

6.0 FILTER REPLACEMENT

To clean or replace the glass filter place the lamp housing on a table, window side up. Pry the lamp housing open as described in Section

5.0 LAMP REPLACEMENT

Insert two fingers into the bottom half of the lamp housing and press downward on the aluminized light shield drawing outward at the same time.

The light shield will easily slide out carrying the filter glass with it. A shallow, V-shaped spring between the boxlike light shield and the rear wall of the lamphousing holds the filter glass in place over the window of the housing.

The spring should lie with the apex of the "V" against the rear wall of the housing and parallel to the vent slots. If the illuminator has a condenser lens, it is necessary to insert the lens first. Hold the lamphouse window opening down to do this. Place the filter glass across the shoulders on the one open side of the light shield, opposite the circular opening in the shield. Holding the filter in place, press the light shield down on the "V" spring and slide the whole assembly into the housing. Filter, spring and light shield should all be pushed into the housing as far as they go.

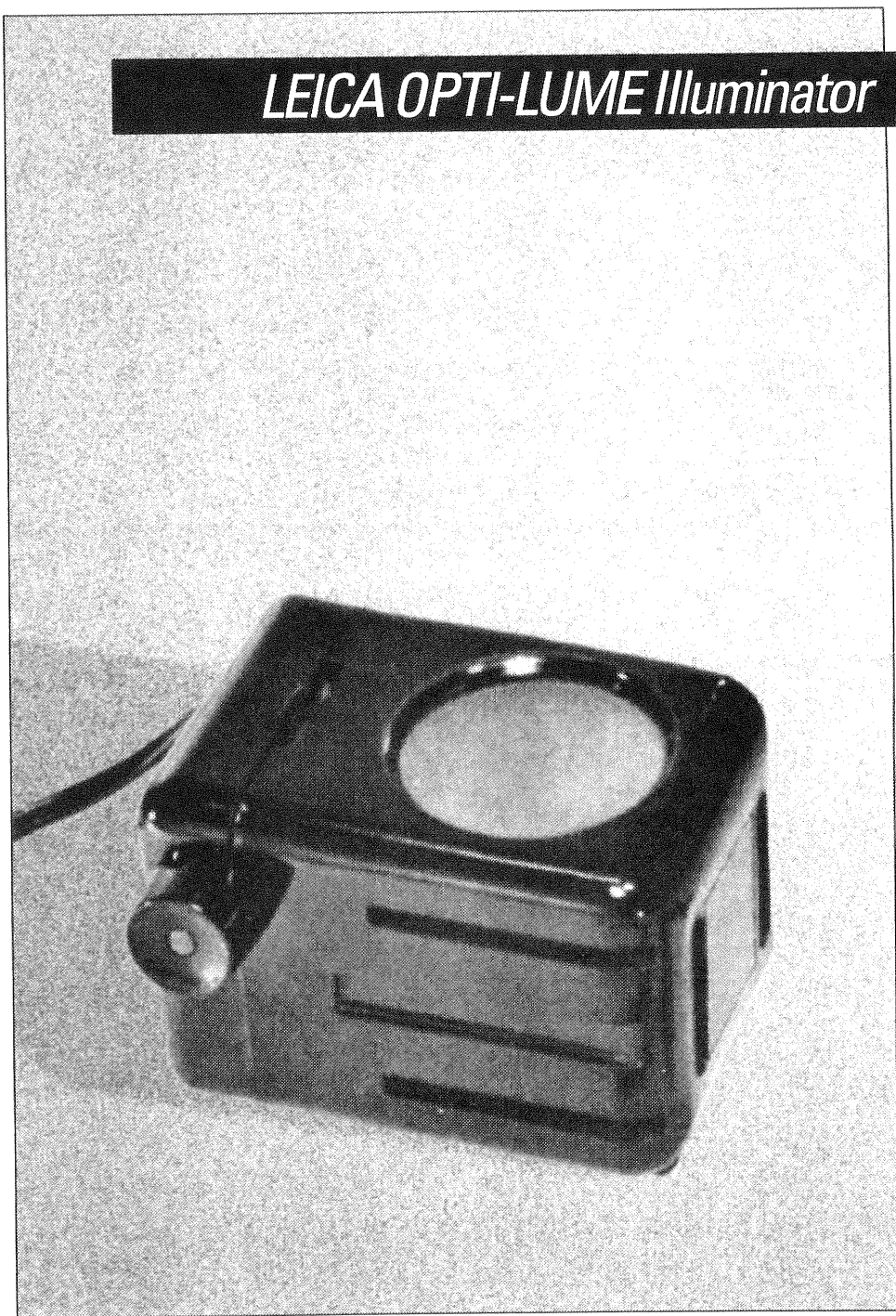
Reassemble the lamphouse first, by aligning the switch with the knob in the lower edge of the housing, and snapping the two parts together.

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Instruction Manual

Leica





Due to a policy of continuous development, we reserve the right to change specifications without notice.

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Explanation of Warning Symbols

	CAUTION: Risk of electric shock		CAUTION: (Refer to accompanying documents)
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1.0 INTRODUCTION

The LEICA OPTI-LUME Illuminator is a convenient, compact unit designed for use with a compound microscope for viewing transparent specimens in brightfield illumination. It may be used with or without the microscope mirror or attached to the mirror post or base of the microscope.

The LEICA OPTI-LUME illuminator is available with a choice of three filters or with a condenser lens combined with one of three filters. An aluminized reflector that clips to the lamp also is available.

The choice of filters include:

- colorless ground glass-enhances specimen for maximum image brightness
 - frosted blue glass-eliminates slight yellow color cast by the lamp
 - frosted daylight filter-provides light quality nearest that of natural daylight; preferred for better evaluation of stained specimens.
- Adding a condenser lens to the illuminator increased the image brightness and improves the distribution of light over the field of view. The aluminized reflector further increases the image brightness.

2.0 USE WITH THE MICROSCOPE MIRROR

To use the LEICA OPTI-LUME Illuminator in conjunction with the microscope mirror place it approximately two to three inches in front of the microscope. The illuminator should be centered with the mirror and squared to the microscope base. Be sure that the illuminator's on-off switch is accessible and that the electrical cord is safely positioned. Connect the electrical cord to any 115-volt line.

Turn the on-off switch clockwise to turn on the illuminator.

Tilt the microscope mirror and adjust the substage condenser until the field of view is brightly and evenly illuminated.

3.0 USE WITHOUT A MICROSCOPE MIRROR

The LEICA OPTI-LUME Illuminator may be placed directly beneath the substage condenser of the microscope if the microscope mirror can be easily removed.

Position the illuminator between the feet of the microscope with the on-off switch facing left. Center the illuminator with the substage condenser. Adjust the substage condenser until the field of view is brightly and evenly illuminated.

NOTE: Whether using the LEICA OPTI-LUME Illuminator with or without the microscope mirror, do not tilt the microscope. Uneven illumination will result.

4.0 ATTACHING THE LEICA OPTI-LUME TO THE MICROSCOPE

The LEICA OPTI-LUME Illuminator can be attached to the microscope with brackets. (Use catalog no. 313448 bracket on a microscope with plane stage or in-stage condenser; catalog no. 313472 bracket, with a substage condenser.)

Before attaching the illuminator to the microscope, it is necessary to remove the mirror and mirror fork. Tilt the microscope backward and gently open the mirror fork enough to release the mirror. Remove the screw holding the mirror fork to the support post.

Secure the bracket to the mirror post using the screw and washer supplied. (The lock washer is placed between the bracket and the post.) Before tightening the screw, rotate the bracket into the correct position. Bracket (catalog no. 313448) attaches with fiber strips toward the stage; Bracket (catalog no. 313472) attaches with narrow slots toward the base; when used with the condenser, the narrow slot faces toward the stage.

Insert the lamphouse between the top sides of the bracket, engaging the fiber strips or metal strips in the center slots along side the illuminator housing. Seat the illuminator housing in the bracket.

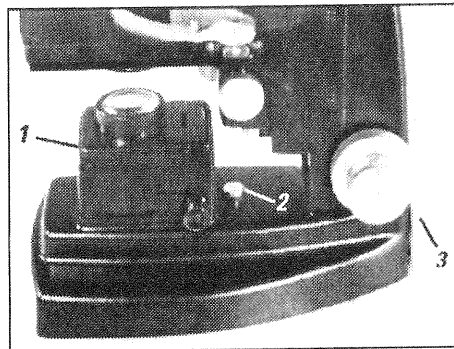



Figure 1 - LEICA OPTI-LUME Illuminator (313390) 2. Bracket (313448) 3. Bracket (313472)

5.0 LAMP REPLACEMENT

	CAUTION: Risk of electric shock. Disconnect the power cord before changing the lamp.
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DANGER: The glass envelope of the lamp may be extremely hot. Do not attempt to change the lamp before it is completely cooled or without wearing adequate skin protection.

To replace a burned-out lamp, remove the lower portion of the lamphouse containing the switch, lamp and socket assembly. Insert a flathead screwdriver or a coin into the slot directly beneath the illuminator window and twist to pry the lamphouse apart. The lower portion of the lamphouse can then be withdrawn and the lamp will be accessible for replacement.

The lamp can be replaced with a standard refrigerator lamp available at stores carrying replacement lamps or bulb for general household appliance use. i.e., G.E. 15511/102. Lamps may also be obtained from Leica (catalog no. 313115).

If the Leica Opti-Lume Illuminator is equipped with the clip-on aluminized reflector, pull it from the burned-out lamp or slightly pry it up with your thumb. The inner surface of the reflector has been aluminized for high reflectance—avoid touching the inner surface. The reflector can be used on the replacement lamp. Simply snap it on, avoiding unnecessary force. Be sure that the reflector is properly oriented on the lamp, i.e., the reflector should be to the rear of the lamp when it assembled in the lamp housing.

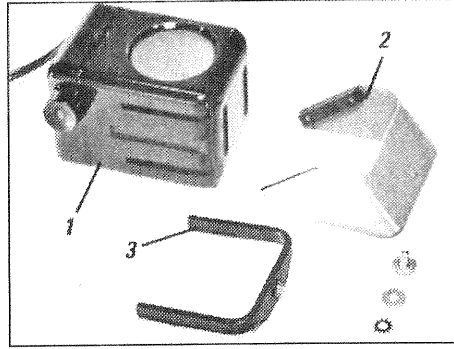


Figure 1 - LEICA OPTI-LUME Illuminator (313390) 2. Bracket (313448) 3. Bracket (313472)