

Nanodyne Replacement Illuminator for Nikon E400 Microscope Installation Instructions: Included Items

Additional Items Included But Not Shown:

- PN 10456 Hex Key 1.5mm (for pot knob)
- PN 10457 Hex Key 2.5mm (for M3 mounting screws)
- PN 10490 Hex Key 5/64 inch (for 2-56 mounting screws)

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 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.



Tape to secure wires.



PN 10736 Rubber plug to block unused AC power receptacle.

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

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Nanodyne Replacement Illuminator for Nikon E400 Microscope Installation Instructions - Step 1. Remove Old Pot Plate, Install New Pot Plate



(1) Remove bottom cover (not shown).
Remove and keep original adjustment pot knob.
Remove using 1.5mm hex key.

(2) Remove the original pot plate by pushing it out from the inside.
Use a small screwdriver to pry if needed.
Unplug it from the cable and discard.

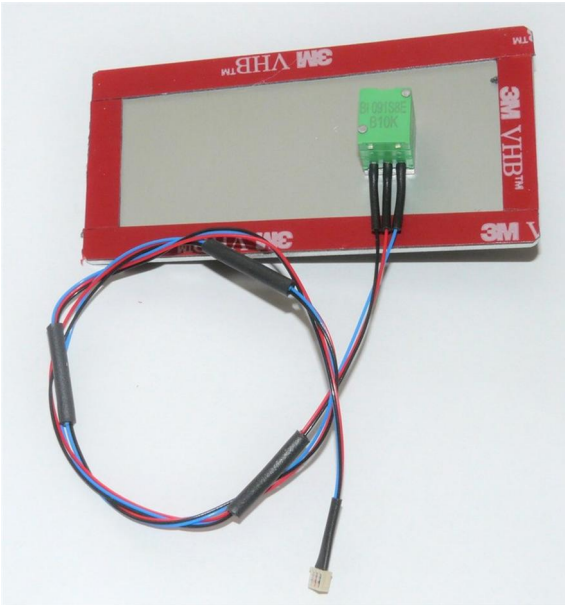
(3) Remove the pot cable as shown above. Cut the far end as shown and discard the cable.

NOTE - These photos show a Nikon E600, but the procedure is the same for the E400.

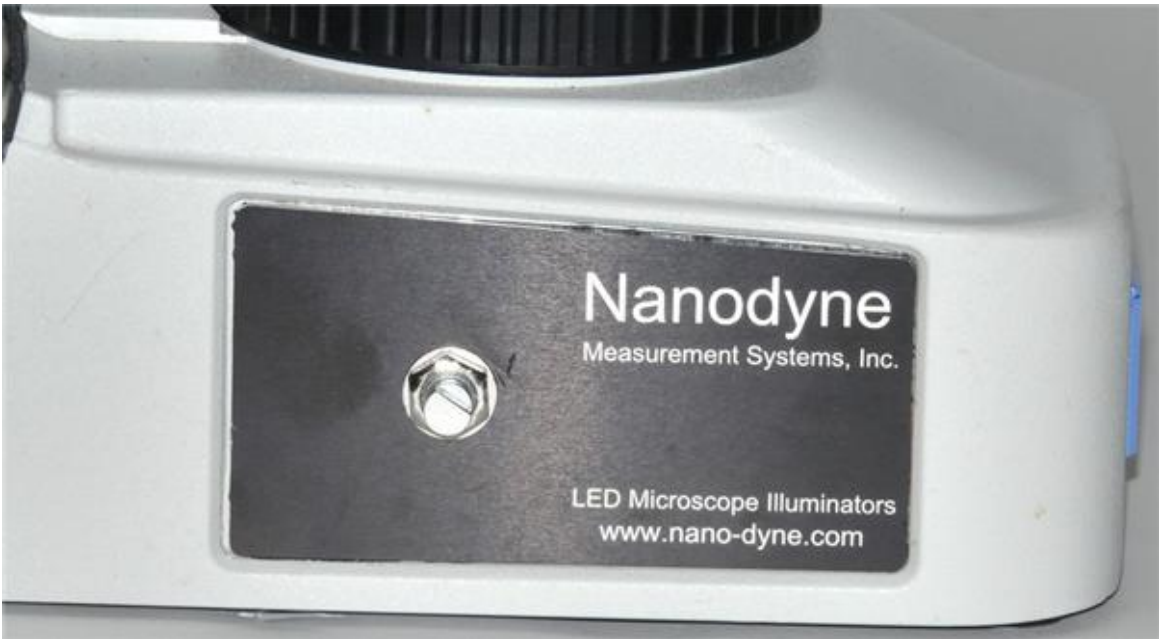
Nanodyne Replacement Illuminator for Nikon E400 Microscope Installation Instructions - Step 1 (continued). Install New Pot Plate



(1): Excessive glue residue left from the old plate. Remove before installing new plate.



(3): New pot plate - front side.



(5): Press the new pot plate into place as shown. Press firmly to ensure it is well attached.



(2): Ready to install new plate.



(4): New pot plate - back side. Remove the red release film from the tape. The tape is very sticky. You might need a sharp tweezer to get the release film off.

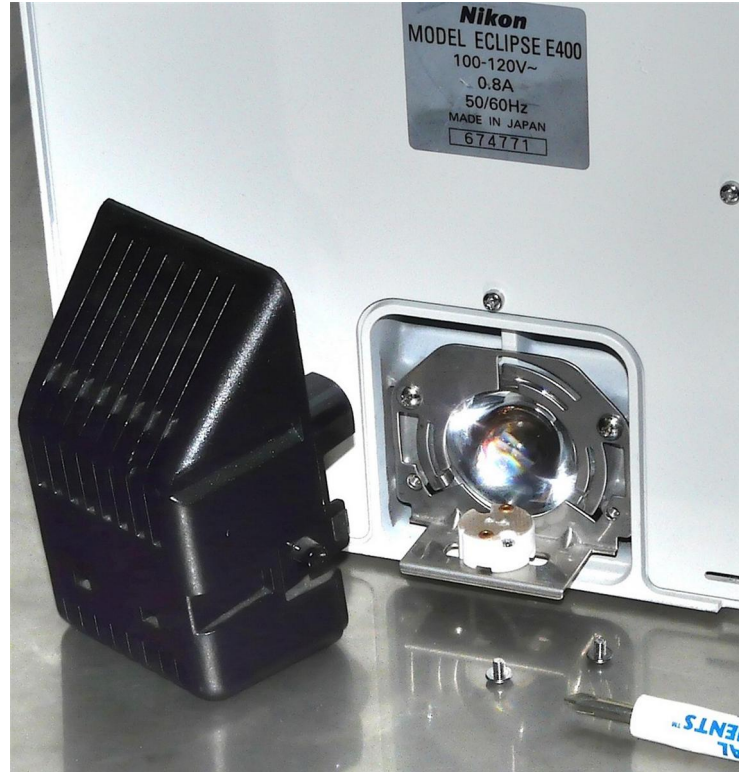


(6): Put the original knob on the new potentiometer shaft. Tighten with the 1.5mm hex key provided. For better appearance, back off the set screw so it fits on the round part of the shaft, rather than the flat, for a closer fit to the plate.

Note that the current pot plate has slightly different text.

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Nanodyne Replacement Illuminator for Nikon E400 Microscope Installation Instructions - Step 2. Remove Old Illuminator, Install Mounting Adapter for New Illuminator



(1): Remove the black lamp cover and the four screws that secure the metal part to the microscope.



(3): Press the O-ring in place in front of the lens as shown. Feed the pot cable out through the hole circled in red above.



(4): Attach the adapter plate using the four M3 screws in the outer four holes. Secure with the 2.5mm hex key. Do not tighten one screw all the way, tighten each screw a little at a time so the O-ring is compressed evenly.

Tightening one side first could cause the lens to be mis-aligned.

Note - The current adapter plate is shown on sheet 1. Installation of the plate is the same as described above.



(2): Cut the lamp wires, and insulate the ends that are inside the microscope.

**BE CAREFULL!
The lens can fall out now.**

Nanodyne Replacement Illuminator for Nikon E400 Microscope Installation Instructions - Step 3. Attach New Illuminator, Electrical Safety



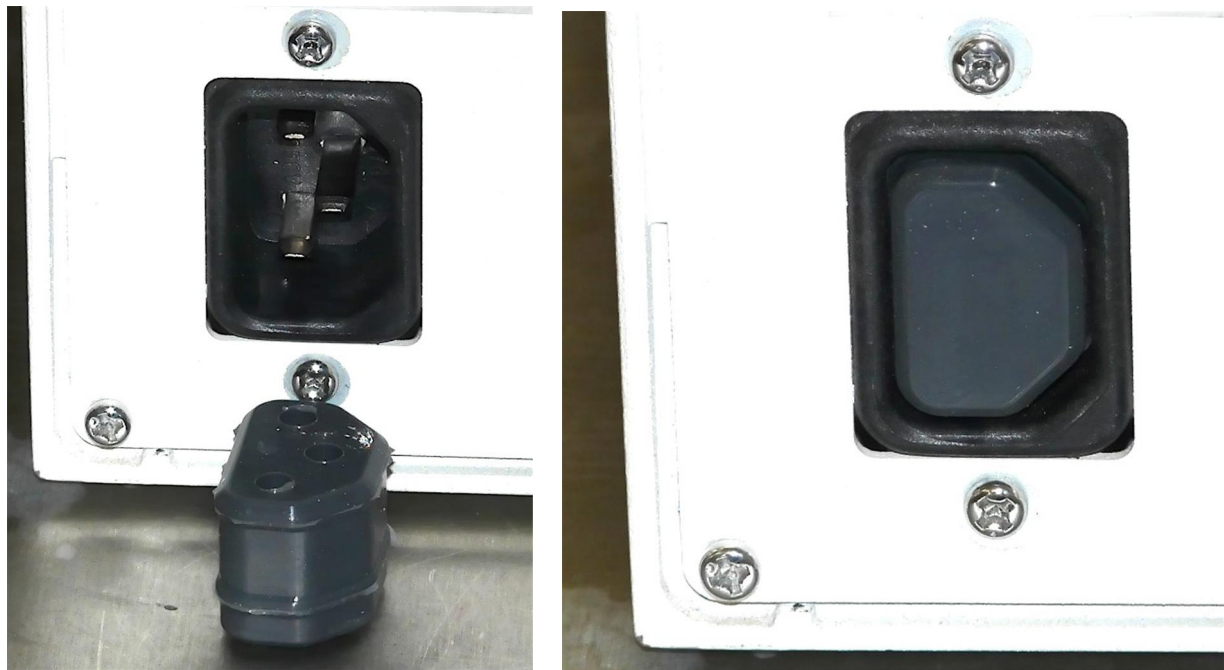
(1): Attach the Nanodyne illuminator by sliding into the center hole. Tighten set screw with the 5/64 hex key.

(2): Connect the pot cable to the bottom of the illuminator.

(no photo here - see sheet 6 for details)

Pull any excess cable length back into the microscope and secure using the original clips that held the old pot cable, plus the red VHB tape as required. Refer to the photos on sheet 2 if needed.

Note - The current illuminator is different from the photos shown here. It installs using the single set screw on the side, rather than 4 screws through the back as shown here. See sheet 1 for reference.



(3): Install the rubber electrical blocking plug in the AC receptacle to deter connecting to AC power. Be sure the lamp wires coming from the power supply are insulated.

For additional safety, we recomend also disconnecting the AC wires from the AC receptacle inside the microscope (requires removing the back cover).

(4): Replace the bottom cover of the microscope.



(4): Connect the power cable to the illuminator as shown at left, and to the power supply.

Plug the power supply into an AC outlet and the system is ready to operate..

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Nanodyne Replacement Illuminator for Nikon E400 Microscope Installation Instructions - Pot Cable Connection Details

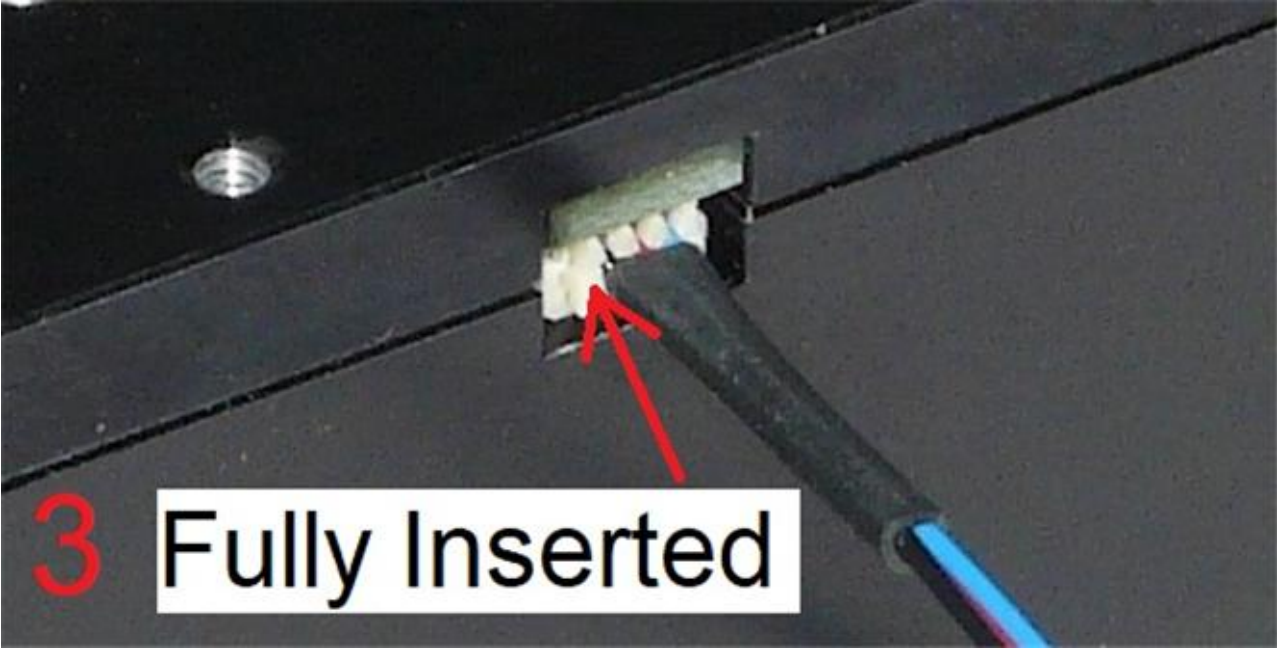
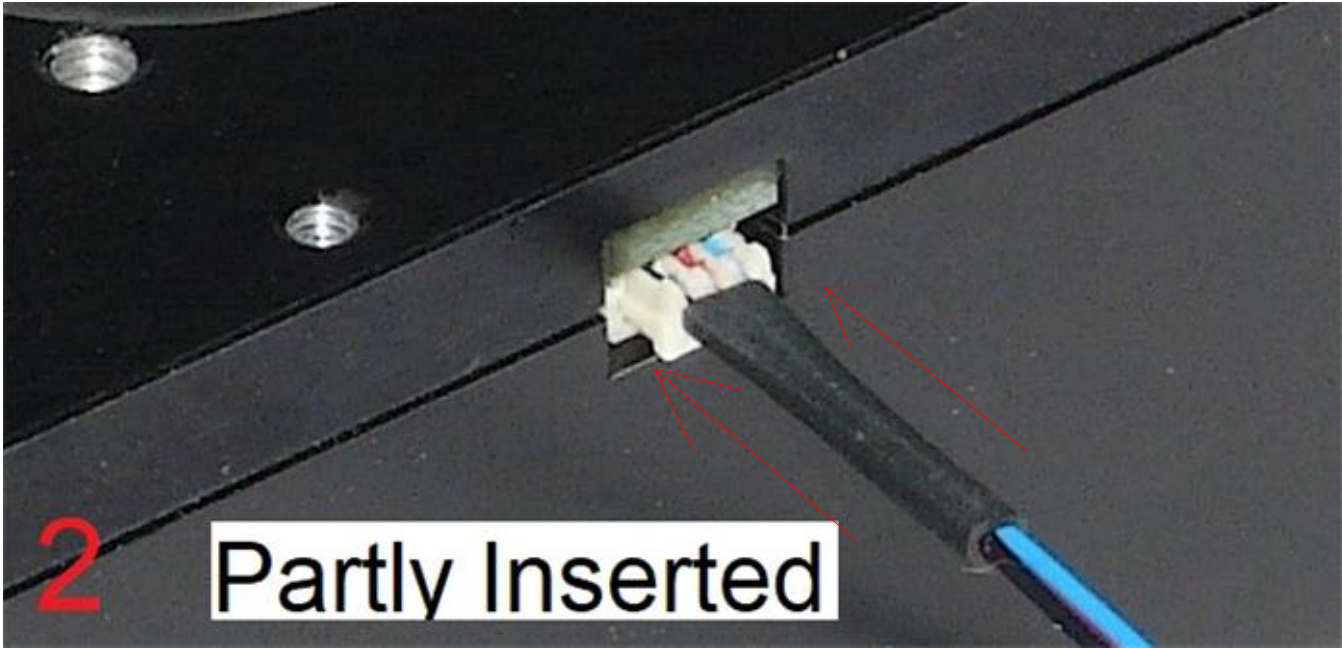
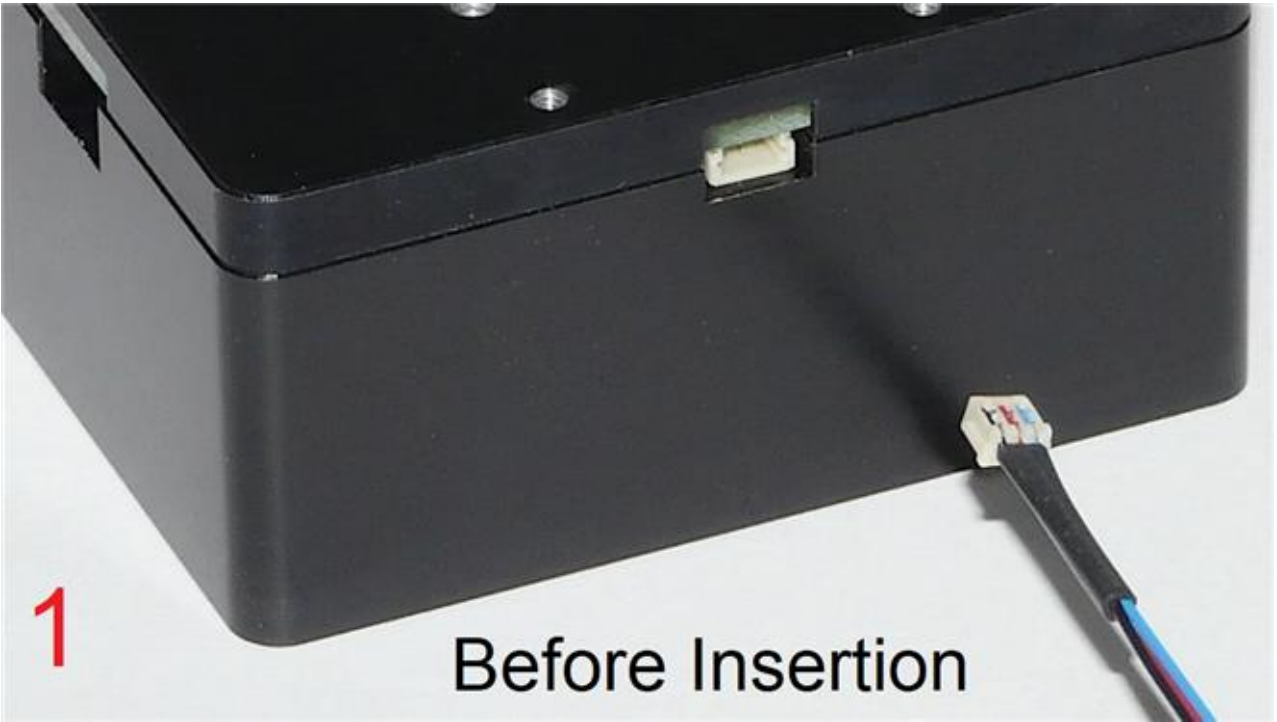
Connect the plug at the end of the Pot Cable Assembly to the mating socket of the illuminator, as shown in the pictures on this page. NOTE THAT THE PLUG IS KEYED TO ONLY GO INTO THE SOCKET ONE WAY, AS SHOWN.

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.



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