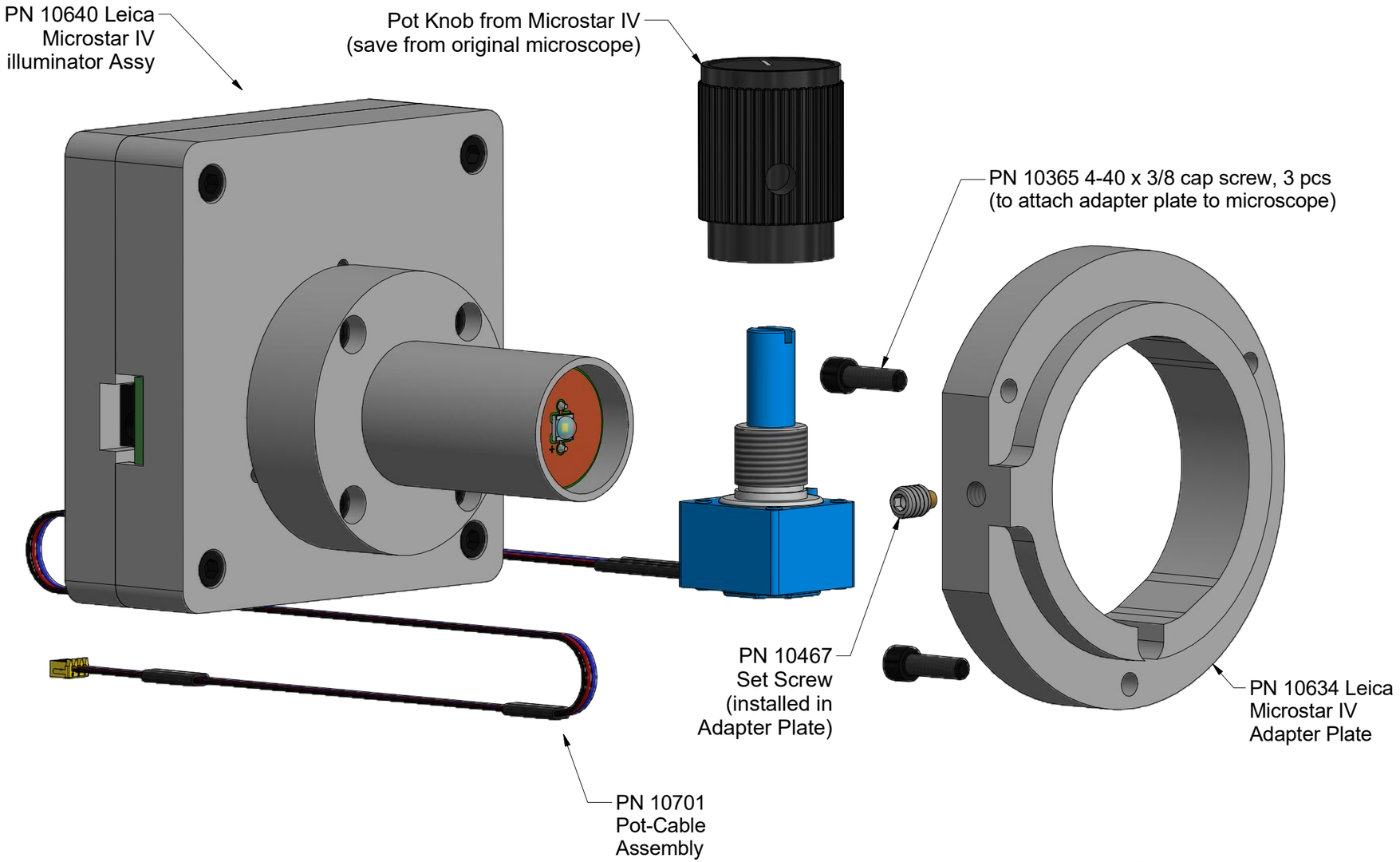
Nanodyne Replacement Illuminator for Leica Microstar IV Microscope Installation Instructions - Included Items

Additional Items Included But Not Shown:

PN 10703 Hex Key 0.05 inch - for knob
PN 10490 Hex Key 5/64 inch - for set screw
PN 10709 Hex Key 3/32 inch - for 4-40 screws
PN 10610 cable ties (4pcs) - to secure pot cable



PN 10733 Power Supply - XP Power 5V 1A and PN 10734 Cable 6 foot USB A to 1.35mm ID/3.5mm OD RA Barrel Plug.

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 10736 Rubber plug to block unused AC power recepticle.

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

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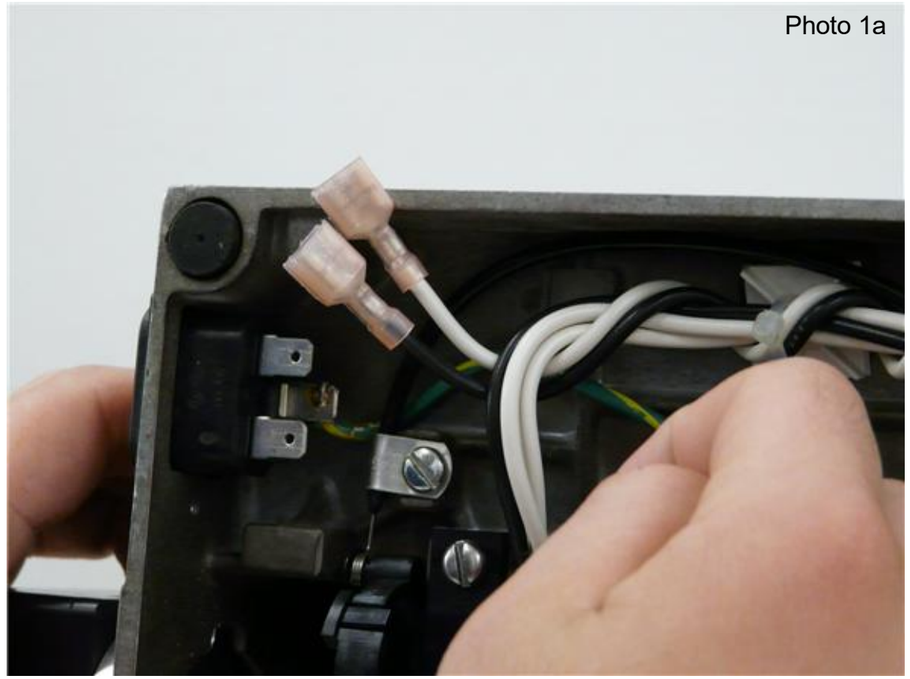
Nanodyne Replacement Illuminator for Leica Microstar IV Microscope Installation Instructions - Step 1. Remove old lamp and wires.

Photo 1a



Remove the bottom plate of the microscope by unscrewing the screws that hold it in place. The new LED illuminator runs on its own DC power supply. To reduce the risk of electric shock if the microscope was accidentally plugged in while performing maintenance, remove the AC power connections and tie them back using the cable ties provided. In addition, use the provided AC power cover to prevent the microscope from being plugged into an outlet in the first place.

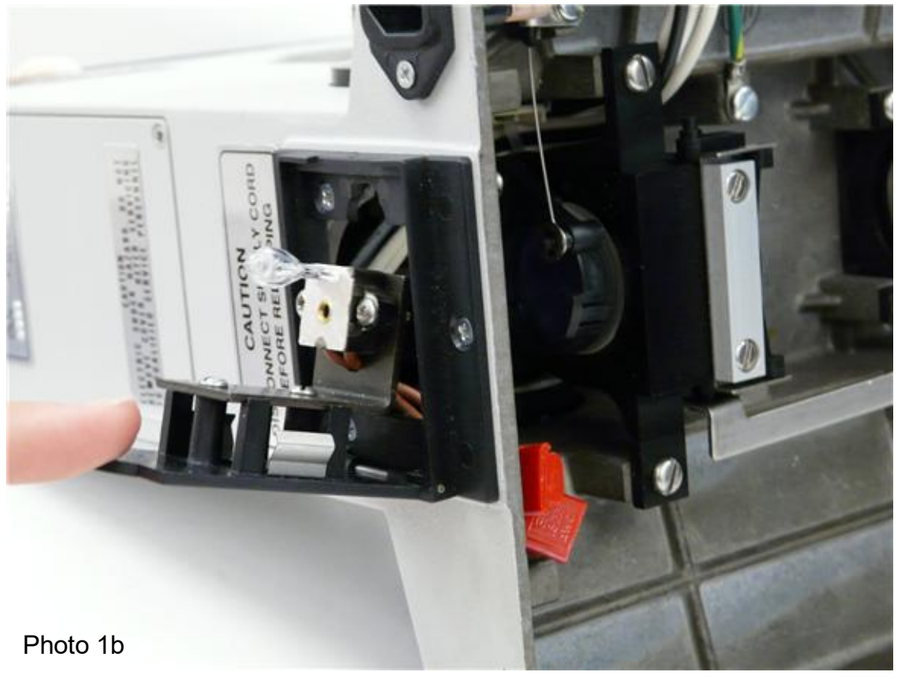


Photo 1b

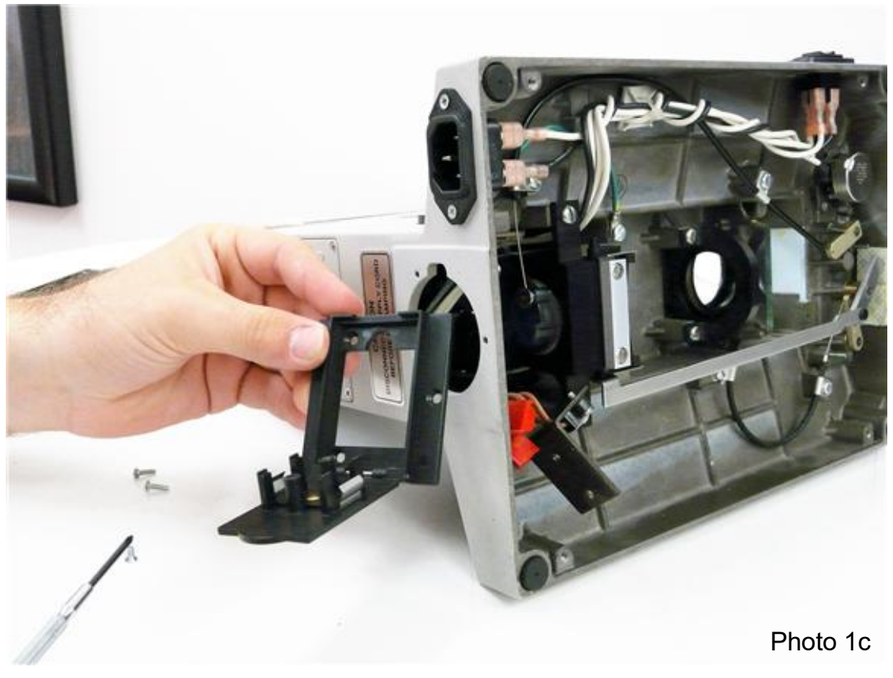


Photo 1c

Remove the old lamp bulb and housing from the back of the microscope using a screwdriver, as shown to the left. In addition, remove its wiring or cut its connections and tie them back with the provided cable ties.

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Nanodyne Replacement Illuminator for Leica Microstar IV Microscope Installation Instructions - Step 2. Remove old potentiometer and knob.

Photo 2a

Using the hex key provided, remove the set screw holding the brightness dial in place on the top of the microscope.

Photo 2b

Locate the potentiometer that controls the light intensity underneath the microscope and remove the plate holding it in place with a screwdriver. Keep the plate for future use.

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Nanodyne Replacement Illuminator for Leica Microstar IV Microscope Installation Instructions - Step 3. Install new potentiometer.

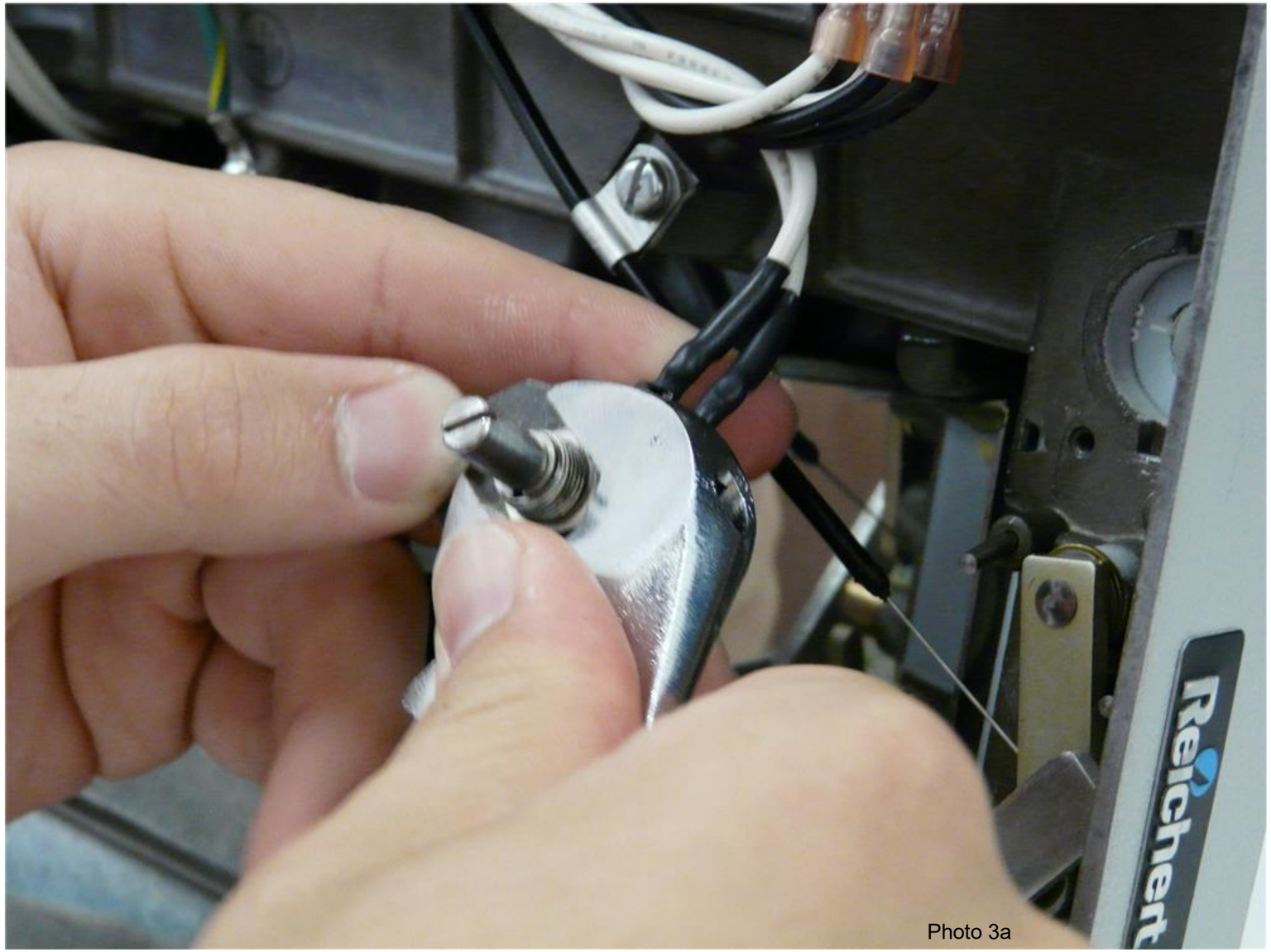

Photo 3a

Photo 3b

Using a wrench, remove the nut that holds the old potentiometer and the plate together. The old potentiometer can now be discarded, and its wiring removed. Use the new nut and washer to secure the potentiometer provided by Nanodyne onto the plate. See the photo on sheet 7 for orienting the potentiometer to the plate to minimize stress on the wires. When the potentiometer is mounted, screw the plate back onto the bottom of the microscope.

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Nanodyne Replacement Illuminator for Leica Microstar IV Microscope Installation Instructions - Step 4. Install pot knob and Nanodyne adapter.

Photo 4a

Replace the brightness adjustment knob and tighten the set screw with the hex key provided.

Photo 4b

Photo 4c

Install the adapter ring onto the back of the microscope using the three screws and hex key provided. Ensure that the ring has the correct orientation: the circled red notch of the ring should face the bottom of the microscope.

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Nanodyne Replacement Illuminator for Leica Microstar IV Microscope Installation Instructions - Step 5. Install Nanodyne illuminator.

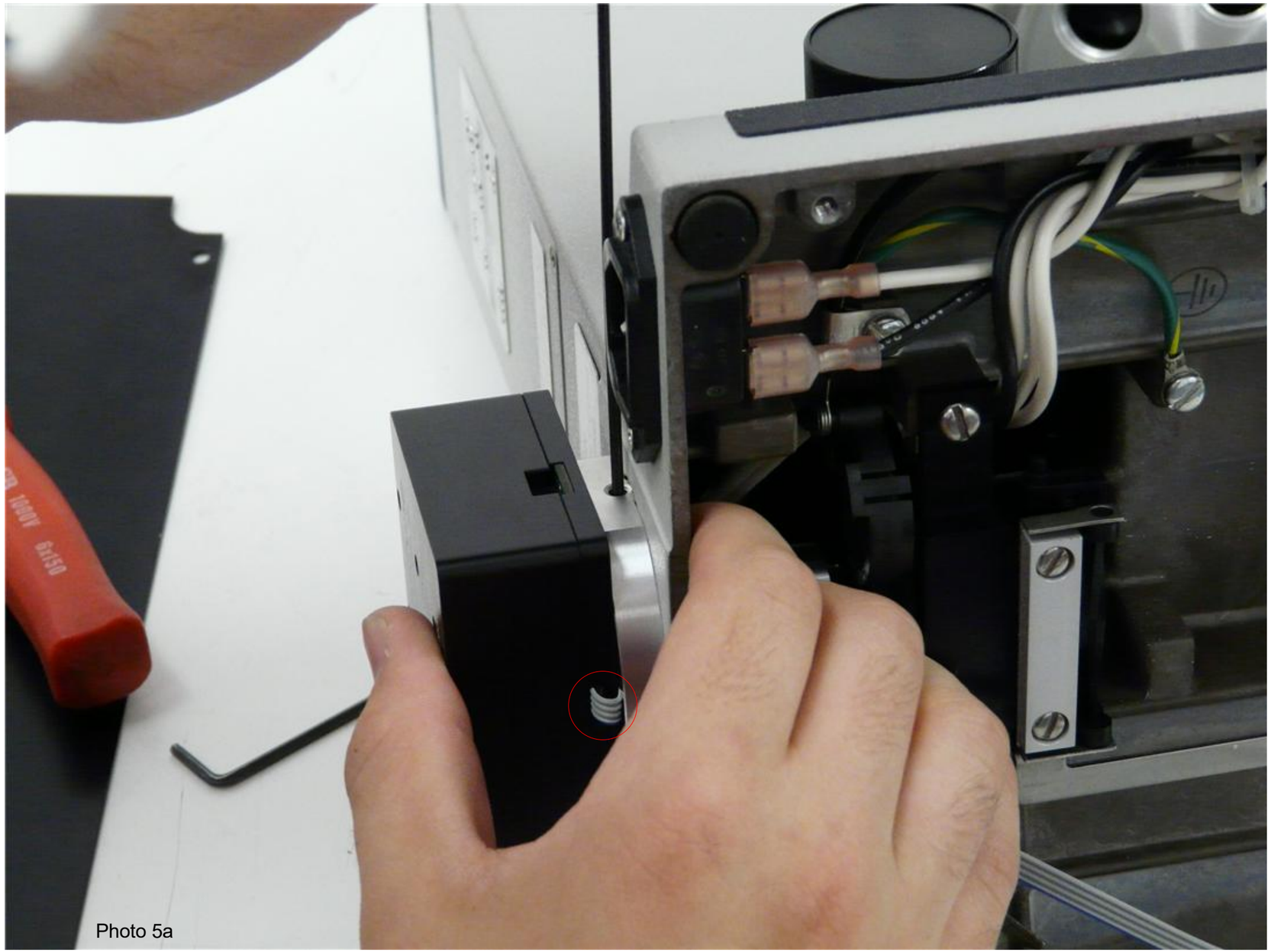

Photo 5a

Note that the photo shows an older model illuminator. The current illuminator is shown on the first page. It has a connector on the bottom that the pot cable plugs into. At this stage in the installation, the pot cable should not be attached to the illuminator.

Install the Illuminator by inserting it into the mount as shown. Secure it by tightening the set screw with the 5/64 hex key provided.

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Nanodyne Replacement Illuminator for Leica Microstar IV Microscope Installation Instructions - Step 6. Route and secure pot cable.

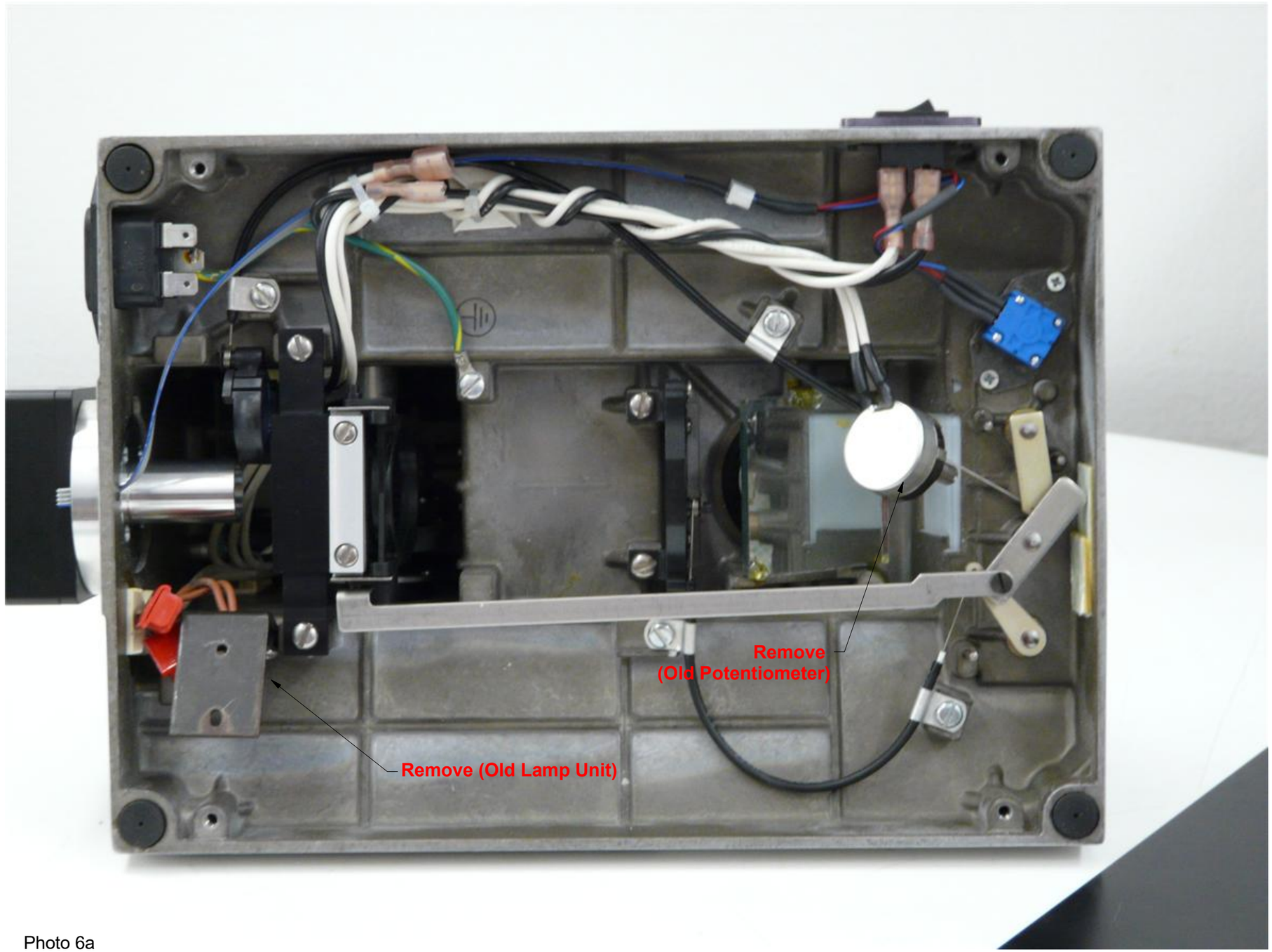

Photo 6a

NOTE: This is an example of a properly installed illuminator. Note the final location of the connector and potentiometer cables as well as the cable-tied AC cables.

DO NOT leave the internal AC power wires connected to the recepticle. This would create a hazard if AC power were connected to the unit after the new installation.

The items highlighted in the picture should be removed at this point in the installation. These items were not removed from the microscope in the picture because it was a borrowed unit.

NOTE: The pot cable on this page is old. The connection procedure of the current pot cable to the illuminator is shown on sheet 8.

Route the pot cable starting from the pot and working back towards the illuminator. Use wire ties as shown to secure the cable. Thread the far end of the cable through the slot at the bottom of the adapter plate and plug the connector into the socket at the bottom of the illuminator.

Refer to sheet 8 for details on making this connection.

The illuminator may be pulled out slightly and then replaced after the connector is plugged in if easier.

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Nanodyne Replacement Illuminator for Leica Microstar IV Microscope Installation Instructions - Step 7. Connect the Pot Cable to the Illuminator.

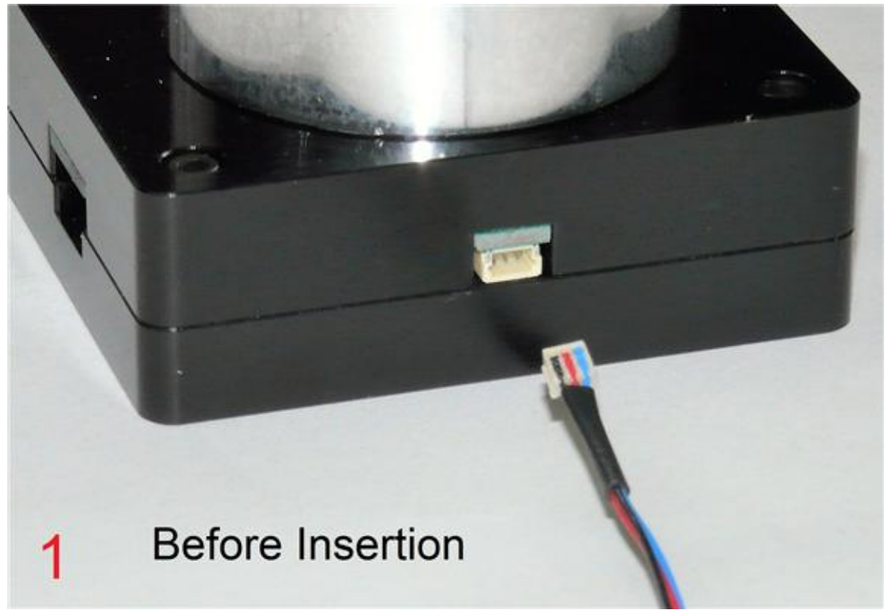
Connect the plug at the end of the Pot Cable Assembly to the mating socket of the illuminator, as shown in the pictures on this page. NOTE THAT THE PLUG IS KEYED TO ONLY GO INTO THE SOCKET ONE WAY, AS SHOWN.

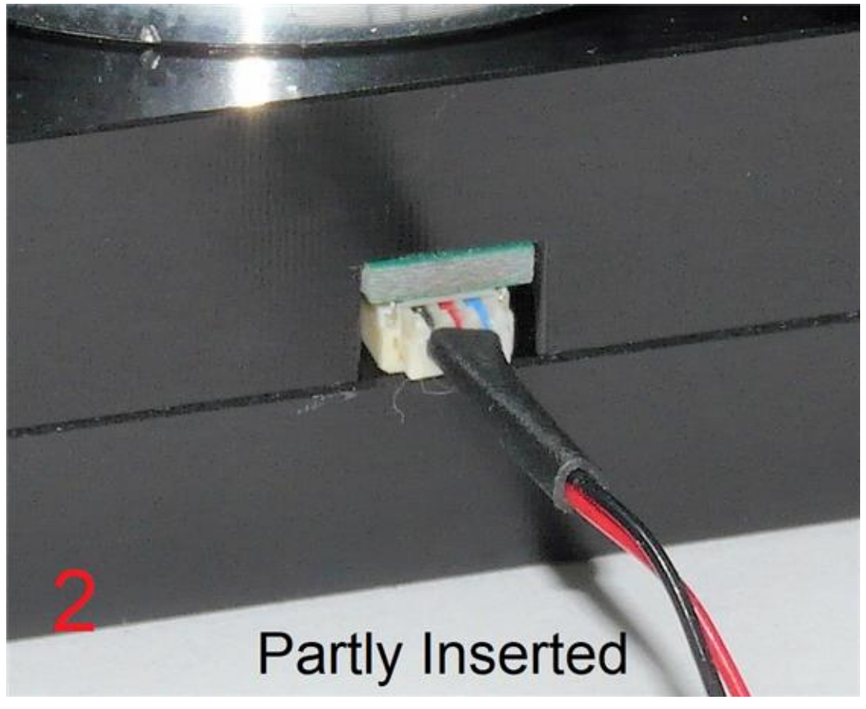
Partially insert the plug into the mating socket of the illuminator by holding the wire next to the plug with your finger (photo 2).

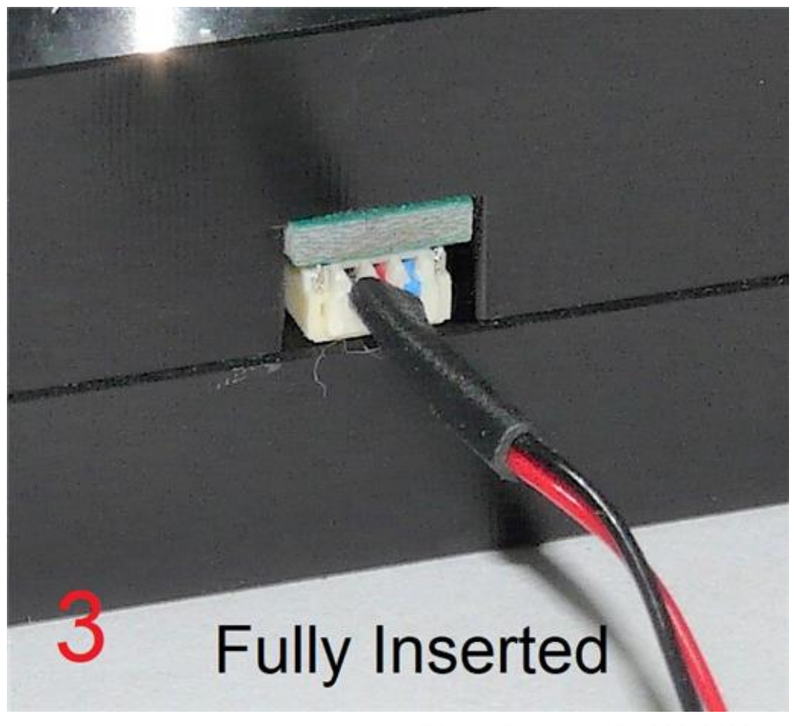
Use your fingernails, if you have them, or tools like a tiny screwdriver or tweezers pushing on the side of the plug to fully insert it (photo 3).

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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Nanodyne Replacement Illuminator for Nikon Labophot 2 Microscope Installation Instructions - Step 8. Re-install bottom plate and connect new power supply.

Photo 8a

Screw the bottom plate back into place and install the rubber AC input safety cover to deter the action of plugging the microscope into a wall outlet.

Photo 8b

Plug in the power supply, and the illuminator is ready for use.

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