

# Nanodyne Replacement Illuminator for Olympus BHS Microscope Installation Instructions: Included Items

## Included Items Not Shown:

PN 10457 Hex Key 2.5mm (to attach OEM collector lens to adapter)

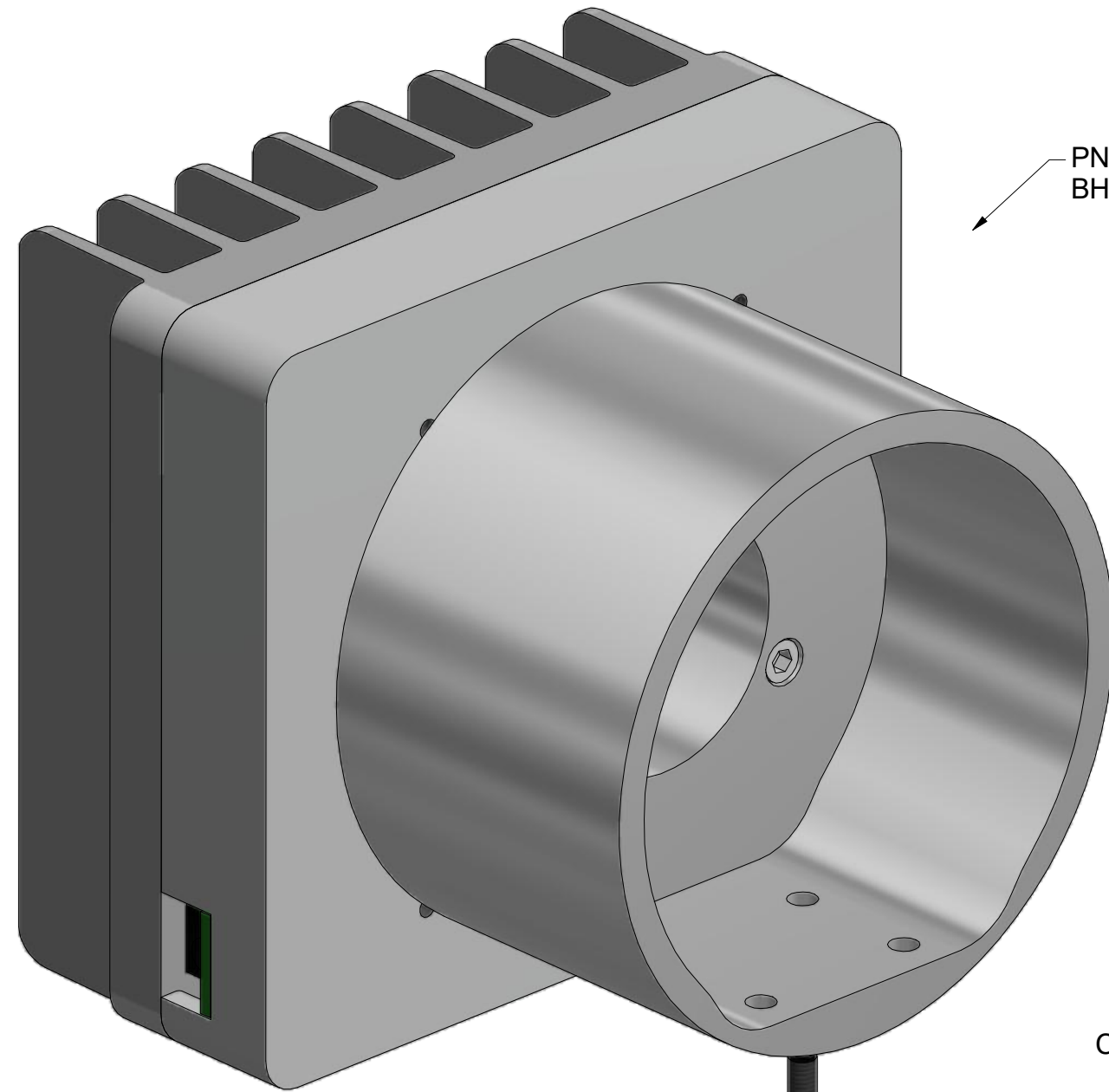
The illuminator may be powered by plugging the cable into the power supply provided, or into a suitable USB port on a computer or other device.



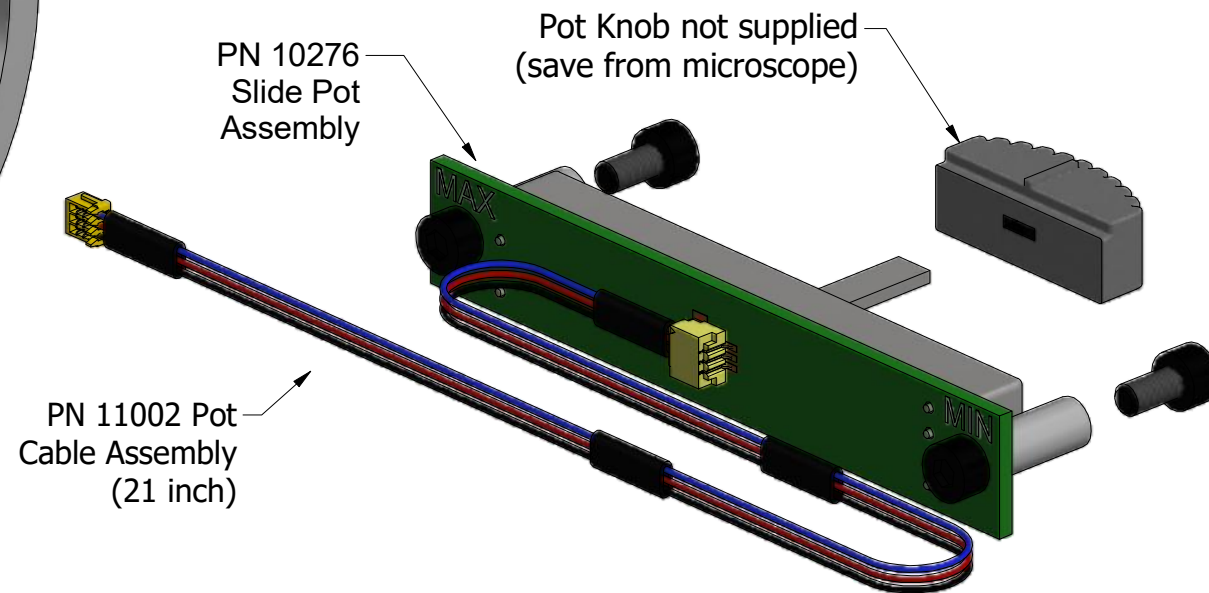
PN 11163 Power Supply 5V 2.1A and PN 10734 Power Cable 1.35mm ID/3.5mm OD x USB A 6 ft.



Tape to secure wires.



PN 10393 Olympus BHS Illuminator Assy



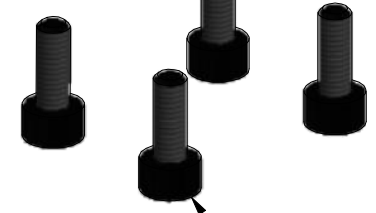
PN 11002 Pot Cable Assembly (21 inch)

PN 10276 Slide Pot Assembly

Pot Knob not supplied (save from microscope)



PN 10736 Rubber plug to block unused AC power receptacle.



PN 10275 SHCS M3 x 0.5 x 8mm (4 pcs) (to attach OEM collector lens to illuminator)

Power supplies are subject to substitution without notice due to availability issues and changes in regulations.

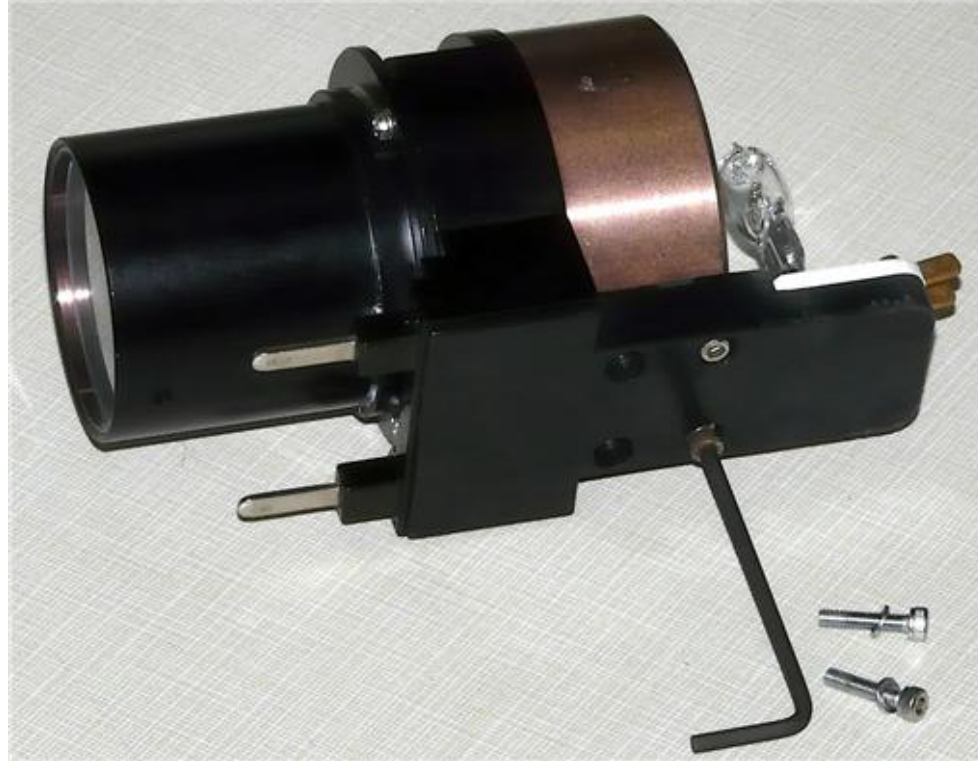
Wayne Bonin	2/9/2023	
PN 10476 Olympus BHS Illuminator System Installation		REV 4
SHEET 1 OF 7		

**Nanodyne Illuminator for Olympus BHS Microscope Installation Instructions: Remove OEM Illuminator, Salvage Collector Lens, Attach Lens to New Illuminator**

**(1)** Remove the OEM illuminator/collector lens assembly from the microscope.

It is attached by a screw under the microscope. See arrow on next page.

Remove the lens from the illuminator housing.



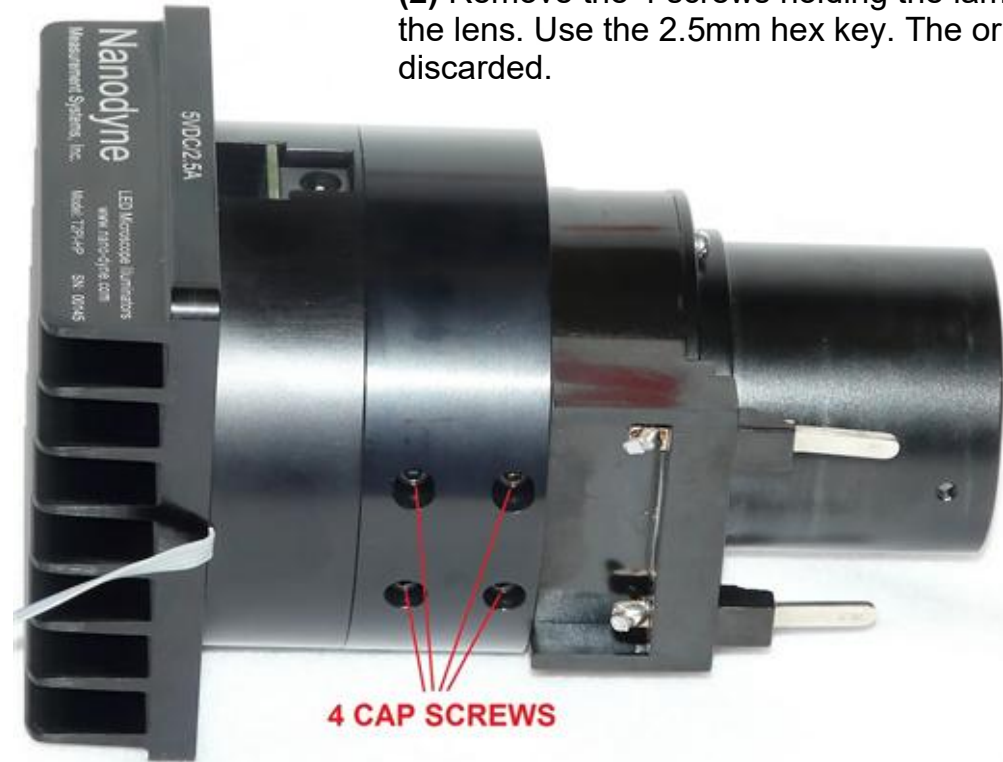
**(2)** Remove the 4 screws holding the lamp socket assembly to the lens. Use the 2.5mm hex key. The original screws may be discarded.



**(3)** Pull the lamp socket assembly away from the lens.



**(4)** Cut the wires close to the collector lens. The lamp socket assembly may be discarded.



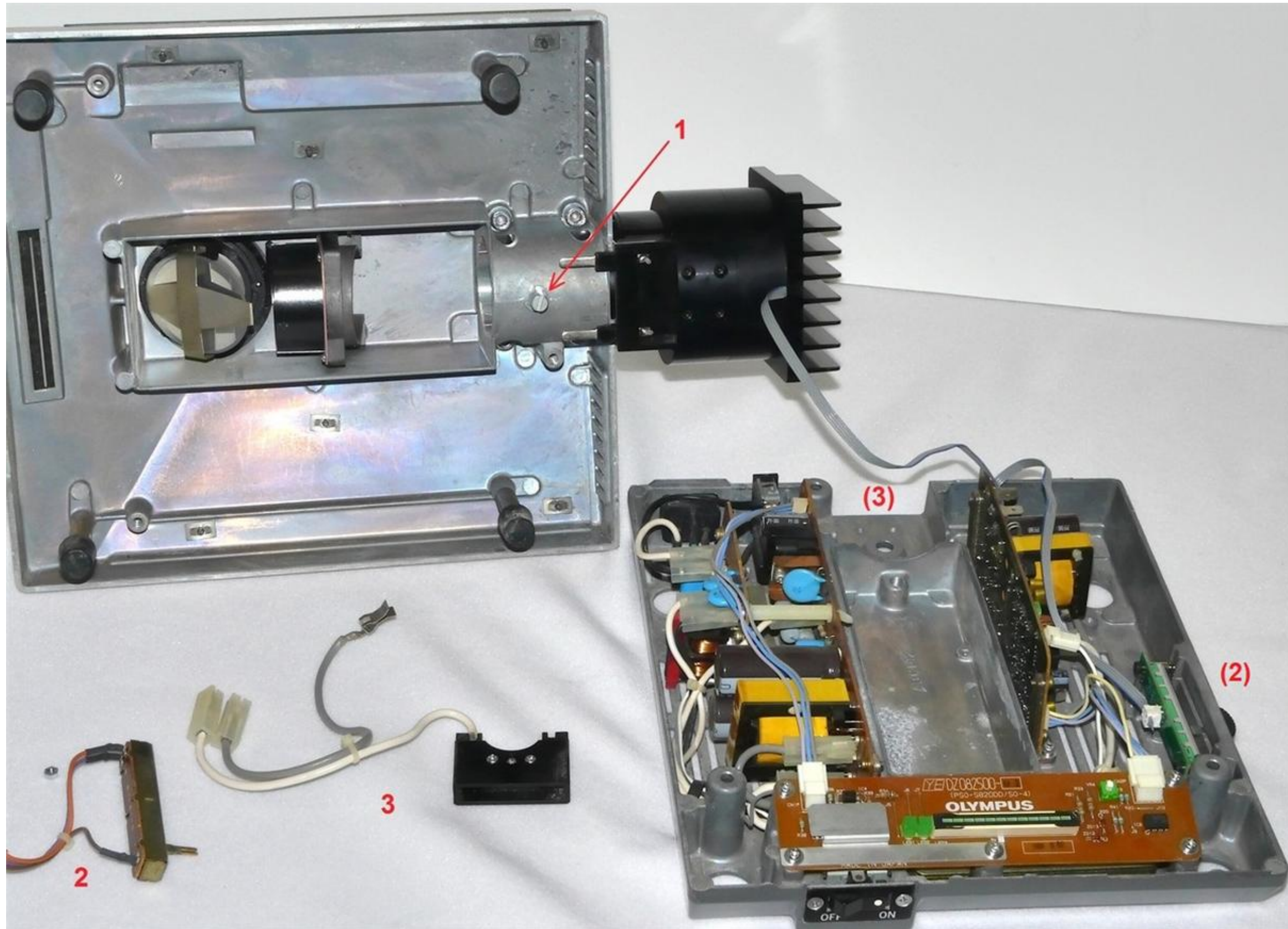
**(5)** Attach the OEM collector lens assembly to the Nanodyne illuminator using the 4 new M3 x 0.5 x 8mm cap screws. Tighten with the 2.5mm hex key.

**NOTE** - The photo at left shows an older model Nanodyne illuminator. The current model is shown on the first page.

The cable for the intensity control now plugs into the bottom of the illuminator, rather than being permanently attached as shown at left.

Wayne Bonin	2/9/2023
PN 10476 Olympus BHS Illuminator System Installation	REV 4
SHEET 2	OF 7

Nanodyne Illuminator for Olympus BHS Microscope Installation Instructions: Remove OEM Illuminator, Salvage Collector Lens, Attach Lens to New Illuminator



**NOTE** - The photo at left shows an older model Nanodyne illuminator.

The cable for the intensity control (pot cable) now plugs into the bottom of the illuminator, rather than being permanently attached as shown at left. Installation is easier as the pot cable can be connected to the illuminator after the base is attached to the microscope.

Remove the bottom cover of the microscope.

Install the new illuminator. Insert the collector lens, now attached to the Nanodyne illuminator assembly, into the microscope and secure with the original screw (1).

Pull the plastic knob off of the intensity adjust pot and set aside. Remove and discard the original intensity adjust pot (2).

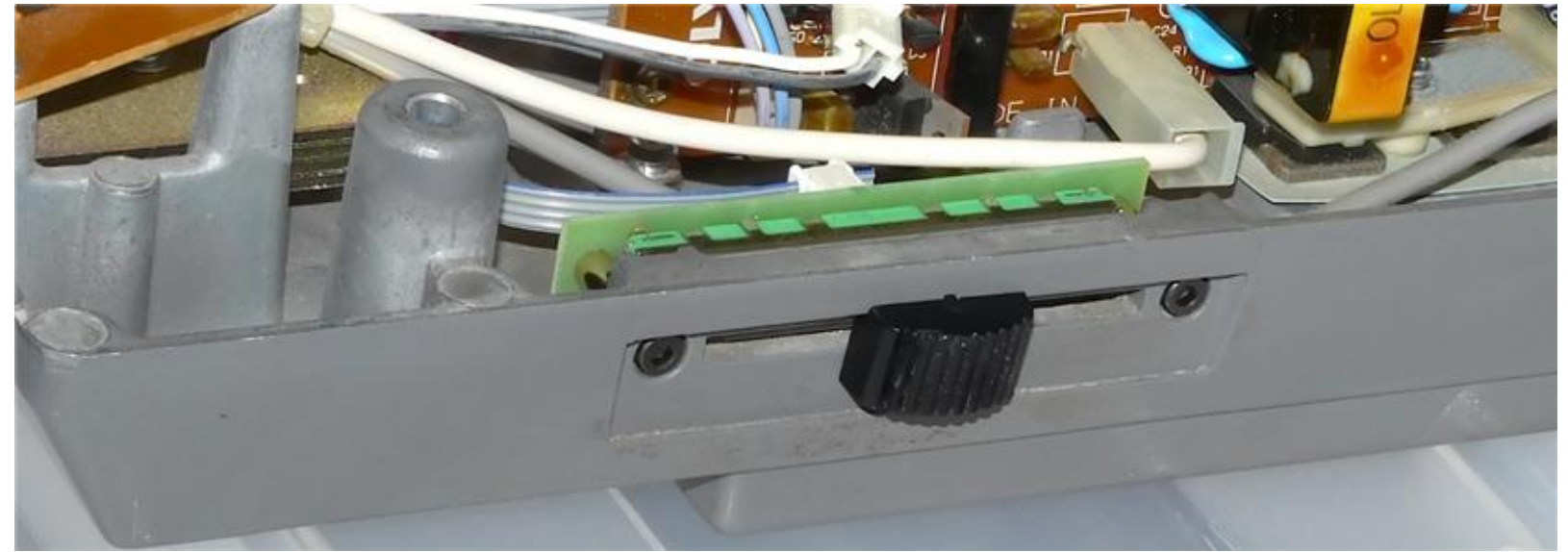
(Installation of new pot is shown on the next page)

Remove and discard the original power connector for the illuminator (3).

To avoid aggravation when later replacing the bottom cover, be sure there are no loose wires near the 4 holes the support feet pass through. Either secure any loose wires, or remove and discard them. None of the original illuminator circuitry is required for the new Nanodyne illuminator.

Wayne Bonin	2/9/2023
PN 10476 Olympus BHS Illuminator System Installation	REV 4
SHEET 3	OF 7

Nanodyne Illuminator for Olympus BHS Microscope Installation Instructions: Install New Intensity Adjust Pot



(2) Press the original knob onto the slide pot lever as shown above.

(1) Attach the slide pot assembly to the microscope with the two M3 cap screws.

Be sure the text "MIN" and "MAX" are as shown, or the operation of the intensity control will be reversed.

NOTE - The photos show an older model pot cable.

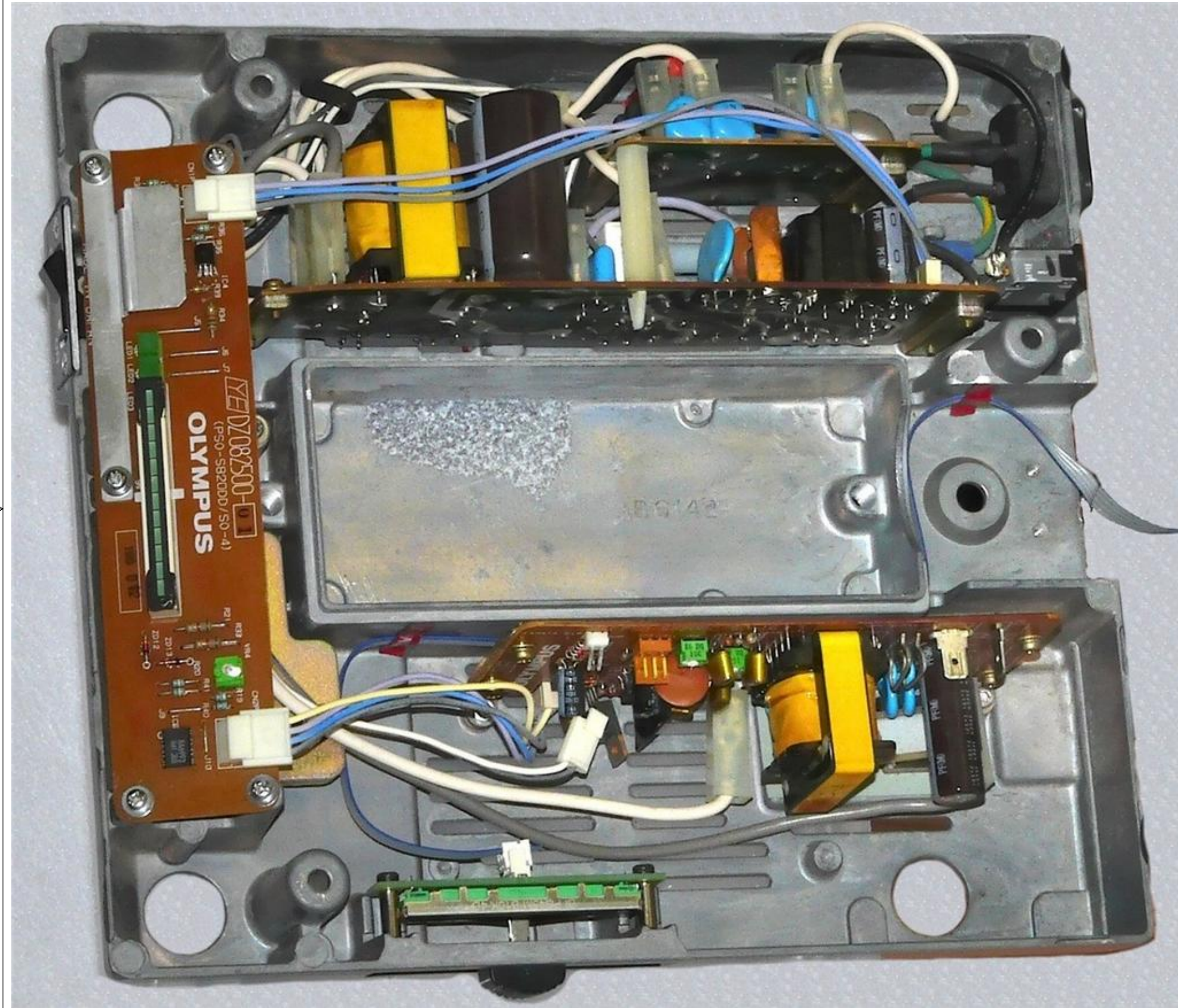
The new cable has a different connector as shown on the first page.

If the pot cable is not already attached to the pot, connect it now.

Sheet 7 shows details about how to connect the pot cable to the illuminator. (The cable is attached to the pot the same way)

Wayne Bonin	2/9/2023
PN 10476 Olympus BHS Illuminator System Installation	REV 4
SHEET 4	OF 7

Nanodyne Illuminator for Olympus BHS Microscope Installation Instructions: Route Pot Cable out back of Microscope



NOTE - The photo at left shows an older model pot cable. The new cable has a different connector as shown on the first page.

Route the pot cable out the back of the microscope as shown.

For the best appearance, make a test assembly, putting the bottom of the microscope together with the top to see how much pot cable is needed to connect to the illuminator. Remove the bottom and secure the pot cable inside the microscope with tie wraps and/or the red tape, leaving only the required length outside the microscope.

Replace the bottom of the microscope, securing it with the original screws.

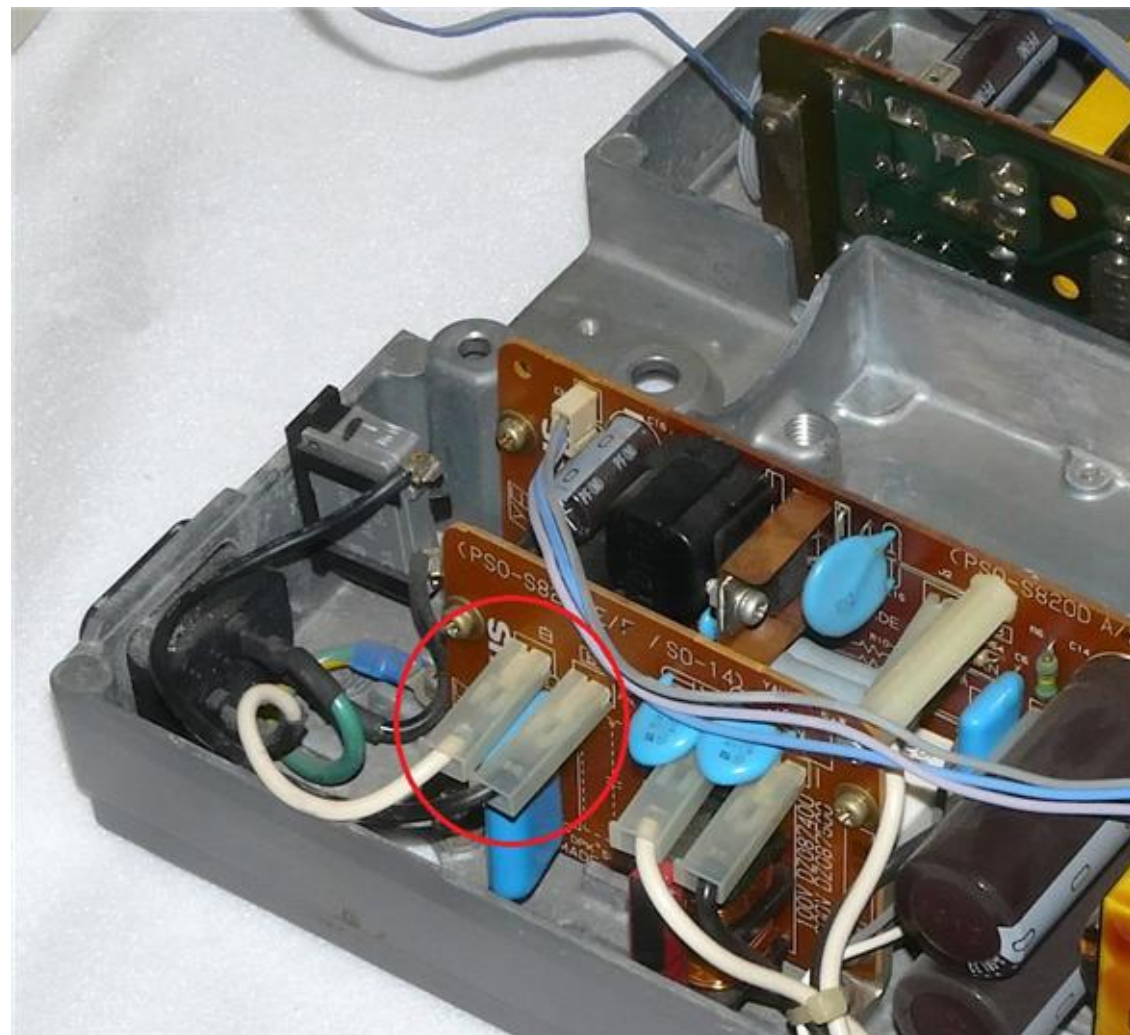
Connect the pot cable to the microscope. See detailed instructions on sheet 7.

Wayne Bonin	2/9/2023
PN 10476 Olympus BHS Illuminator System Installation	REV 4
SHEET 5	OF 7

Nanodyne Illuminator for Olympus BHS Microscope Installation Instructions: Electrical Safety, New Power Supply



Install PN 10736 rubber blocking plug to deter connection of unneeded AC power.



At a minimum, disconnect the AC power from the old power supply by unplugging the two circled connectors. The white and black wires could be cut off next to the AC receptacle and completely removed for maximum safety.



Connect the power cable to the illuminator and power supply. Plug the power supply into an AC outlet and the system is ready to operate. There is no off switch. The LED is completely off when the control is slid back towards the front of the microscope.

NOTE - The photo at left shows an older model illuminator.

The new cable has a different connector as shown on the first page.

Wayne Bonin	2/9/2023
PN 10476 Olympus BHS Illuminator System Installation	REV 4
SHEET 6 OF 7	

## Nanodyne Illuminator for Olympus BHS Microscope Installation Instructions: Pot Cable Connection Details

Connect the plug at the end of the Pot Cable Assembly to the mating socket of the illuminator, as shown in the pictures on this page. NOTE THAT THE PLUG IS KEYED TO ONLY GO INTO THE SOCKET ONE WAY, AS SHOWN.

Partially insert the plug into the mating socket of the illuminator by holding the wire next to the plug with your finger (photo 2).

Use your fingernails, if you have them, or tools like a tiny screwdriver or tweezers pushing on the side of the plug to fully insert it (photo 3).

The socket cannot be fully engaged by pushing on the wires, as the wires would just collapse.

To disconnect it if needed, pull the wire straight out by firmly gripping the black heat shrink tubing.

