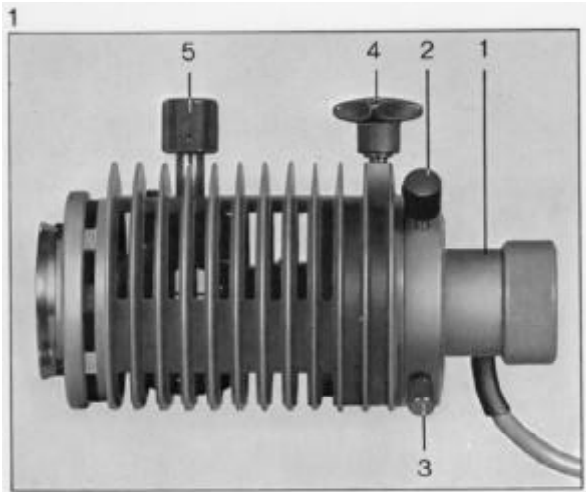


# Microscope Illuminator 60

## Operating Instructions

G 41 - 305 - e

# Microscope Illuminator 60



**1**  
Socket 60/1 (46 80 15) with fitted filament lamp  
12 V 60 W (5 A)

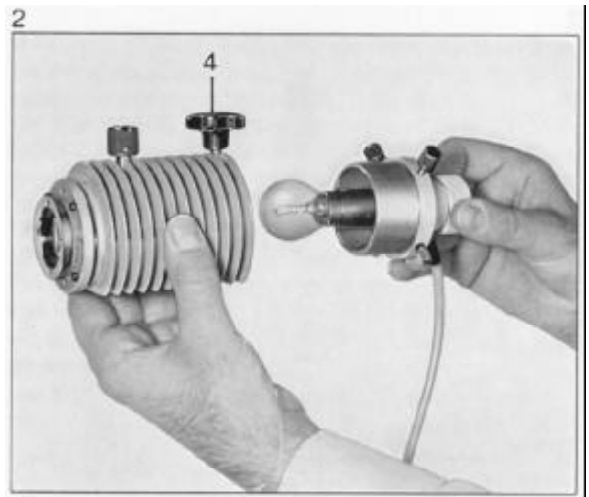
**2**  
Centering screws for lamp socket

**3**  
Set screws for spring bolts; loosen the two set  
screws to operate the centering screws (2)

**4**  
Set screws to fix socket 60/1 in lamp housing 60

**5**  
Knob for diffusion disk; swing in for microscopy,  
the slit will then be horizontal

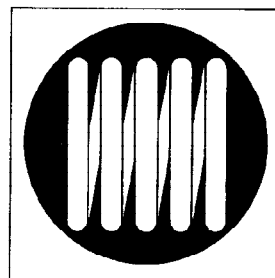
# Assembly



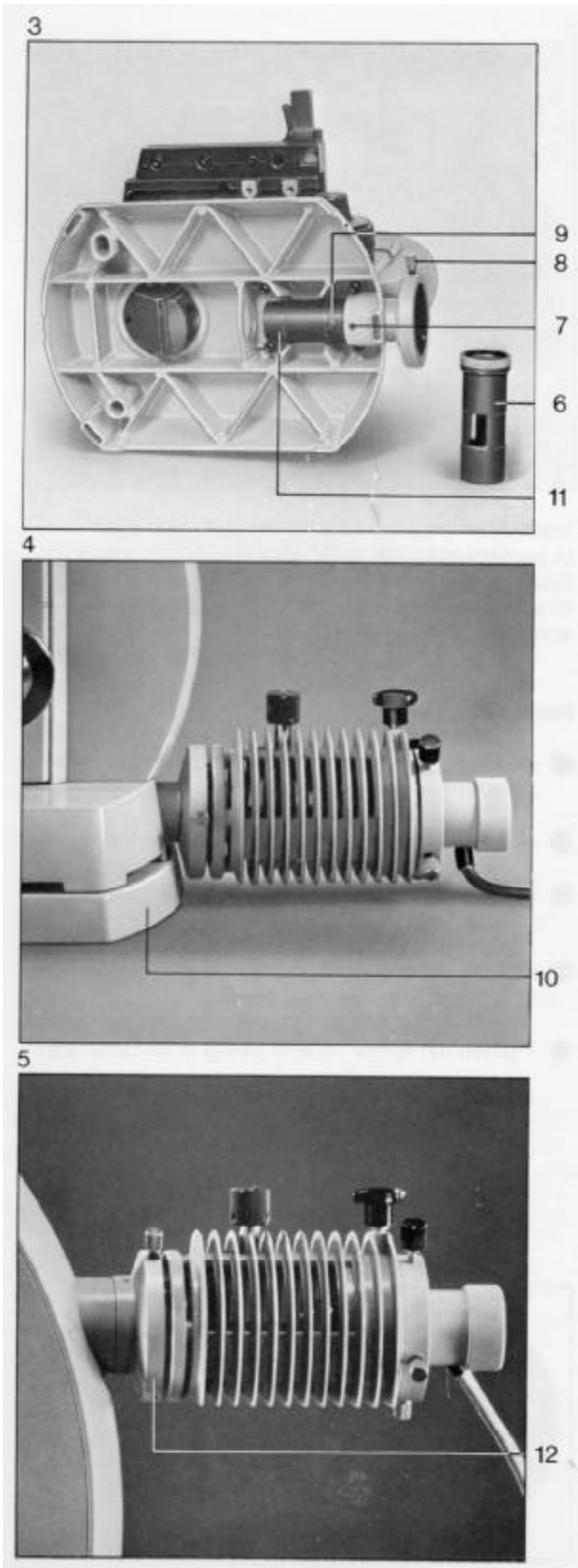
Insert filament lamp 12 V 60 W (38 00 18-2520)  
in socket (46 80 15).  
Slide socket with fitted filament lamp into housing  
60 with lamp condenser (46 72 57) and fasten with set  
screw (4) of the socket.

## Focusing the lamp

- Connect illuminator 60 to the mains via transformer and switch it on.
- Swing out diffusion disk (5).
- Hold the illuminator and project the light bundle on a surface about 2 to 3 m away.
- Loosen set screw (4) and shift the socket until the coil is in focus (Fig. below).
- Tighten set screw (4) and swing in diffusion disk.



# Mounting on the microscope



If illuminator 60 replaces the substage illuminator on the microscope base, remove first the collector tube with lamp condenser (46 70 50) (6). On STANDARD, WL microscopes and INVERTOSCOPE M mount instead with the same screw the connector tube (46 70 40) (11). With Allen Key swing the diffusion disk (9) out of the beam path. With filament lamp 12 V 60 W adjusted, swing back in diffusion disk for a more uniform illumination. On UNIVERSAL and Photomicroscope mount the connector tube (46 70 41) in the same manner. Fit illuminator 60 to the connector tube; loosen set screw (8), press down the spring bolt with the dovetails of the tilted illuminator 60 and insert the dovetails. Tighten set screw (8).

Place STANDARD microscopes on riser plate (46 72 86) and WL microscopes on riser plate (46 72 85) (10).

Fix microscope on riser plate with the two Allen head screws included. Diffusion disk in connector tube (46 70 40-9902) can be switched on and off by introducing an Allen Key through a bore of the riser plate.

For vertical illumination on UNIVERSAL microscope, mount illuminator 60 with the aid of connecting piece 46 70 42 (12).

# Centering the lamp

**1a) On transmitted light microscopes**

STANDARD, UNIVERSAL and PHOTOMICROSCOPE

- Remove condenser from condenser carrier.
- Rack up condenser carrier to the stop.
- Provide a sheet of translucent paper.
- Swing out diffusion disk (5).
- Open lamp field stop.

**1b) On reflected light microscopes**

UNIVERSAL and PHOTOMICROSCOPE

- Open aperture diaphragm.
- Close lamp field stop, if available.
- Remove objective from vertical illuminator.
- Place a sheet of translucent paper on the specimen stage.

**2**

- Loosen set screws (3) of spring bolts.
- With centering screws (2) project the filament coil in the center of the illuminated field (Fig. below) on the translucent paper.
- Tighten set screws (3).

**3**

- Insert the items removed under 1a) and/or 1b).
- Swing in diffusion disks (5) and (9).

