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Nanodyne Replacement Illuminator for Zeiss Axioskop Microscope Installation Instructions



Microscope with original illuminator.



Microscope with Nanodyne replacement illuminator.

Nanodyne Replacement Illuminator for Zeiss Axioskop Microscope Installation Instructions: Included Items

The installer will need to provide common hand tools such as screwdrivers, pliers and wire cutters.



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.

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.



PN 10736 Rubber plug to block unused AC power receptacle.



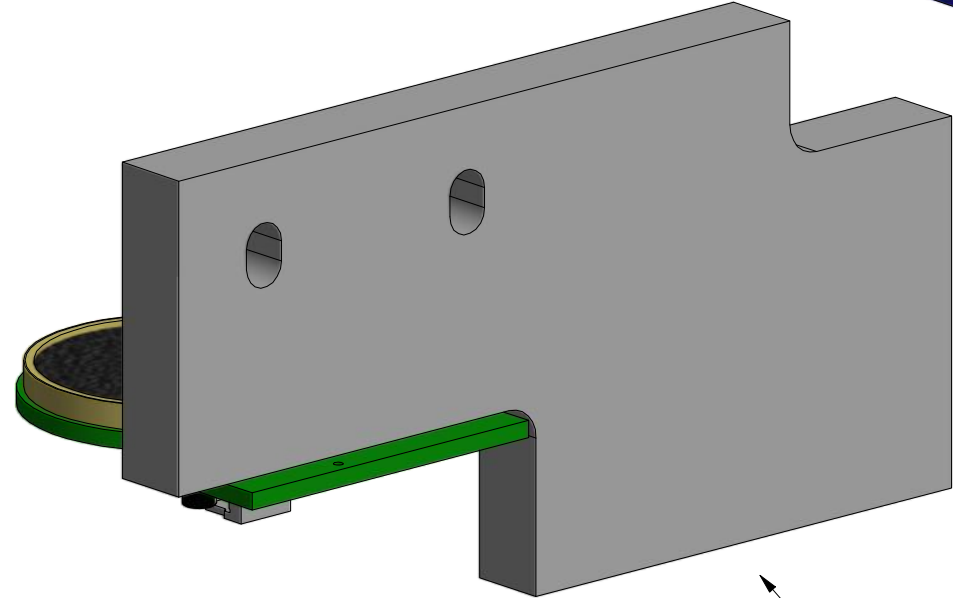
Tape to secure wires.

Power Connector (15 in cable)

PN 10821 Axioskop Side Panel Assembly

PN 10823 Axioskop Illuminator Assembly

PN 11170 Pot-Cable Assy - shaft cut 5mm (15 in long)



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Nanodyne Replacement Illuminator for Zeiss Axioskop Microscope Installation Instructions: Step 1. Remove Back Cover and Old Power Supply.



(1) Remove the 4 screws indicated above.



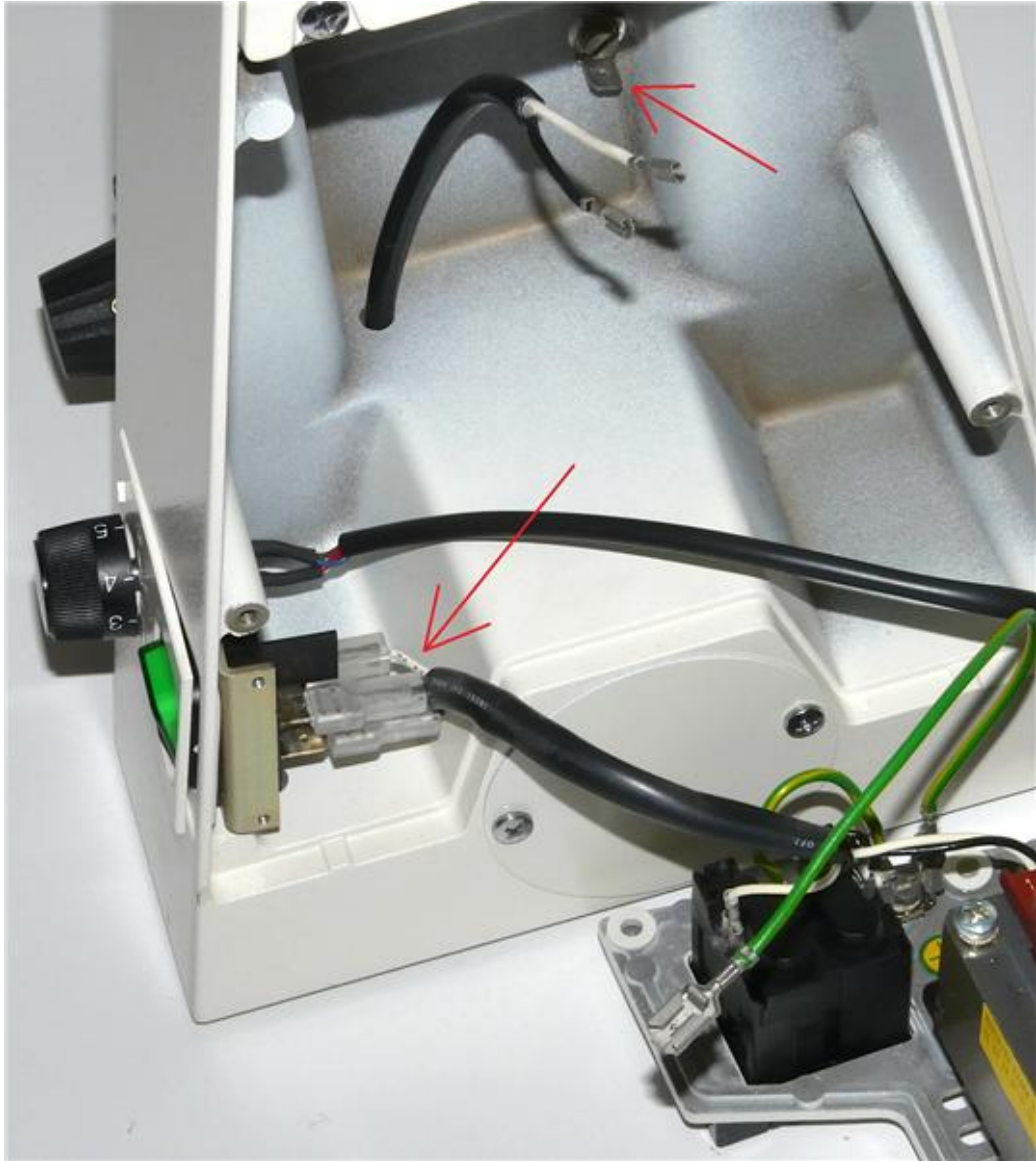
(2) Pull the back cover away from the microscope.



(3) Pull the black connector off of the circuit board. Pull the white and black wires off the transformer. If these wires are too tight to pull by hand use a pliers (see next sheet).



Nanodyne Replacement Illuminator for Zeiss Axioskop Microscope Installation Instructions: Step 2. Disconnect Unneeded Old Wires.



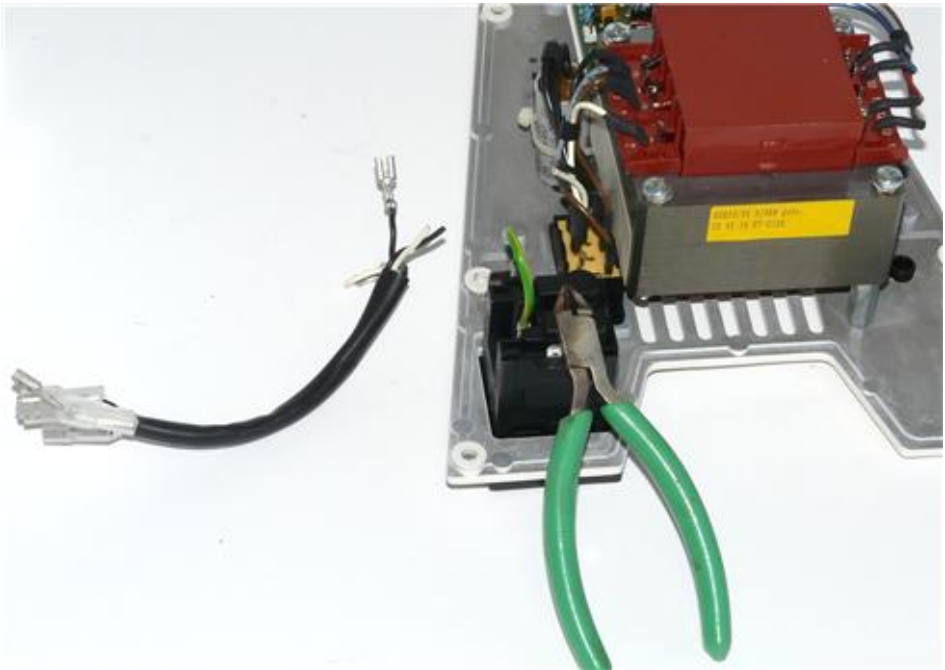
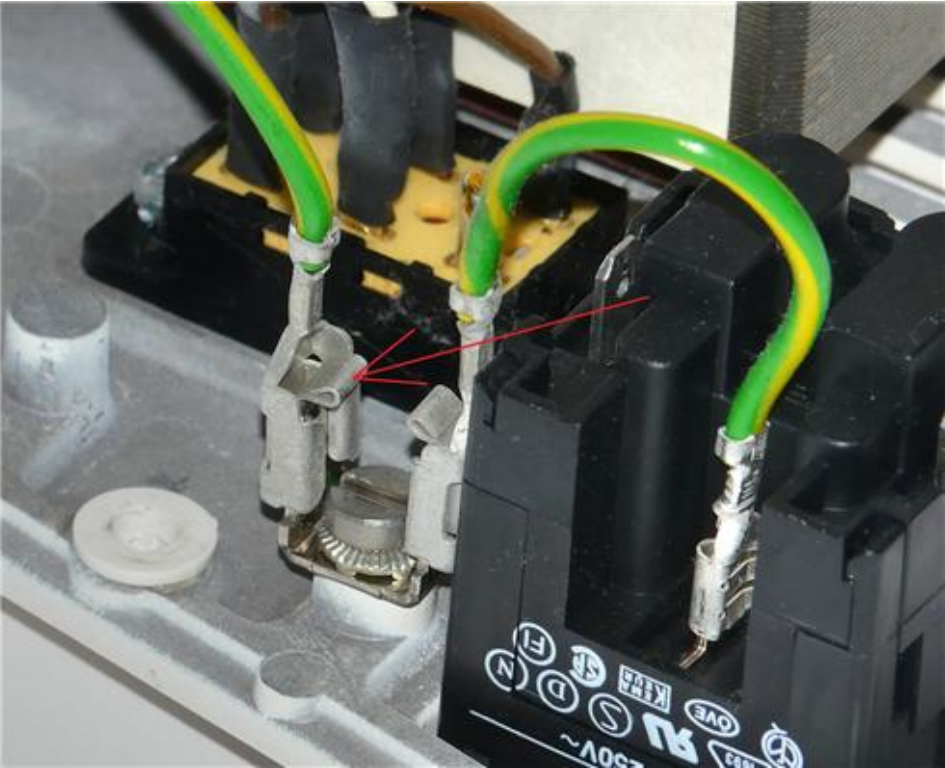
(1) Disconnect the power cable at the power switch as indicated in photo above.

A plier as shown in the center photo can help.

Remove the ground wire from the microscope (top arrow in above photo). Depressing the tab on the ground wire (see top photo at far right) releases the connector.



(2) The back cover is now free from the microscope.



(3) We recommend removing all of the loose wires from the back cover as shown in the photos above right. The top photo shows the tab on the ground connector to depress to remove it. The bottom photo shows the power cable removed by cutting the black and white wires at the transformer.

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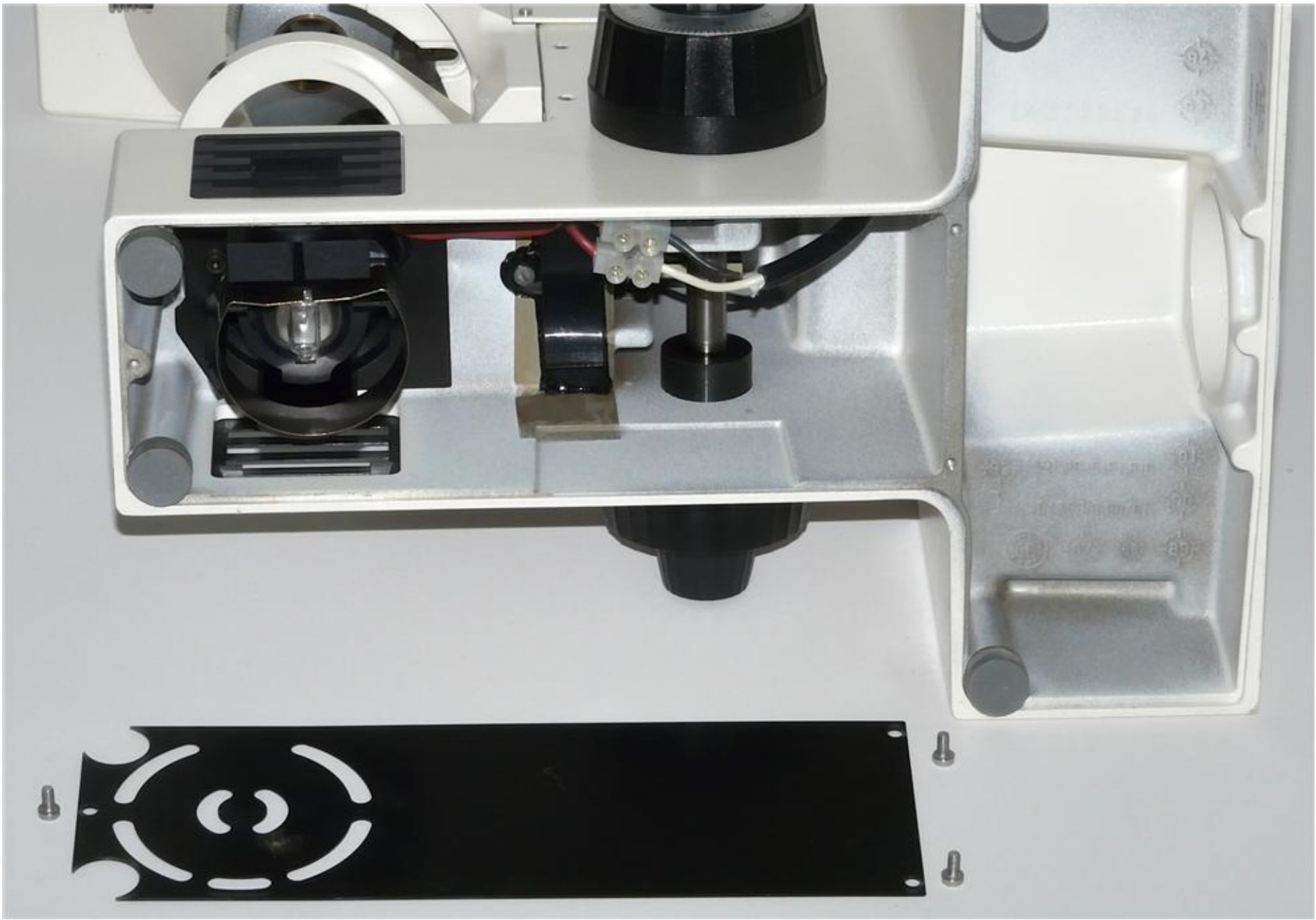


Nanodyne Replacement Illuminator for Zeiss Axioskop Microscope Installation Instructions: Step 3. Remove original adjustment pot, power switch and bottom cover.



(1) Pop off the cover from the original adjustment pot with a knife or similar tool. Loosen the nut with a 12mm socket. Then pull the adjustment knob off the shaft. The plastic bezel can now be pulled off, and the metal bracket holding the power switch will be free. Remove it from the microscope.

(Note - a "Husky" brand socket would not work as the outer diameter was too big. Several other higher quality brands all fit OK.)

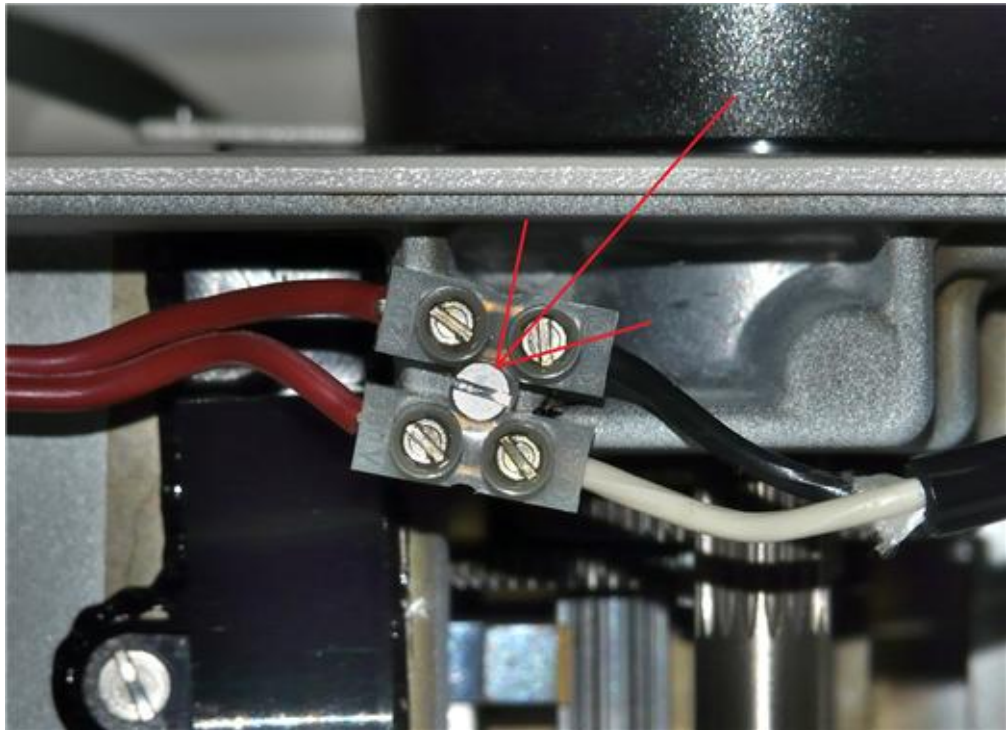


(2) Remove the bottom cover by removing the three screws as shown above.

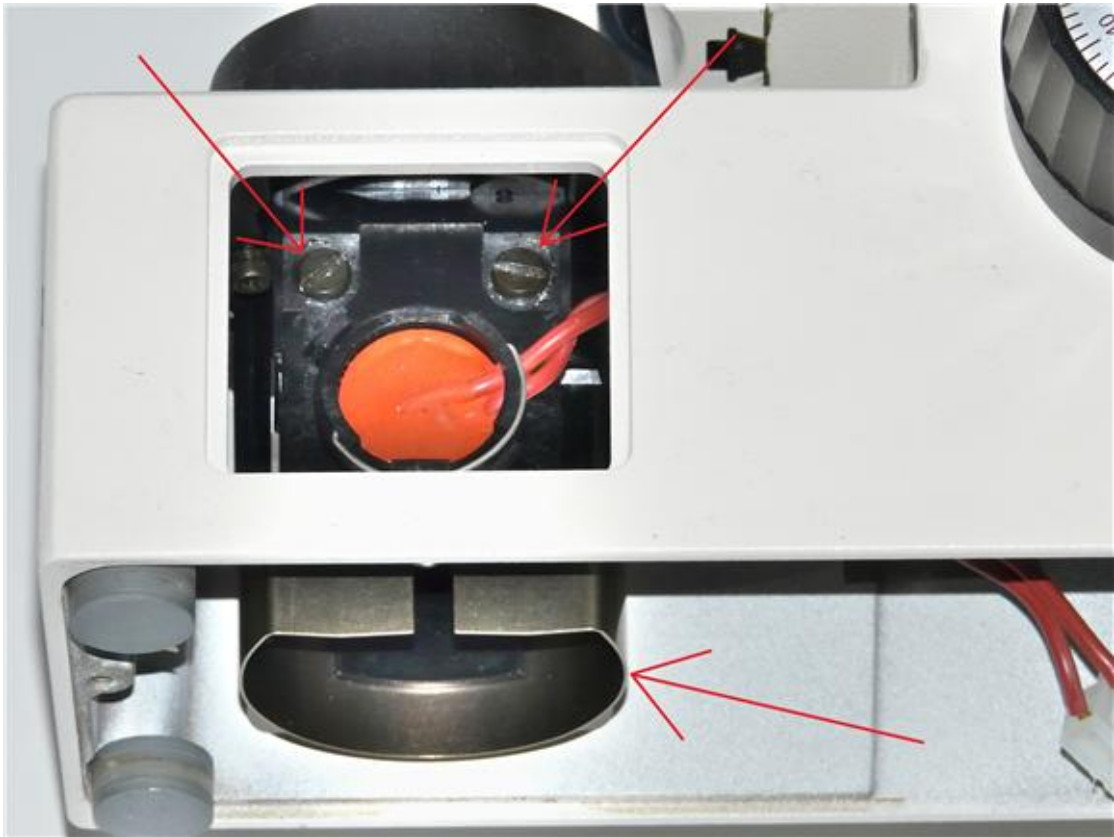
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Nanodyne Replacement Illuminator for Zeiss Axioskop Microscope Installation Instructions: Step 4. Remove old lamp assembly and metal shield.



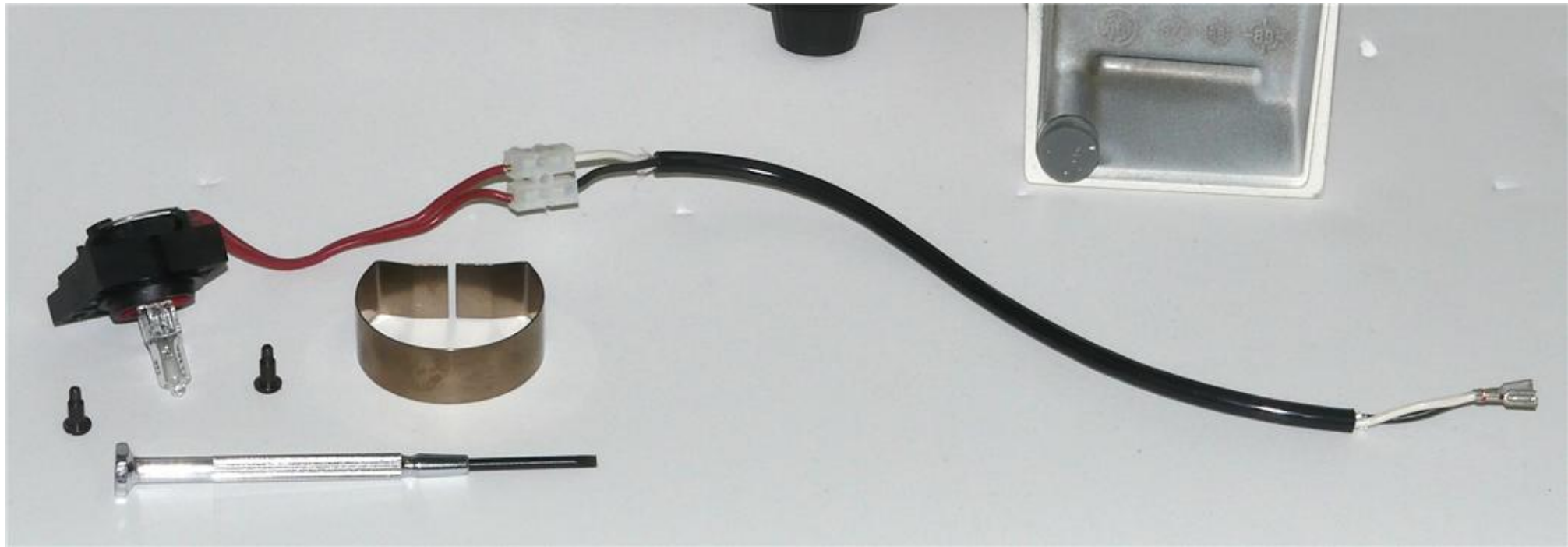
(1) Remove the screw holding the lamp wires in place, then pull the black end of the cable free from the microscope.



(2) Remove the black louvered plastic lamp cover from the side of the microscope to expose the lamp holder.

Remove the metal shield (bottom arrow) by pulling it out.

Remove the two screws indicated by the top arrows. Keep these screws. They are used to install the Nanodyne illuminator.

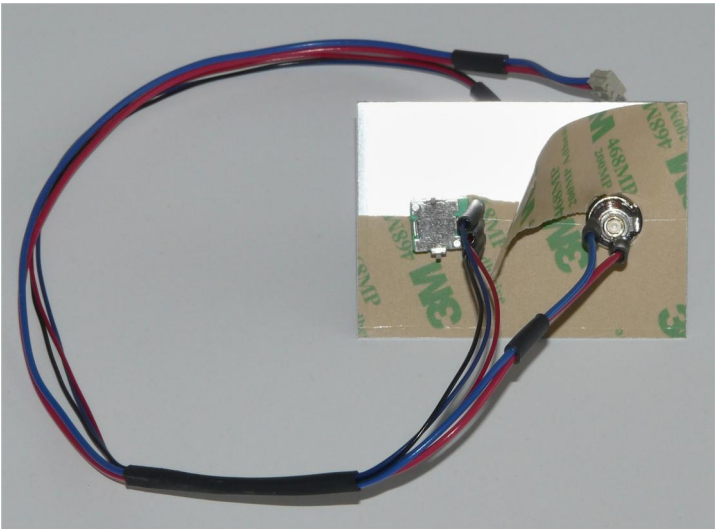


(3) Slide the lamp assembly straight out through the bottom of the microscope. The lamp assembly with the wires, and the metal shield shown above are not needed. Keep the two screws.

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Nanodyne Replacement Illuminator for Zeiss Axioskop Microscope Installation Instructions: Step 5. Install Nanodyne side panel assembly.



(1) Remove the release film from the back of the Side Panel Assembly.



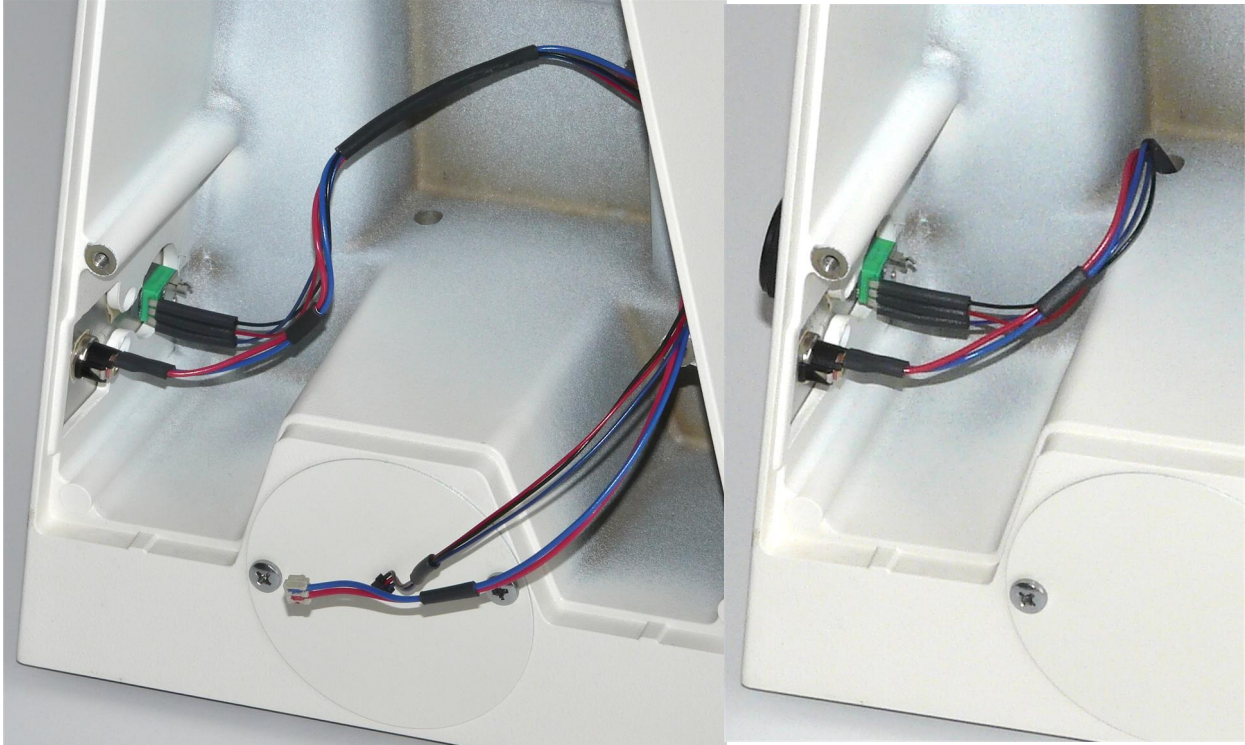
(3) Press the side panel firmly in place as shown above.



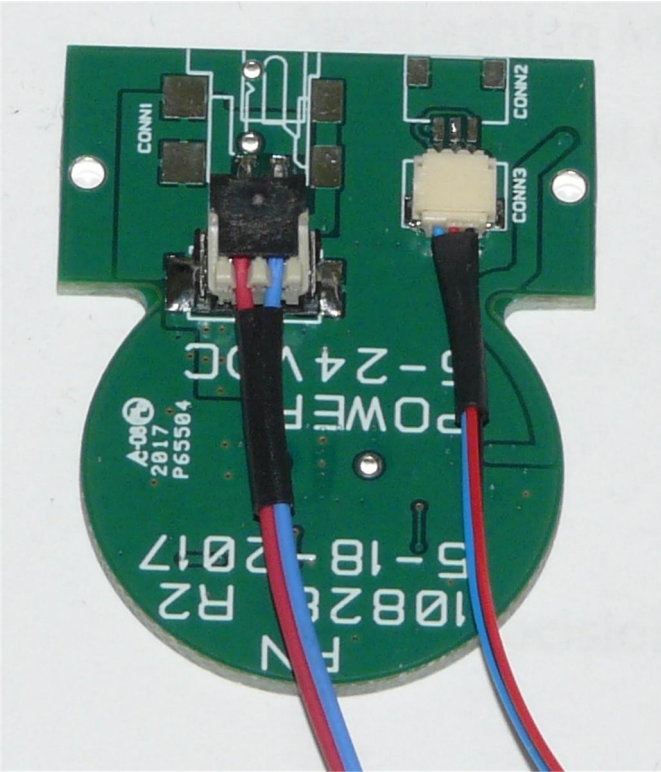
(2) Route the cables through the side panel hole in the microscope as shown above.



Nanodyne Replacement Illuminator for Zeiss Axioskop Microscope Installation Instructions: Step 6. Route and Connect the Cables.

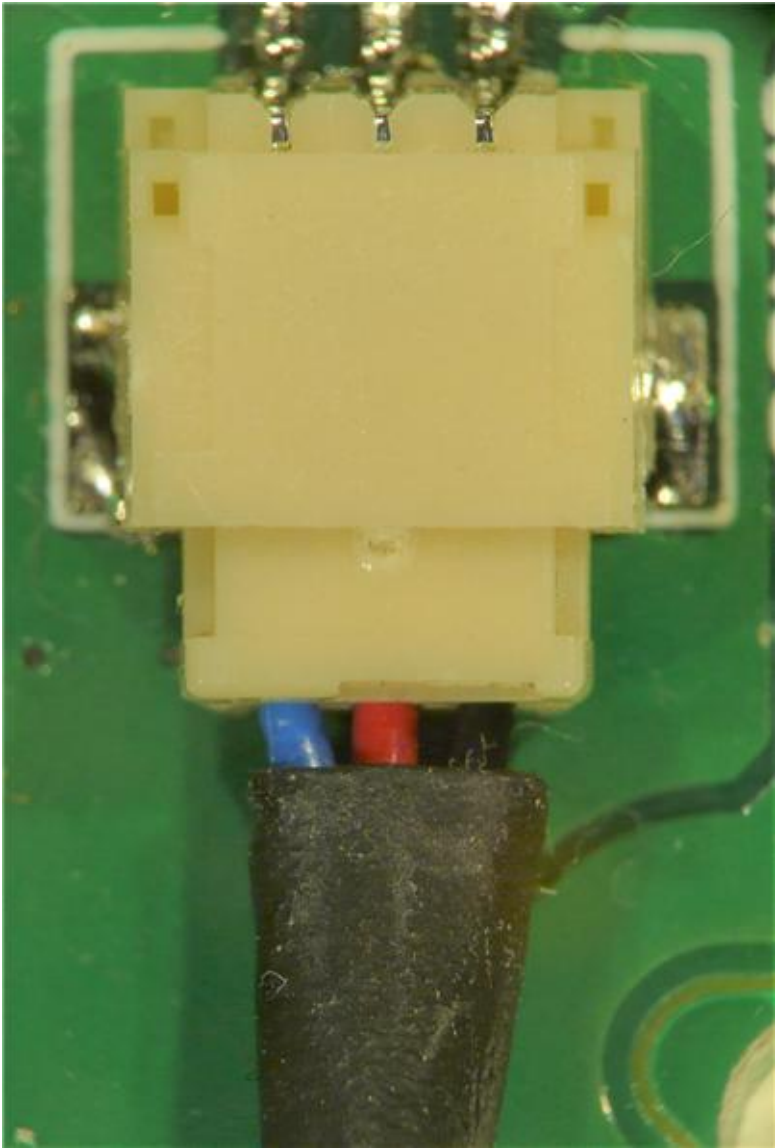


(1) Route the cables through the the small hole in the microscope as shown. The larger power connector (with two wires) must be inserted first, then the smaller pot connector (with three wires). Be sure the heat shrink tubing is positioned as shown to protect the cable from the sharp edges of the hole.

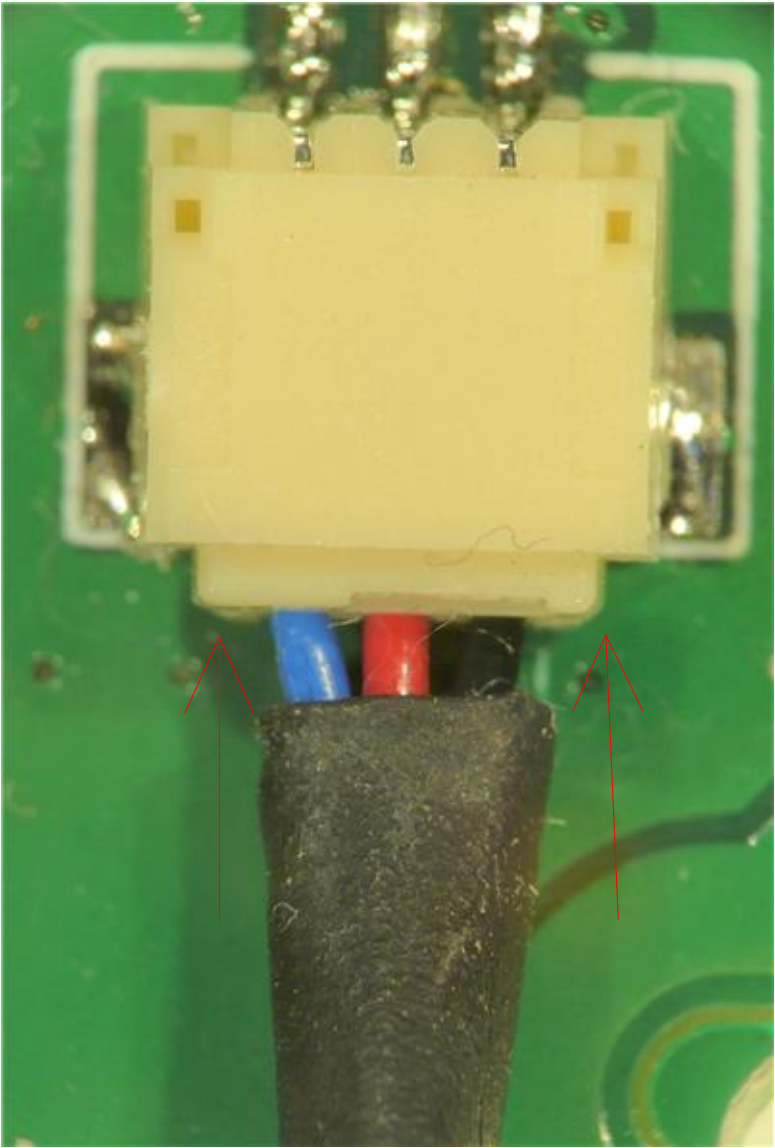


(2) Connect the cables to the illuminator circuit as shown at left. The connectors are keyed to only go together one way. Be sure they are fully inserted so they do not come loose later. See detail at right top.

Note - The cables may be connected after installing the illuminator assembly (see next page) if that seems easier.



(3) The plug for the intensity adjustment goes into the socket on the printed circuit board this far with no force when oriented correctly. The connector is not yet engaged.



(4) Push the plug into the socket using your fingernail. There will be a small snap as the connector engages. The required force should be quite small.



Nanodyne Replacement Illuminator for Zeiss Axioskop Microscope Installation Instructions: Step 7. Install Nanodyne illuminator, Secure Cables and Install Covers.

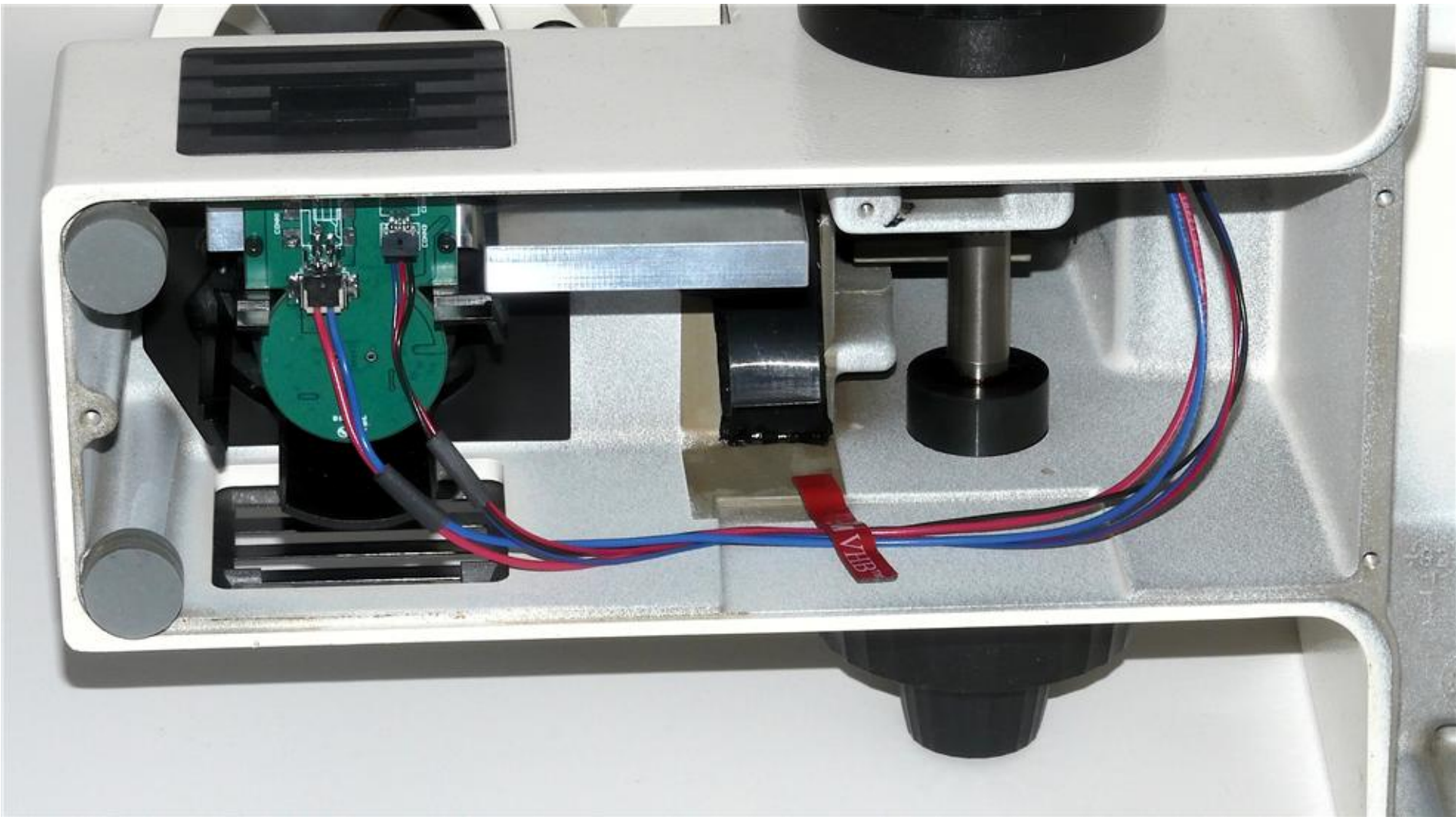


(1) The Nanodyne illuminator will be mounted just like the old halogen lamp assembly, using the same screws.



(2) Nanodyne illuminator Assy partially attached.

Slide the illuminator in from the bottom, maneuvering it so the circuit board clears the plastic posts that held the old metal shield. Align the illuminator slots with the threaded holes and secure it with both screws.



(3) Secure the wires away from the focusing gears using one or more of the VHB tape strips provided. Then replace the bottom and back covers. Insert PN 10736 AC power receptacle blocking plug into the now obsolete AC receptacle as shown below.

Note that there is significant play between the screws and the illuminator base. We did this to duplicate the original setup. Connect the power supply and verify that the light is properly aligned by looking through the microscope using the lowest power objective and verify that the illumination is uniform. If it is off-center or not focused properly the two screws can be loosened and the illuminator position adjusted.

