

Nanodyne Replacement Illuminator for Olympus BX43/46 Microscope Installation Instructions (easy install): Included Items

Additional Items Included But Not Shown:

- PN 10490 Hex Key 5/64 inch (for set screw)
- PN 10566 Hex Key 2.5mm Long Arm (for M4 screw)
- PN 10747 Hex Key 3mm
- PN 10460 Hex Key 4mm



3M VHB Tape to secure wires.

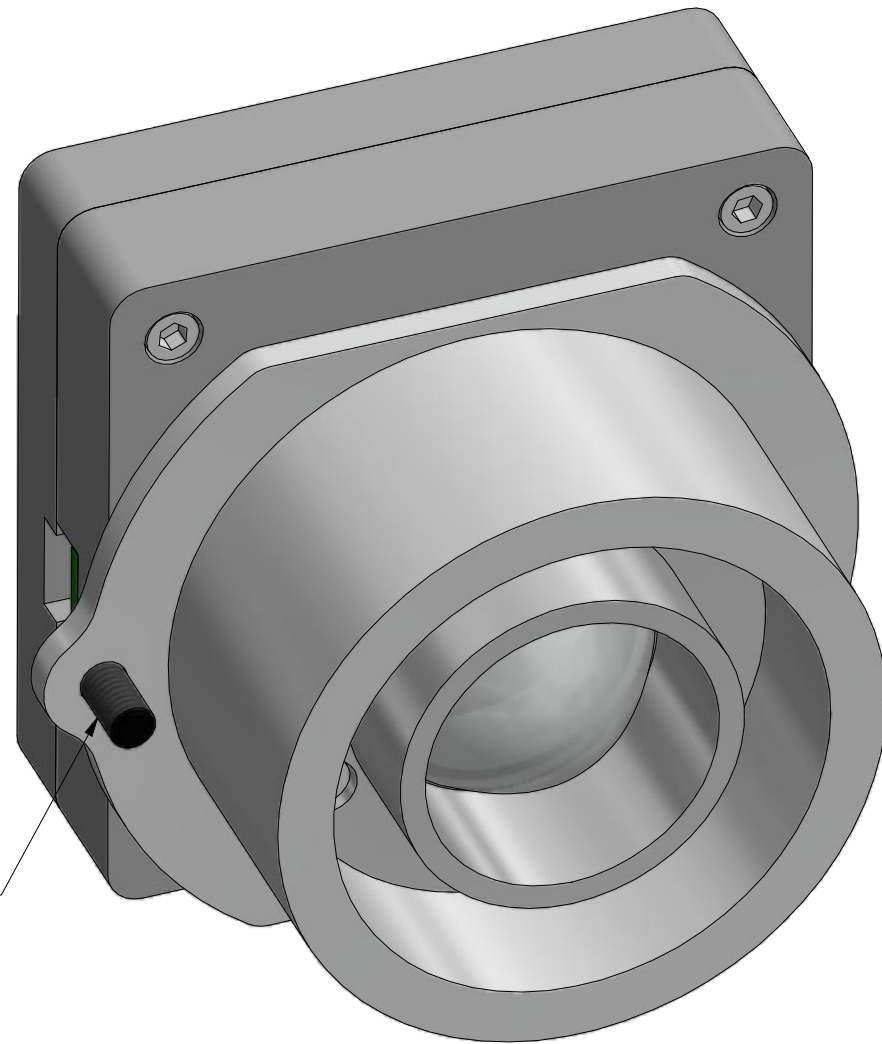


PN 10733 Power Supply - XP Power 5V 1A and PN 10734 Cable Assy 1.35mm ID x 3.5mm OD RA plug to USB A, 6 foot.

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.

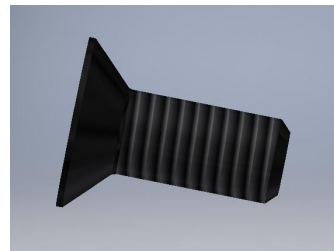
Power supplies are subject to substitution without notice due to availability issues and changes in regulations.

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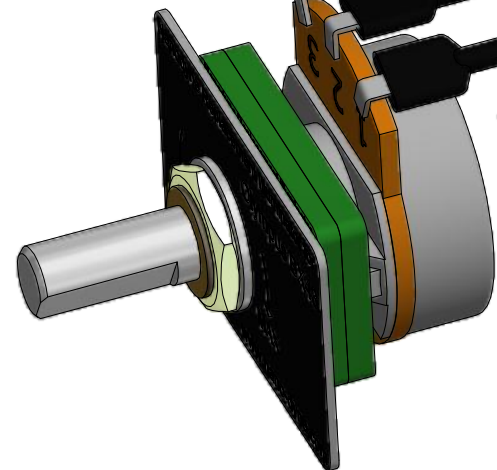


PN 11017
Olympus BX43_46
Illuminator Assy

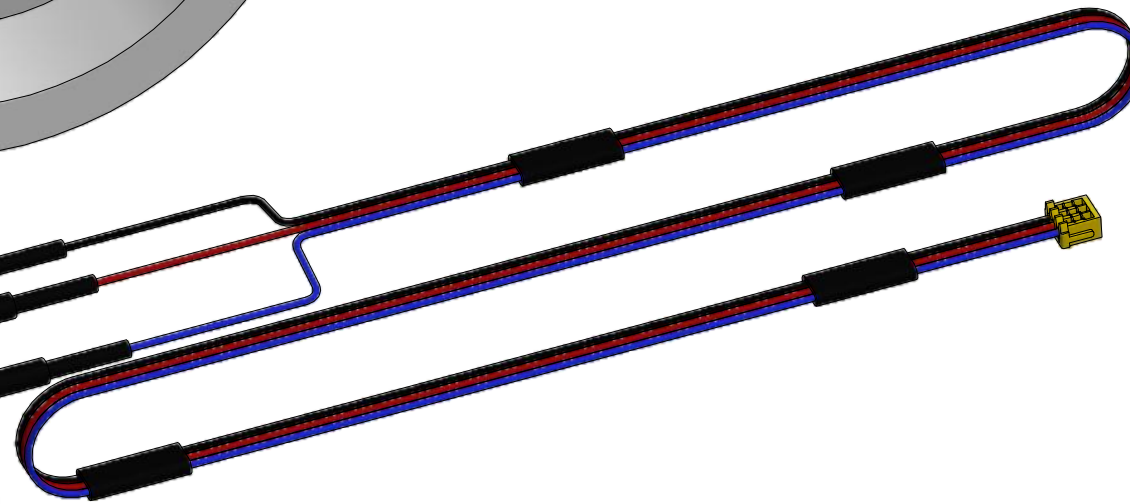
PN 12081 FHCS M4 x 0.7 x 10mm



PN 11054
Knob 0.50 dia.



PN 11062
Pot-Plate-Cable Assy
BX43_46 (easy install)
(15 in cable)



Nanodyne Replacement Illuminator for Olympus BX43/46 Microscope Installation Instructions (easy install) - Step 1. Remove old illuminator.



Photo 1a



Photo 1b

Place the microscope upside down, unplug the existing BX43 illuminator cable, and unscrew the existing illuminator unit from microscope port as shown, using the 3mm hex key provided.



Photo 1c



Photo 1d

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Nanodyne Replacement Illuminator for Olympus BX43/46 Microscope Installation Instructions (easy install) - Step 2. Remove back cover and old circuitry.



Photo 2a

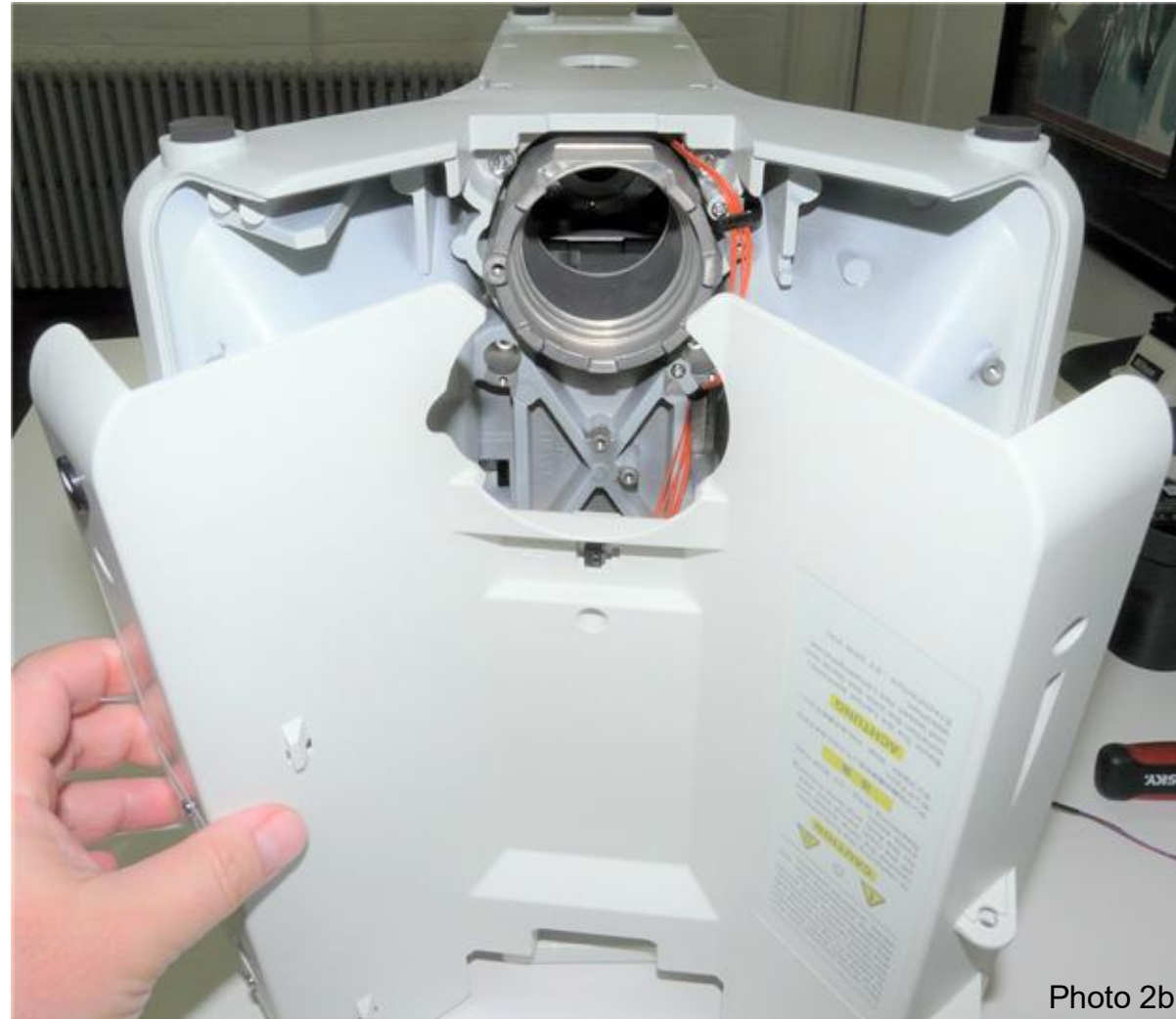


Photo 2b

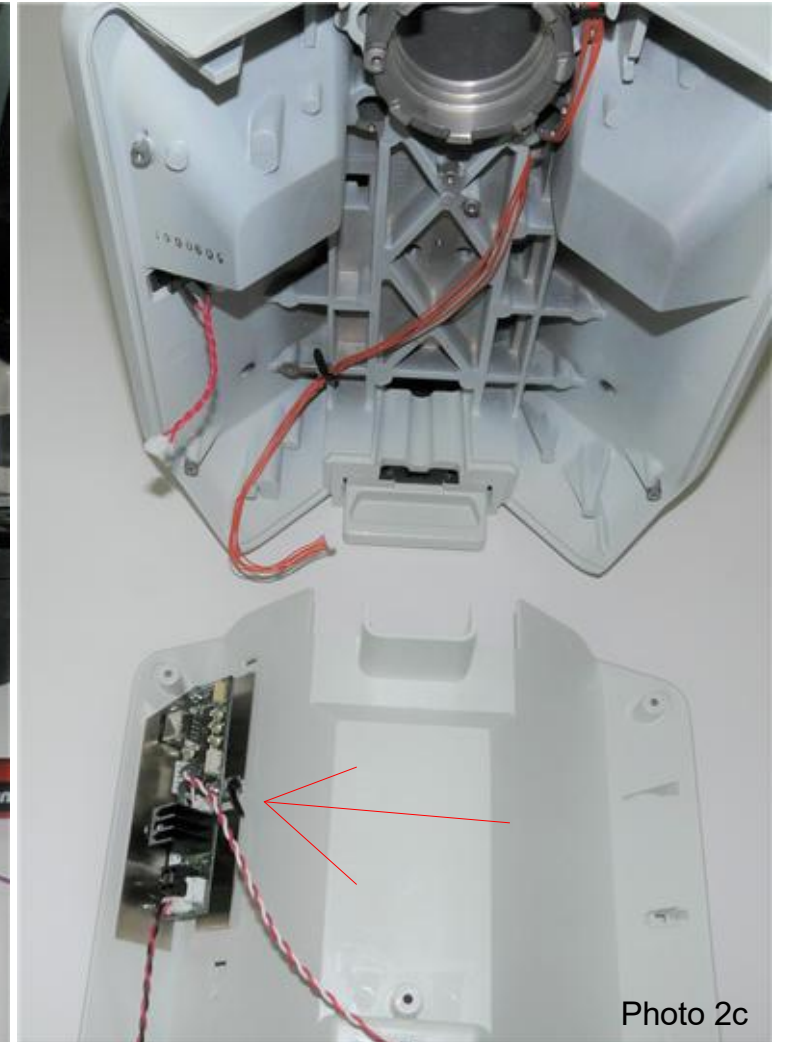


Photo 2c

Disassemble back cover. Note that after installation of the Nanodyne illuminator, there should be no power connections left in place to the DC power inlet (red circle).

**** Safety and misc. ****

Regardless whether the original circuitry is left in place or removed, be sure there is no possibility of electrical hazard in case an unfamiliar user connects power to the old DC input.

We recommend removing the power cable from the DC input connector. It should be cut short so there is no possibility it could be connected to the original circuitry, or insulated with heat shrink tubing or electrical tape.

The original 120/220VAC powered illuminator circuitry (red arrow) is completely replaced by the Nanodyne equipment which is powered by a universal input wall plug power supply with low voltage DC output.

The original circuitry may be left in place, or removed as it is no longer used.

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Nanodyne Replacement Illuminator for Olympus BX43/46 Microscope Installation Instructions (easy install) - Step 3. Remove old power switch and insert new potentiometer.

4

3

2

1

B

B

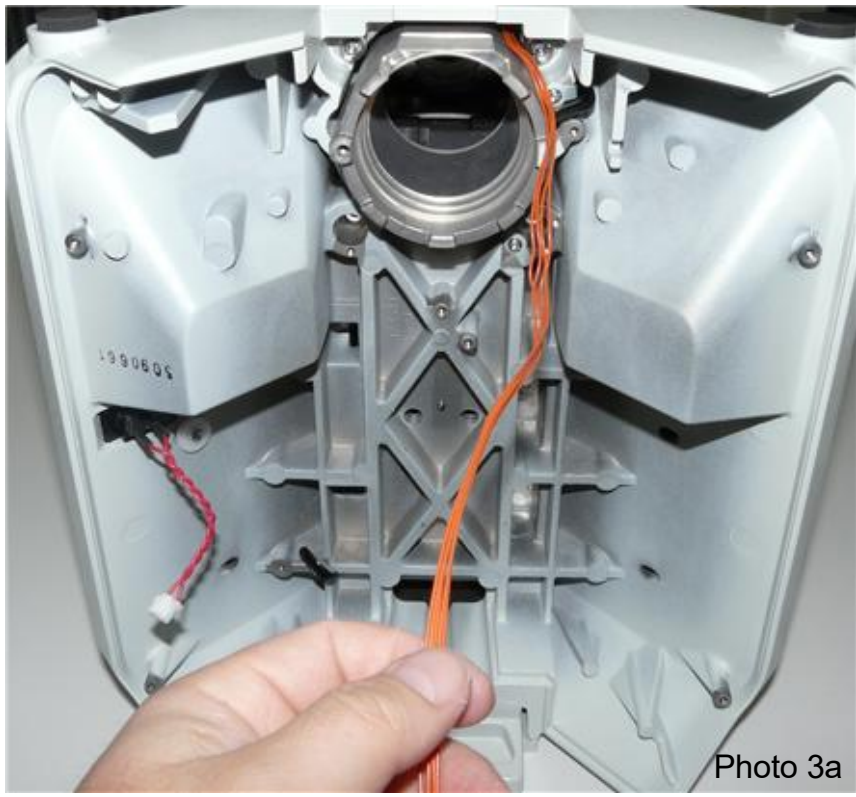


Photo 3a

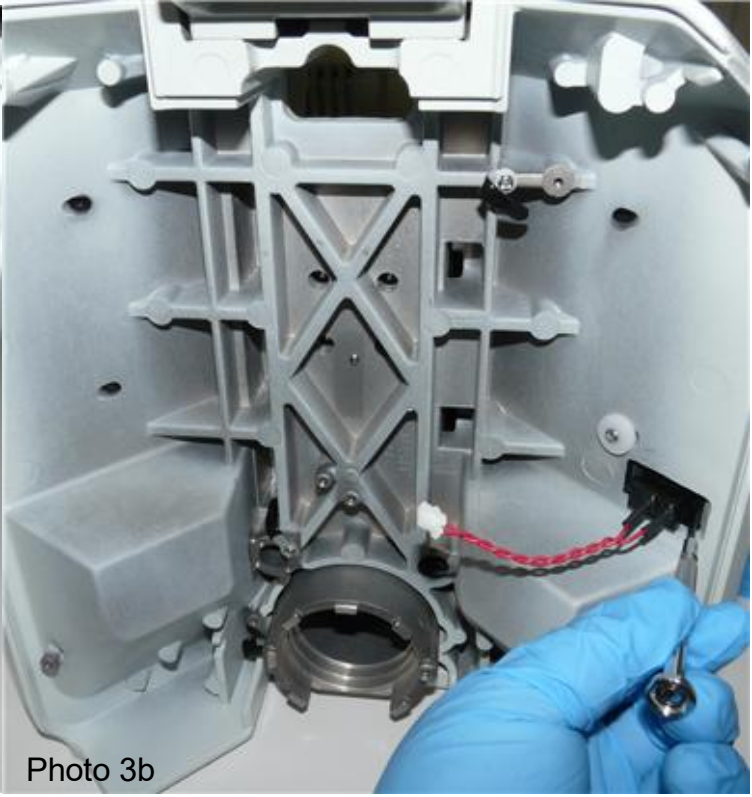


Photo 3b



Photo 3c



Photo 3d

A

A

The original pot cable may be left in place, or removed as it is no longer used.

Place the microscope back to upright position, then remove now-obsolete power on/off switch using mechanical tools such as flat screw driver or tweezers.

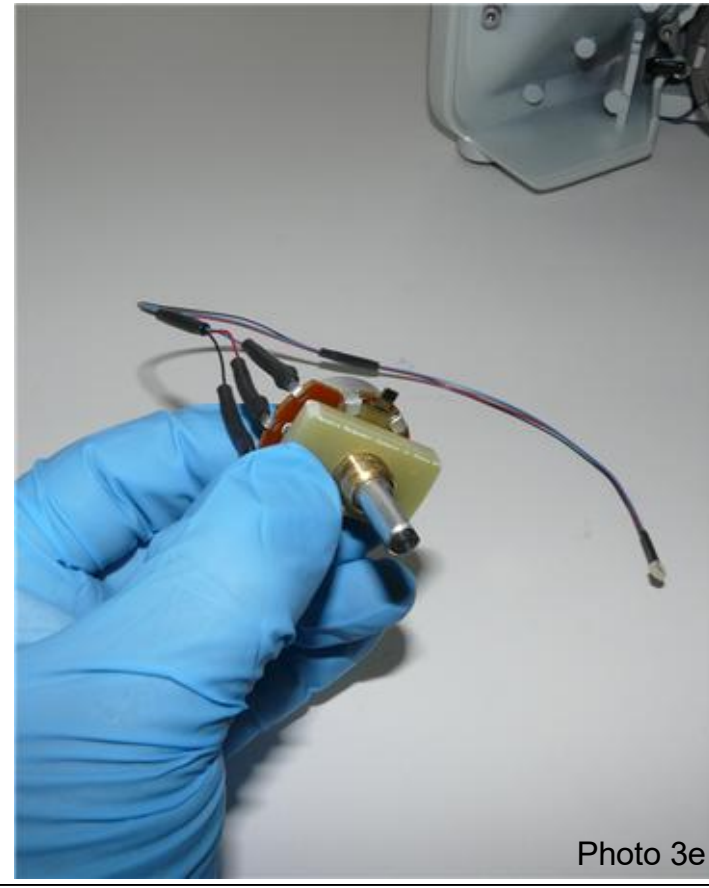


Photo 3e



Photo 3f



Photo 3g

Insert a new potentiometer (PN 11061) along with Pot Plate (PN 11060 Type 2 Back) to the power switch hole as shown in left. The Pot Plate exactly fits to the hole.

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4

3

2

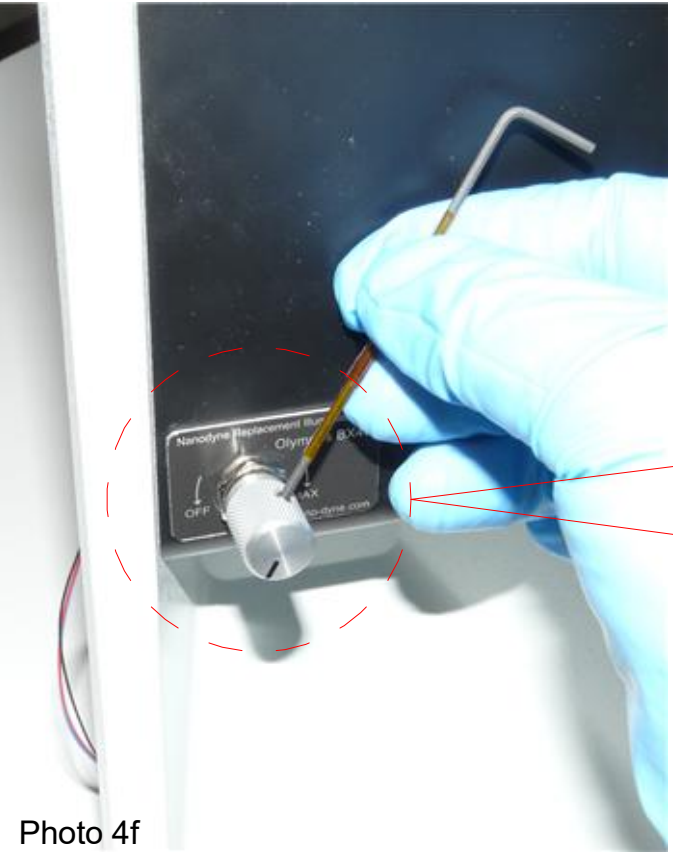
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Nanodyne Replacement Illuminator for Olympus BX43/46 Microscope Installation Instructions (easy install) - Step 4. Install new potentiometer.

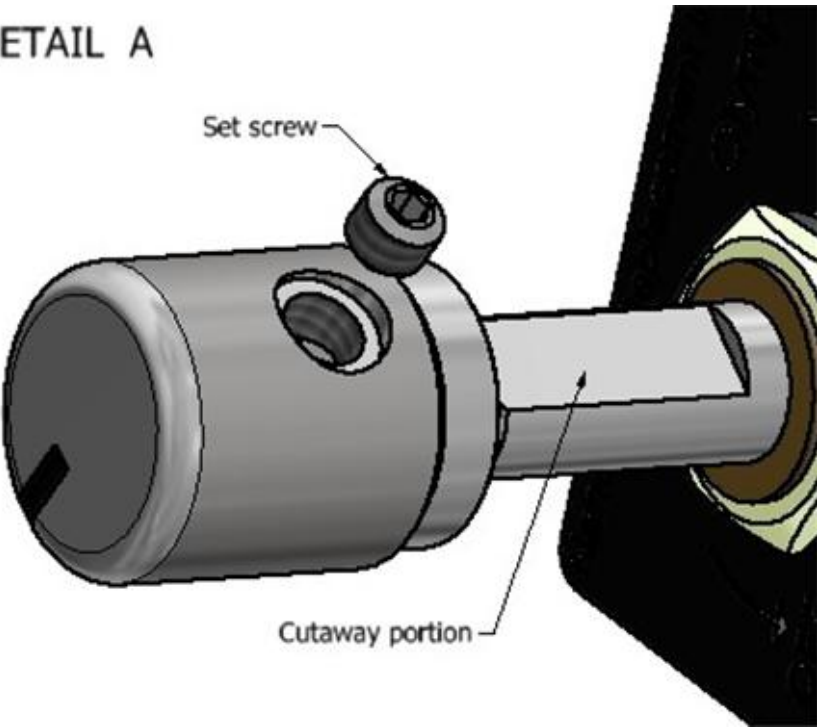


Remove the protective release film

Remove the release film and assemble front Pot Plate (PN 11059 Pot Plate Type 2) along with washer and nut using 13mm hex socket (red circle above), then install a new pot knob (PN 11054) provided using 1.5mm hex key as shown in below. Pot knob set screw and cutaway portion of shaft must be aligned as shown in detail A.



DETAIL A



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Nanodyne Replacement Illuminator for Olympus BX43/46 Microscope Installation Instructions (easy install) - Step 5. Re-install back cover.

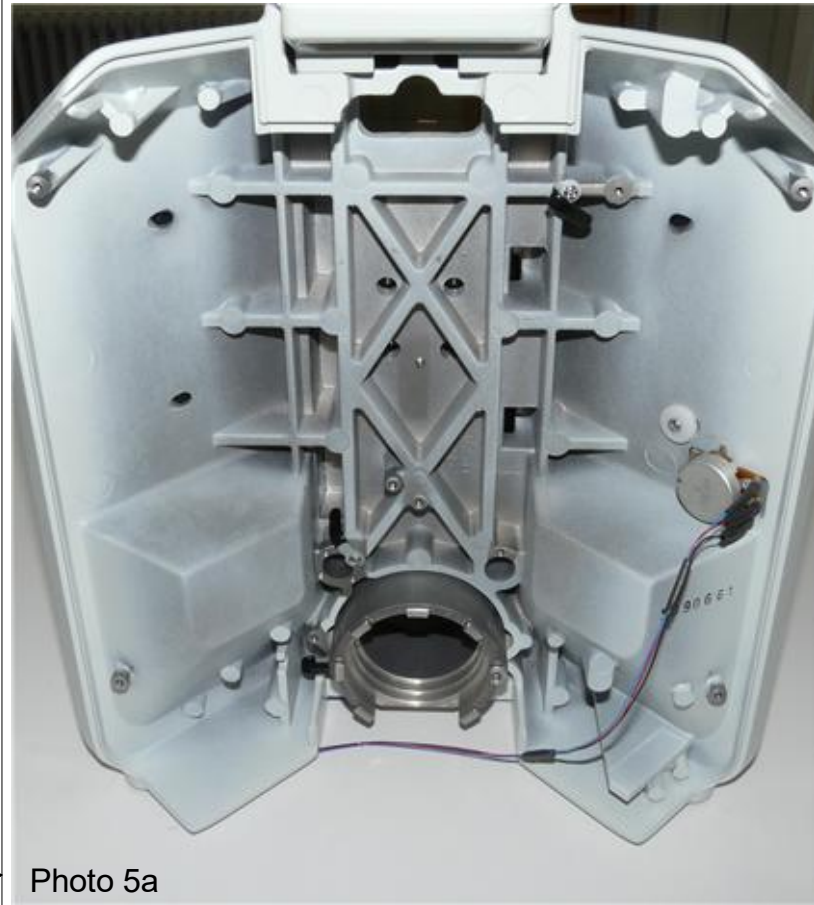


Photo 5a

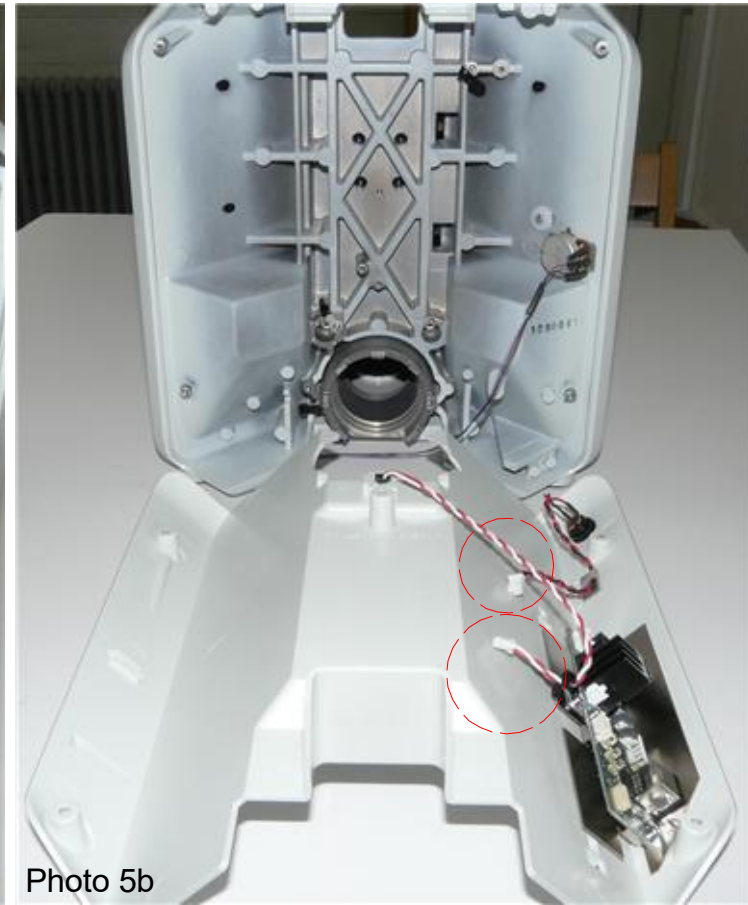


Photo 5b



Photo 5c

Make sure all the original circuitry cables are disconnected (red circles) as shown in left.



Photo 5d



Photo 5e

Re-install the back cover and place the microscope upside down as shown in left.

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Nanodyne Replacement Illuminator for Olympus BX43/46 Microscope Installation Instructions (easy install) - Step 6. Insert and secure Nanodyne illuminator.



Photo 6a



Photo 6b



Photo 6c

Insert PN 11021 hex screw (red circle) to the screw hole of the Nanodyne adapter as shown above, insert Nanodyne adapter to the microscope port, and tighten the hex screw to secure Nanodyne adapter in place.

NOTE: Your current illuminator will look slightly different than the one in the photos. The installation procedure is identical.

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Nanodyne Replacement Illuminator for Olympus BX43/46 Microscope Installation Instructions (easy install) - Step 7. Connect pot cable and new power supply.



Insert Nanodyne illuminator, tighten the set screw, and connect the pot cable, note that the connector will only seat one way, so do not force it in if it does not fit. Secure the cables as shown above (using 3M VHB tape if needed). Place the microscope back to upright position, plug AC adapter to the Nanodyne illuminator, and now it is ready to use.

***Note:** The Pot Cable insertion procedure will be shown in next page.

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Nanodyne Replacement Illuminator for Olympus BX43/46 Microscope Installation Instructions (easy install) - Step 8. Connect the Pot Cable to the Illuminator.

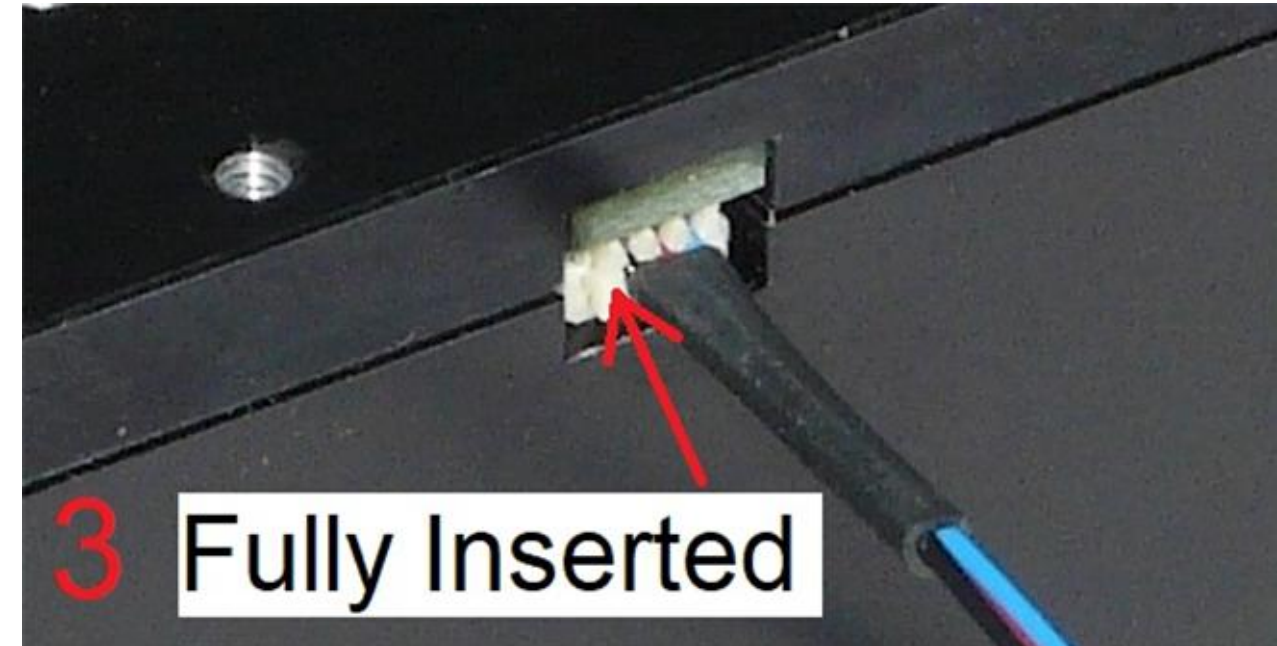
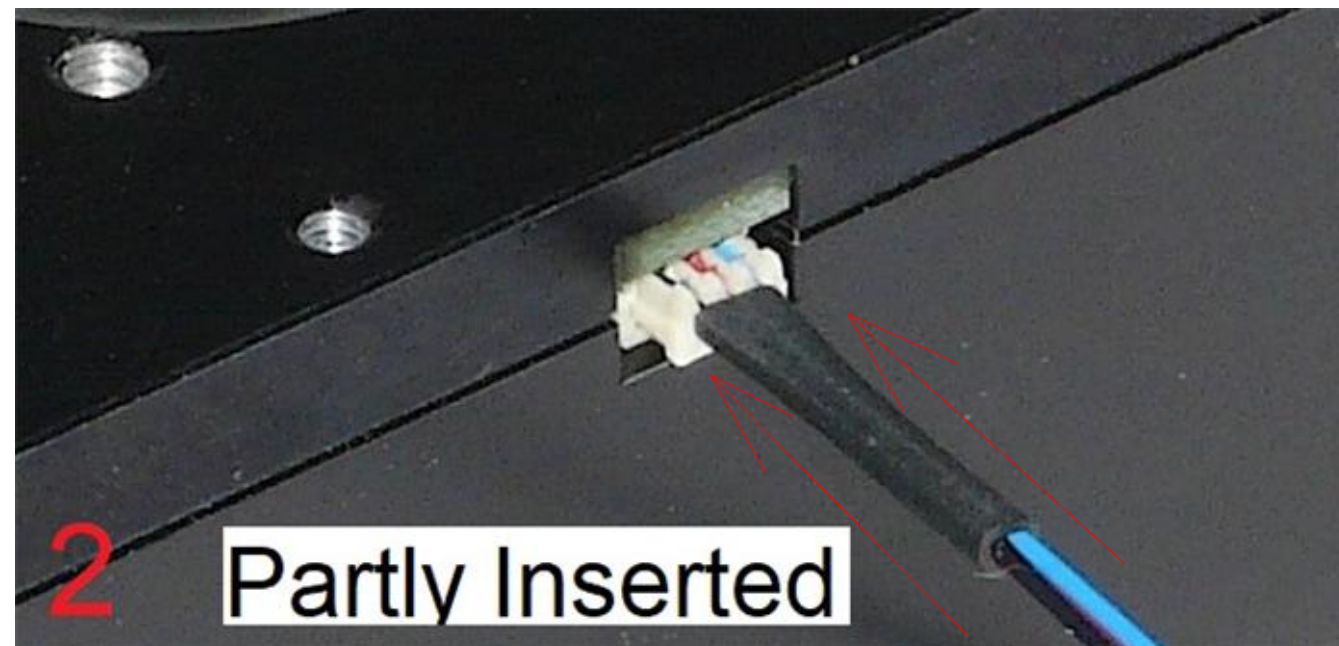
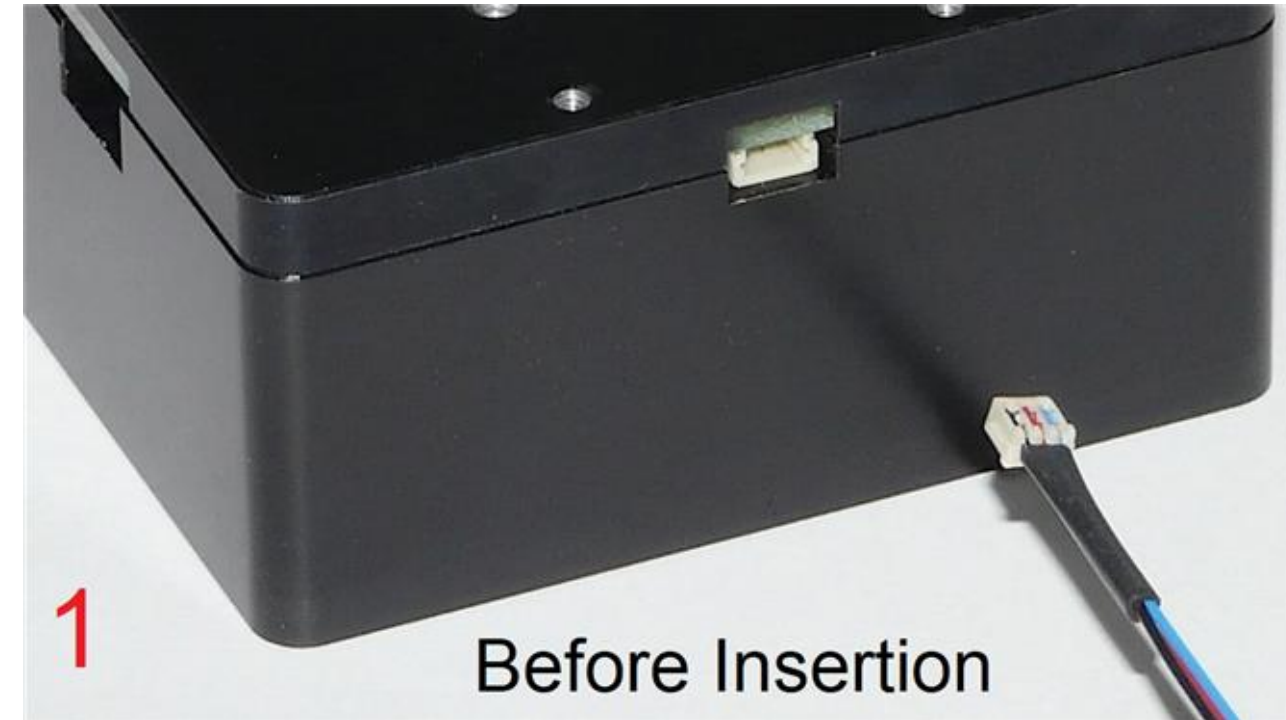
Connect the plug at the end of the Pot Cable Assembly to the mating socket of the illuminator, as shown in the pictures on this page. NOTE THAT THE PLUG IS KEYED TO ONLY GO INTO THE SOCKET ONE WAY, AS SHOWN.

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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