

### Nanodyne Replacement Illuminator for Nikon Epiphot Installation Instructions- Included Items Additional Items Included But Not Shown: PN 10399 Hex Key 5mm (to remove bottom cover) PN 10457 Hex Key 2.5mm (for pot knob) PN 10463 Nikon Diaphot -PN 10490 Hex Key 5/64 (for 8-32 set screw) Illuminator Assy - Remote Pot В PN 10937 Pot Cable Assy (24 in cable) 0 $\bigcirc$ PN 10929 Header 3POS 1mm Top Entry

PN 11414 Nikon Epiphot Pot Plate

PN 10213 Pot - Shortened 5mm (8mm bushing / 15mm shaft / 6mm diameter)

PN 11002 Pot Cable Assy (6 in cable)

PN 11476 AC Power Blank Off Plate

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PN 10467 Set Screw 8-32 Brass Tip -



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

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.



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3M VHB tape to secure pot cable

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### 4 3 Nanodyne Replacement Illuminator for Nikon Epiphot Installation Instructions



(1) This photo shows the microscope this illuminator system was designed for.

(2) This replaces the Nikon Epiphot 50W illuminator. If the original lamp house looks like this photo, this illuminator system is the right one for you.

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(3) If you have a 100W system and the original lamp house looks like this photo, we have a solution for you. However, please contact us to discuss your needs.

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### Nanodyne Replacement Illuminator for Nikon Epiphot Installation Instructions: Step 1. Remove Old Illuminator and Bottom Cover.



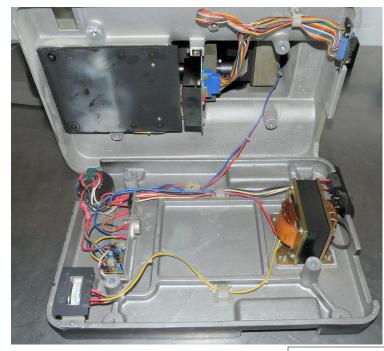
(1) Be sure the AC power is unpluged. Disconnect the original lamp power cable.



(2) Loosen the set screw holding the original lamp and remove the original lamp.



(3) Remove the 4 screws holding bottom cover using 5mm hex key provided and open the bottom cover. Keep the screws for later.



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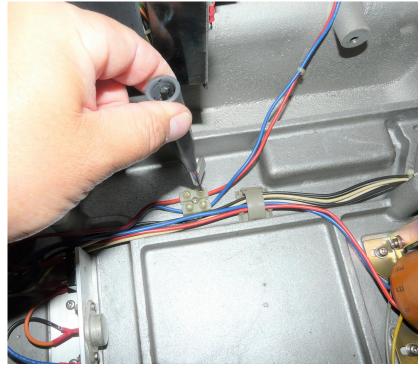


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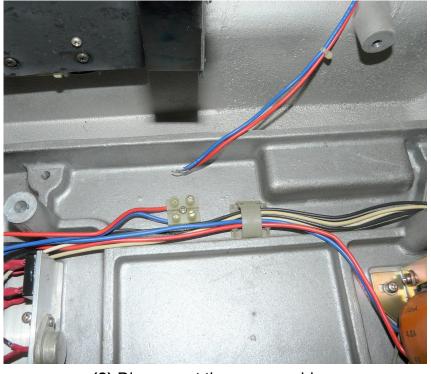
Han-Seung Yang 2/22/2021 (4) Original electrical parts and wires. PN 11478 Nikon Epiphot REV Illuminator System Installation 1 Instructions SHEET 3 OF 10

### Nanodyne Replacement Illuminator for Nikon Epiphot Installation Instructions: Step 2. Disconnect Old Wiring, Adjustment Pot and Electrical Parts.

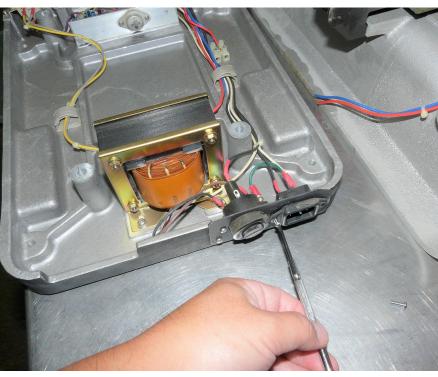


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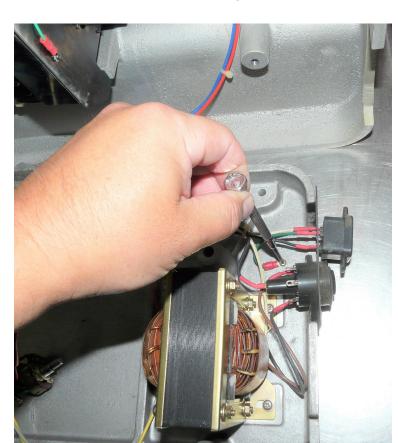
(1) Loosen the screws using Philips screw driver.



(2) Disconnect the power cables.



(3) Loosen the 2 screws holding AC power receptacle using Philips screw driver. Keep the screws for later.



(5) Disconnect the cables (red arrow) and completely remove AC power receptacle (red circle) out of the microscope. Nanodyne AC power blank off plate will replace it.



(6) Remove the knob using the 2.5mm hex key provided. Save the knob for the new pot.

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(4) Disconnect the ground cable.

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# Nanodyne Replacement Illuminator for Nikon Epiphot Installation Instructions: Step 3. Remove Old Wiring, Adjustment Pot and Electrical Parts.

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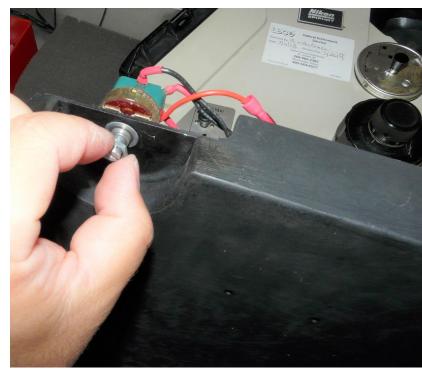
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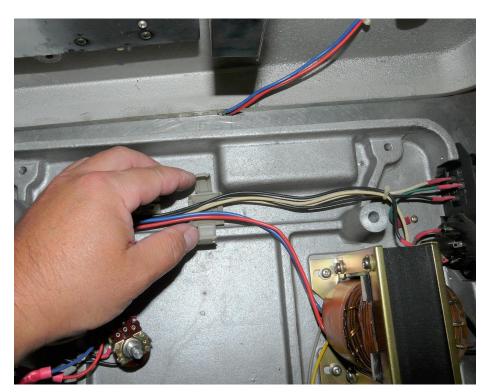
(1) Unscrew the nut holding the old pot, using a hex socket.



(2) Remove the nut and washer.



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(4) Pull the disconnected cables out of the microscope. You can completely remove all the now-obsolete original wires, potentiometer and electrical parts.

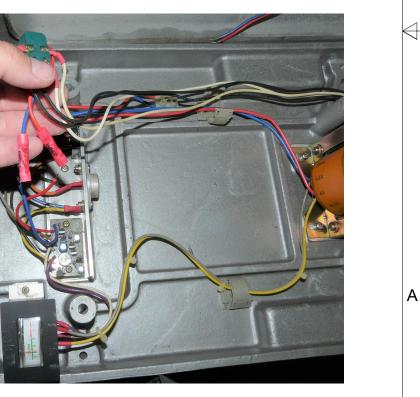
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(3) Remove the old potentiometer.



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### Nanodyne Replacement Illuminator for Nikon Epiphot Installation Instructions: Step 4. Install a New Pot Plate.

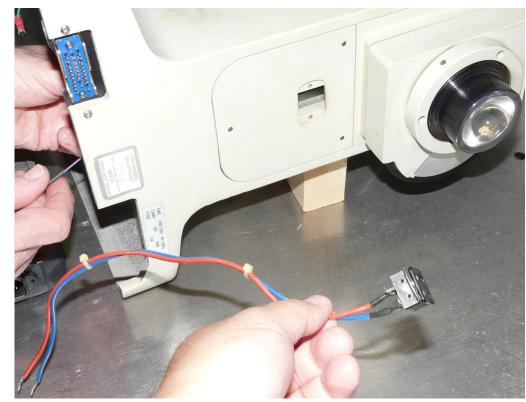


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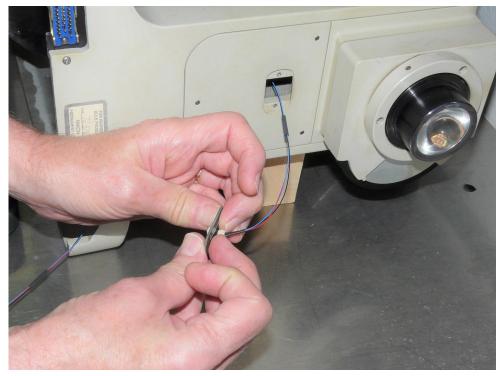
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(1) Unscrew the original power plate. Keep the screws for later.



(2) Remove the original power plate-cable assembly.





(4) Connect the pot cable to the PN 11414 pot plate.



(5) Install the PN 11414 pot plate.

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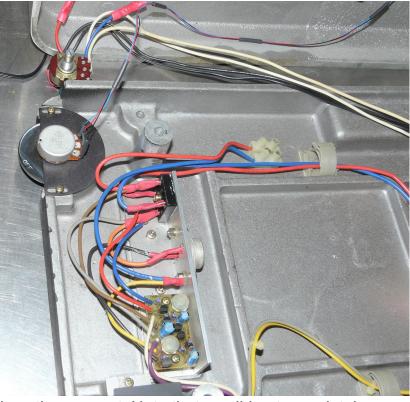
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(3) Route and insert the new pot cable assembly.

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### Nanodyne Replacement Illuminator for Nikon Epiphot Installation Instructions: Step 5. Install New Pot and Replace Pot Knob.



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(1) Place the new pot. Note that we did not completely remove original pot and wires in this photo because the microscope was a borrowed one from a customer.



(2) Raise up the the bottom cover.



other tools may be required.





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(4) Install the knob on the new pot using the 2.5mm hex key provided.

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(3) Secure the new pot in place with the nut and washer provided. You should be able to turn the nut by hand. If it is too difficult, a hex socket or В

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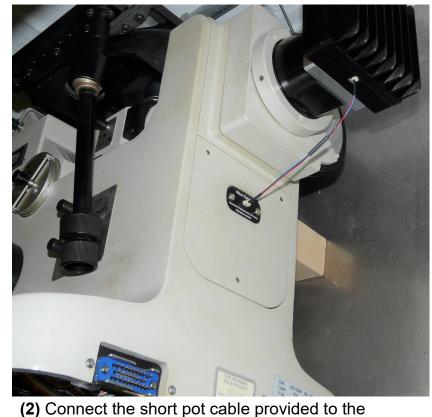
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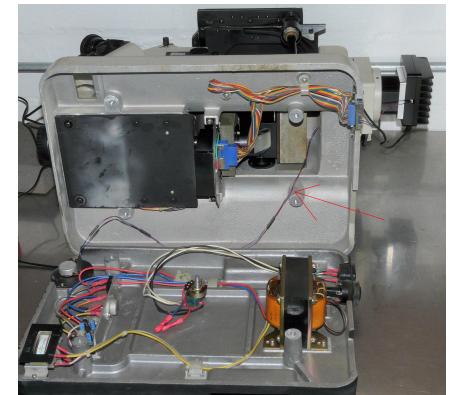
Nanodyne Replacement Illuminator for Nikon Epiphot Installation Instructions: Step 6. Install New Illuminator and Replace Bottom Cover.

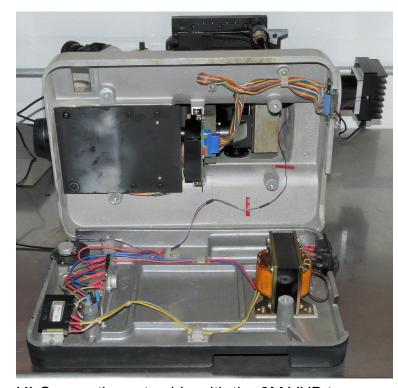


(1) Insert the new illuminator and tighten the set screw with the 5/64 hex key.

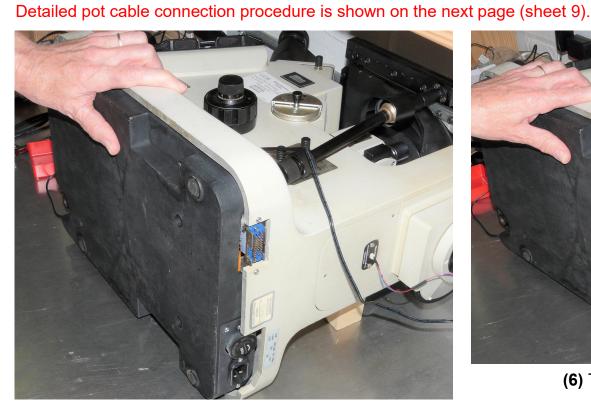


illuminator and PN 11414 pot plate.





(4) Secure the pot cable with the 3M VHB tape provided (red, in above photo).



(5) Replace the bottom cover.



(6) Tighten the 4 screws sa

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(3) Route the pot cable (red arrow) as shown above. \*Note: We did not completely remove original pot and wires in this photo because the microscope was a borrowed one from a customer.

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## Nanodyne Replacement Illuminator for Nikon Epiphot Installation Instructions: Step 6 (continued). 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.

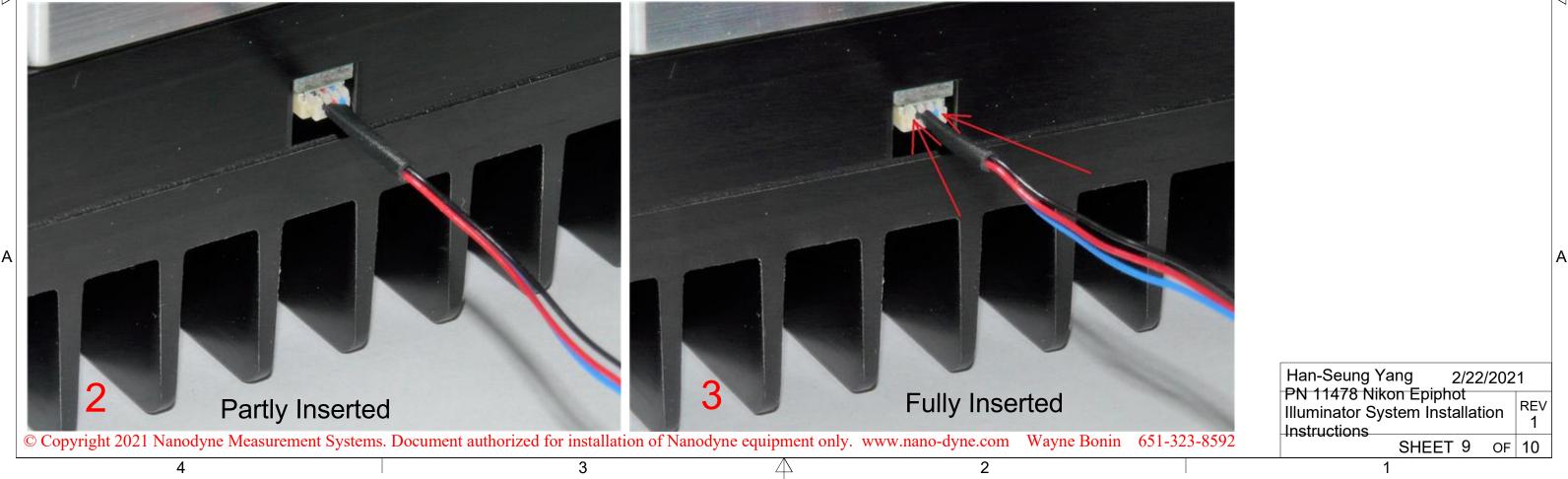
Partially insert the plug into the mating socket of the illuminator by holding the wire next to the plug with your finger (photo 2).

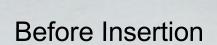
Use your fingernails, if you have them, or tools like a tiny screwdriver or tweezers pushing on the side of the plug to fully insert it (photo 3).

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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### 3 Nanodyne Replacement Illuminator for Nikon Epiphot Installation Instructions: Step 7. Secure Pot Cable and Plug in Power Supply.



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(1) Connect the power supply cable to the wall mount and plug in to the Nanodyne illuminator.



(2) Secure the pot cable with the 3M VHB tape provided (red, in above photo).

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(3) Install PN 11476 AC power blank off plate as a replacement of the now-obsolete AC power receptacle using original screws saved.



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(4) The microscope is now ready to operate.

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