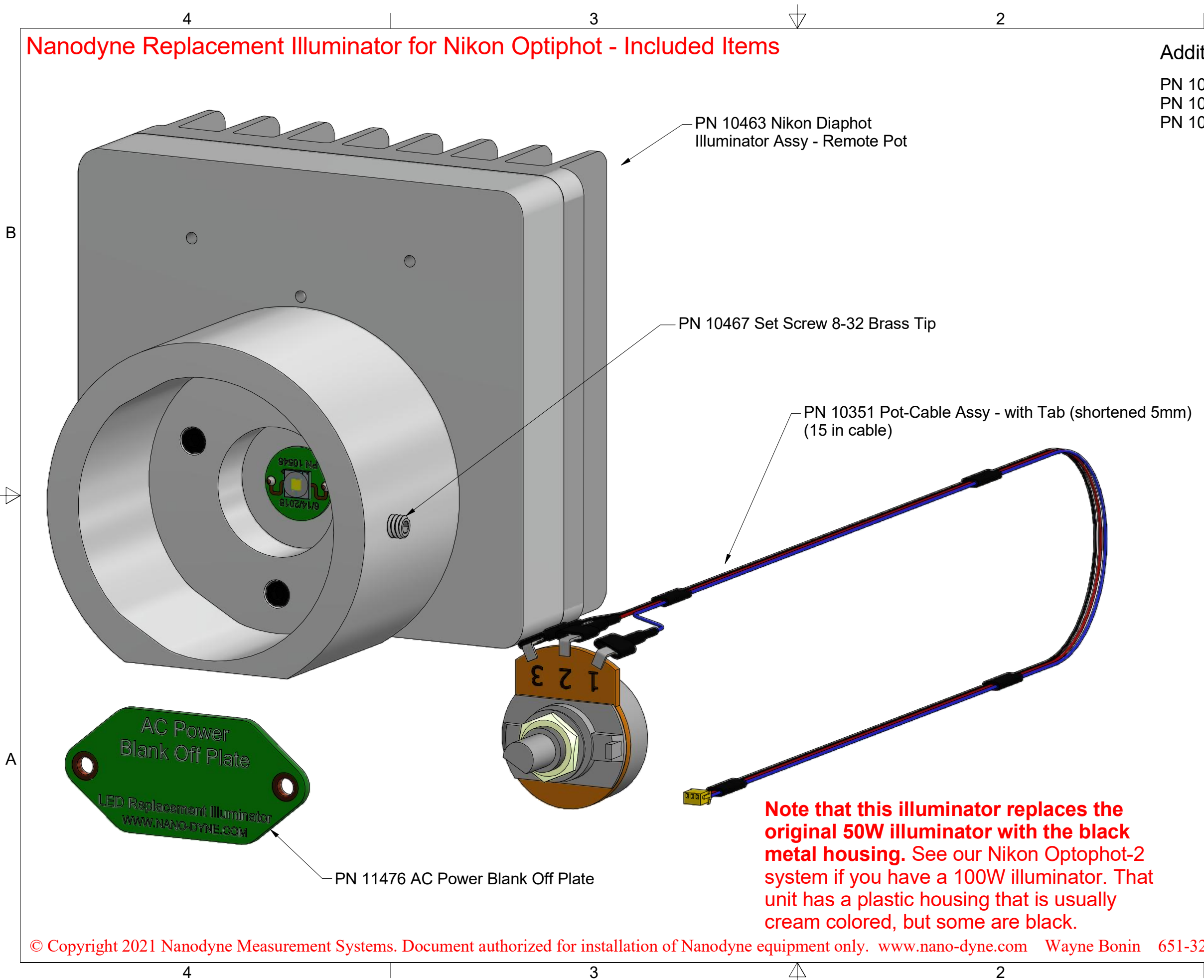


Nanodyne Replacement Illuminator for Nikon Optiphot - Included Items



Additional Items Included But Not Shown:

- PN 10460 Hex Key 4mm (to remove bottom cover)
- PN 10457 Hex Key 2.5mm (for pot knob)
- PN 10490 Hex Key 5/64 (for 8-32 set screw)



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.



3M VHB tape to secure pot cable

Han-Seung Yang 2/23/2021	
PN 11223 Nikon Optiphot	
Illuminator System Installation	
Instructions - Remote Pot	
SHEET 1 OF 7	
REV	1

Nanodyne Replacement Illuminator for Nikon Optiphot Installation Instructions: Step 1. Remove Old Illuminator and Microscope Frame.

B



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



(2) Remove the 4 screws holding bottom cover using 4mm hex key provided. Keep the screws for later.



A



(3) Unscrew and remove the lens assembly by hand. Keep the parts for later.



Nanodyne Replacement Illuminator for Nikon Optiphot Installation Instructions: Step 2. Remove Microscope Frame and Old Adjustment Pot.



(1) Take the microscope frame off.



(2) Original electrical parts and wires.



(3) Loosen the set screw on the pot knob using 2.5mm hex key provided.



(4) Remove the knob. Save the knob for the new pot.



(5) Unscrew the nut using the 10mm hex socket.

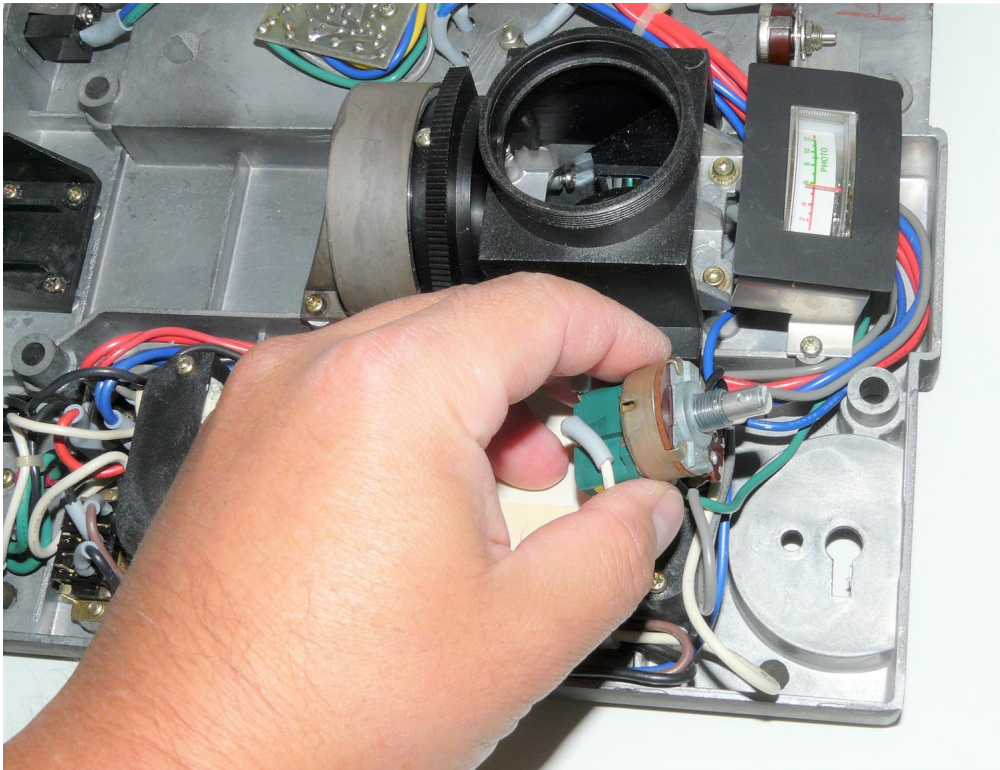


(6) Remove the washer and nut.

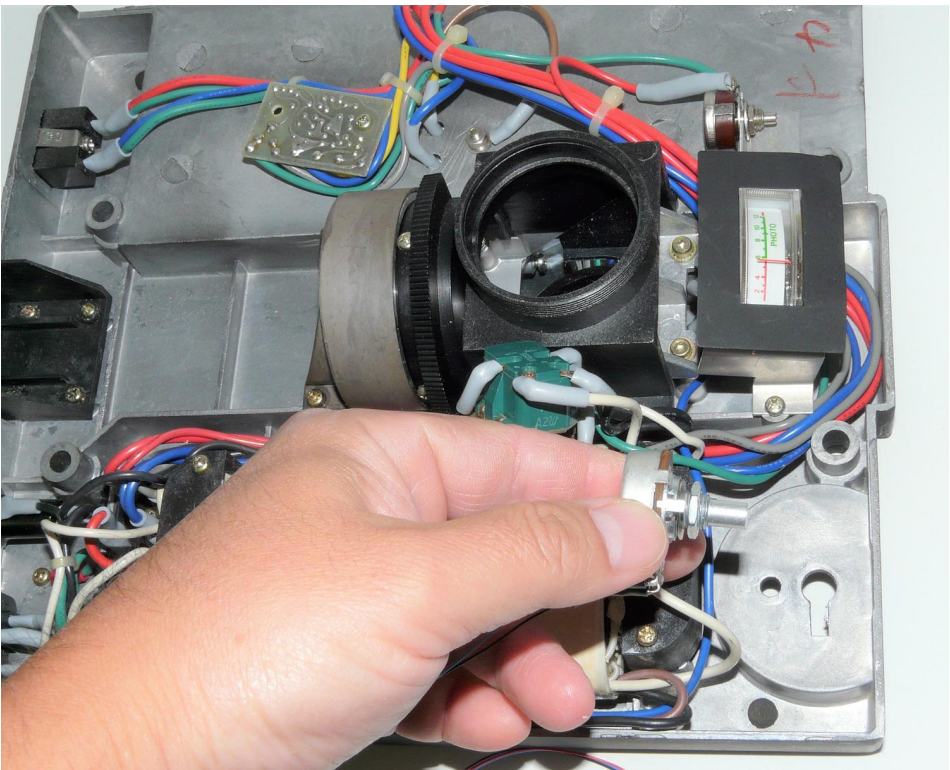
4 3 2 1

Nanodyne Replacement Illuminator for Nikon Optiphot Installation Instructions: Step 3. Install a New Adjustment Pot and Replace Pot Knob.

B



(1) Remove the old potentiometer.



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



(3) Install the new potentiometer. Align the tab into the hole.

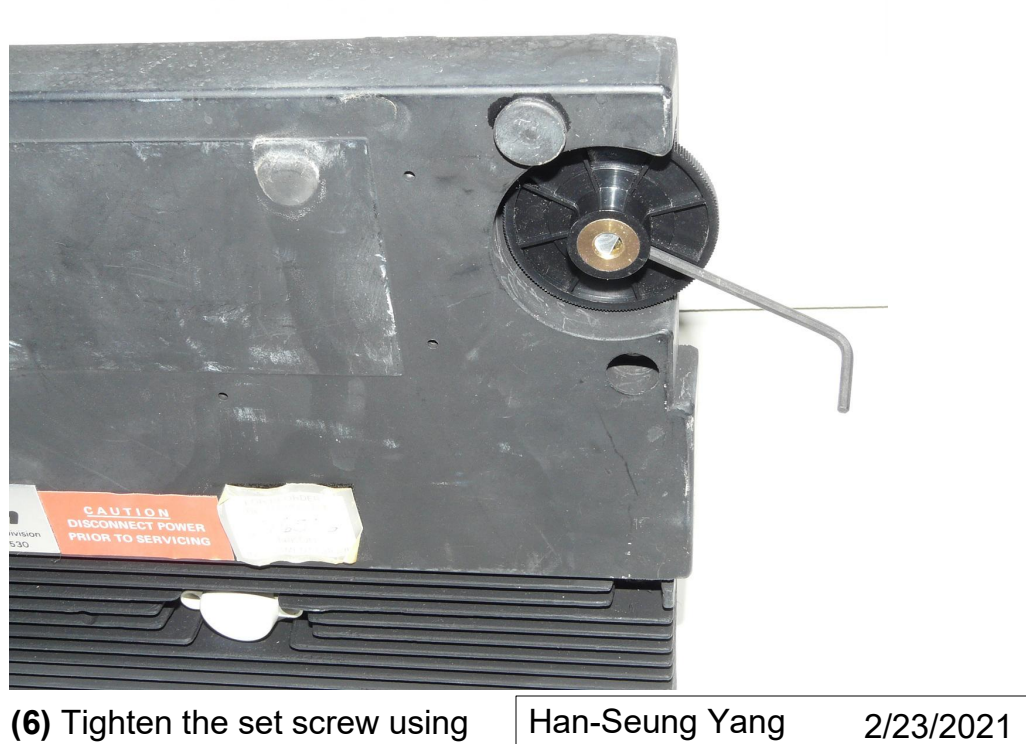
A



(4) 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 other tools may be required.



(5) Reinstall the knob on the new pot.

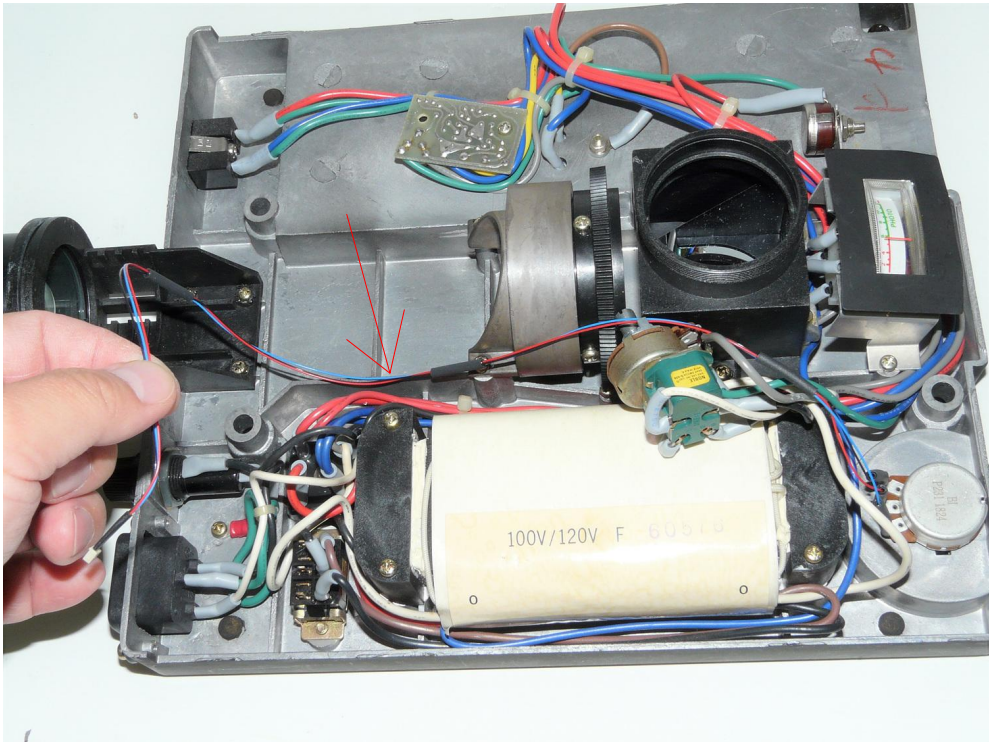


(6) Tighten the set screw using the 2.5mm hex key provided.

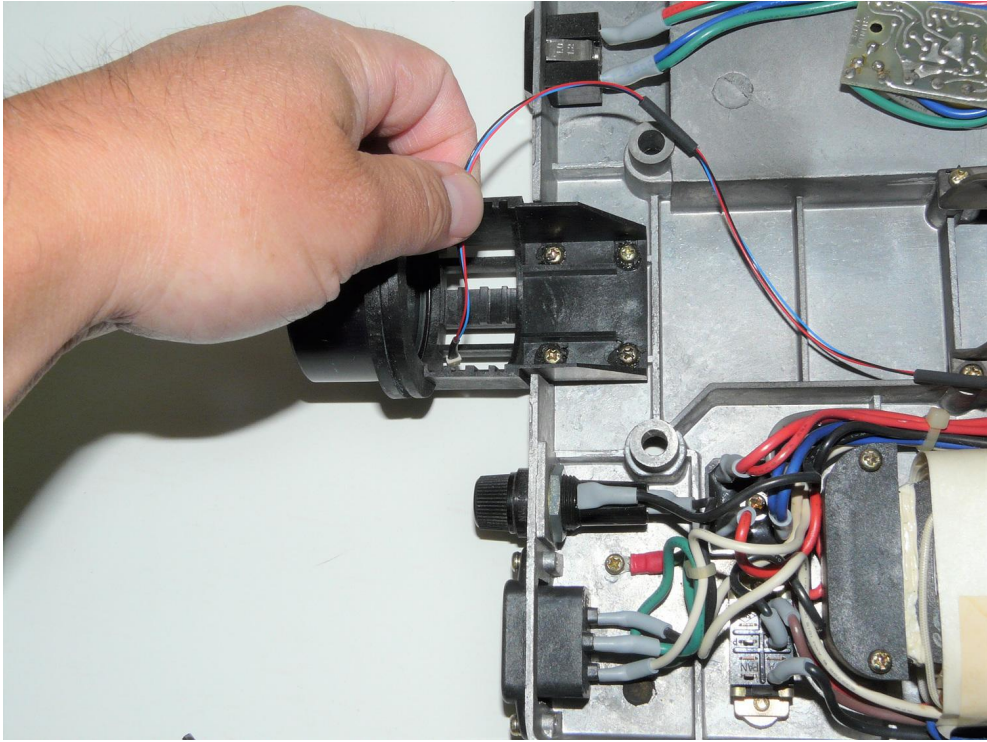
4 3 2 1

Nanodyne Replacement Illuminator for Nikon Optiphot Installation Instructions: Step 4. Remove Old Wiring/Electrical Parts. Secure New Pot Cable.

B



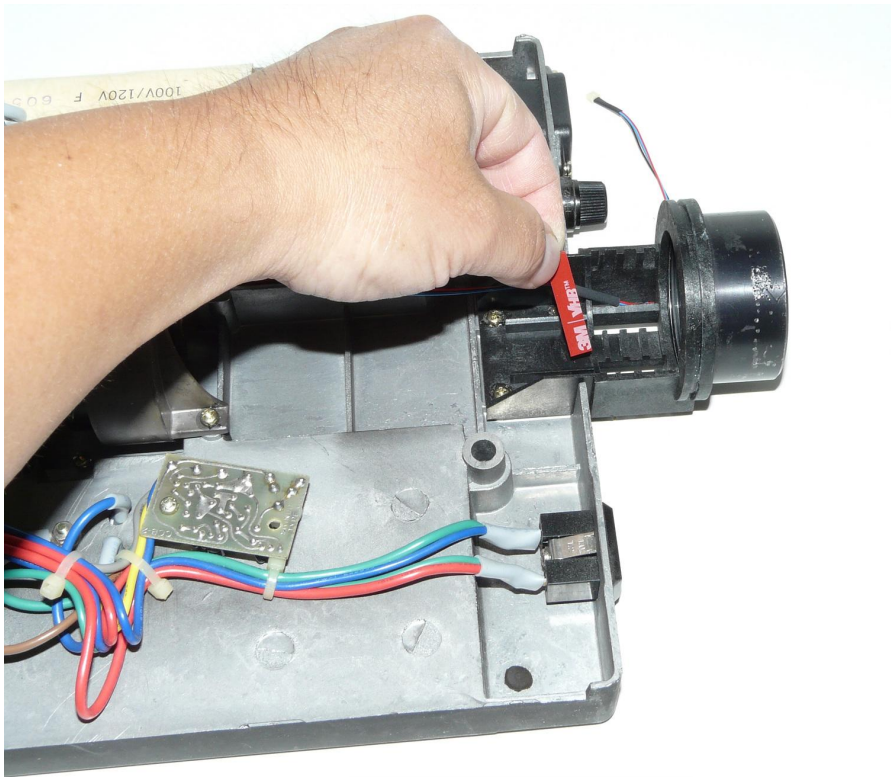
(1) Route the new pot cable (red arrow) as shown above.



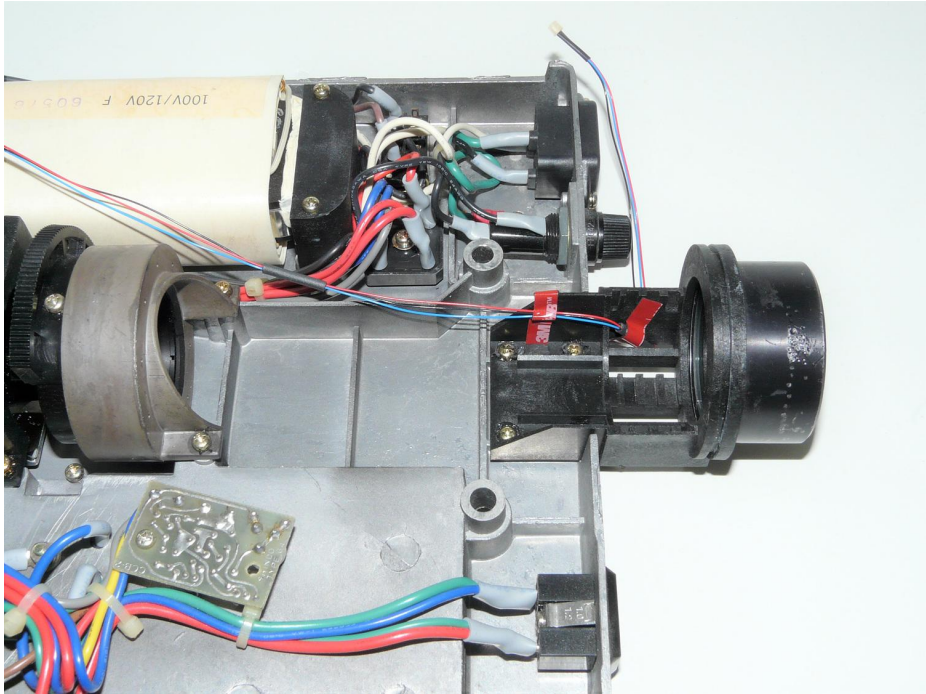
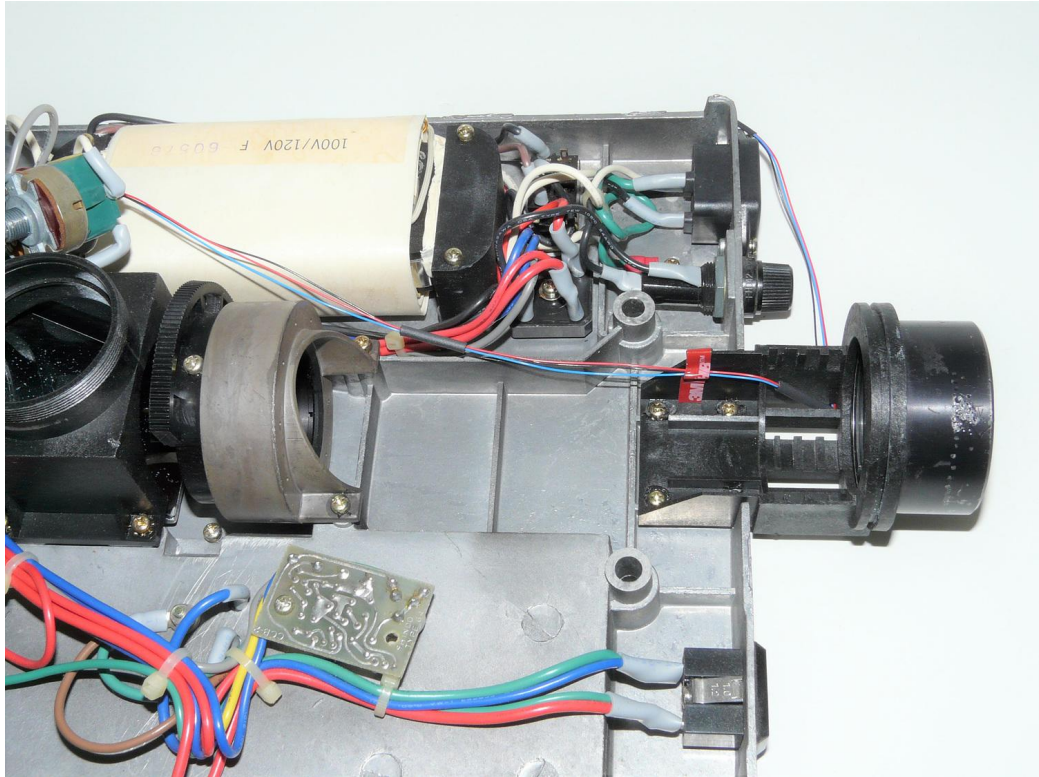
(2) Route and insert the new pot cable into the slit.

*Note: We did not completely remove original pot and wires in this photo because the microscope was a borrowed one from a customer. You can pull the disconnected cables out of the microscope and completely remove all the now-obsolete original wires, potentiometer and electrical parts.

A

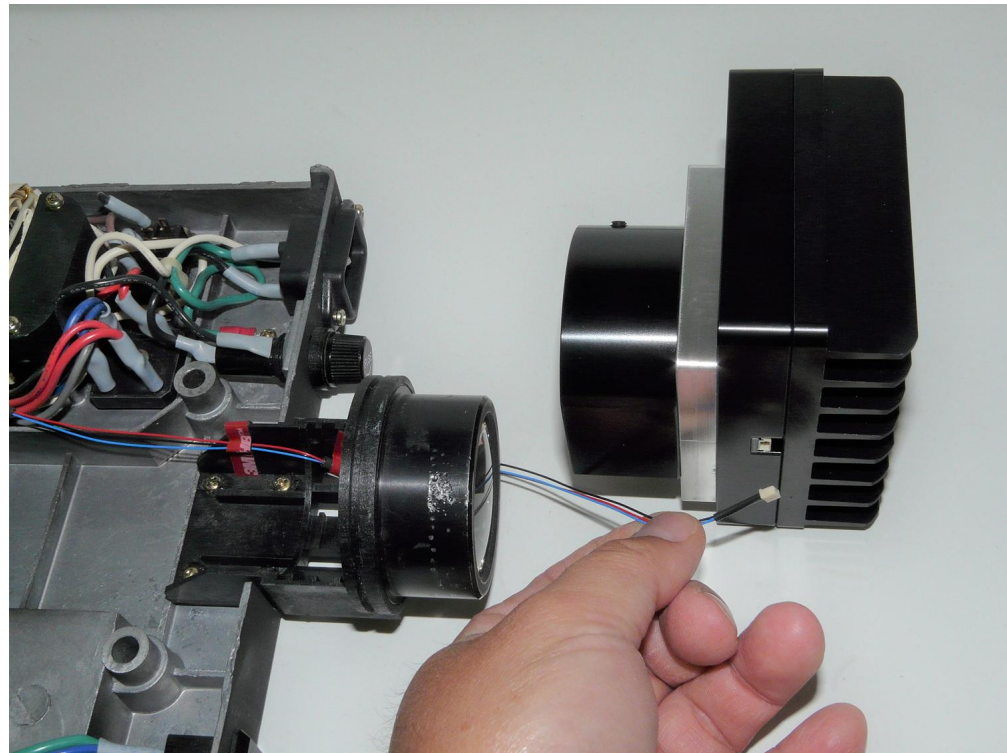


(3) Secure the pot cable accordingly with the 3M VHB tape provided (red, in above photos).

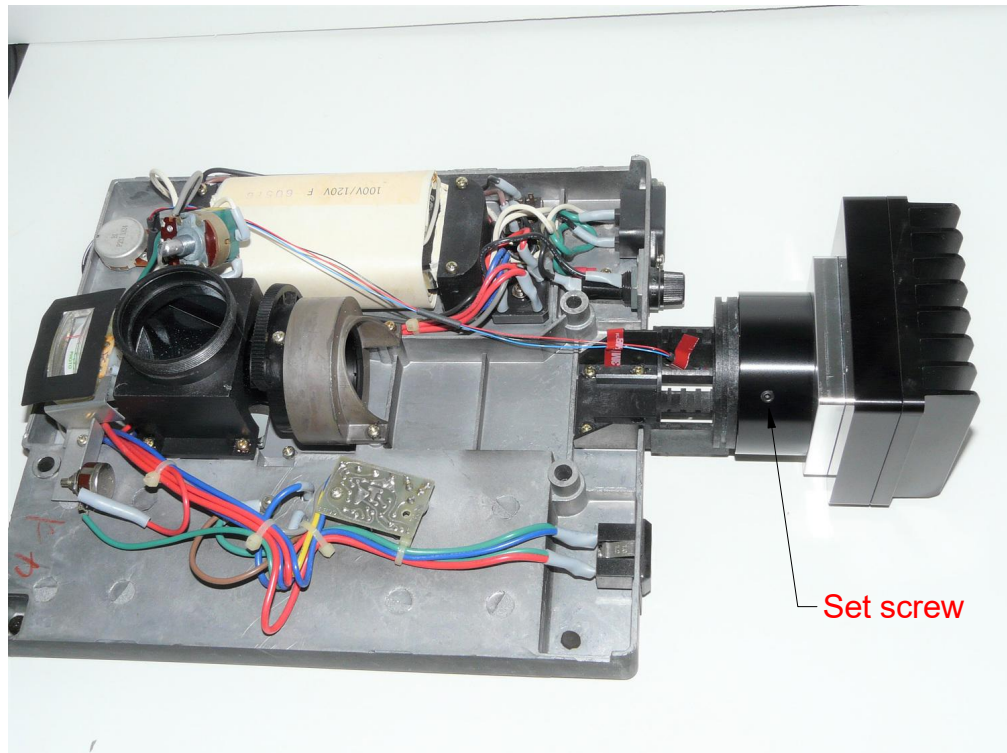


A

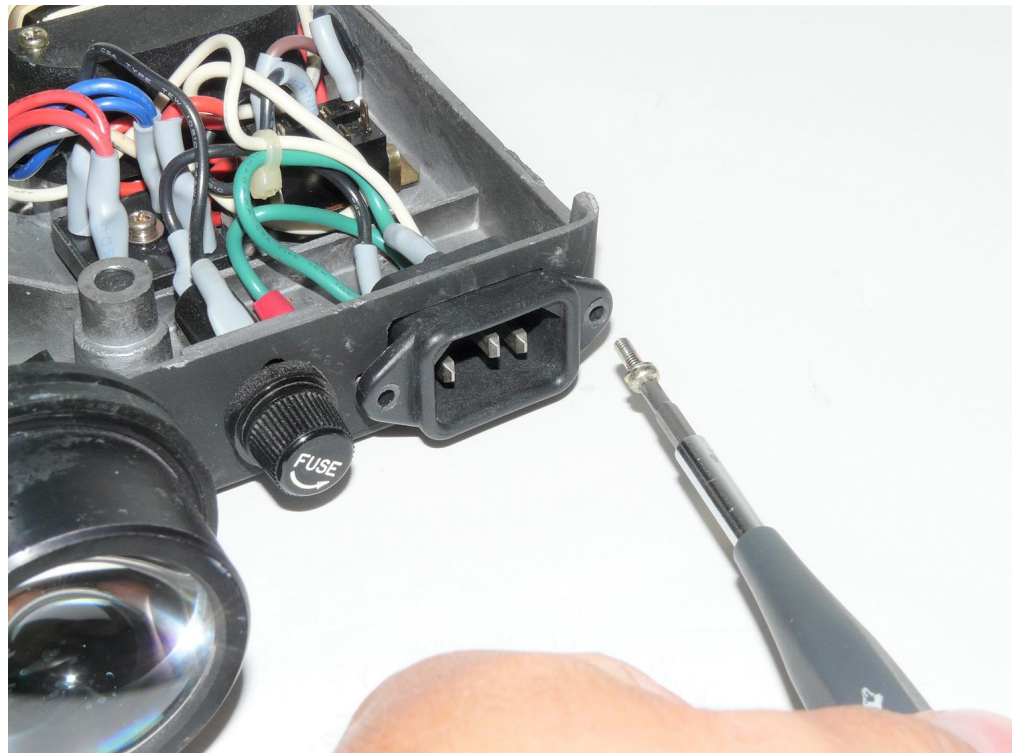
Nanodyne Replacement Illuminator for Nikon Optiphot Installation Instructions: Step 5. Install New Illuminator and Replace Microscope Frame.



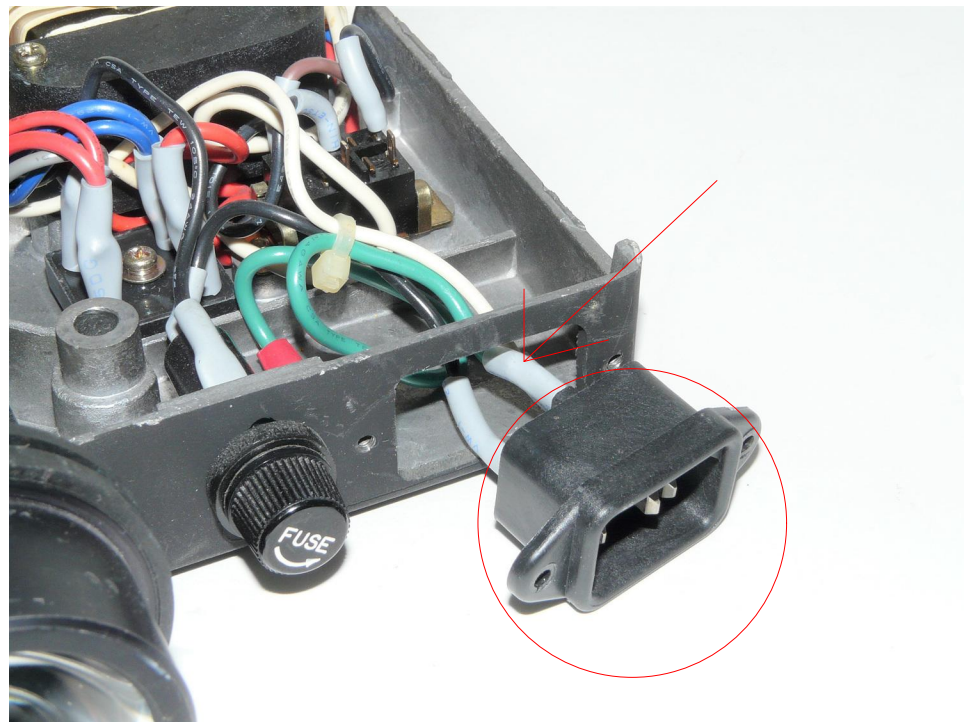
(1) Connect the new pot cable to the Nanodyne illuminator. Detailed pot cable connection procedure is shown on the next page (sheet 7).



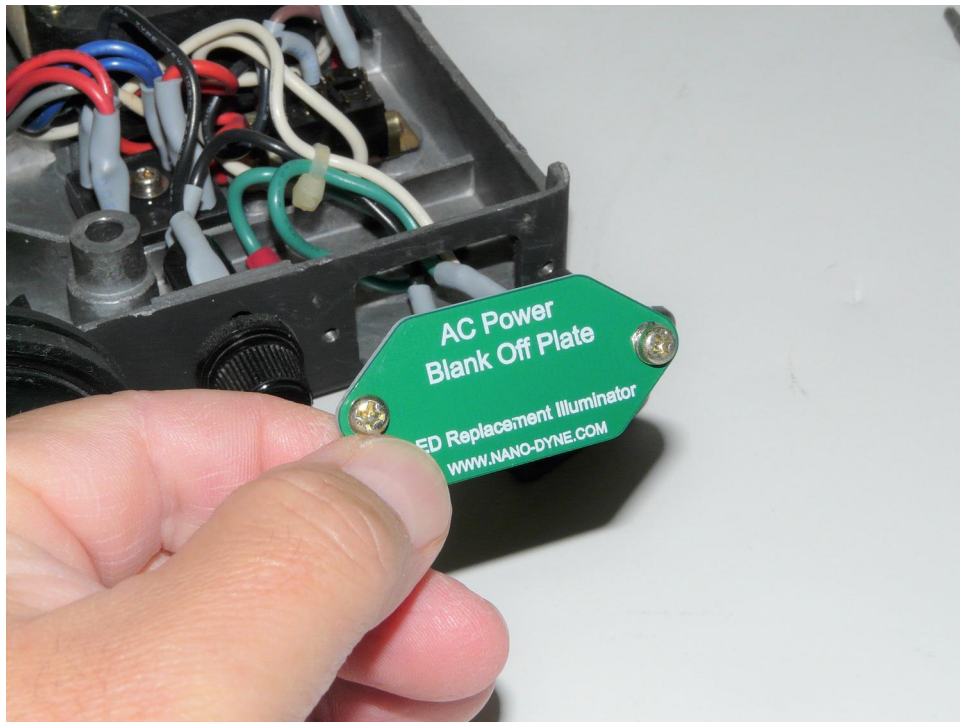
(2) Insert the new illuminator and tighten the set screw with the 5/64 hex key provided.



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



(4) Disconnect the cables (red arrow) and completely remove AC power receptacle (red circle) out of the microscope.



(5) Install PN 11476 AC power blank off plate as a replacement of the now-obsolete AC power receptacle using original 2 screws saved.



(6) Replace the microscope frame. Tighten the 4 screws saved. Connect the power supply cable to the wall mount and plug in to the Nanodyne illuminator. The microscope is now ready to operate.

Nanodyne Replacement Illuminator for Nikon Optiphot Installation Instructions: Step 5 (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.

