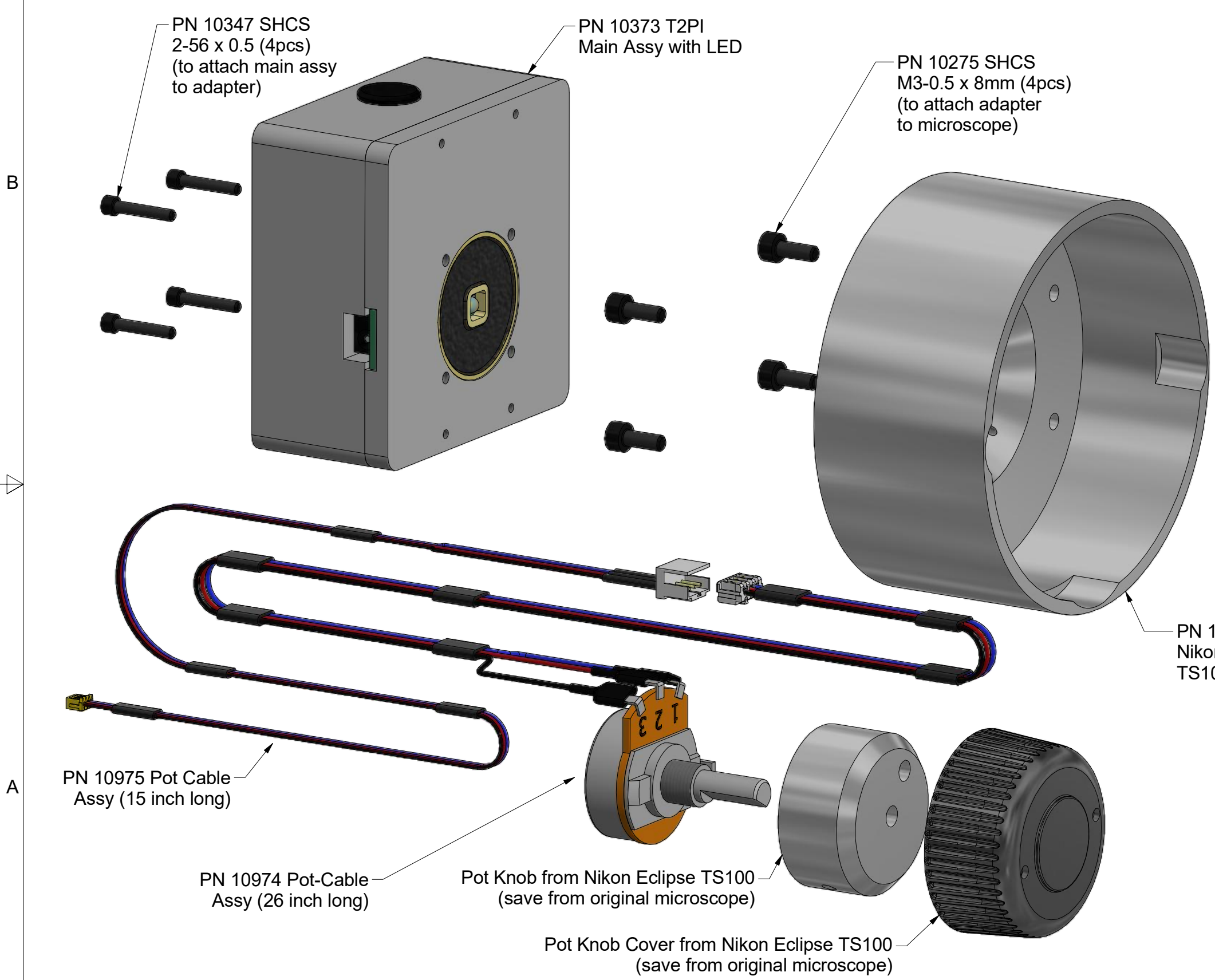


# Nanodyne Replacement Illuminator for Nikon TS100 Microscope Installation Instructions: Included Items



## Additional Items Included But Not Shown:

- PN 10337 Hex Key 2mm (for pot knob)
- PN 10490 Hex Key 5/64 inch (for 2-56 screws)
- PN 10566 Hex Key 2.5mm (for 3mm screws)
- PN 10610 Cable Tie 6in (3pcs)

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 recepticle.

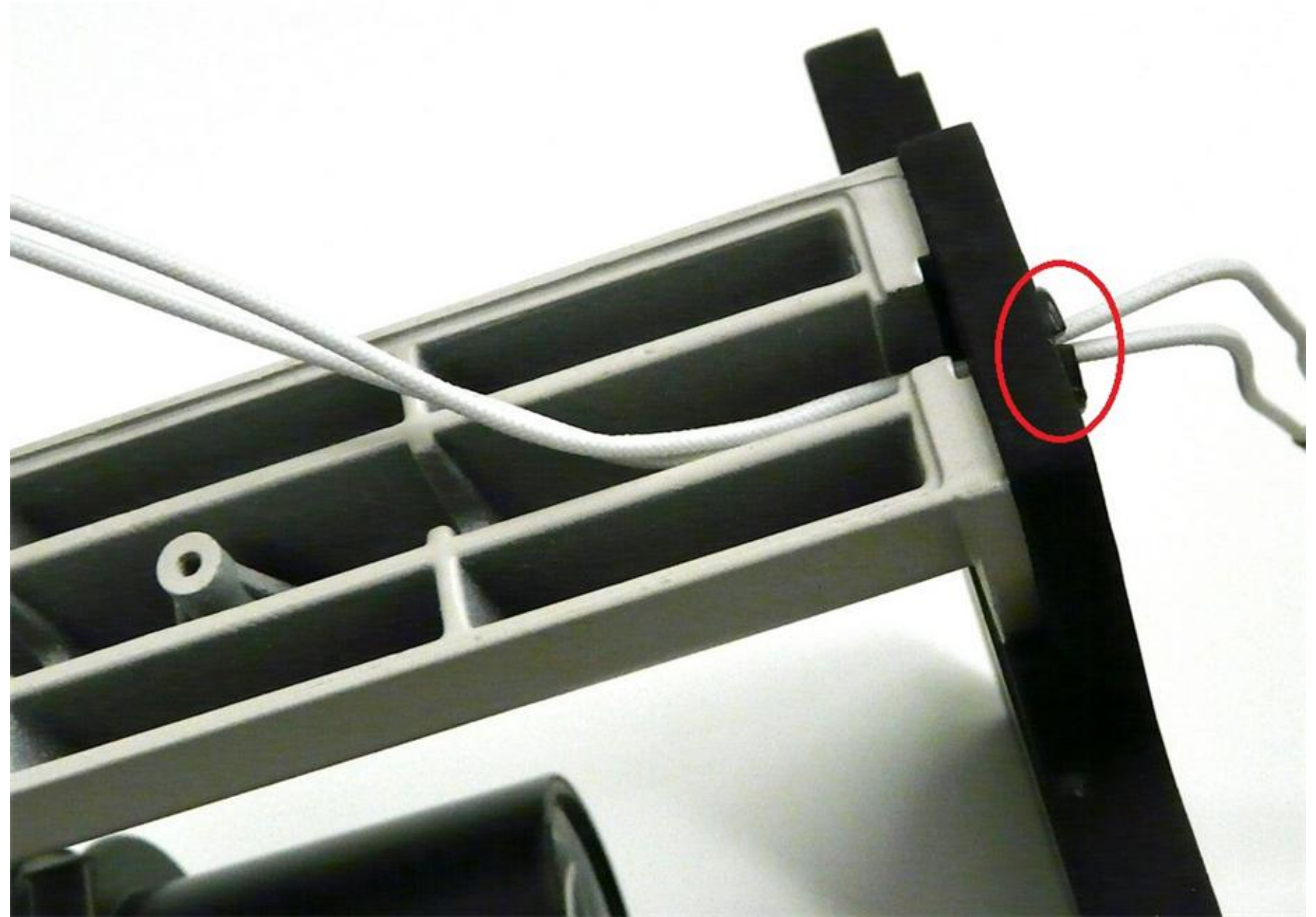
Power supplies are subject to substitution without notice due to availability issues and changes in regulations.

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Nanodyne Replacement Illuminator for Nikon TS100 Microscope Installation Instructions: Step 1. Remove Illuminator/Stage Assy and Old Lamp Parts

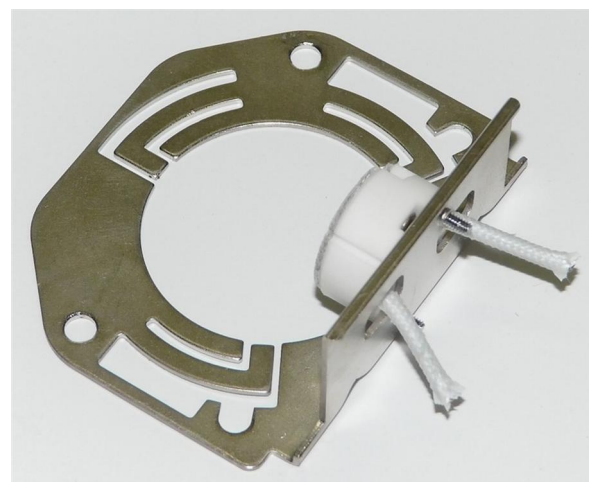
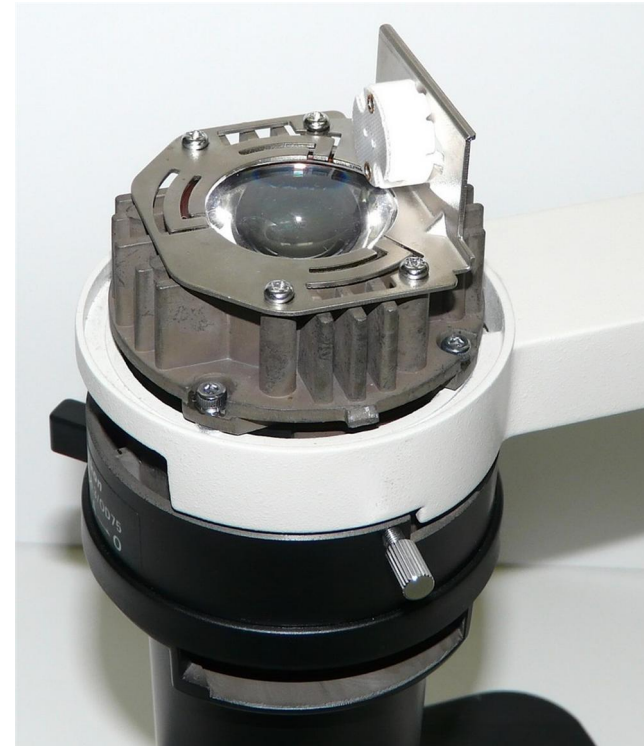


(1) Remove the lamp assembly and stage from the microscope (three screws hold it in place).



(4) Remove the cover from the neck between the lamp housing and stage.

Remove the black plastic wire retainer (circled above) and the wires. Don't worry about damaging the retainer, it will not be used.



(3) Remove the lamp holder assembly (three screws hold it in place).

This part will not be used.

(2) Remove the black plastic housing by pressing firmly on two sides and lifting.

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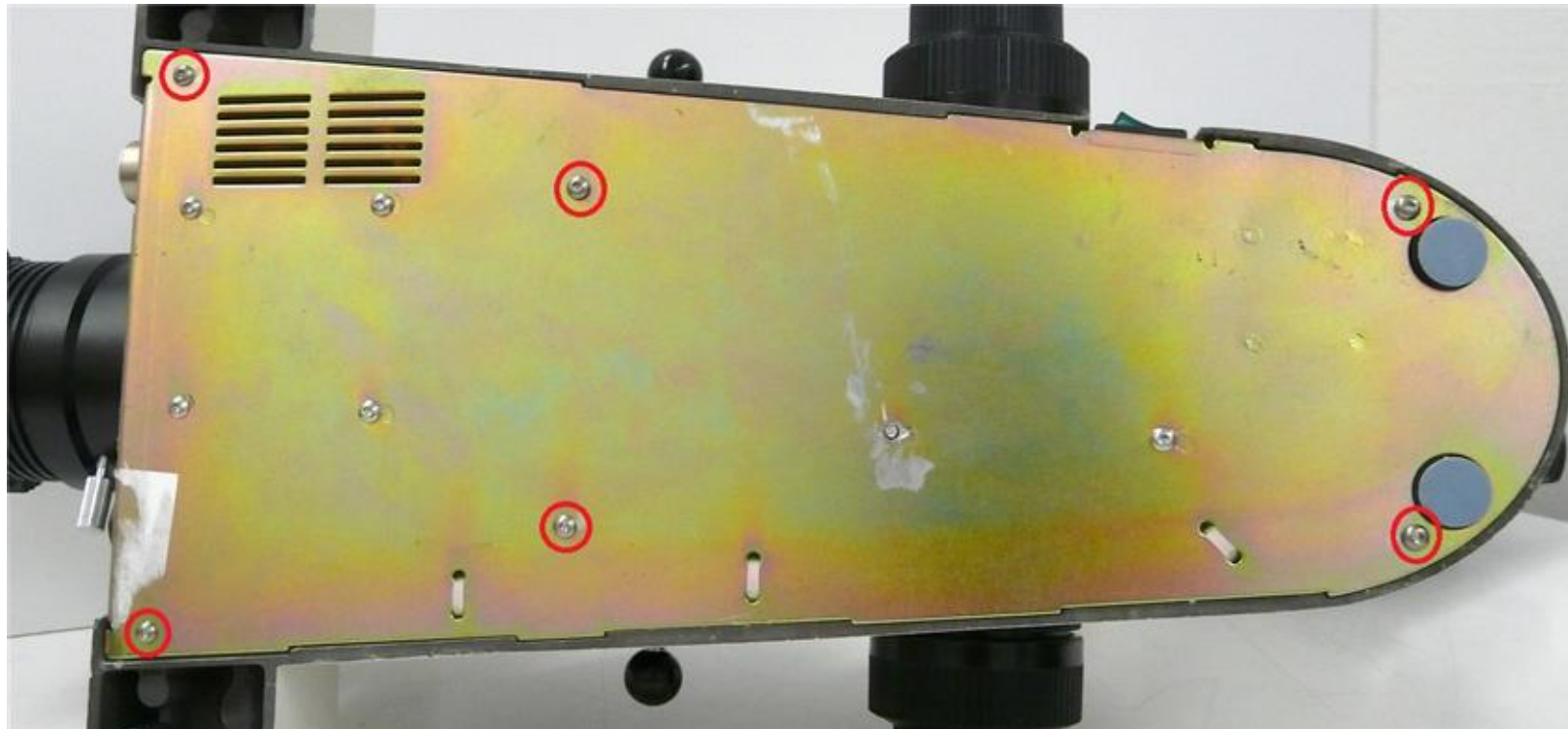
Nanodyne Replacement Illuminator for Nikon TS100 Microscope Installation Instructions: Step 2. Remove Pot Knob and Bottom Cover



(1) Remove the rubber cover from the intensity control knob to access the setscrew. This will take some force.



(2) Remove the metal knob by loosening the setscrew using the hex key provided.

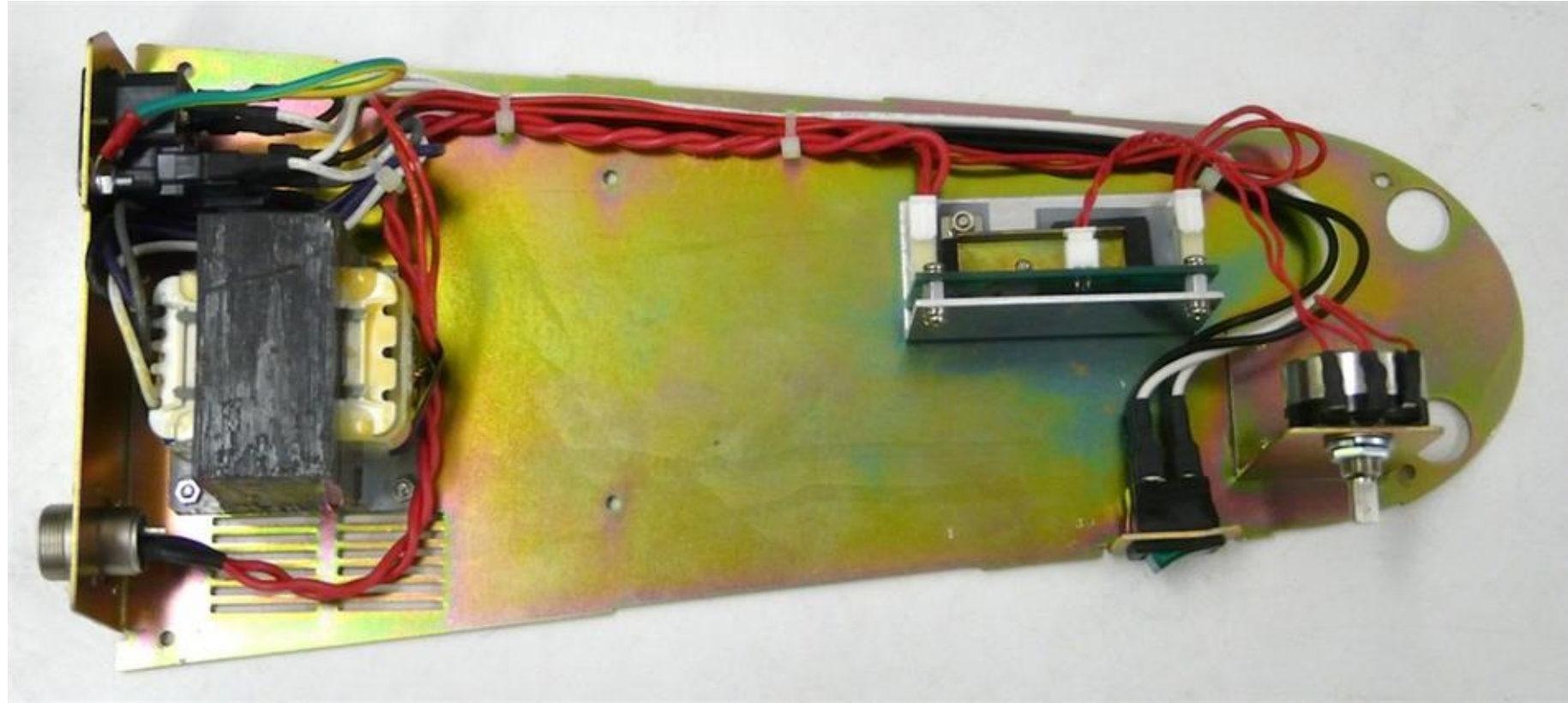


(3) Remove the 6 screws circled above to remove the bottom cover.

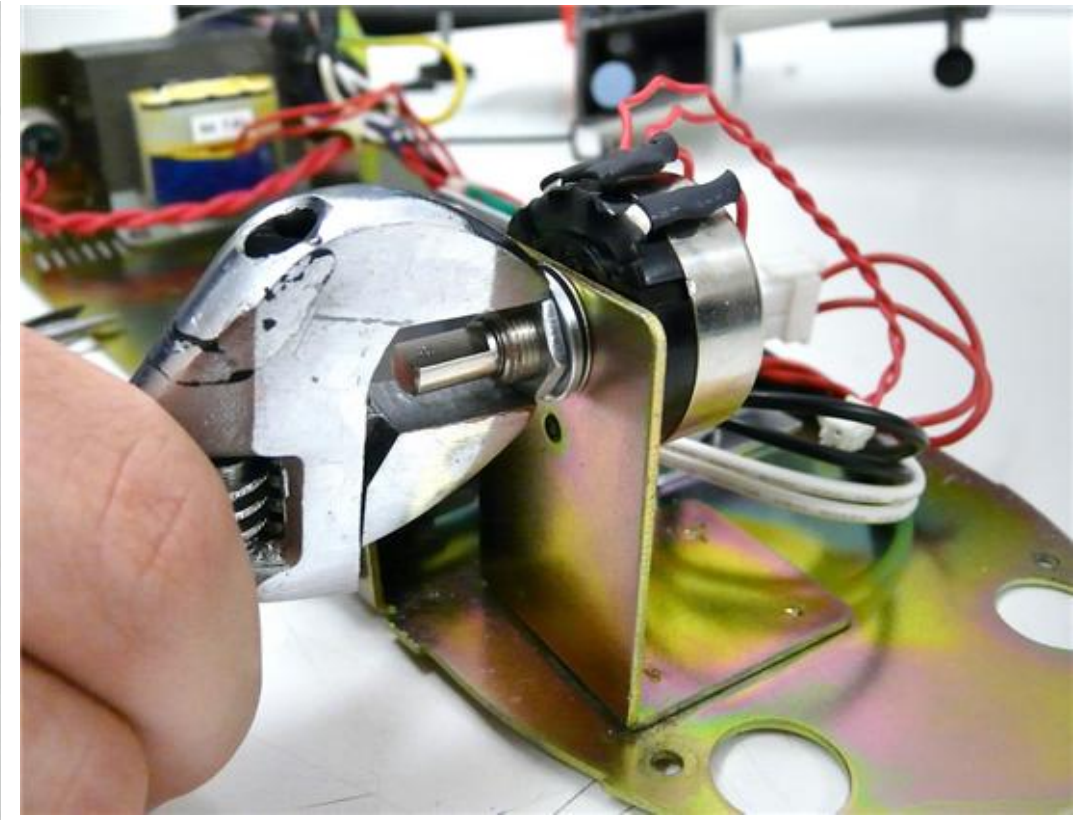
Be aware that the the potentiometer shaft needs to be maneuvered through the hole in the side of the base while removing the bottom cover.

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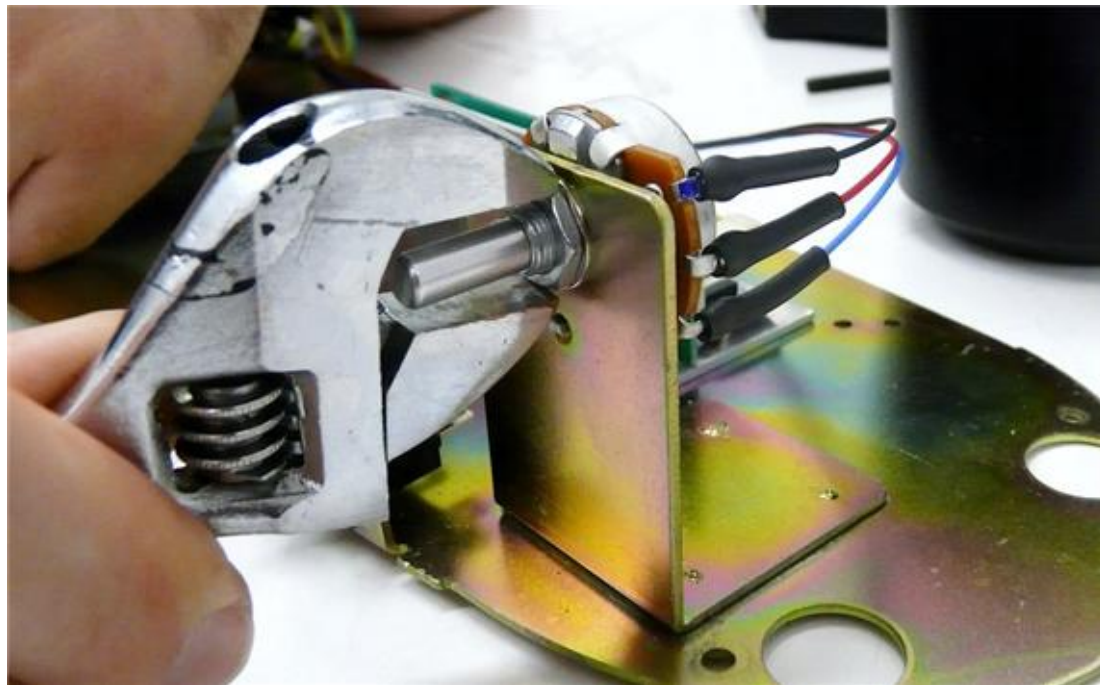
Nanodyne Replacement Illuminator for Nikon TS100 Microscope Installation Instructions: Step 3. Replace OEM Pot, Remove Old Wires



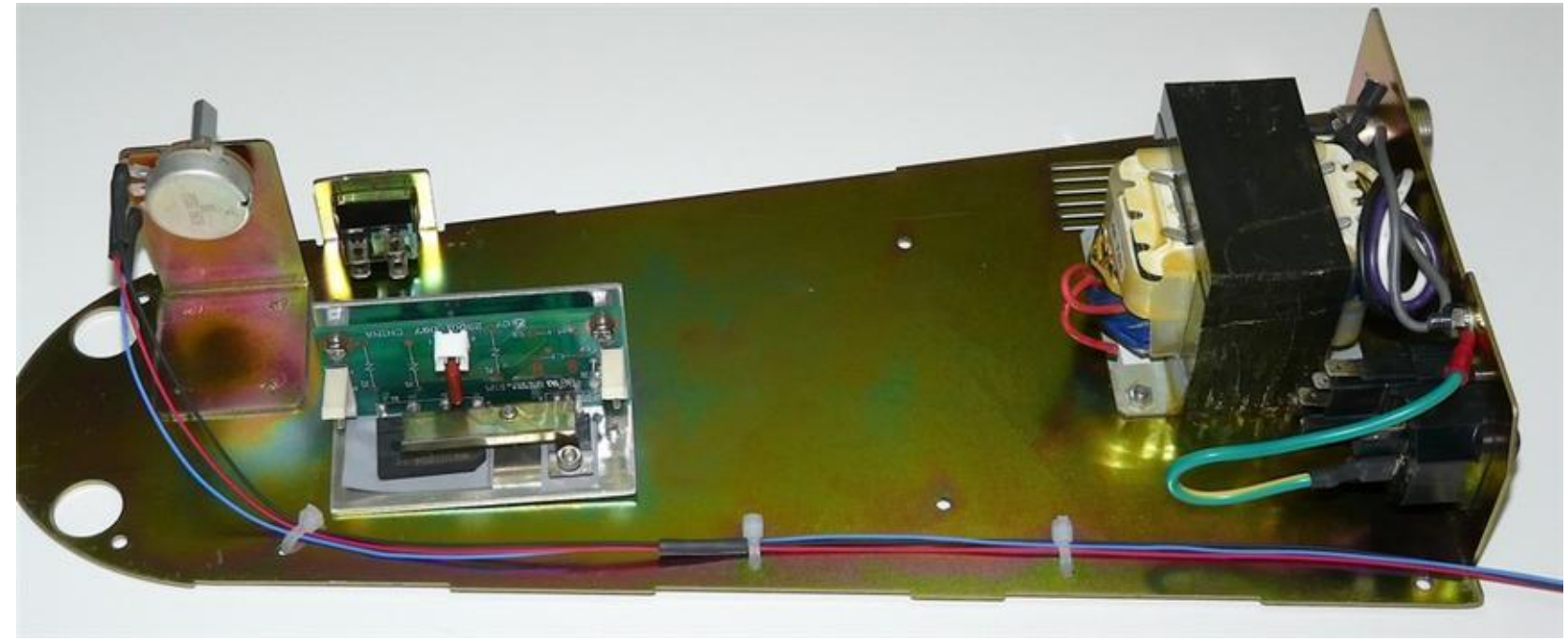
(1) Bottom cover removed - inside view.



(2) Remove OEM Pot.



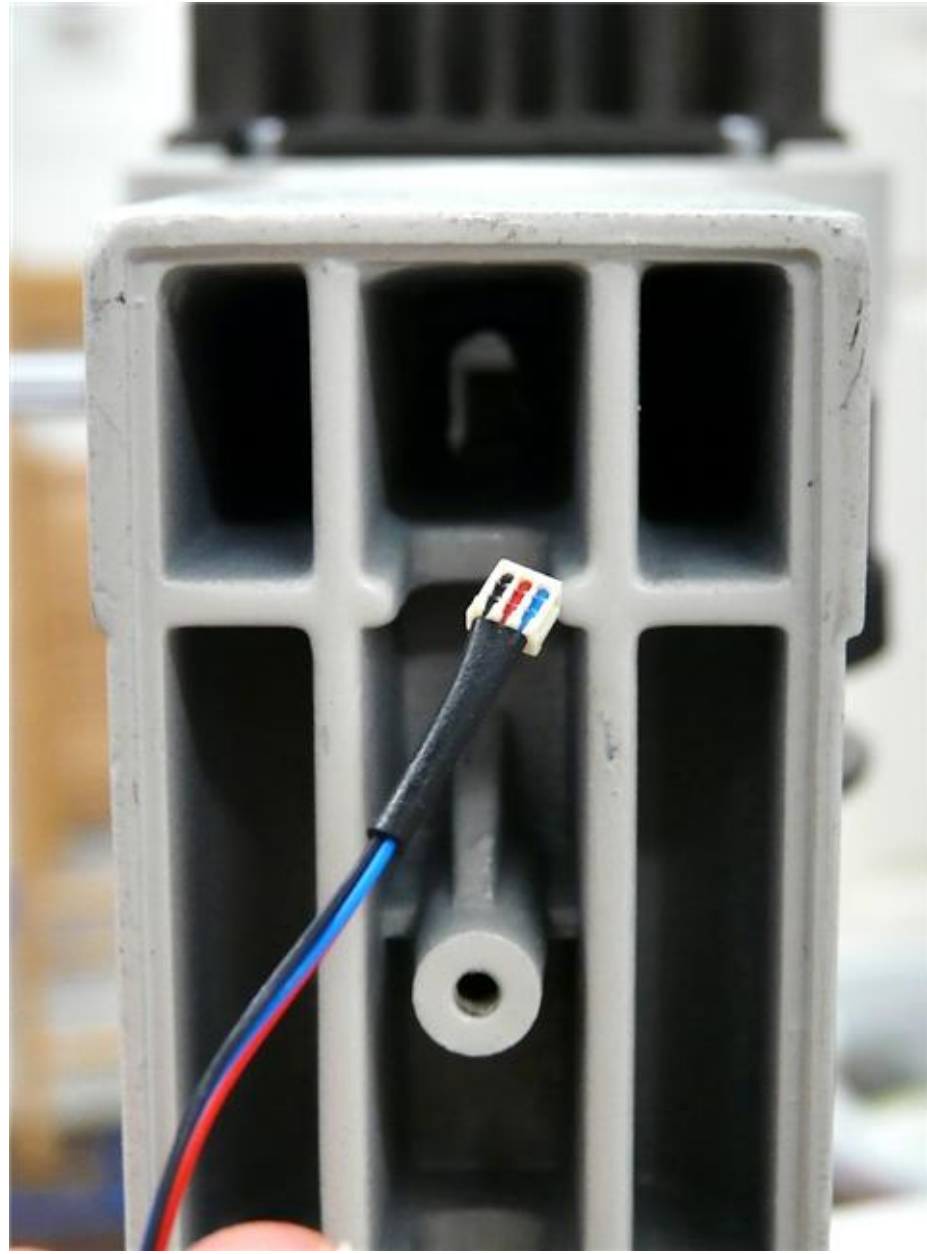
(3) Install Nanodyne pot.



(4) Remove old wiring and route new pot cable, securing it as shown with 3 tie wraps. Remove all connections to the AC power. Leave the green ground wire in place.

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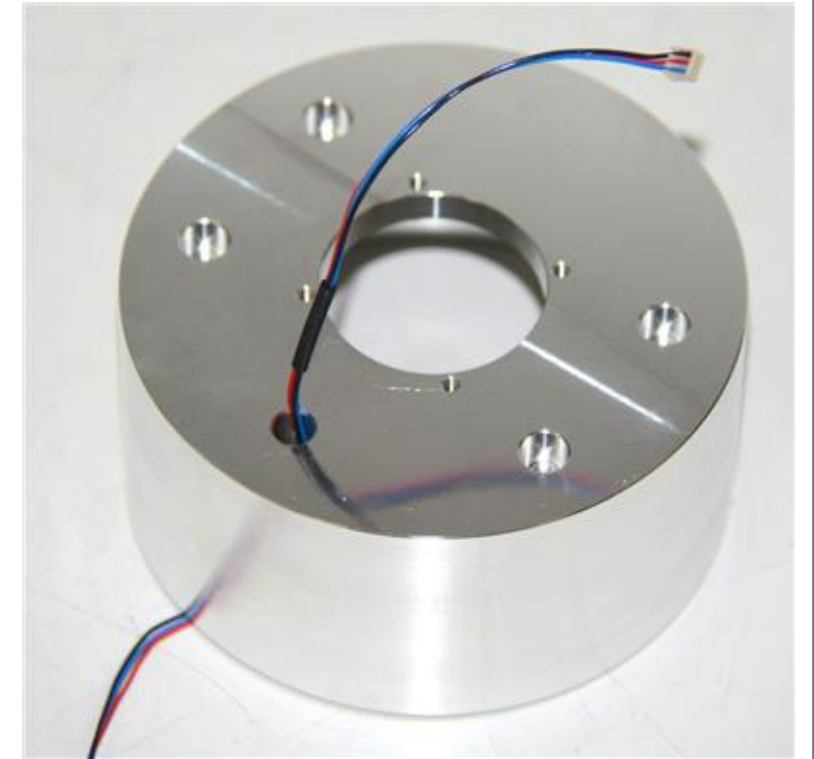
Nanodyne Replacement Illuminator for Nikon TS100 Microscope Installation Instructions: Step 4. Route Pot Cable, Connect Adapter and Install Illuminator



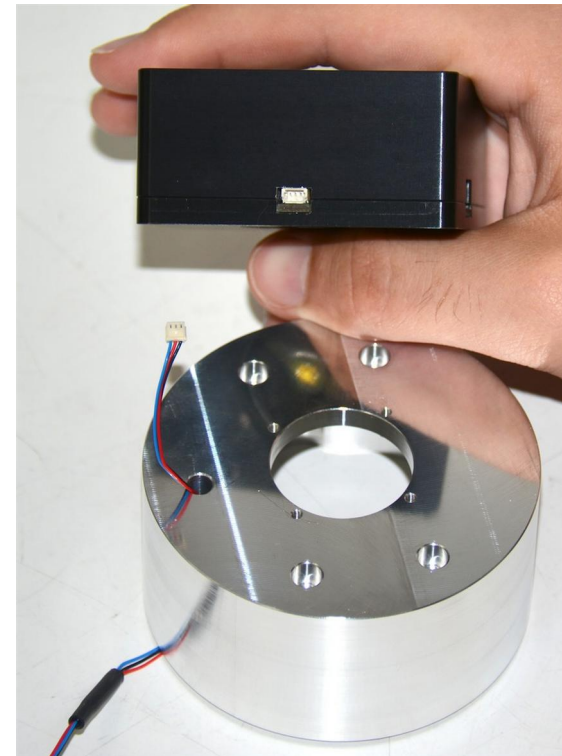
(1) Feed the pot cable end with the small connector through the back of the neck....



(2) ... and up and out at the lens assembly.



(3) Place the adapter over the lens assembly (shown in (2)), with the pot cable going through the hole as shown above. Fasten the adapter in place with the M3 screws.



(4) Connect the pot cable to the illuminator. See sheet 6 for detailed instructions.



(5) Connect the illuminator to the adapter with the four 2-56 screws. Pull any excess cable back into the microscope neck.

NOTE - Photos 3,4 and 5 were taken after the microscope was returned.

The adapter is installed over the microscope lens assembly shown in (2).

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Nanodyne Replacement Illuminator for Nikon TS100 Microscope Installation Instructions: Pot Cable Connection Details

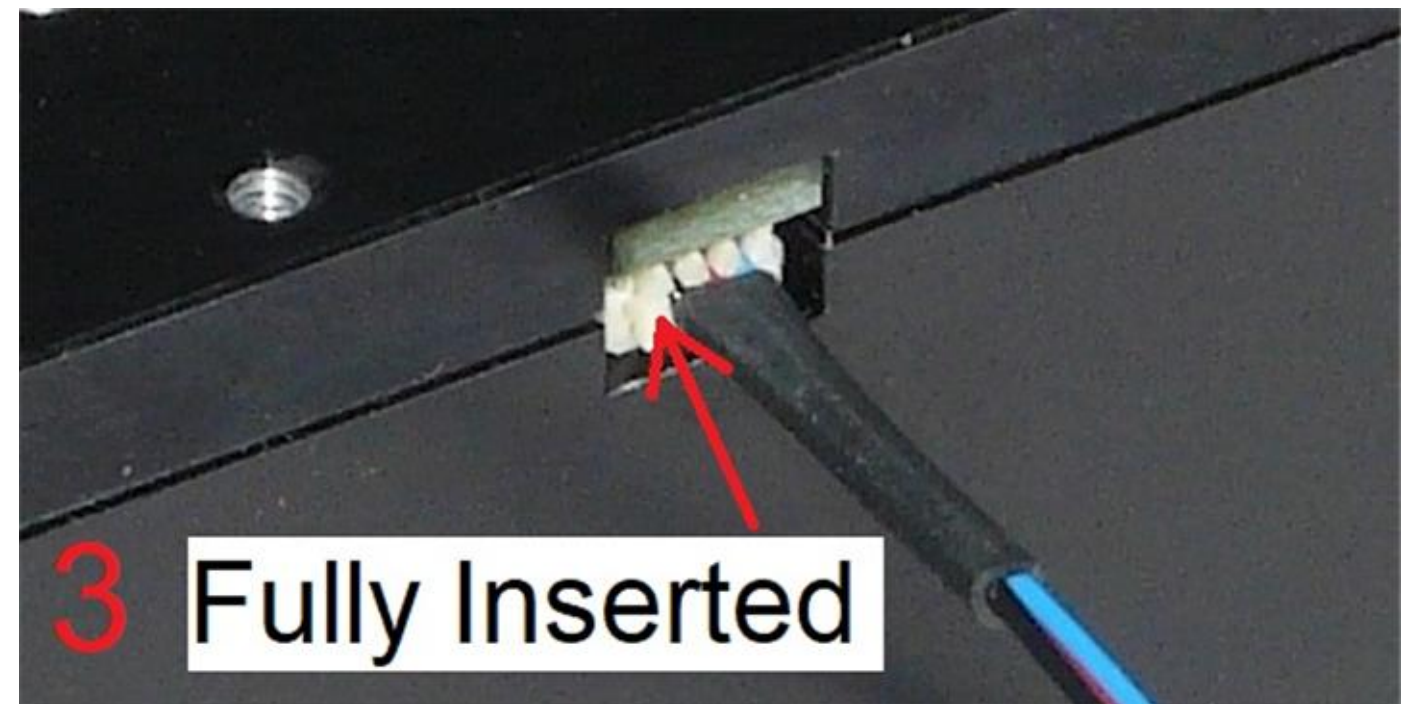
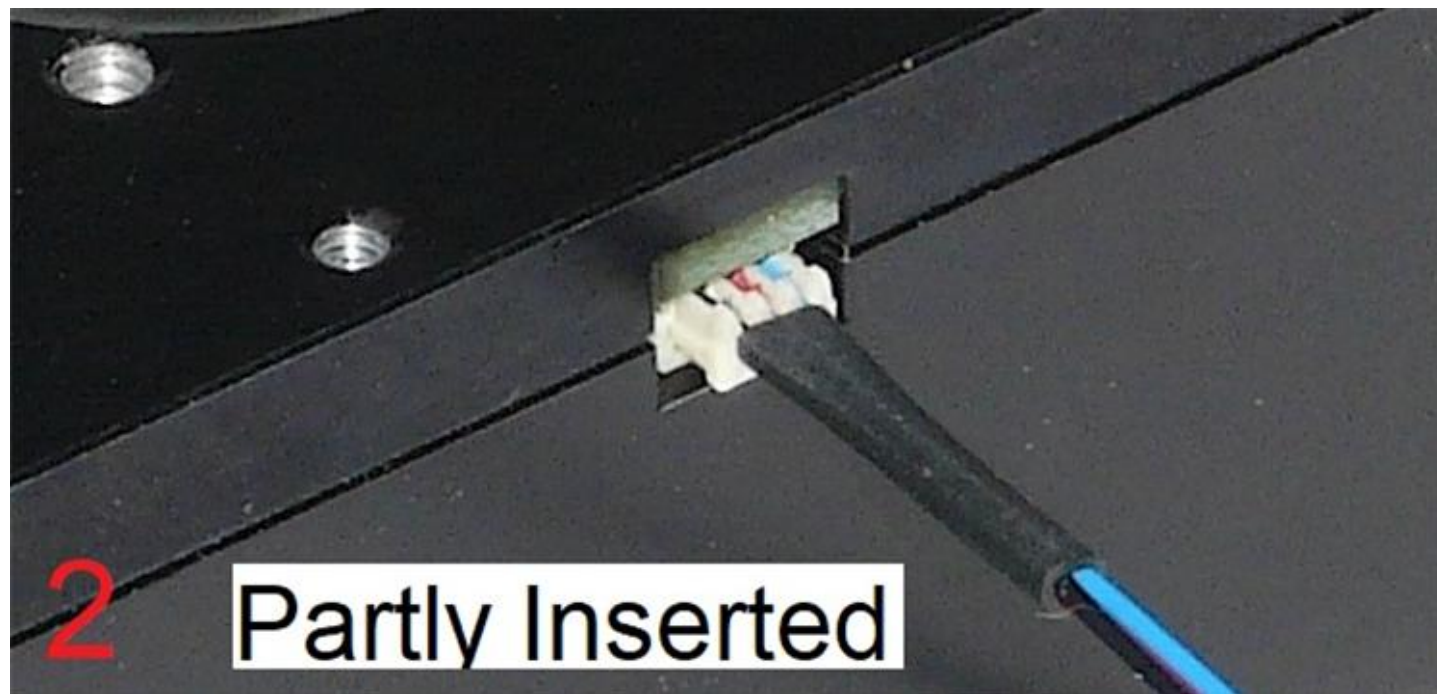
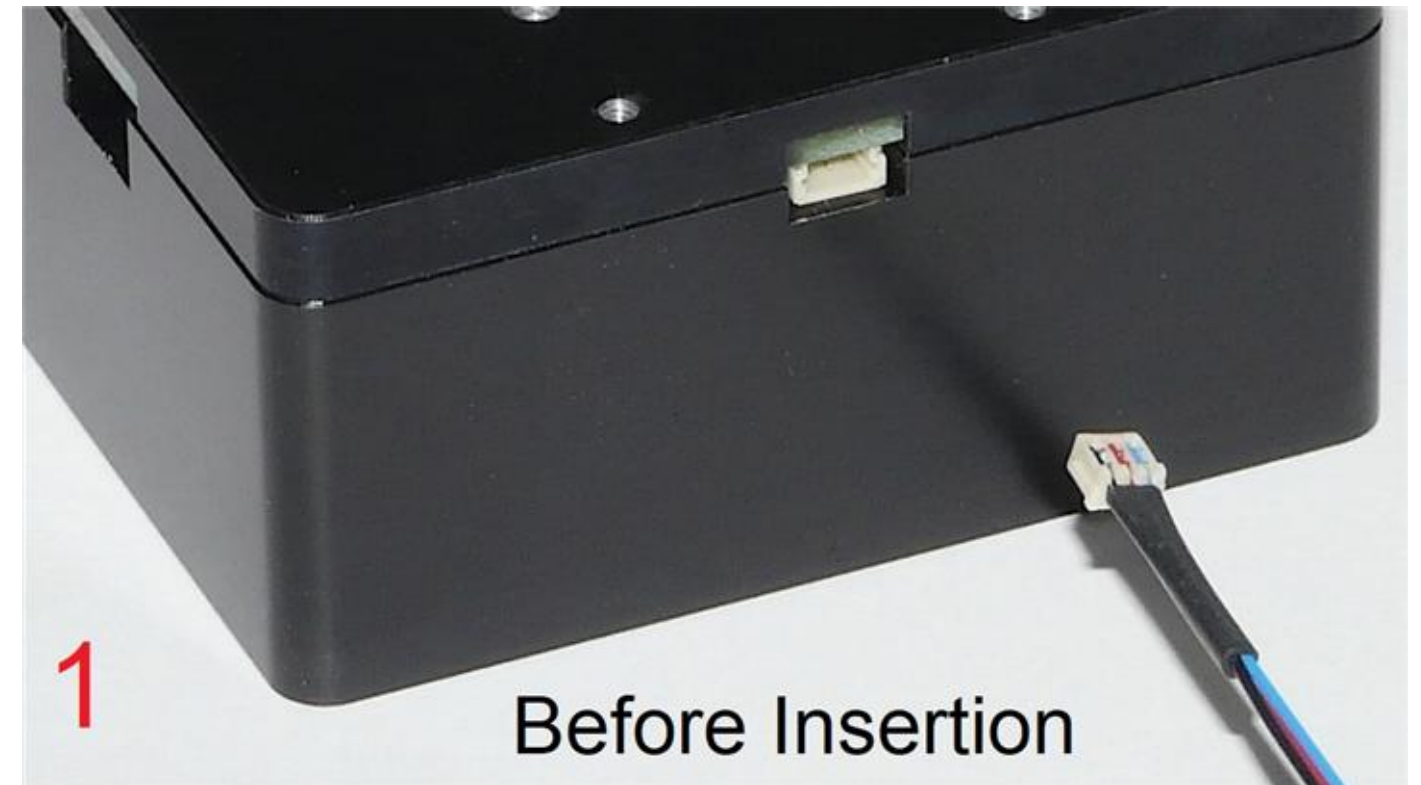
Connect the plug at the end of the Pot Cable Assembly to the mating socket of the illuminator, as shown in the pictures on this page. NOTE THAT THE PLUG IS KEYED TO ONLY GO INTO THE SOCKET ONE WAY, AS SHOWN.

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).

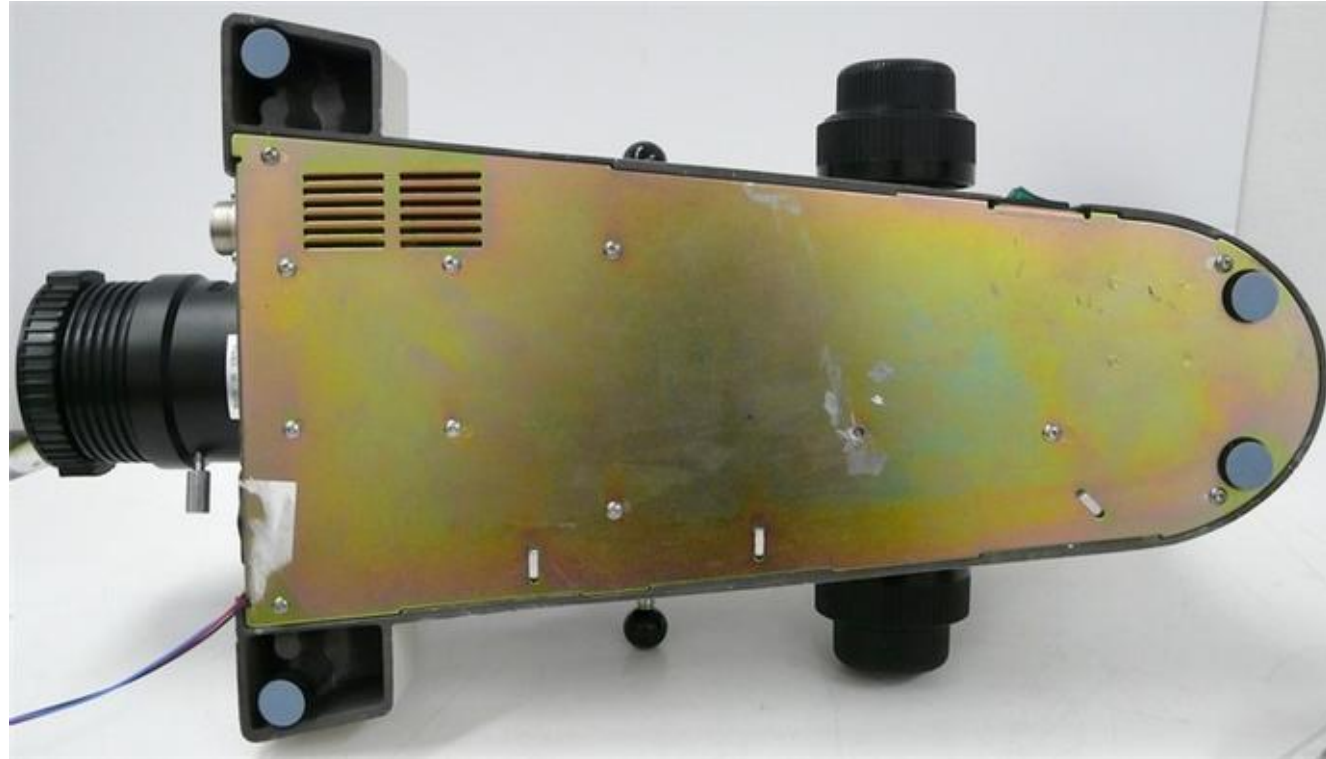
The socket cannot be fully engaged by pushing on the wires, as the wires would just collapse.

To disconnect it if needed, pull the wire straight out by firmly gripping the black heat shrink tubing.

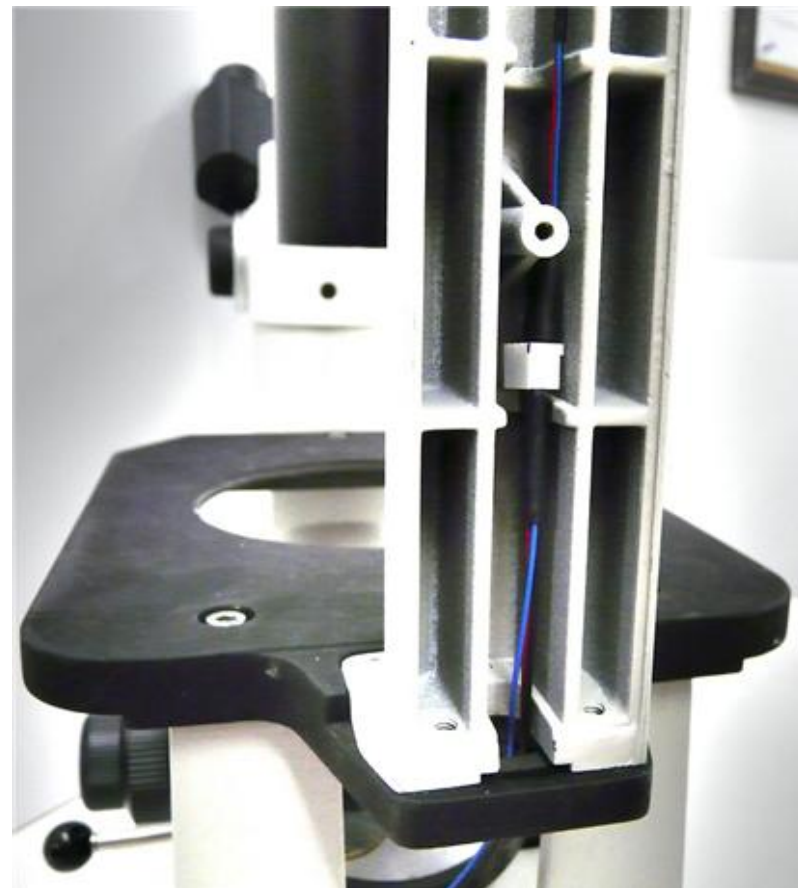


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Nanodyne Replacement Illuminator for Nikon TS100 Microscope Installation Instructions: Step 5. Complete Routing of Pot Cables



(1) Replace the bottom cover. Route the potentiometer cable through the slot in the cover as shown above.



(2) Re-attach the stage/neck/illuminator assembly to the microscope, and route the potentiometer cable up the back side of the scope and insert the loose end into the hole where the wire retainer used to be.

Use the VHB tape provided to secure the pot cable to the back of the microscope.

Connect the two pot cables as shown at left.



(3) Replace the cover on the neck as shown above.

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Nanodyne Replacement Illuminator for Nikon TS100 Microscope Installation Instructions: Step 6. Replace Pot Knob, Install AC Power Blocking Plug.



**(1)** Replace the potentiometer knob and secure it with the hex key provided.

Replace the rubber covering, making sure to align the protrusion on the inside of the cover with the hole in the metal knob.



**(2)** Install PN 10736 rubber blocking plug in the receptacle on the back of the microscope as shown above (photo from generic microscope).

**(3)** Connect the USB end of the power cable to the power supply. Connect the other end of the power cable to the illuminator. Plug the power supply into an AC outlet and the illuminator is ready for use.

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