

Nanodyne Replacement Illuminator for Olympus BX50 Bottom Illuminator Installation Instructions

Refer to the photos below to determine which type of illuminator is required, or that you have the correct items if already purchased. The basic Nanodyne illuminator is the same for both, but there are different options for intensity control.



Top Illuminator for viewing the sample by reflected light off the surface.

If you are replacing this illuminator, you need PN 10401 Olympus BX50 Full Illuminator System (top illuminator). Please refer to installation document PN 10401 Olympus BX50 Top Illuminator Installation Instructions.

Important Note: This illuminator is intended to replace halogen (white light) illuminators. It is NOT intended as a replacement for mercury vapor (UV) lamps used for fluorescence.



Bottom illuminator for viewing by light transmitted through the sample.

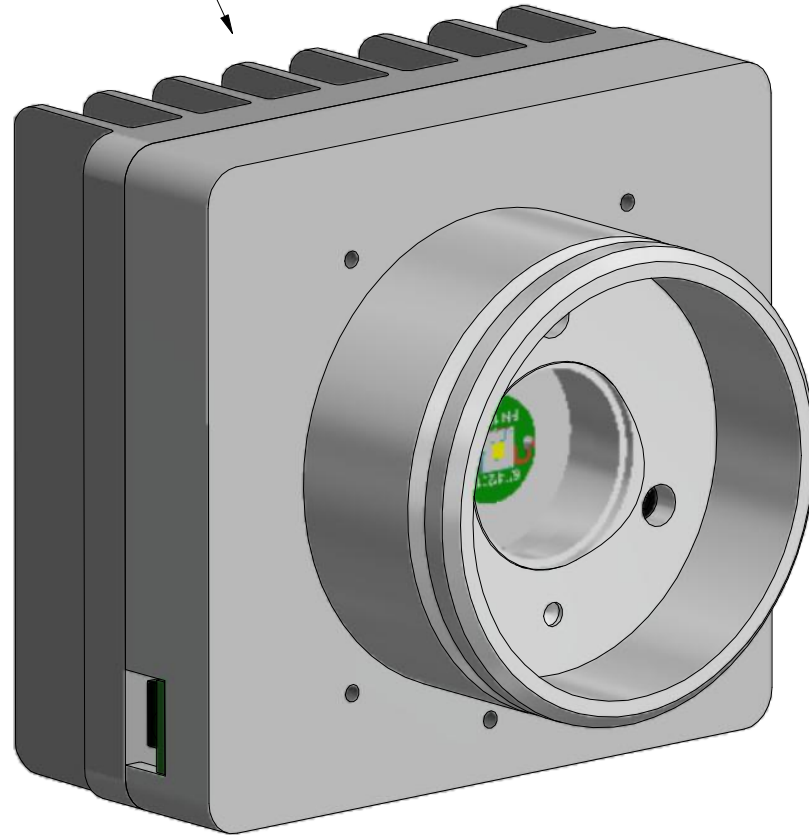
This configuration uses a custom pot plate from Nanodyne that replaces the original slide pot intensity adjust with a more ergonomic rotary pot. The original photo preset controls are obsolete, and discarded.

Follow the instructions in this document to replace the lower illuminator with a Nanodyne system.

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Nanodyne Replacement Illuminator for Olympus BX50 Bottom Illuminator Installation Instructions: Included Items

PN 10407 BX50-51
Bottom illuminator Assy



PN 10584 Olympus BX50
Pot Plate Cable Assembly
(15 in cable)



Tape to secure pot cable



PN 10736 Rubber plug to block
unused AC power receptacle.



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.

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Nanodyne Replacement Illuminator for Olympus BX50 Bottom Illuminator Installation Instructions: Step 1. Remove OEM illuminator.



(1) Use the tool recessed in the top of the microscope to release the illuminator.



(2) Original illuminator removed from the microscope. It will not be used.

(An earlier version of our illuminator used the original collector lens, but we now include our own collector lens as this makes the installation much simpler.)

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Nanodyne Replacement Illuminator for Olympus BX50 Bottom Illuminator Installation Instructions: Step 2. Remove Back Cover and OEM Intensity Control.



(1) Remove the back cover. It is held by 9 phillips head screws.



(2) Back cover removed.



(3) Unplug the cable at the red circle.



(4) Push out the old intensity control plate. (is is attached with a tape like adhesive)



(5) Outside view after removing intensity control plate.

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Nanodyne Replacement Illuminator for Olympus BX50 Bottom Illuminator Installation Instructions: Step 3. Install New Intensity Control Plate, Disconnect Obsolete AC Power



(1) Remove the release film from the tape on the back of the new adjustment plate, and press it firmly into place.
(The film can be difficult to remove. A sharp tweezers or X-Acto knife and magnifier will help if you are having trouble.)



(2) Back view of new adjustment plate with pot and cable.



(3) AC power connections at inside of back cover.

The white and black leads will be disconnected.



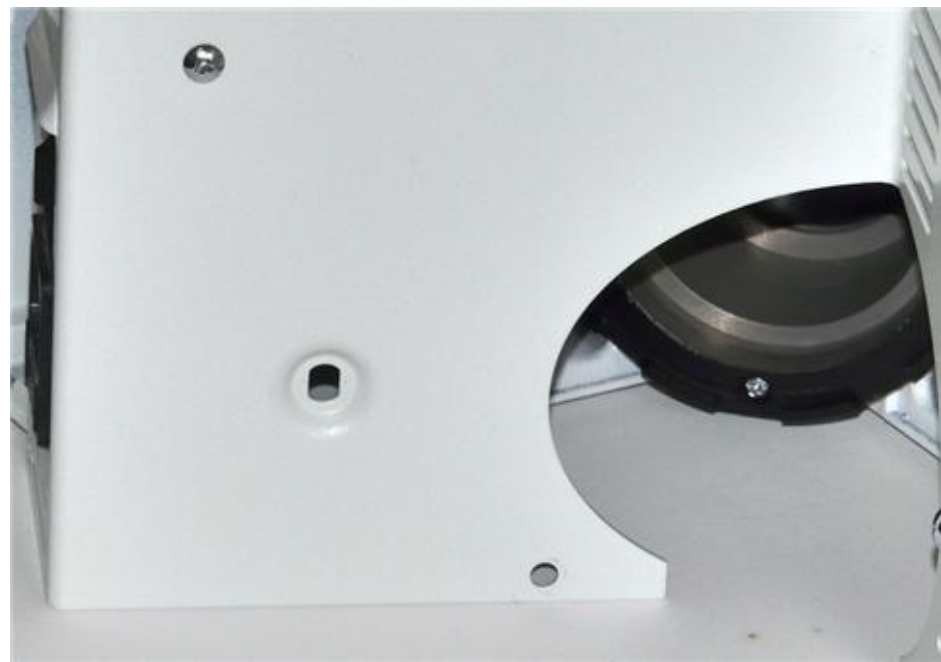
(4) Disconnect the white and black AC power leads by pulling them off of the terminals.

Secure the leads as shown so there is no way they can contact the terminals.

Nanodyne Replacement Illuminator for Olympus BX50 Bottom Illuminator Installation Instructions: Step 4. Route Pot Cable, Replace Cover.



(1) Remove the ground stud. It is not needed as the AC power has been disconnected.



(2) Outside of back cover after removing ground stud.



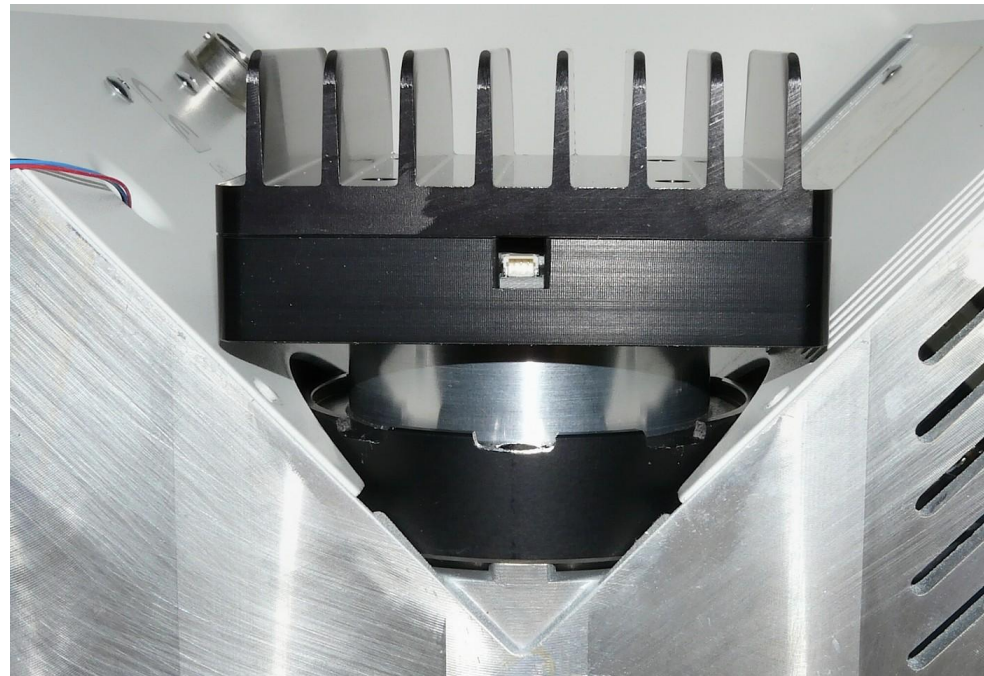
(3) Route the pot cable through the hole for the ground stud. Replace the back cover.

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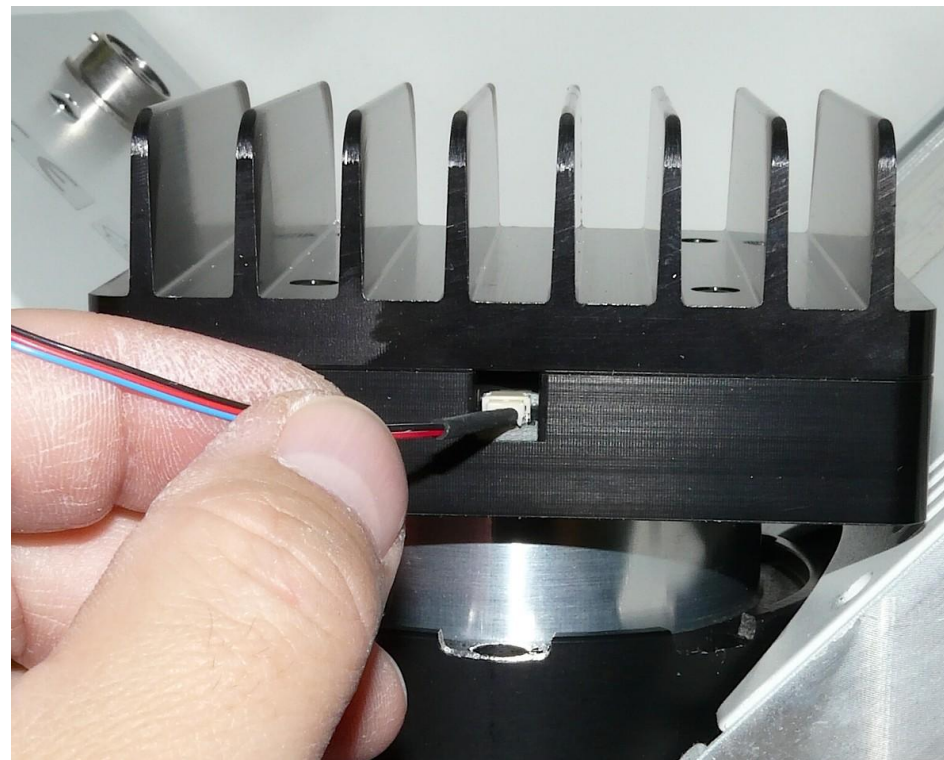
Nanodyne Replacement Illuminator for Olympus BX50 Bottom Illuminator Installation Instructions: Step 5. Install New Illuminator.



(1) Insert the illuminator into the microscope port and secure it the same way as the original. Keep it pressed firmly in place until the microscope screw has secured it (to ensure good alignment).



(2) The adjustment pot cable plugs into the connector at the bottom of the illuminator.



(3) The connector is keyed to only fit one way. See the next sheet for detailed instructions to be sure it is properly engaged.

If you ever need to remove it, just firmly grab all 3 wires and pull it straight out. the connector is tougher than it looks.

NOTE - The power cable must be plugged into the illuminator before it is mounted. It will not fit after.

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Nanodyne Replacement Illuminator for Olympus BX50 Bottom Illuminator Installation Instructions: Pot Cable Connection Details

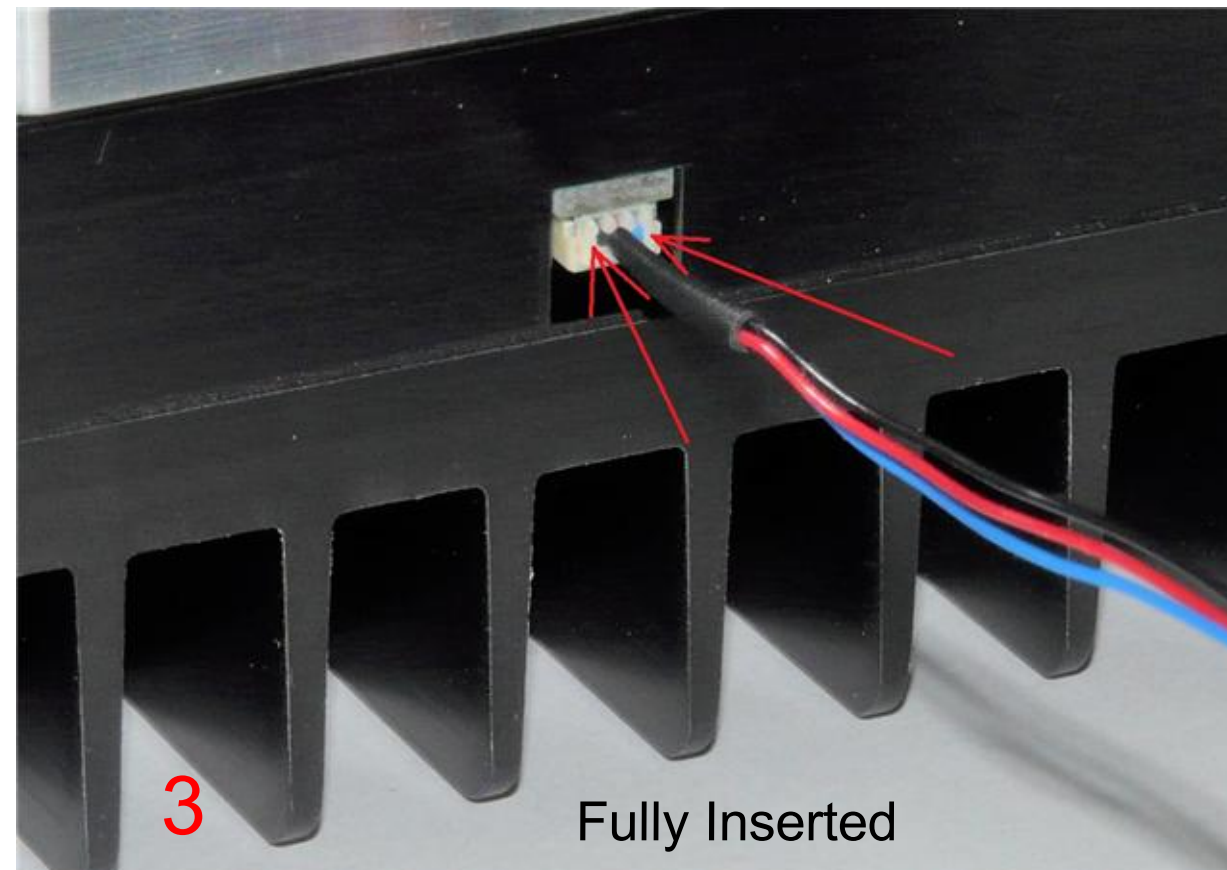
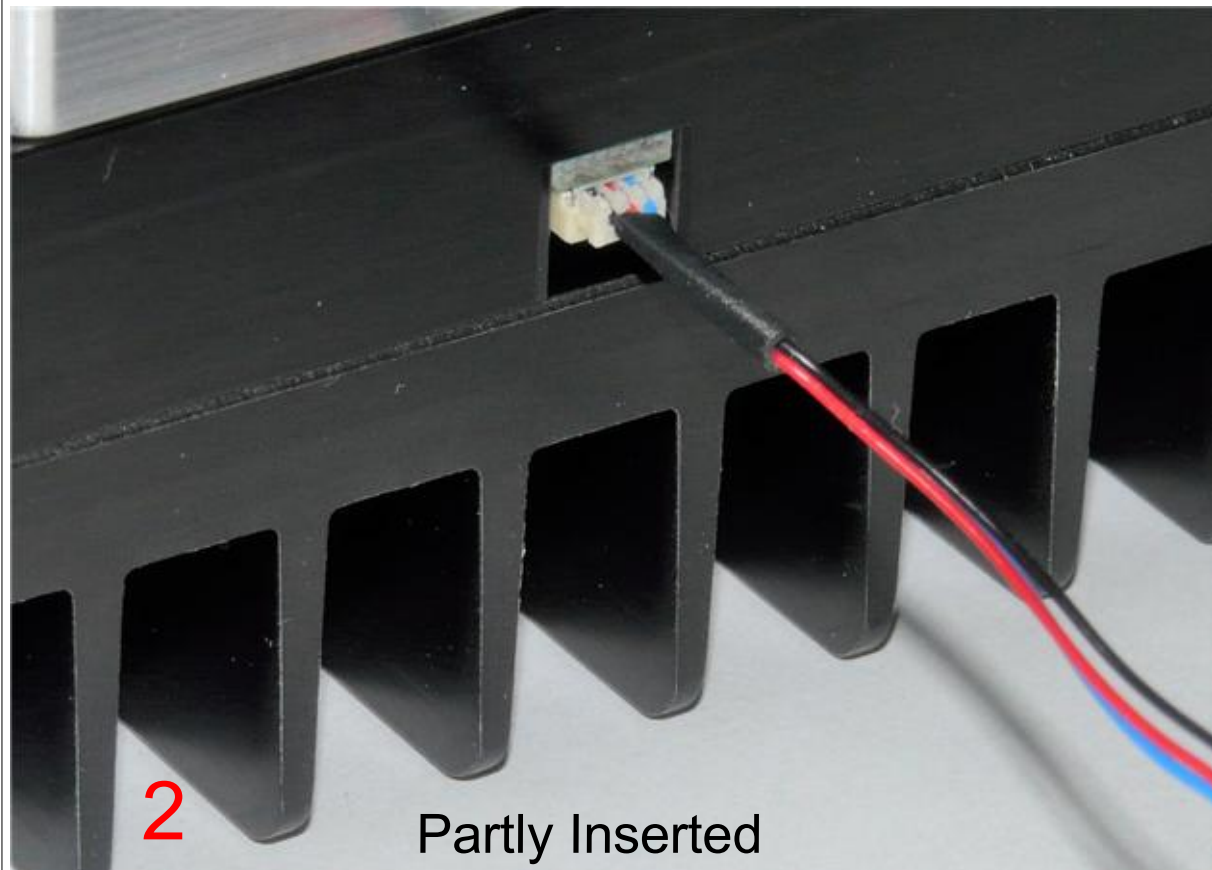
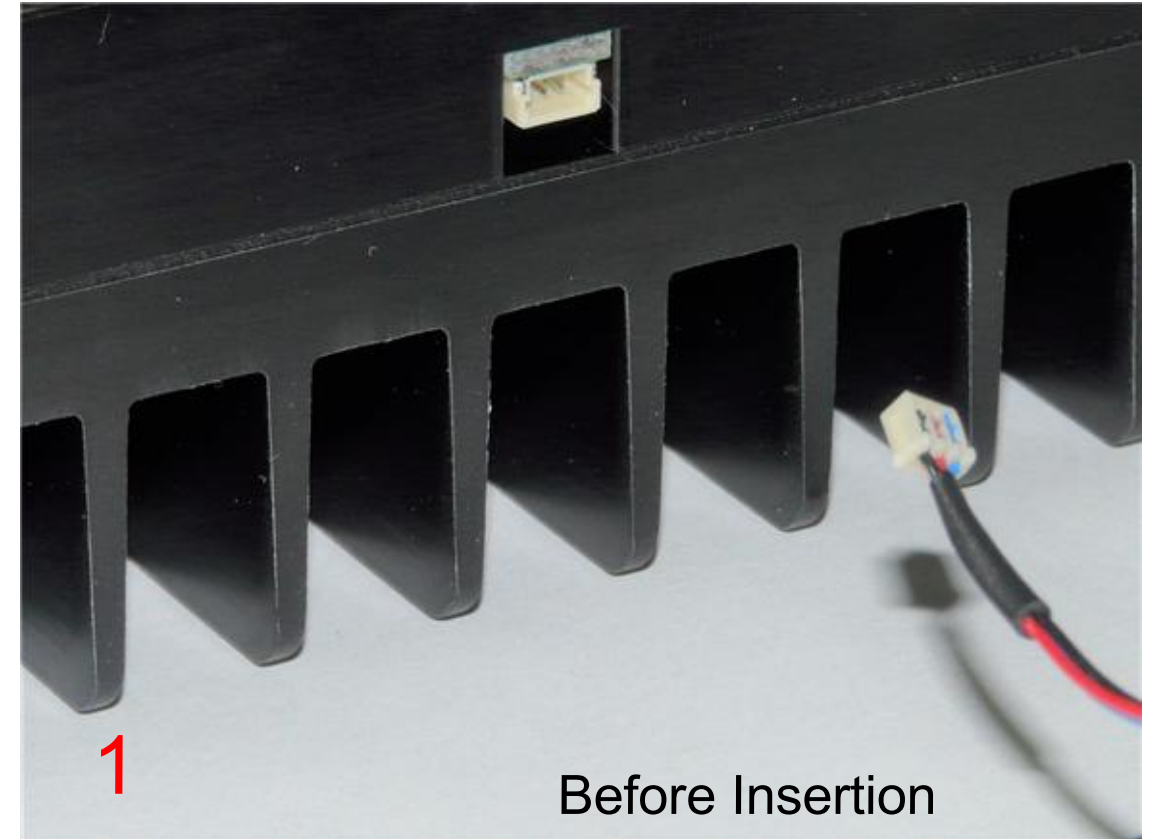
Connect the plug at the end of the Pot Cable Assembly to the mating socket of the illuminator, as shown in the pictures on this page. NOTE THAT THE PLUG IS KEYED TO ONLY GO INTO THE SOCKET ONE WAY, AS SHOWN.

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.



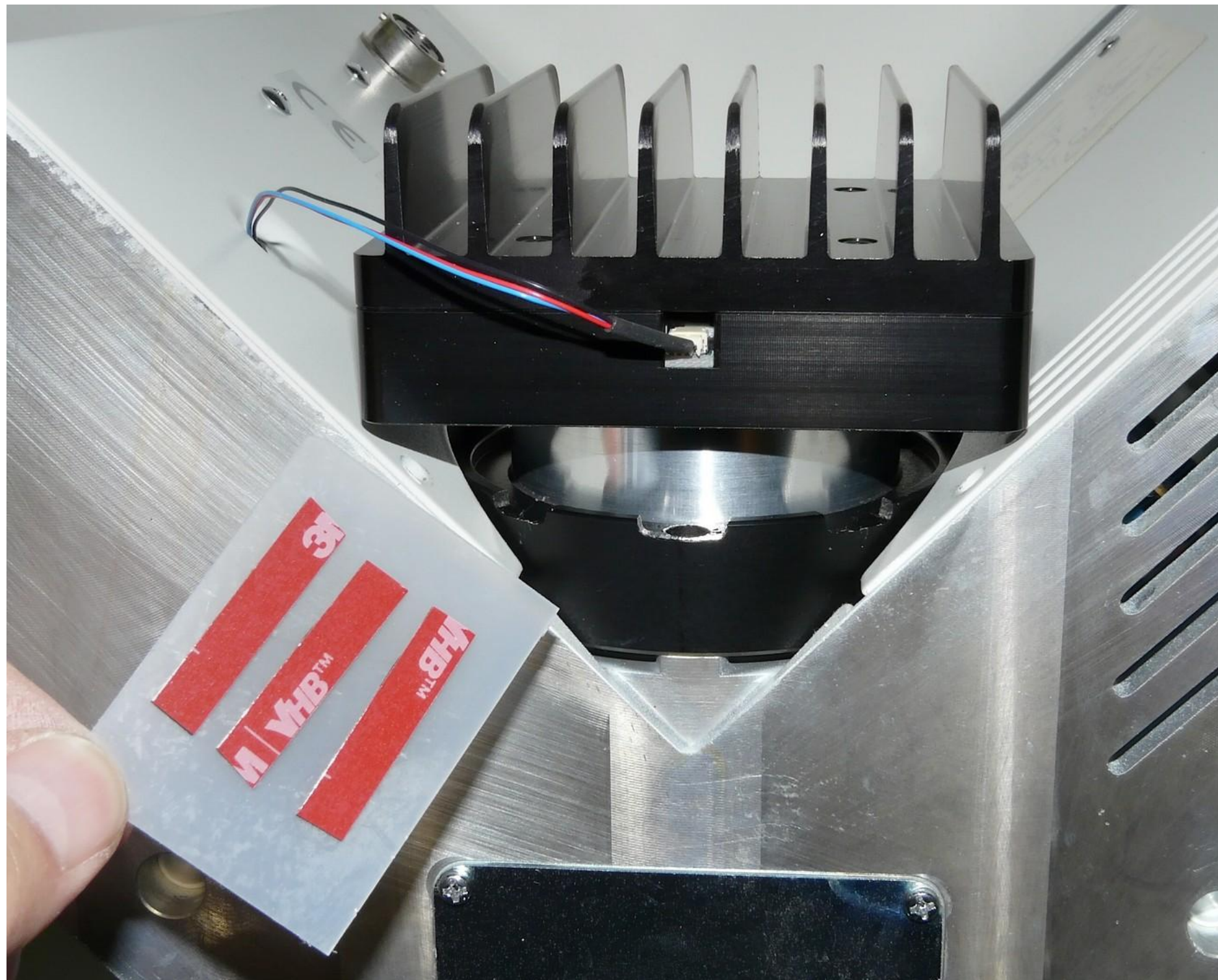
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Nanodyne Replacement Illuminator for Olympus BX50 Bottom Illuminator Installation Instructions: Step 6. Secure Pot Cable, Install AC Power Blocking Plug.



(1) Push any excess pot cable length back through the hole into the microscope. Secure it with the red tape so the cable cannot get snagged while moving the microscope.



(2) Install PN 10736 rubber plug in AC receptacle to deter connection of AC power.

(3) Connect the power. The round end of the power cable should already be plugged into the illuminator. Plug the USB end into the power supply. Plug the power supply into an AC outlet.

It is now ready to use.

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