fig. 6

10. Replace the fuse

- 10.1) Screw the fuse tube out with a screwdriver and then pull the fuse out of the tube.
- 10.2) Renew the fuse and mount it in an adverse way. (Fig. 7)

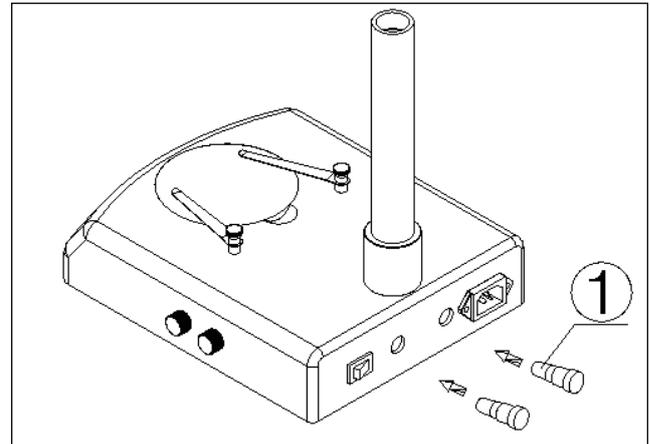


Fig. 7

TECHNICAL PARAMETER

Product number: 077150/077151

Eyepiece	Auxiliary objectives					
	Standard configuration		0.5X		2X	
	Working distance 100 mm		Working distance 165 mm		Working distance 30 mm	
	Magnification	Field of view	Magnification	Field of view	Magnification	Field of view
10X/20	7X	28.6	3.5X	57.1	14X	14.3
	45X	4.4	22.5X	8.9	90X	2.2
20X/10	14X	14.3	7X	28.4	28X	7.1
	90X	2.2	45X	4.4	180X	1.1

Working distance is fixed regardless of the magnification factor.

Total mag. = Zoom mag. X Eyepiece mag. X Auxiliary objective mag.

$$\text{Diameter of field of view (mm)} = \frac{\text{Field number of eyepiece}}{\text{Zoom mag. X Auxiliary objective mag.}}$$

TROUBLESHOOTING

The performance of the microscope can't be made fully because of unfamiliar using, this table will give some advices.

1. General troubleshooting

Trouble	Cause	Remedy
1. Double images	Interpupillary distance is not correct	Readjust it
	Diopter adjustment is not correct	Readjust it
	Magnification of each eyepiece is not the same size	Mount the same size eyepiece
2. Dirt appears in the field of view	Dirt on the specimen	Clean the specimen
	Dirt on the surfaces of eyepiece	Clean the surface
3. Image is not clear	Dirt on the surfaces of the objectives	Clean the objectives
4. Image is not clear while the focus changing	Diopter adjustment is not correct	Readjust the diopter
	Focus is not correct	Readjust the focus
5. The focusing knob is not smooth	The focusing knob is too tight	Loosen it to a suitable position
6. The image is obscure because of the head slipping down by itself during observation	The focusing knob is too loose	Tighten it to a suitable position
7. Eyes fell tired easily	Diopter adjustment is not correct	Adjust the diopter
	Brightness of light is not correct	Adjust the brightness
8. Bulb does not work when the switch is on	No power supply	Check the connection with the power supply