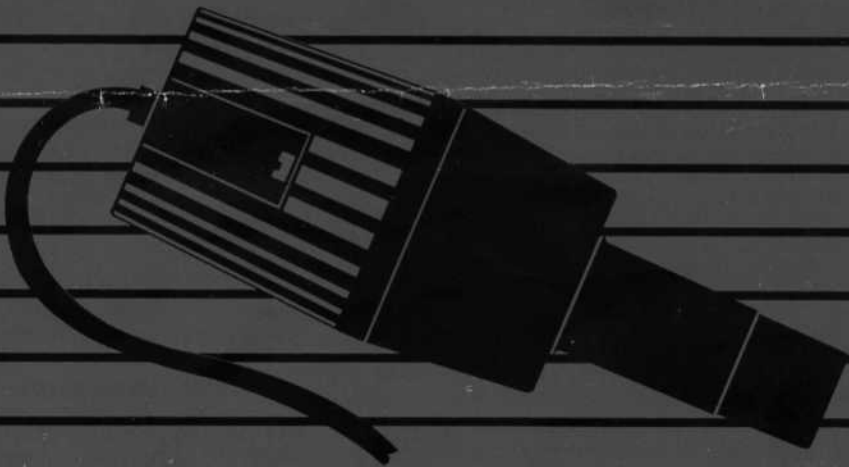


Nicholas Illuminator

INSTRUCTION MANUAL



NICHOLAS ILLUMINATOR

Cat. Nos. 31-33-05-11
31-33-05-21
31-33-05-28
31-33-05-29

The Nicholas Illuminator provides a highly directional spotlight illumination and brings out shadows of surface contours. This Illuminator is recommended for opaque-diffuse, transparent or translucent specimens. The unit may be mounted to the StereoZoom or StereoZoom 7 power pod, to the arm of the A Stand (Cat. No. 31-26-88), to the Stationary Arm (Cat. No. 31-26-59), to the B Base (Cat. No. 31-26-84), or to the Transformer base. Consult the instruction books for the StereoZoom microscopes for additional information.

MOUNTING

To mount the Illuminator to the A Stand, the Stationary Arm or the B Base:

1. Insert the Illuminator into the circular opening in the Arm or Base and plug the Illuminator Cord into the rear of the Transformer.
2. Plug the Transformer Cord into an electrical outlet and turn the Transformer Knob for the desired illumination level. If mounted to the B Base, rotate the substage mirror for the best illumination.

To mount the Illuminator to the Power Pod:

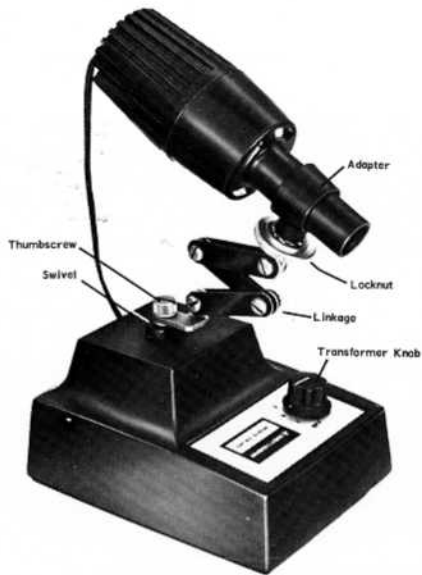
1. Attach the Swivel end of the Linkage to one of the illuminator stations on the power pod and tighten the thumbscrew.
2. Remove the tape from the other end of the Linkage. Be sure the lock washer remains in place.
3. Insert the Nicholas Illuminator into the Adapter and plug the Illuminator Cord into the Transformer base outlet.
4. Plug the Transformer Cord into an electrical outlet. Turn the Transformer Knob for the best illumination level and position the Illuminator as desired.

NOTE

HELPFUL HINT: Operating the lamp on tap 2 of the Transformer will result in many extra hours of lamp life.

LAMP REPLACEMENT

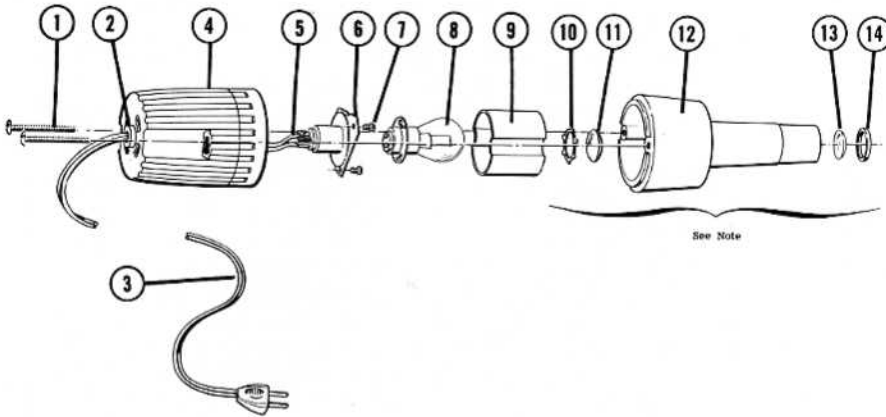
1. Unplug the Transformer Cord. Loosen each of the two clamp screws one complete turn. Rotate the Lamp Housing until it can be pulled off over the screw heads.
2. Twist the lamp counterclockwise, at the same time applying a slight tilting action, and remove.
3. Align the notch in the new lamp's circular base plate with the notch in the triangular Lamp Housing plate. Seat the lamp on the retaining pins and twist it clockwise, using a slight tilting action to raise the pins until it locks in place.
4. Wipe off the lamp and reassemble the Illuminator.



The Nicholas Illuminator

AVAILABLE EQUIPMENT

Cat. No.	Description
31-33-05-11	Nicholas Illuminator, Adapter, Linkage
31-33-05-21	Nicholas Illuminator, Transformer (3 Tap, 6V., 3-Wire), Adapter, Linkage
31-33-05-28	Nicholas Illuminator, Transformer (3 Tap, 120/6V, 3-wire), Adapter Linkage
31-33-05-29	Nicholas Illuminator, Transformer (3 Tap, 240/6V, 3-wire), Adapter, Linkage
31-33-05	Nicholas Illuminator
31-35-21	Transformer (3 Tap, 6V, 3-wire)
31-35-28	Transformer (3 Tap, 6V, 3-wire)
31-35-29	Transformer (3 Tap, 240/6V, 3-wire)
31-35-34	Adapter
31-35-41	Linkage
31-31-76	Lamp (Box of 5)
31-31-75	Lamp (Pkg. of 1)



Nicholas Illuminator (Exploded View)

Parts List - Nicholas Illuminator

Description	Part No.
1. Screw (2 required)	313305-102ND
2. Strain Relief	313611-116ND
3. Cord Set	313353-180ND
4. Cover	313304-114
5. Sleeve (2 Required)	313353-178
6. Lamp Holder	313353-136ND
7. 4-40 x 5/16 Screw (3 required)	313304-116
8. GE #1460X Lamp	313175-101
9. Shield	313353-148
10. Lens Retainer	313353-197
11. Lens A	313353-024
12. Lens B	313353-022
13. Retainer	313353-199
14. Lens Mount Assy.	313305-105
	313305-910ND

NOTE:

Parts numbered 10 thru 14 are factory assembled by special tools. The assembled unit may be ordered complete by Part No. 313305-910ND -Lens & Mount Ass'y.

Warranty

This product is warranted to be free from defects in material and workmanship for a period of one year from the date of invoice to the original purchaser.

If during the warranty period the product is found to be defective, it will be repaired or replaced at facilities of Bausch & Lomb or elsewhere, all at the option of Bausch & Lomb. However, Bausch & Lomb reserves the right to refund the purchase price if it is unable to provide replacement and repair is not commercially practicable or cannot be timely made. Parts not of Bausch & Lomb manufacture carry only the warranty of their manufacturer. Expendable components such as lamps and fuses carry no warranty.

This warranty does not cover damage caused in transit; damage caused by misuse, neglect, or carelessness; or damage resulting from either improper servicing or modification by other than Bausch & Lomb approved service personnel. Further, this warranty does not cover any routine maintenance work on the product described in its instruction manual or any other minor maintenance work which is reasonably expected to be performed by the purchaser.

No responsibility is assumed for unsatisfactory operating performance due to environmental conditions such as humidity, dust, corrosive chemicals, deposition of oil or other foreign matter, spillage, or other conditions beyond the control of Bausch & Lomb.

For service, repair or return procedures under this warranty, contact your distributor, your local Bausch & Lomb field office or, in the United States, Bausch & Lomb at (716) 338-6513.

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Improvements are constantly being made in all Bausch & Lomb products to provide better performance, greater convenience of use, longer life, and improved appearance.

Often, the nature of such improvements will be self-evident and will not require an explanation.

If the improvements affect use or maintenance procedures, supplementary instructions will be included in your manual or with the instrument.

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