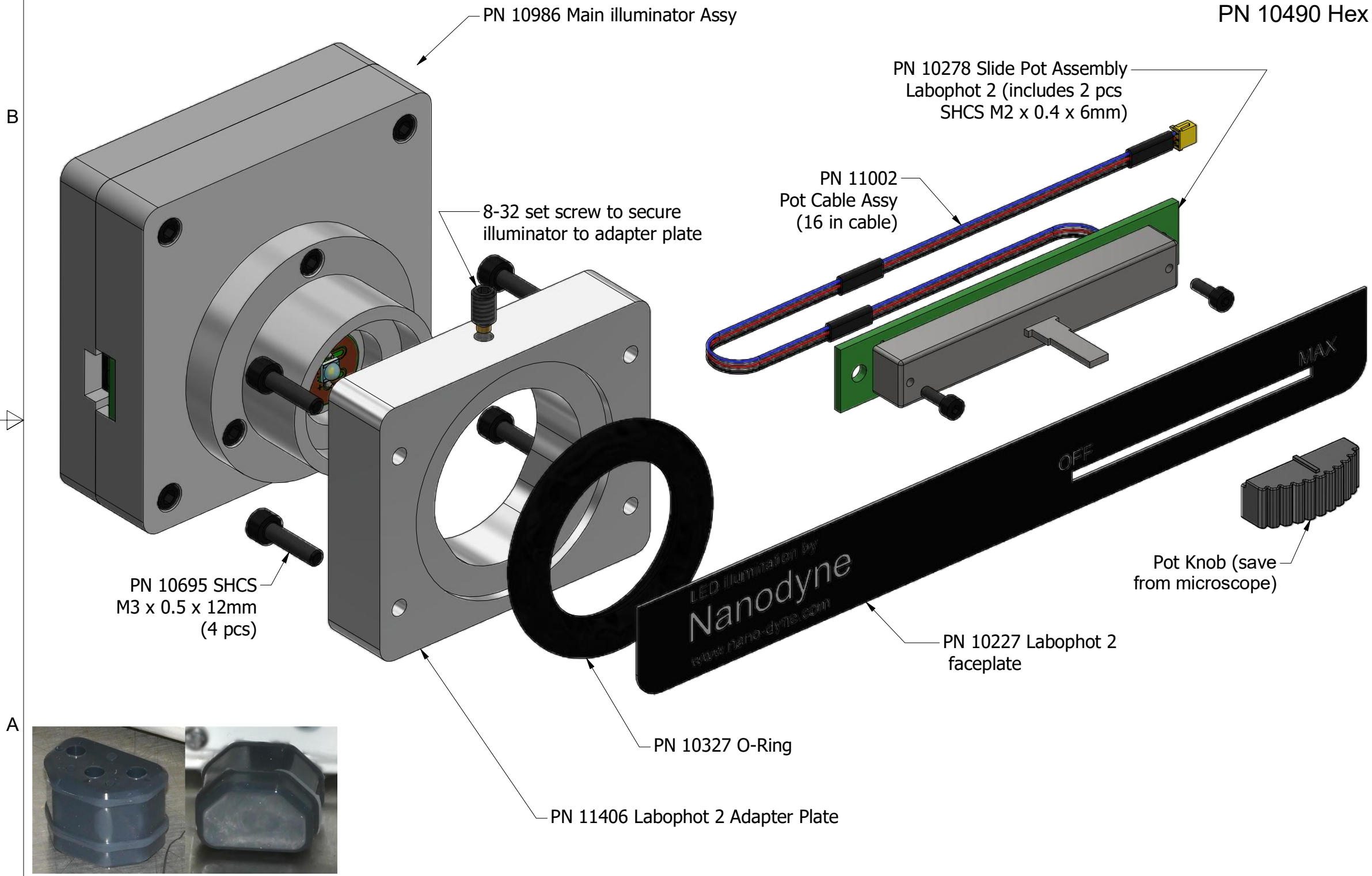


Nanodyne Replacement Illuminator for Nikon Labophot 2 Microscope, Installation Instructions: Included Items

Additional Items Included But Not Shown:

- PN 10456 Hex Key 1.5mm (for pot install - M2 screws)
- PN 10457 Hex Key 2.5mm (for M3 mounting screws)
- PN 10490 Hex Key 5/64 inch (for 8-32 set screw)



Tape to secure wires.



PN 10733 Power Supply - XP Power 5V 1A and PN 10734 Cable Assy 1.35mm ID x 3.5mm OD RA plug to USB A, 6 foot.

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.

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



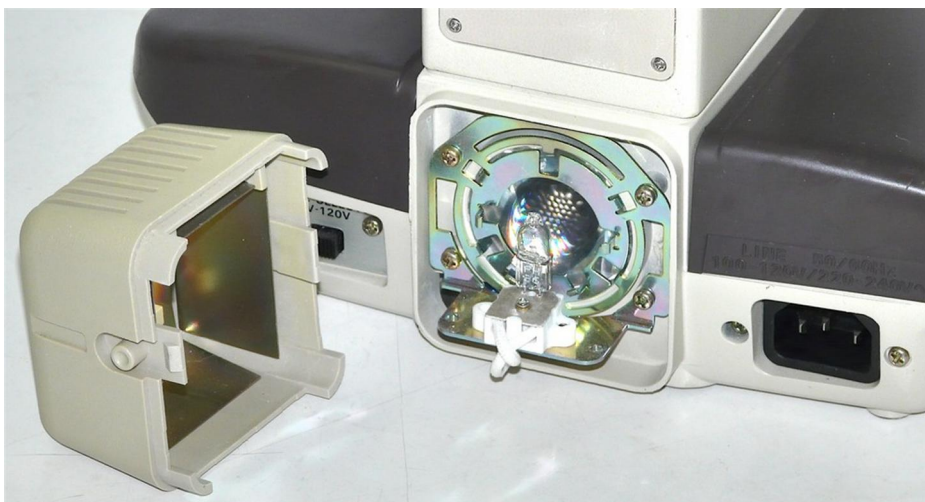
PN 10736 Rubber plug to block unused AC power receptacle.

Wayne Bonin	6/29/2019
PN 10473 Nikon Labophot 2 Installation Instructions	REV 5
SHEET 1	OF 8

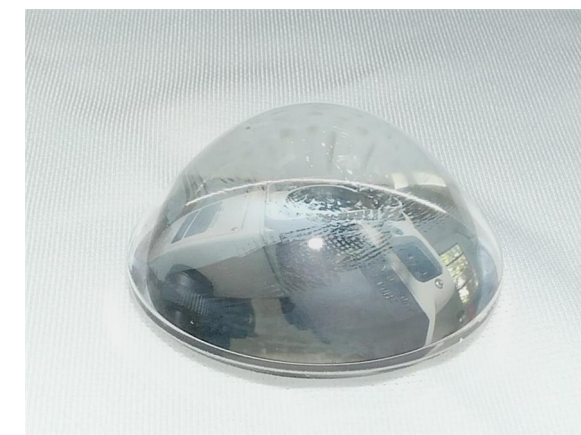
Nanodyne Replacement Illuminator for Nikon Labophot 2 Microscope, Installation Instructions: Step 1. Remove old lamp housing.



(1) Labophot-2 with original lamp housing. Be sure the AC power cord is disconnected before starting.



(2) Remove OEM lamp housing. (push the round button on the side to release the latch while pulling it out)



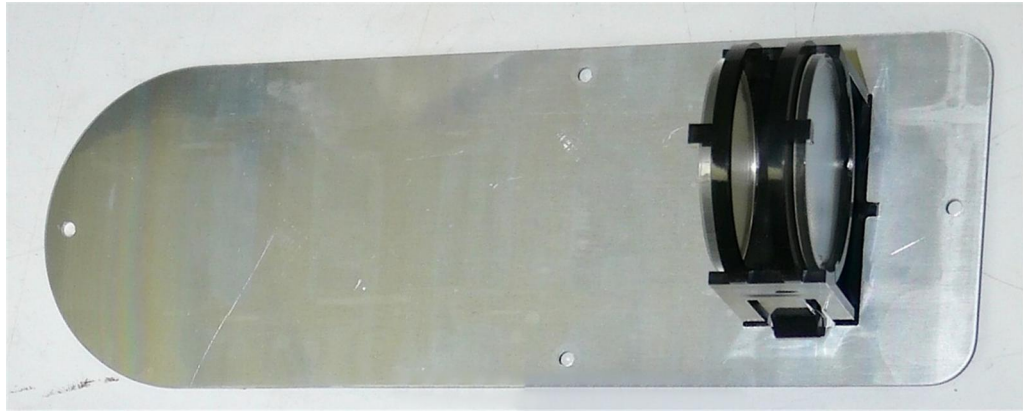
(4) Set the lens aside in a safe place so it won't get damaged.



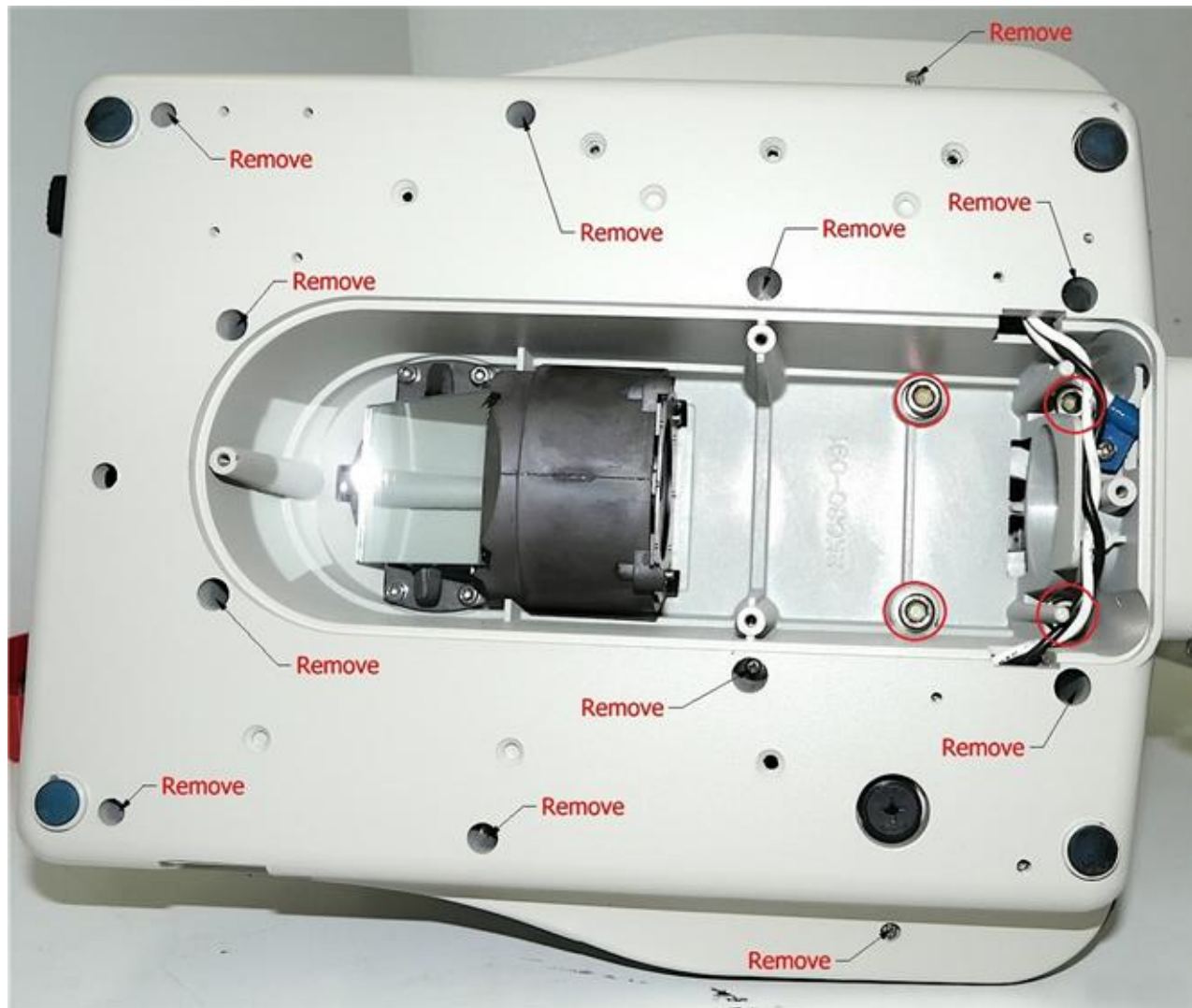
(3) Remove OEM lamp assembly by removing the 5 screws. **Warning** - the lens is held in place by this assembly.

Wayne Bonin	6/29/2019
PN 10473 Nikon Labophot 2 Installation Instructions	REV 5
SHEET 2	OF 8

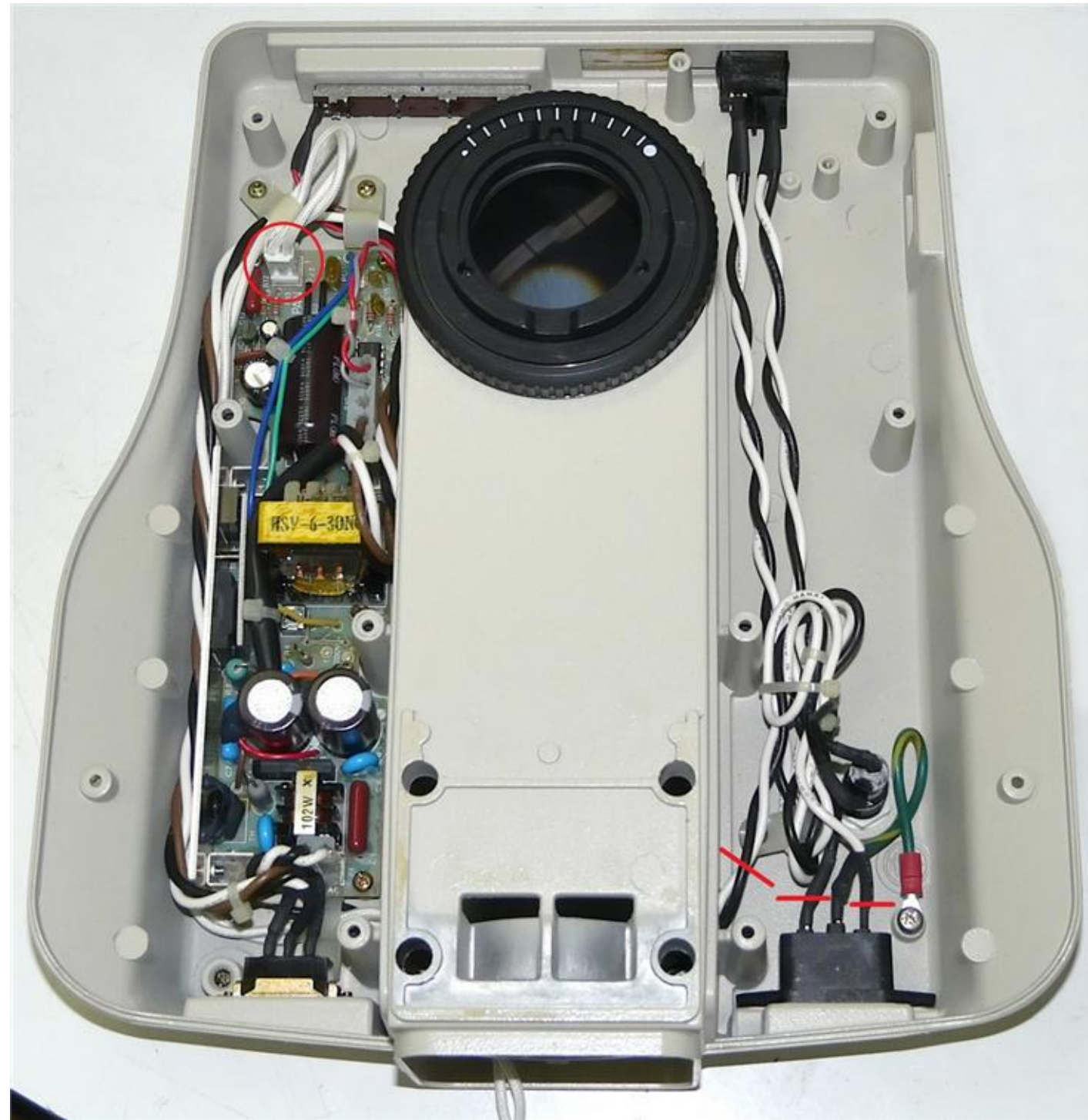
Nanodyne Replacement Illuminator for Nikon Labophot 2 Microscope, Installation Instructions: Step 2. Remove Microscope Covers, Old Circuitry and Wiring.



(1) Remove the bottom cover by removing 4 screws. Inside view after removal shown above.



(2) Remove the top cover by removing 12 screws from the bottom side as shown above. (We removed the base from the rest of the microscope by removing the 4 circled bolts to get better photos. You do not need to do that)



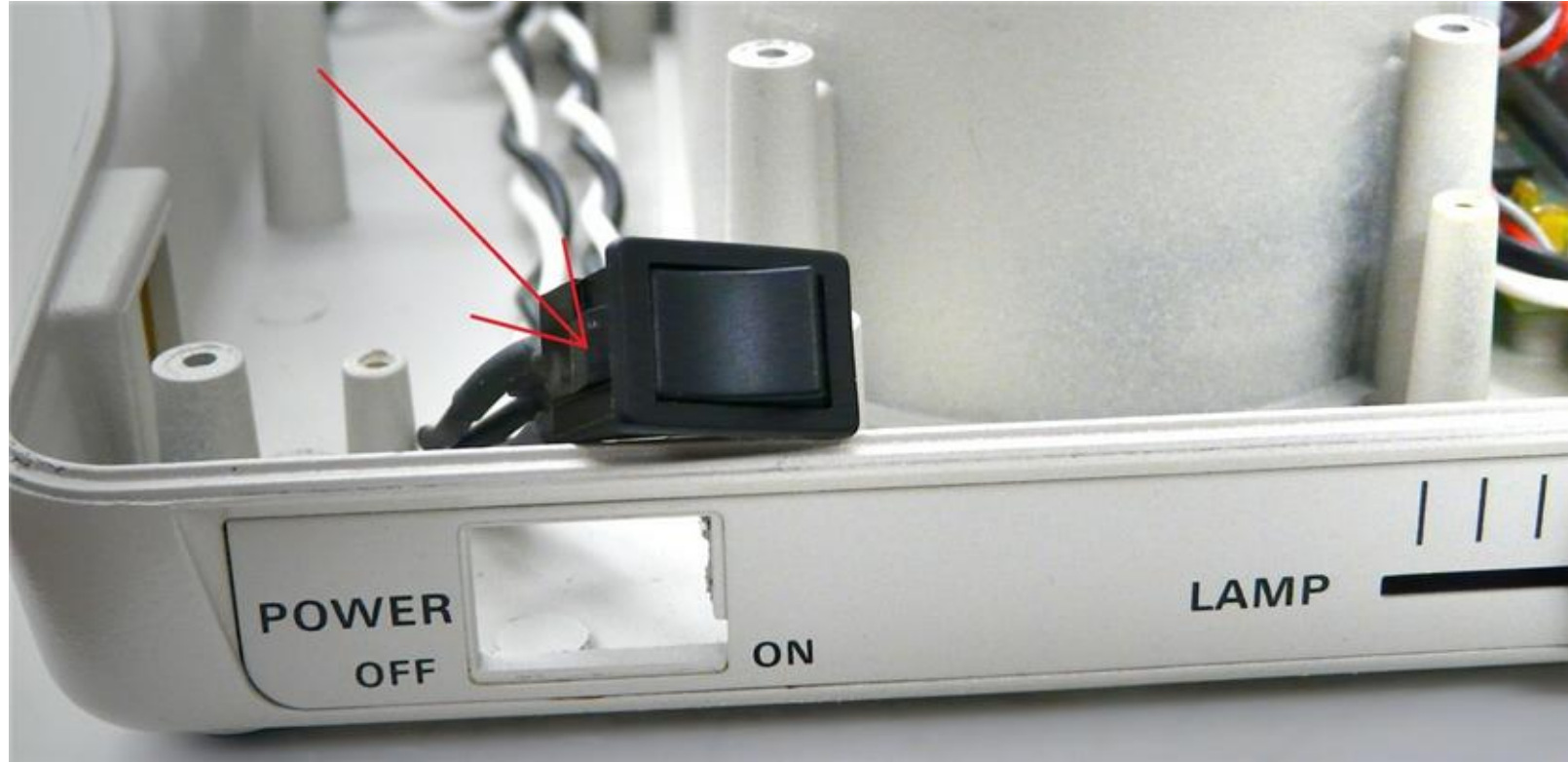
(3) Unplug the wires to the lamp (red circle near top left) and remove the entire lamp assembly with the white lamp wires. (the wires can be cut for easier removal if desired).

Cut the AC power leads (one white, one black) as shown above near lower right. They will be completely removed in the next step.

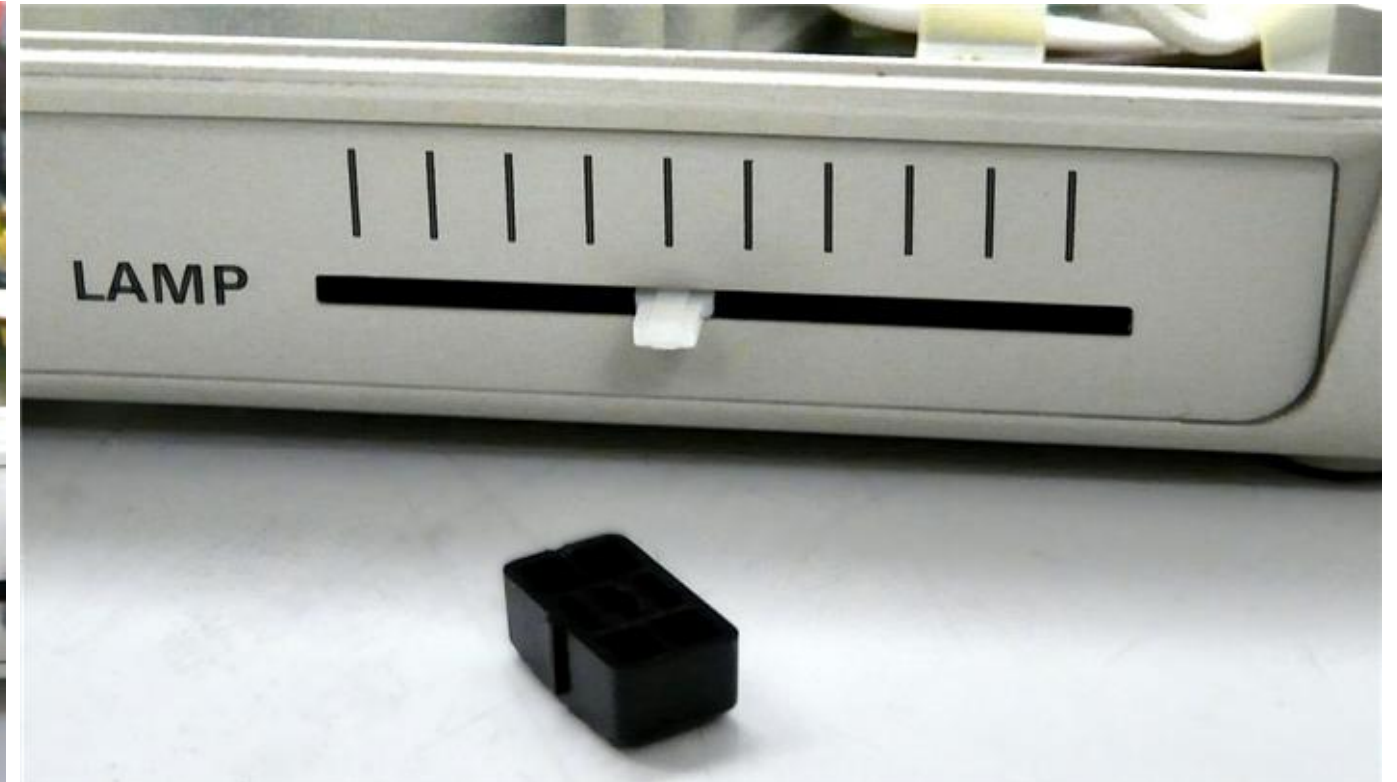
The old power supply can be removed if desired as it is no longer used.

Wayne Bonin	6/29/2019
PN 10473 Nikon Labophot 2 Installation Instructions	REV 5
SHEET 3 OF 8	

Nanodyne Replacement Illuminator for Nikon Labophot 2 Microscope, Installation Instructions: Step 3. Remove Old Power Switch, Pot Knob, Bezel and Pot.



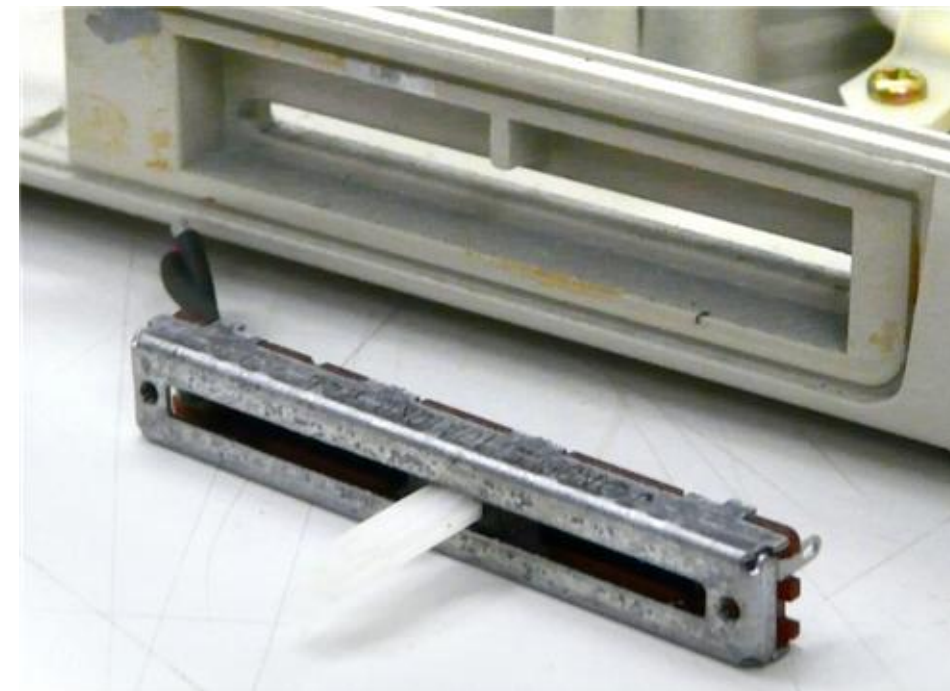
(1) Remove the power switch. Push it out from the inside. Depress the plastic retainer with a small screwdriver while pushing, to get it out. Pull all of the AC wiring out with it and discard.



(2) Pull the black knob off of the slide pot as shown above. Set it aside for later.



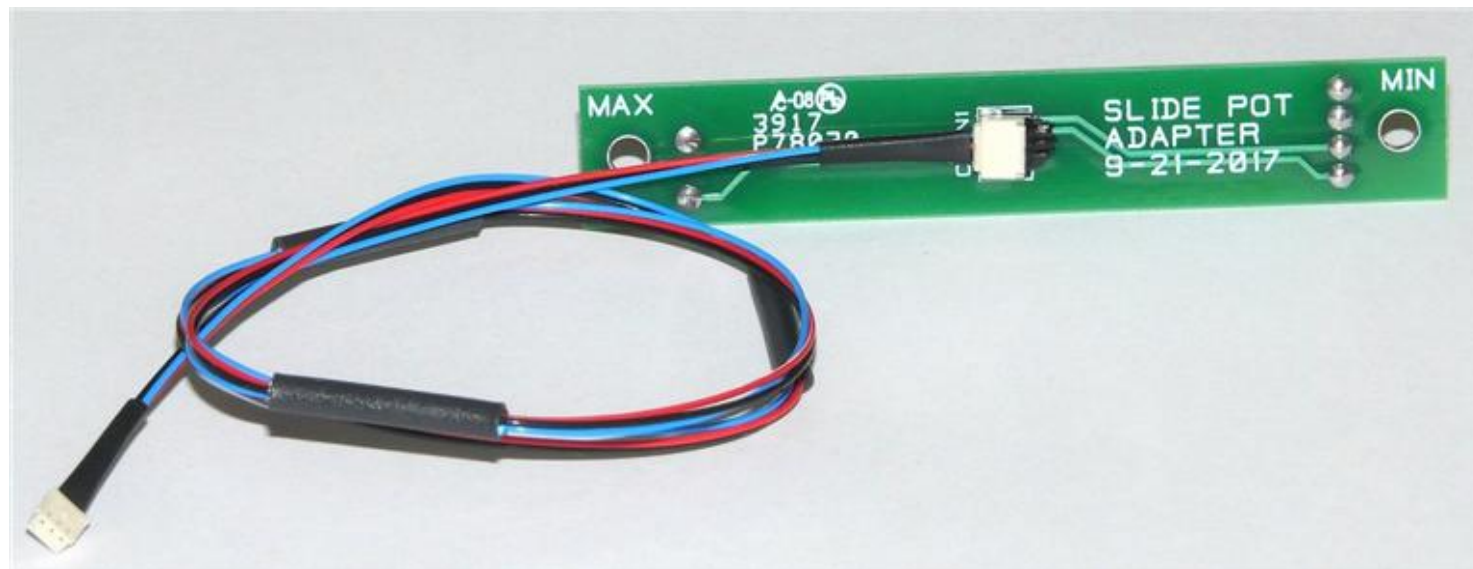
(3) Remove the bezel from the front, as shown above. It will be replaced with a new one. Remove any large lumps of old adhesive, so the new bezel will adhere well.



(4) Cut the wires going to the pot, remove the 2 screws holding the pot and remove the pot. The pot and the 2 screws may be discarded.

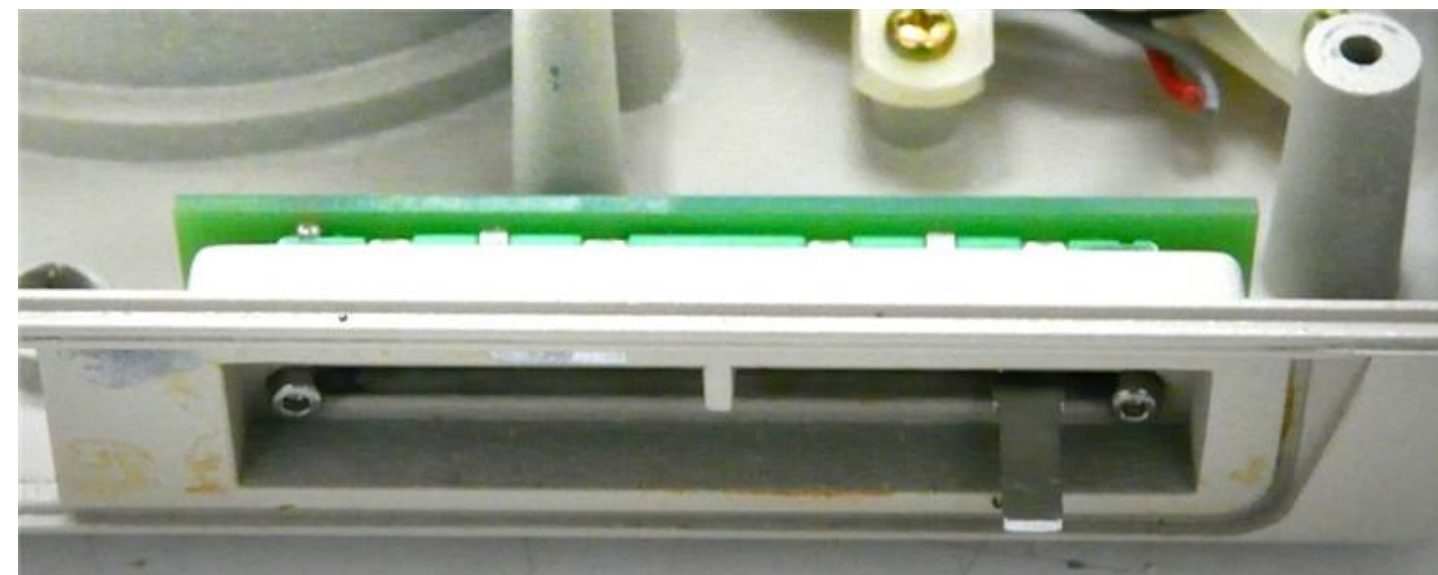
Wayne Bonin	6/29/2019
PN 10473 Nikon Labophot 2 Installation Instructions	REV 5
SHEET 4 OF 8	

Nanodyne Replacement Illuminator for Nikon Labophot 2 Microscope, Installation Instructions: Step 4. Install New Potentiometer, Bezel and Pot Cable.



(1) If not already attached, connect the pot cable to the socket on the pot pcb as shown above. (both ends of the cable are the same) The connector is keyed so it only goes in one way. See sheet 8 for detailed instruction.

When installed in the microscope, the MIN and MAX text on the pcb should be oriented as shown above when viewed from inside the microscope.



(2) Install the new pot. Use the two M2 screws provided, tighten with the 1.5mm hex key. Install it with the text on the green pcb reading "MIN" on the left, as viewed in the above photo.



(3) Remove the release film from the back of the bezel and press it in place as shown above. Before pressing it securely in place, be sure the pot lever does not rub. Then install the old knob as shown.



(4) Route the pot cable to the back of the microscope, through hole shown at left (next to the voltage select switch) and out the back. See also photo on next sheet.

Wayne Bonin	6/29/2019
PN 10473 Nikon Labophot 2 Installation Instructions	REV 5
SHEET 5	OF 8

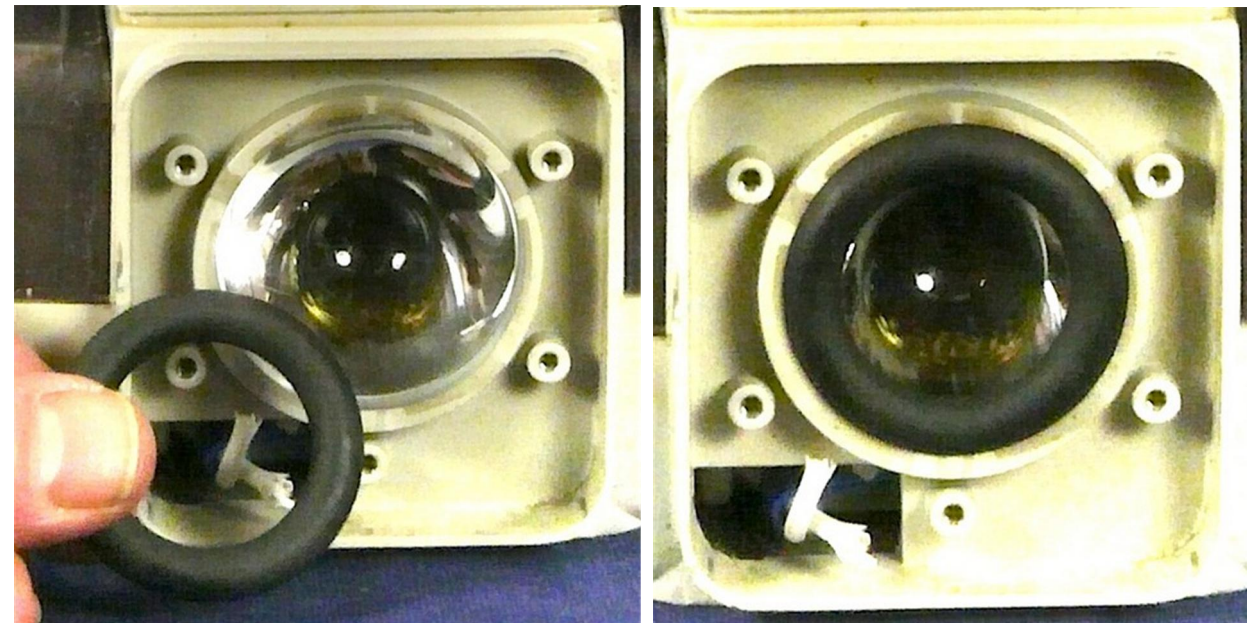
Nanodyne Replacement Illuminator for Nikon Labophot 2 Microscope, Installation Instructions: Step 5. Replace Lens, Install Nanodyne Adapter and AC Blocking Plug



(1) Route the pot cable as shown. Only enough to connect to the illuminator needs to extend out of the microscope.



(3) Attach the Adapter Plate using the four M3 x 12mm screws and the 2.5mm hex key. Then install the AC blocking plug in the obsolete AC power receptacle



(2) Replace the collector lens, then place the o-ring in front of it as shown.



NOTE - The Adapter Plate shown above is an old model. The current one is shown on sheet 1. The installation is the same.

Wayne Bonin	6/29/2019
PN 10473 Nikon Labophot 2 Installation Instructions	REV 5
SHEET 6 OF 8	

Nanodyne Replacement Illuminator for Nikon Labophot 2 Microscope, Installation Instructions: Step 6. Install Nanodyne illuminator.



(1) Attach the illuminator to the adapter with the four #2-56 screws inserted through the four circled holes. Use the 5/64 key key to tighten them.

Plug the pot cable into the bottom of the illuminator. See sheet 8 for detailed instruction. Then secure any extra cable inside the microscope with the red tape.



(3) Connect the USB end of the power cord to the power supply, connect the other end to the illuminator and plug the power supply into an AC outlet. The microscope is now ready to use.



(2) Replace the top and bottom covers as shown above.

NOTE - The illuminator shown on this page is an older model. The current one is shown on sheet 1. The current illuminator is attached by tightening the single set screw in the adapter plate. There are no holes in the back of the current illuminator

Wayne Bonin	6/29/2019
PN 10473 Nikon Labophot 2 Installation Instructions	REV 5
SHEET 7 OF 8	

Nanodyne Replacement Illuminator for Nikon Labophot 2 Microscope, Installation Instructions: Pot Cable Connection Details.

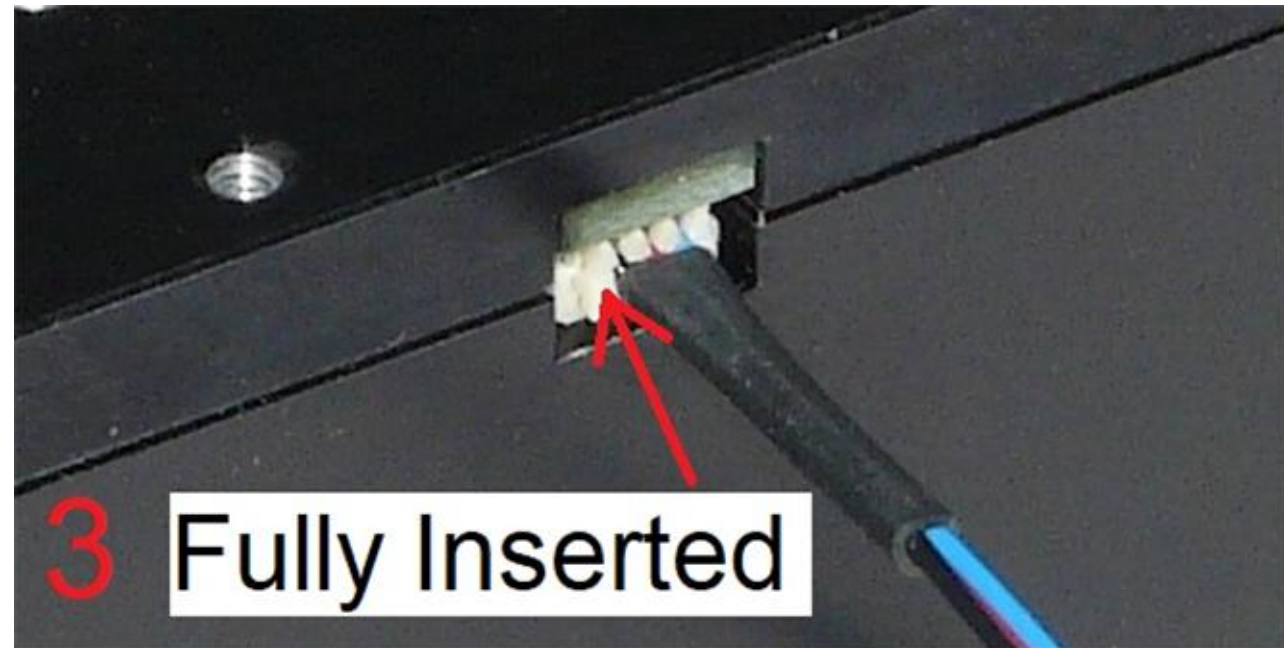
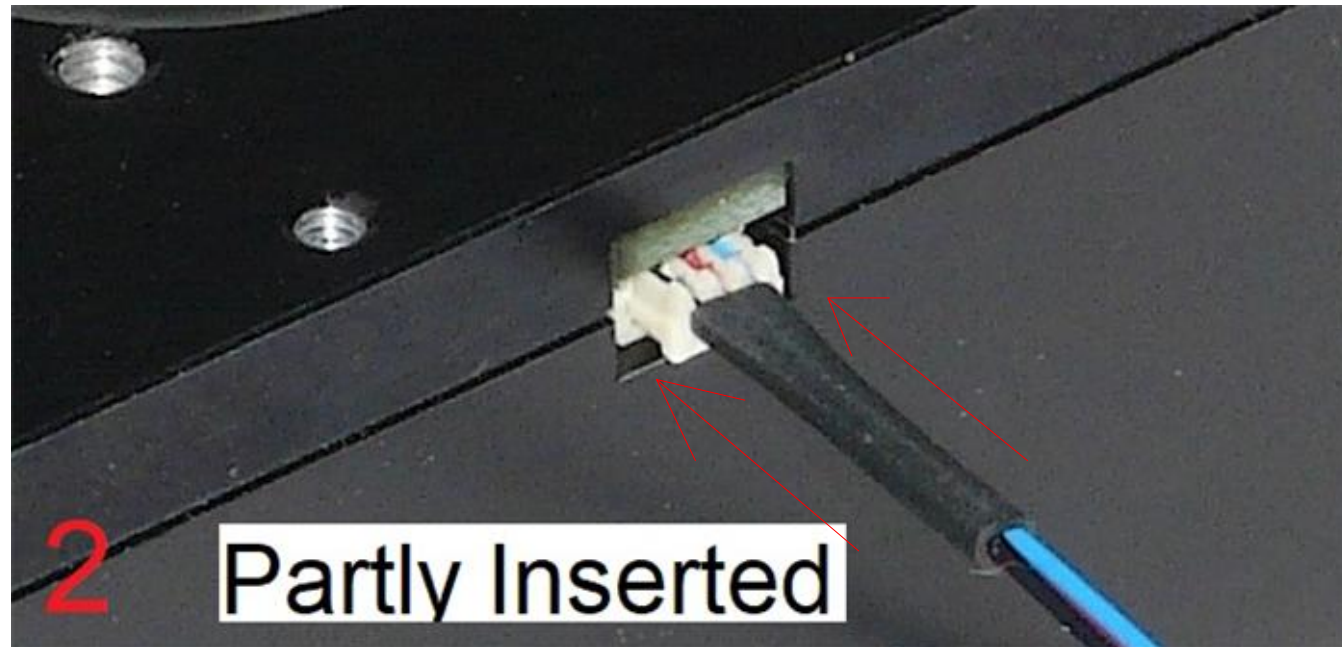
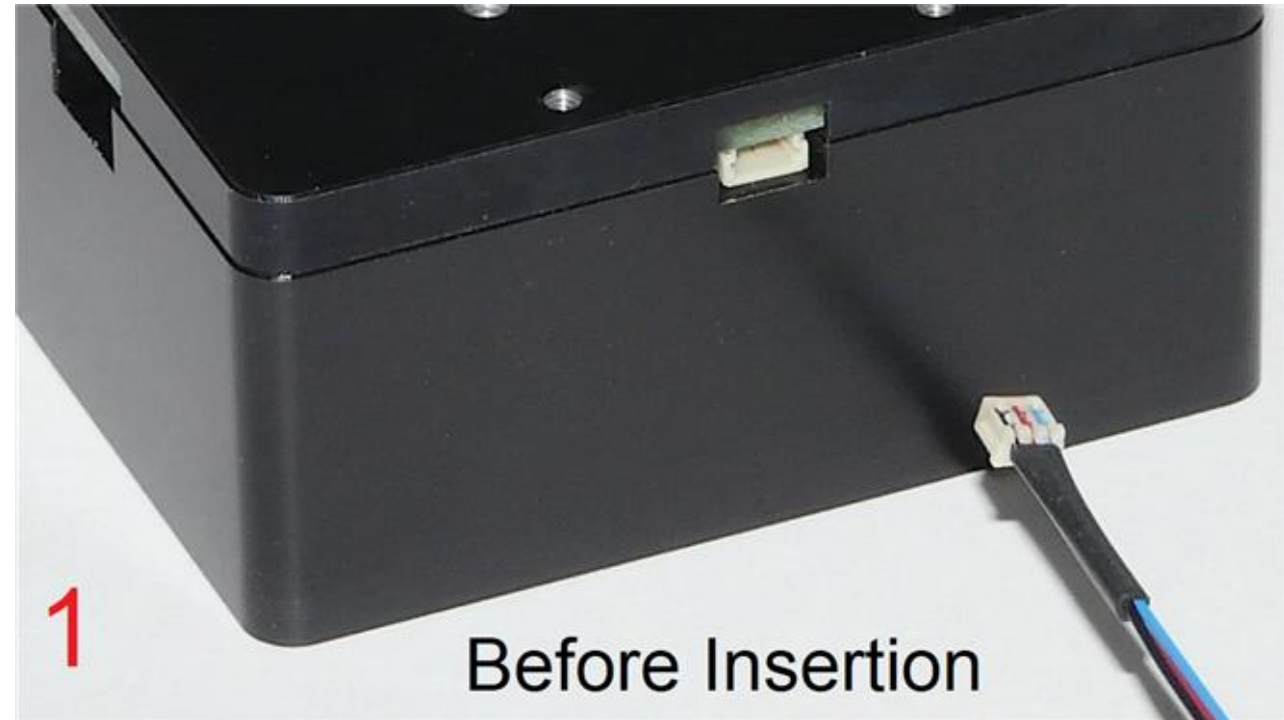
Connect the plug at the end of the Pot Cable Assembly to the mating socket of the illuminator, as shown in the pictures on this page. NOTE THAT THE PLUG IS KEYPED TO ONLY GO INTO THE SOCKET ONE WAY, AS SHOWN.

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.



Wayne Bonin	6/29/2019
PN 10473 Nikon Labophot 2 Installation Instructions	REV 5
SHEET 8 OF 8	