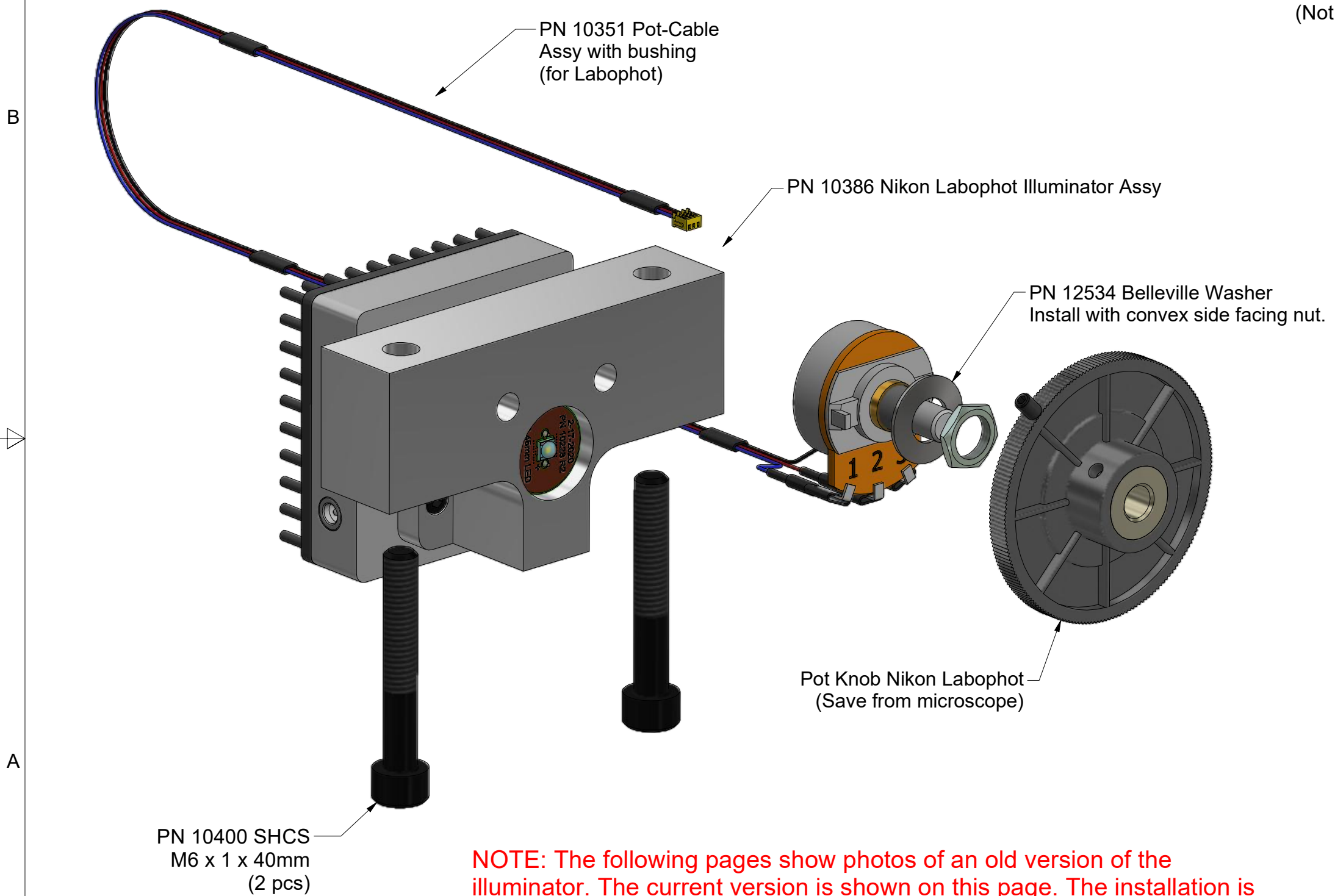


Nanodyne Replacement Illuminator for Nikon Labophot Microscope Installation Instructions: Included Items

- Additional Items Included But Not Shown:**
- PN 10456 Hex Key 1.5mm (for pot knob)
  - PN 10460 Hex Key 4mm Short Arm (for microscope bottom cover)
  - PN 10399 Hex Key 5mm Short Arm (for M6 mounting bolts to attach illuminator to scope)
  - (Not included but needed - 11 mm socket or wrench for pot nut)



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.

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

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.



Tape to secure wires.

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Nanodyne Replacement Illuminator for Nikon Labophot Microscope Installation Instructions: Step 1. Initial Disassembly



(1) The black ring around the lens must be removed to open the microscope.

(2) Unscrew and remove the black ring and lens.

(3) Keep the black ring and lens for later.



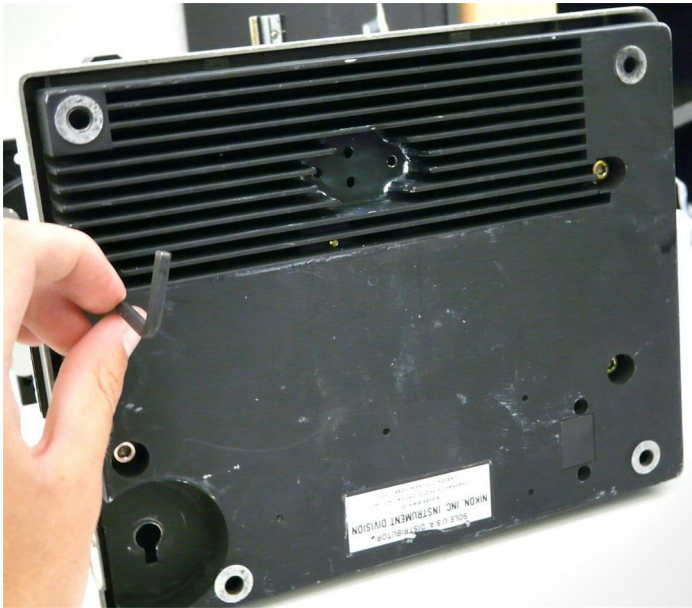
(4) Remove the original lamp housing.

(5) Remove the intensity control wheel.

(6) Keep the intensity control wheel for later.



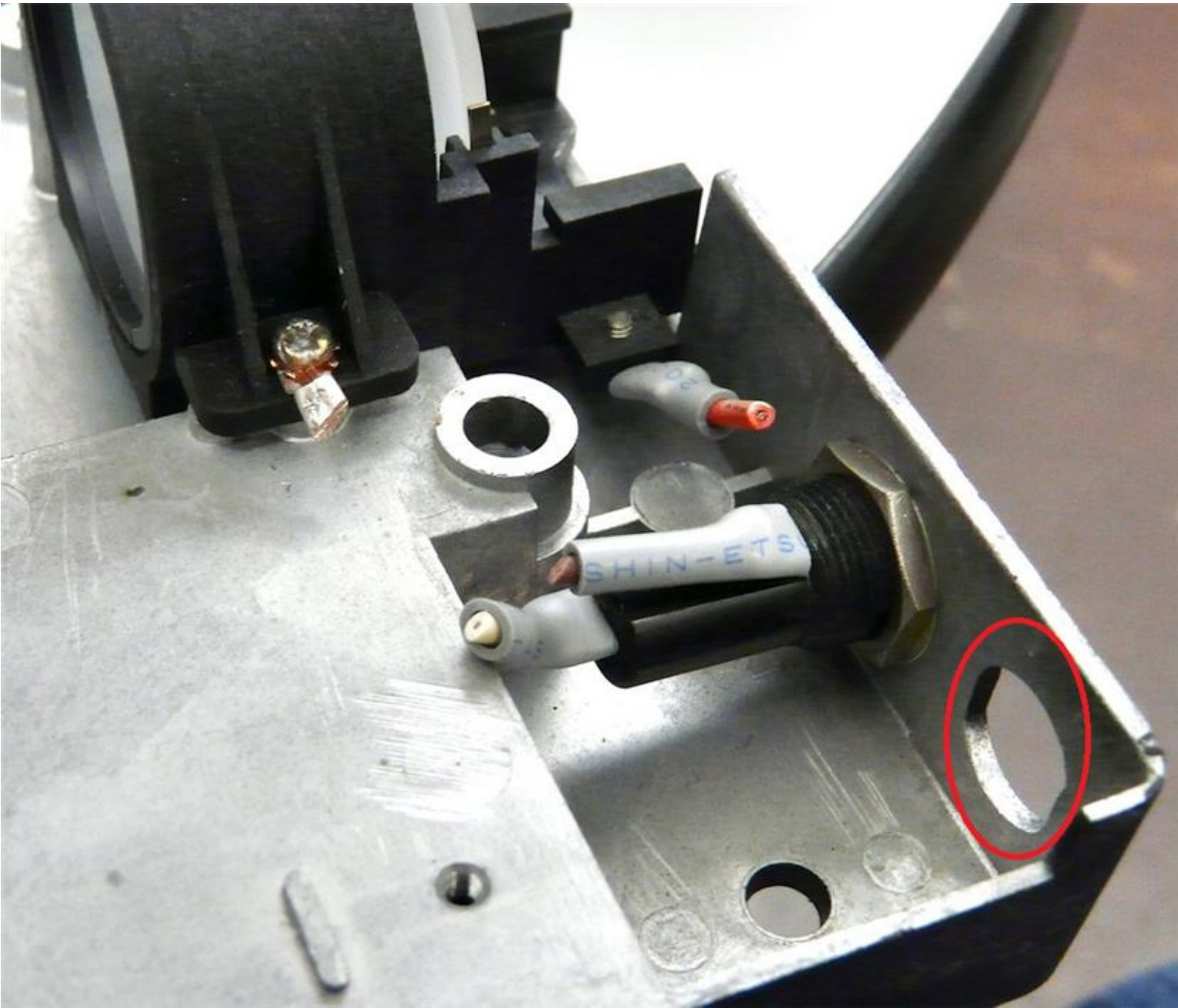
Nanodyne Replacement Illuminator for Nikon Labophot Microscope Installation Instructions: Step 2. Remove Bottom Cover and AC Power



(1) Remove the 4 cap screws with the 4mm hex key.



(2) Bottom cover removed. Note that the pot will still be in place at the red circle, and the electronics were stripped out before we got it.



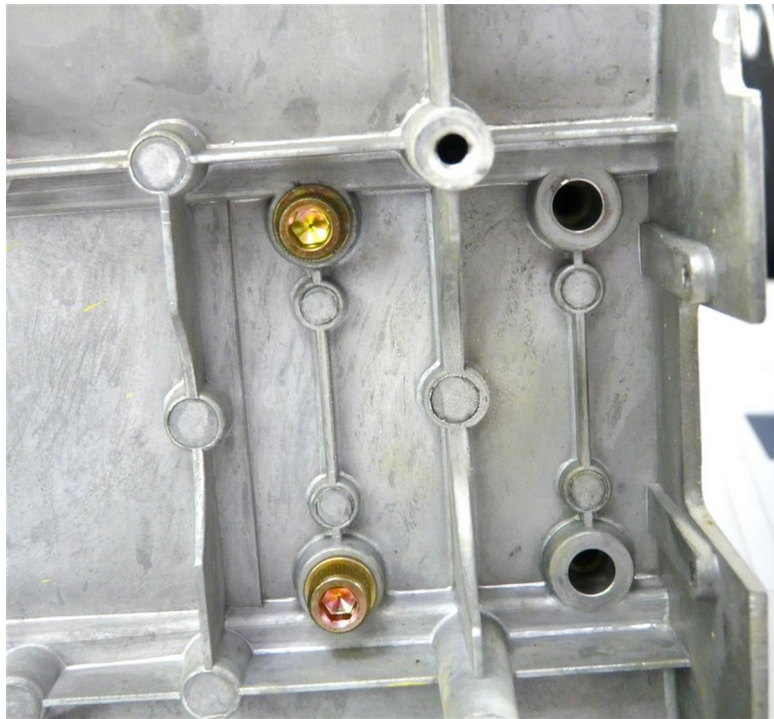
(3) AC power is no longer needed. The AC line cord came in though the hole with the red circle. Remove all AC power connections including the line cord.

None of the original electronics are required, so they can also be removed if desired.

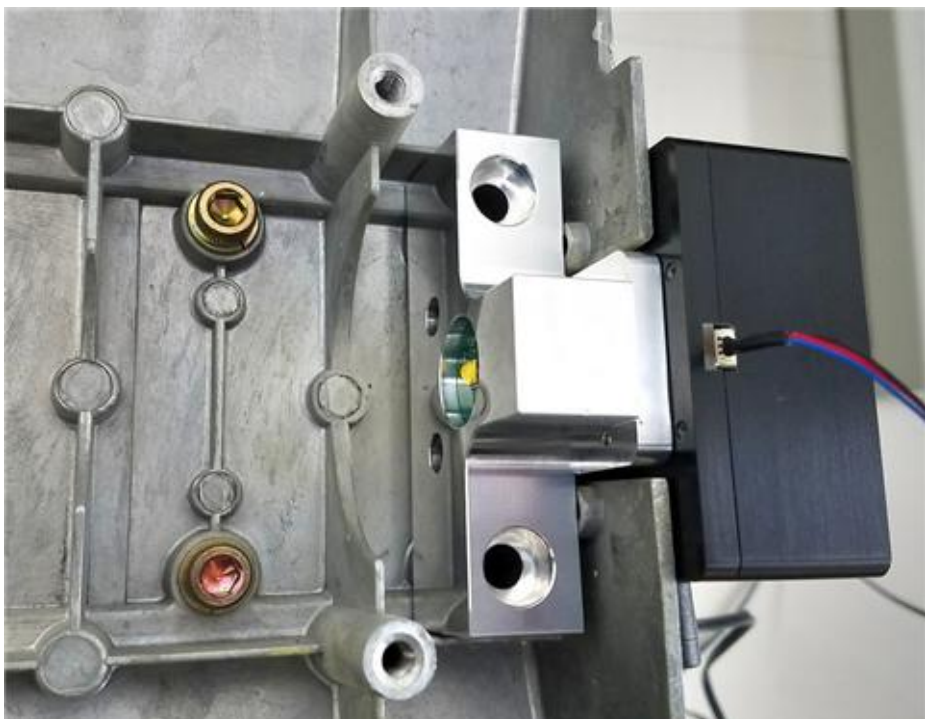
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Nanodyne Replacement Illuminator for Nikon Labophot Microscope Installation Instructions: Step 3. Install Nanodyne Illuminator and New Pot



(1) Remove the 2 cap screws closest to the back of the microscope. (the ones holding the neck to the base) Use the 5mm hex key.



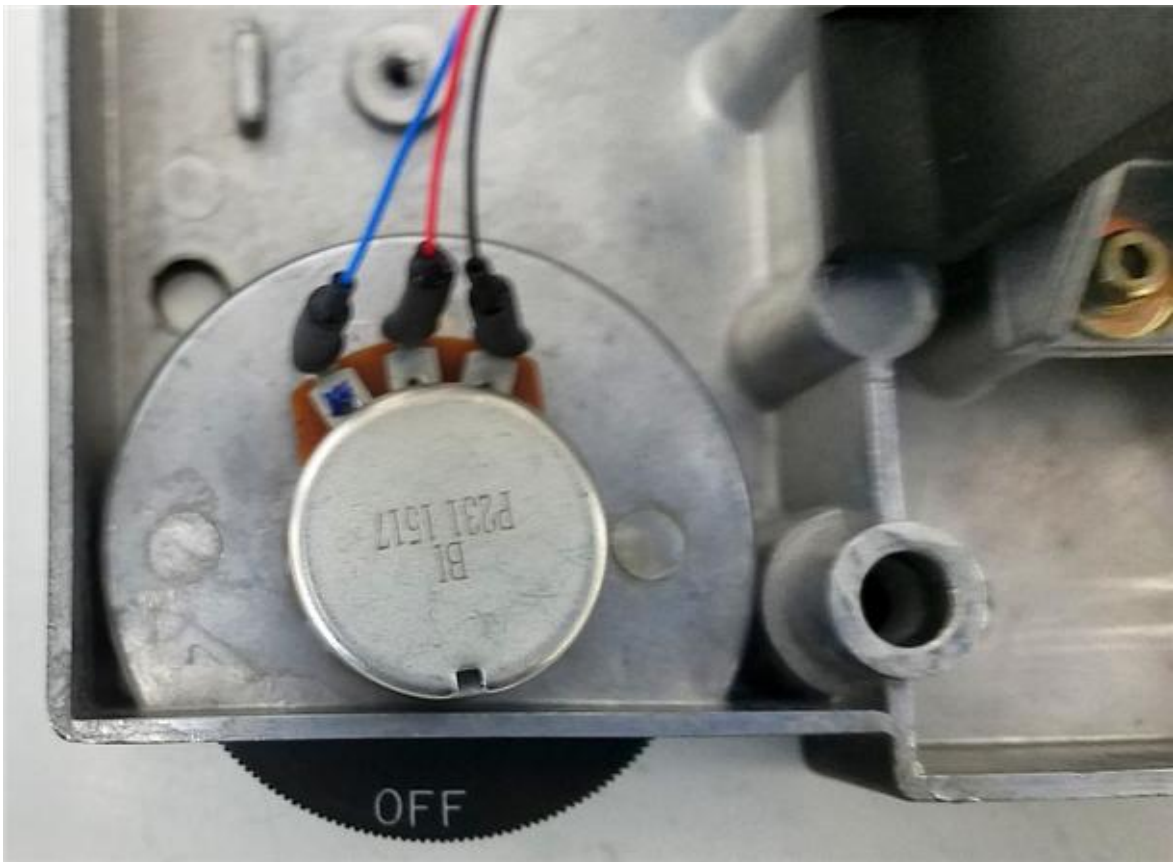
(2) Install the Nanodyne illuminator as shown. Secure it with the two longer M6 cap screws provided. Tighten using the 5mm hex key. Note that the cable will **not** be plugged into illuminator yet.



(3) Install the Nanodyne pot as shown. The Anti-Rotate tab goes in the slot in the microscope (red circle). With an 11mm socket, snug the nut finger tight, then using the handle for the socket, tighten at least 1/4 turn, but less than 1/2 turn.

The Belleville washer, if installed and properly tightened as specified will prevent loosening of the nut. It is much better than so-called "lock washers", which are generally worse than nothing.

(We did not have a Labophot available for this photo. It is a similar model.)



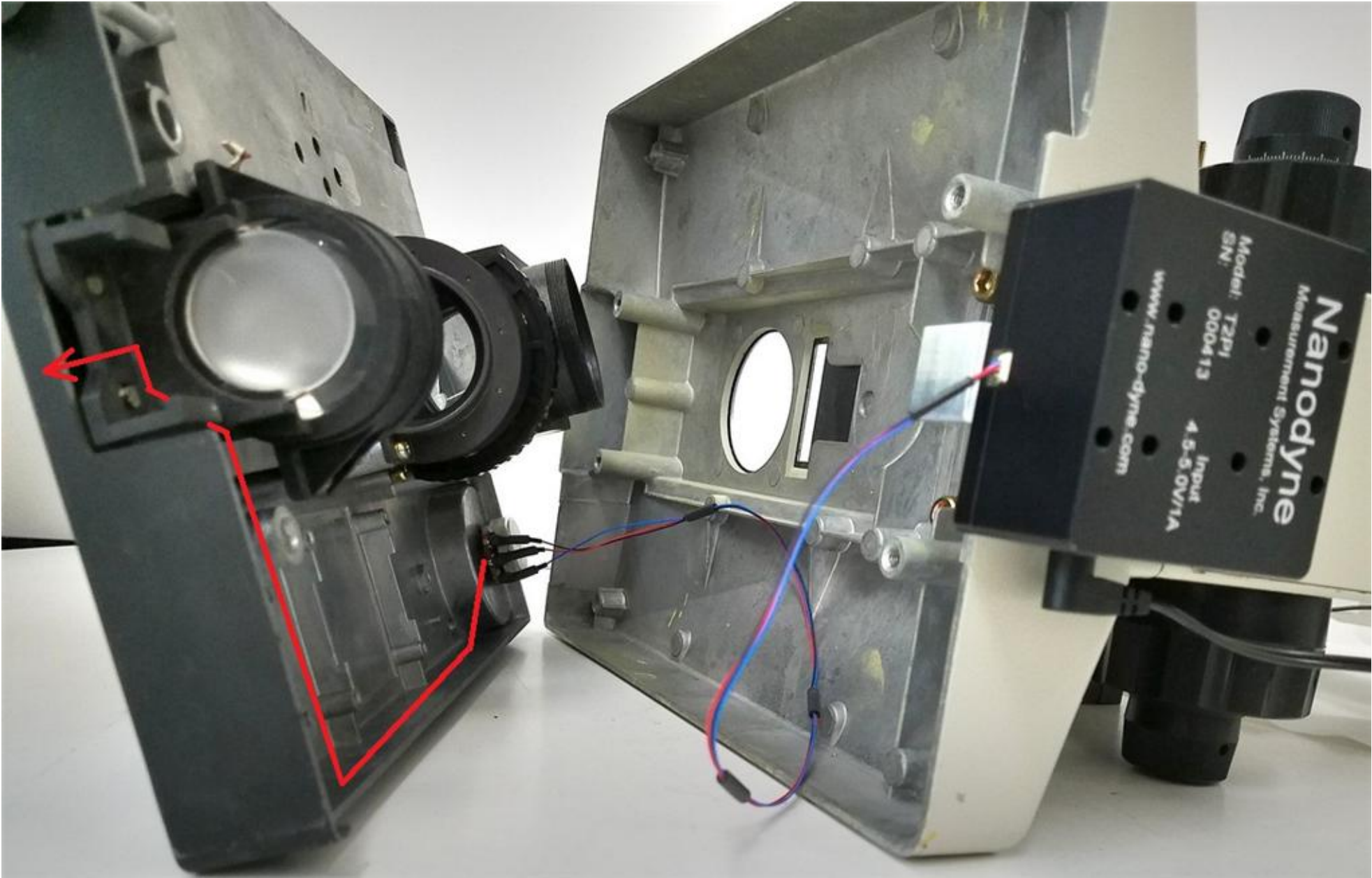
(4) Turn the shaft on the pot fully counter clock wise **when looking at the shaft side**. (put it in the OFF position)

Install the control wheel so it reads "OFF" in this position. Tighten the set screw on the wheel using the hex key provided.

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Nanodyne Replacement Illuminator for Nikon Labophot Microscope Installation Instructions: Step 4. Reinstall Bottom Cover



(1) **NOTE - The pot cable and power cord should not be connected yet.**

Rout the pot cable along the path of the red lines in the photo above. Use the red VHB tape to secure it. There should be just enough length coming out of the microscope to plug it into the illuminator. Be sure the cable cannot get into the light path.



(2) Secure the bottom cover to the microscope with the original screws. Plug the pot cable into the bottom of the illuminator. See detailed instructions on the next sheet.

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

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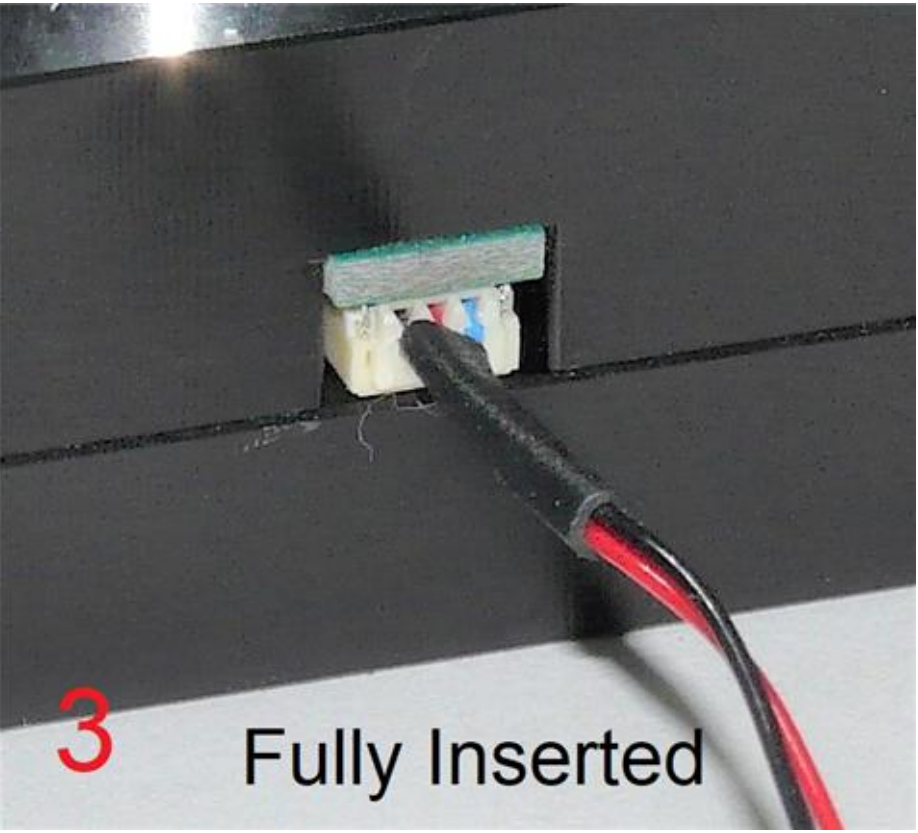
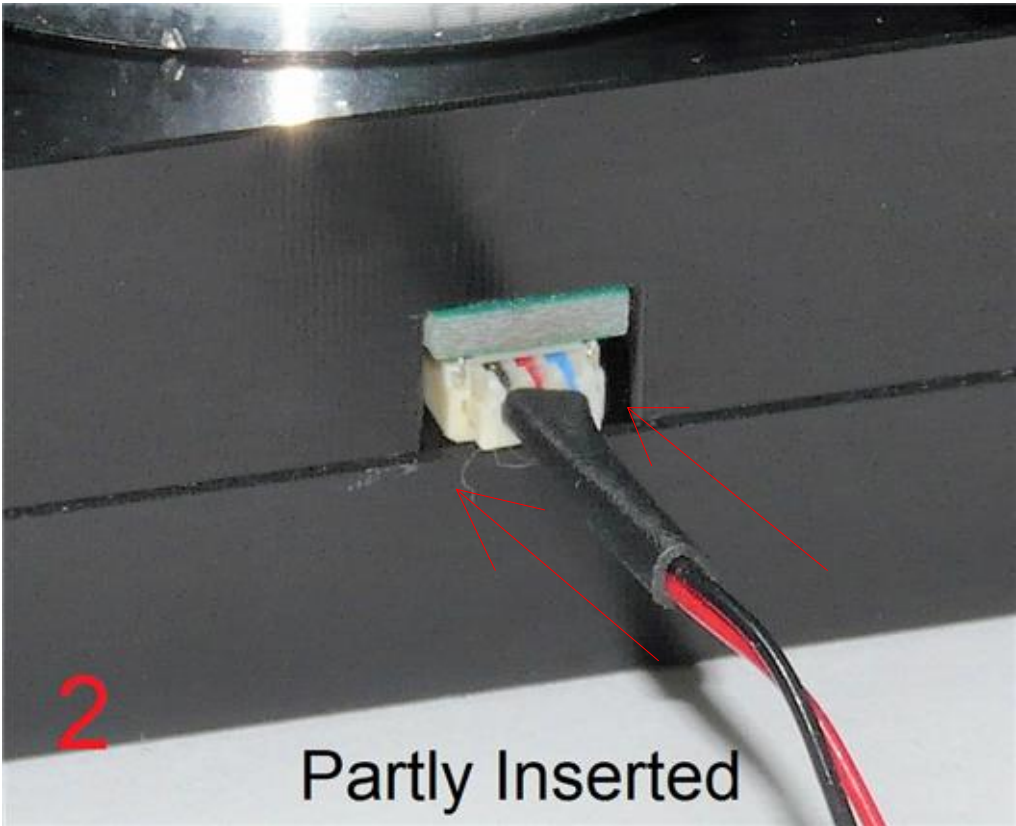
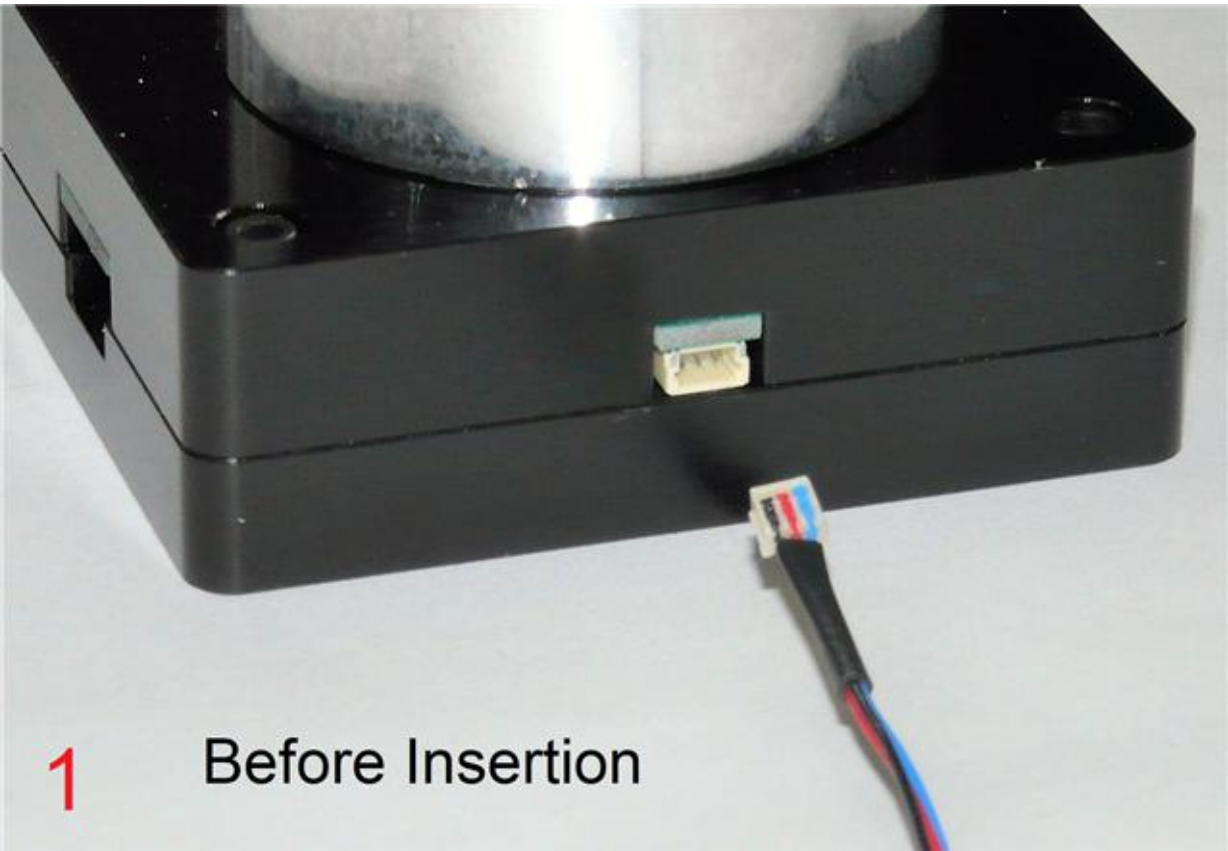
Connect the plug at the end of the Pot Cable Assembly to the mating socket of the illuminator, as shown in the pictures on this page. NOTE THAT THE PLUG IS KEYED TO ONLY GO INTO THE SOCKET ONE WAY, AS SHOWN.

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.





(1) Replace the lens and lens holder.



(2) Connect the USB end of the power cord to the power supply and the other end to the illuminator at the red circle. Plug the power supply into an AC outlet and it is ready to use.