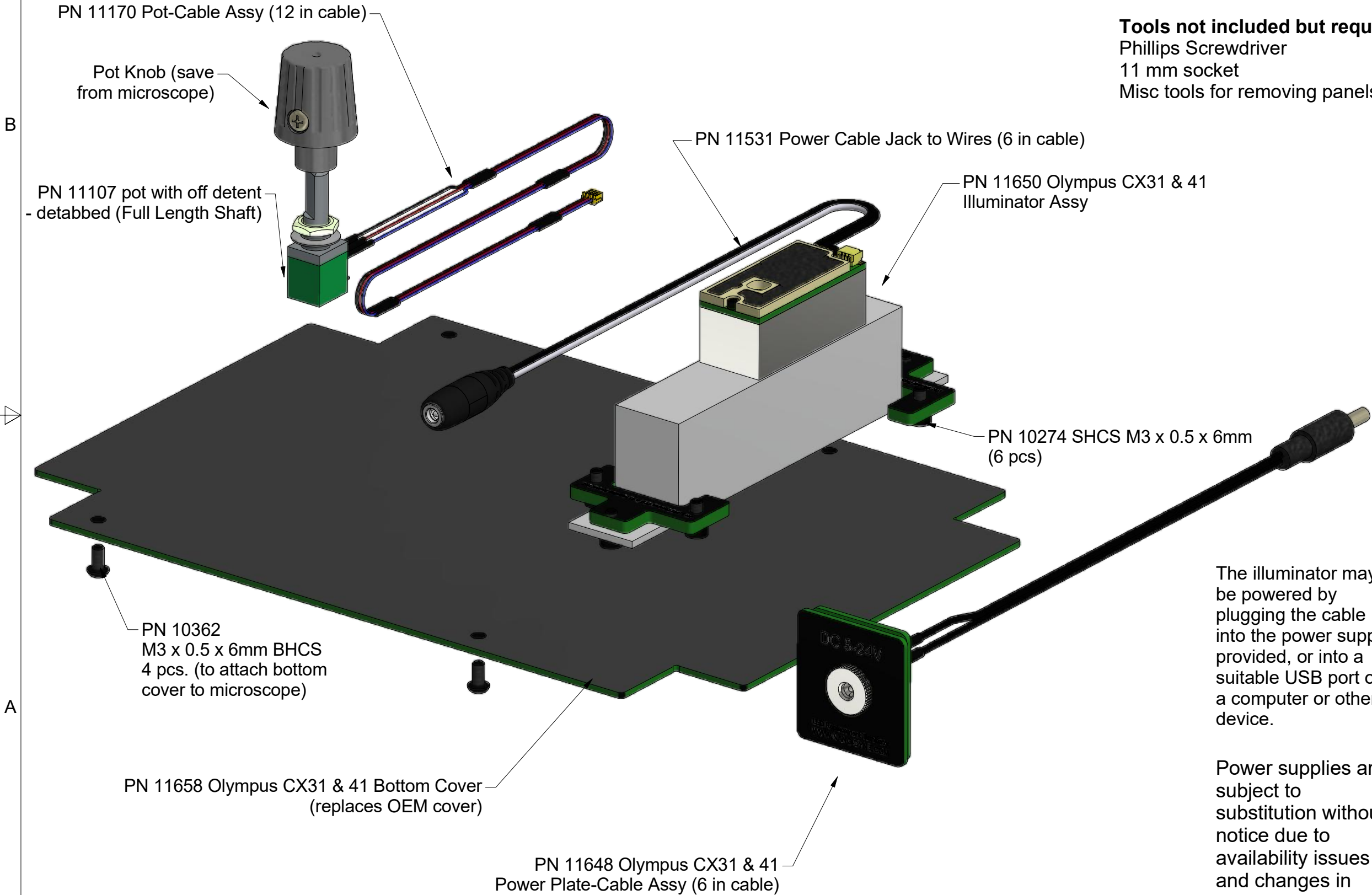


Nanodyne Replacement Illuminator for Olympus CX31 / 41 Microscope Installation Instructions: Included Items

- Also Included but not shown:**
PN 10337 Hex Key 2mm Short Arm (for M3 BHCS)
PN 10457 Hex Key 2.5mm Short Arm (for M3 SHCS)
- Tools not included but required:**
Phillips Screwdriver
11 mm socket
Misc tools for removing panels and original illuminator from microscope.



3M VHB Tape to secure wires.



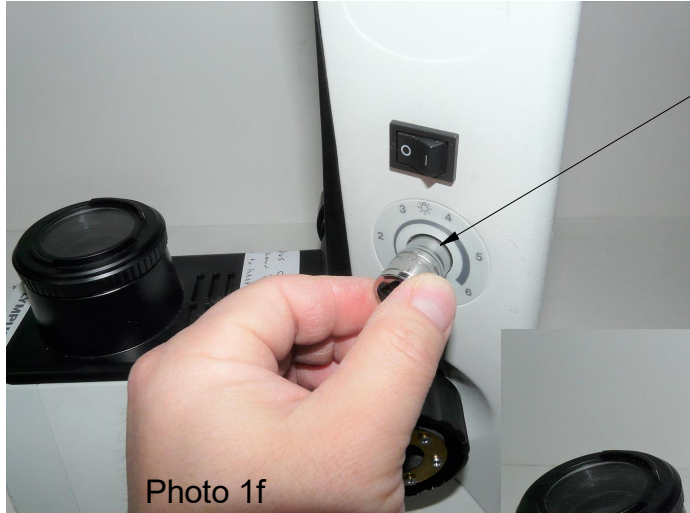
The illuminator may be powered by plugging the cable into the power supply provided, or into a suitable USB port on a computer or other device.

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

PN 10733 Power Supply & PN 10734 Cable Assy 1.35mm ID x 3.5mm OD RA plug to USB A 6 ft.

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Nanodyne Replacement Illuminator for Olympus CX31 / 41 Microscope Installation Instructions - Step 1. Remove back cover and old potentiometer.



11mm socket



Be sure AC power is disconnected. Remove back cover (photo 1b), and the original adjustment pot. First remove the knob by loosening the screw with a Phillips screwdriver (photo 1d). Then remove the nut with an 11mm hex socket (photo 1f). You should be able to turn the socket by hand. If it is too tight a deeper socket than shown will be required.

Keep the original washer and knob shown at right to install the new pot.

Nanodyne Replacement Illuminator for Olympus CX31 / 41 Microscope Installation Instructions - Step 2. Remove old potentiometer (continued) and lamp housing.

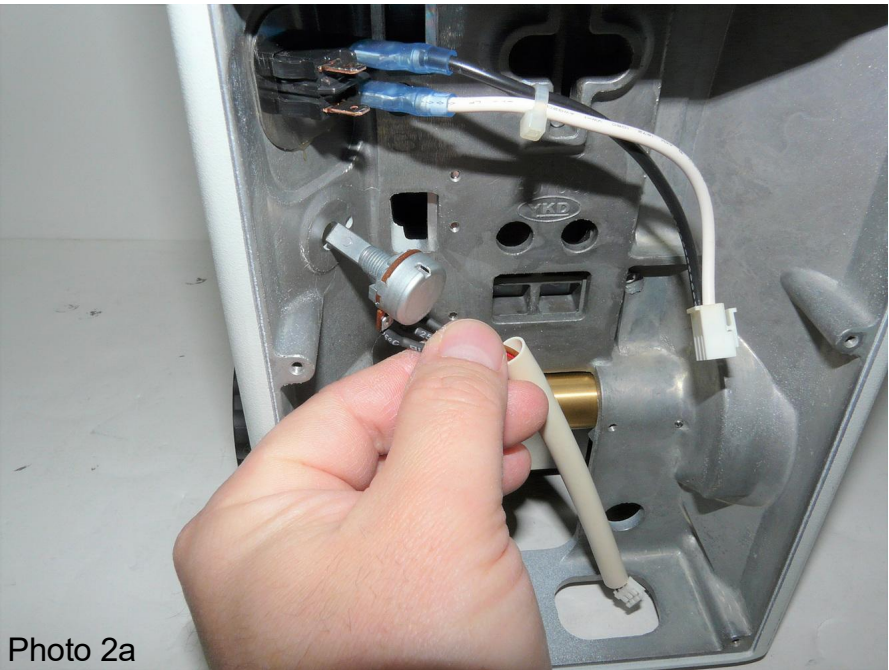


Photo 2a
Remove original adjustment pot cable assembly.

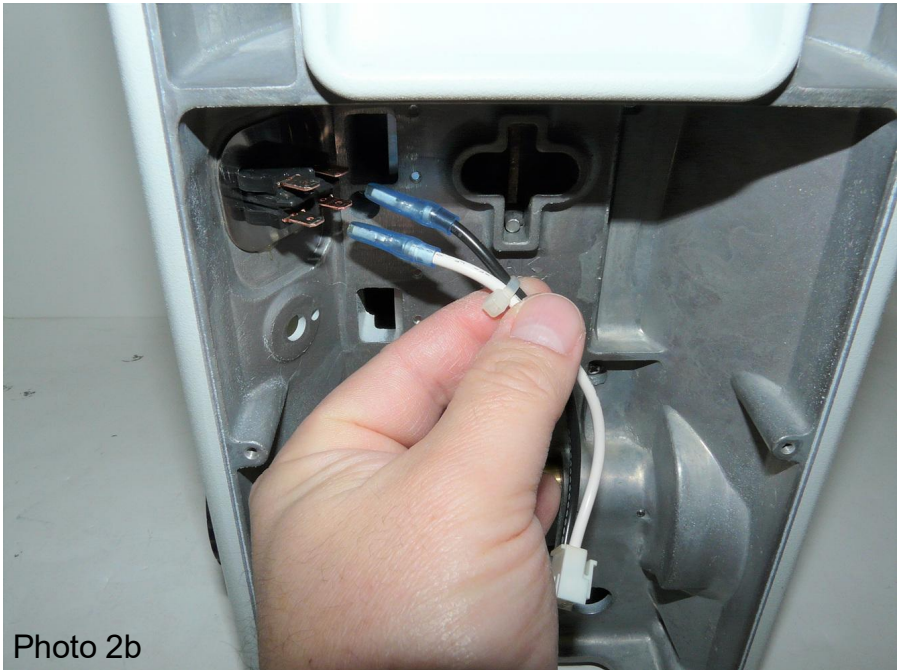


Photo 2b
Remove original electrical wires from the power switch.



Photo 2c
Original adjustment pot and electrical wires completely removed.

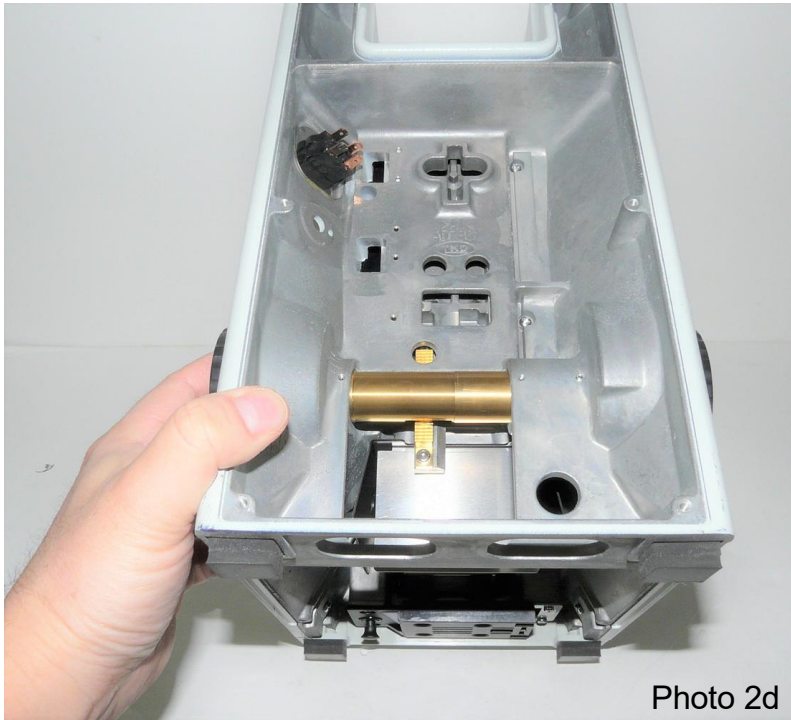


Photo 2d
Turn 90 degree and remove original bottom cover (not shown in photo 2e).

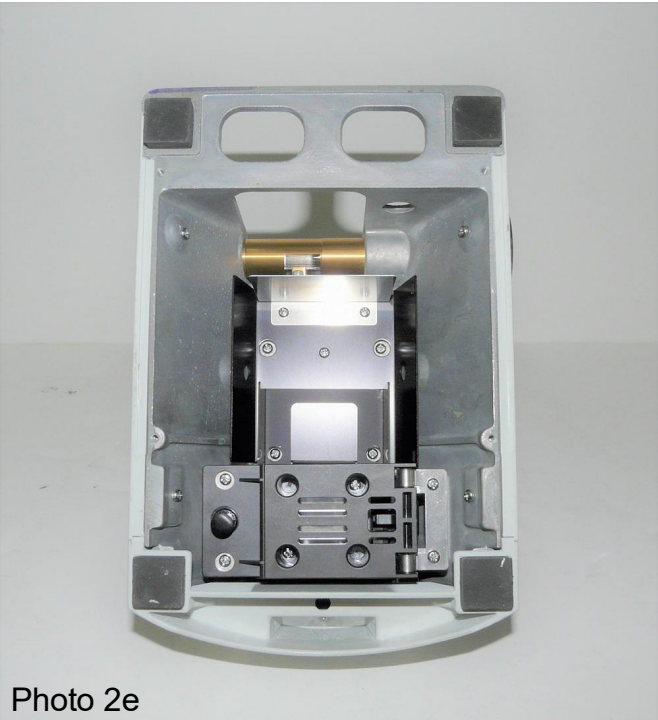


Photo 2e

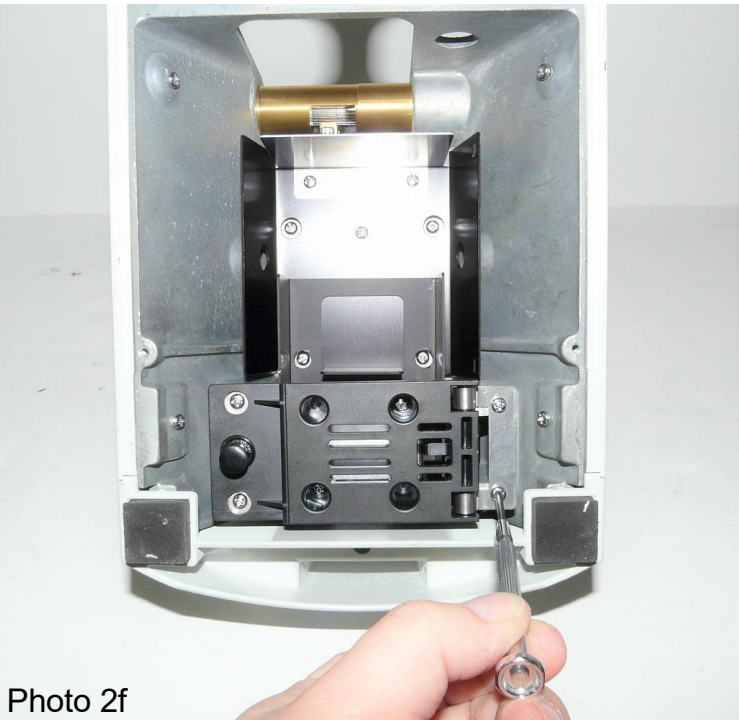


Photo 2f

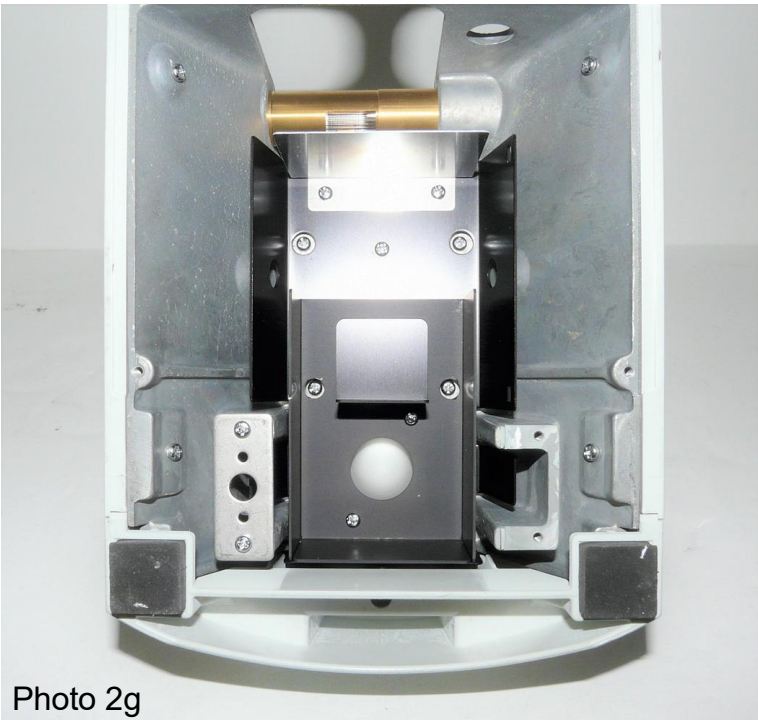
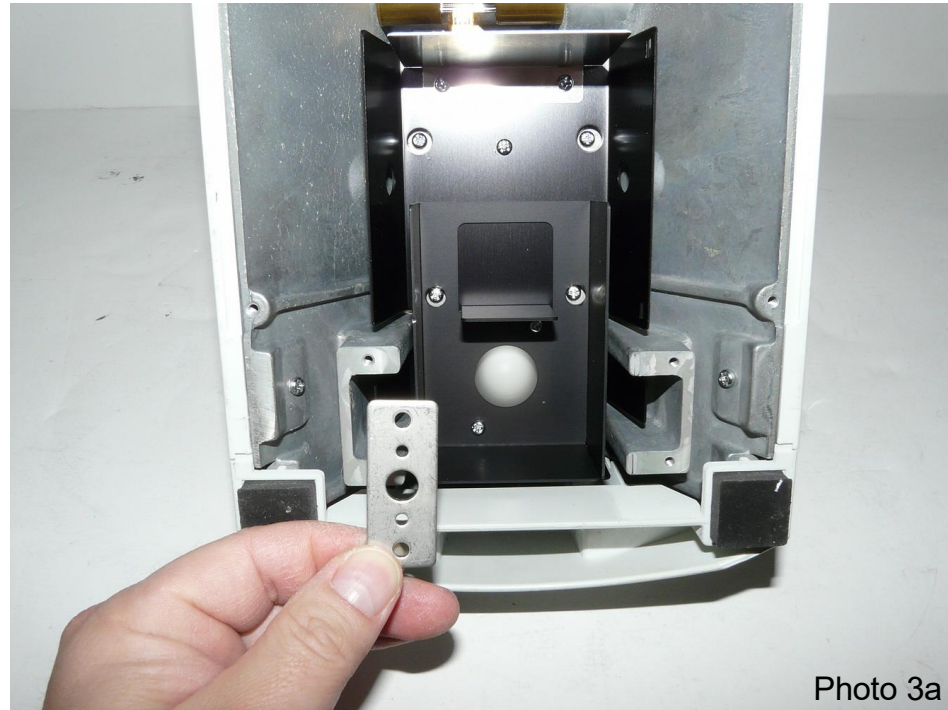


Photo 2g

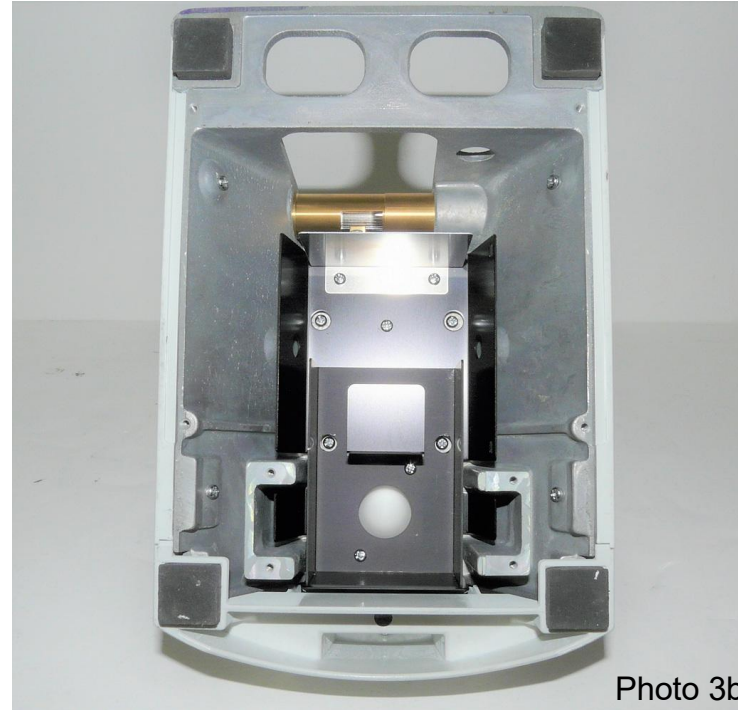
Unscrew and remove the original lamp housing from the bottom of microscope.

Be sure that the now unneeded 115/230 VAC wiring (white and black wires) cannot cause a short circuit in case AC power is connected by mistake sometime. They can be completely removed if desired.

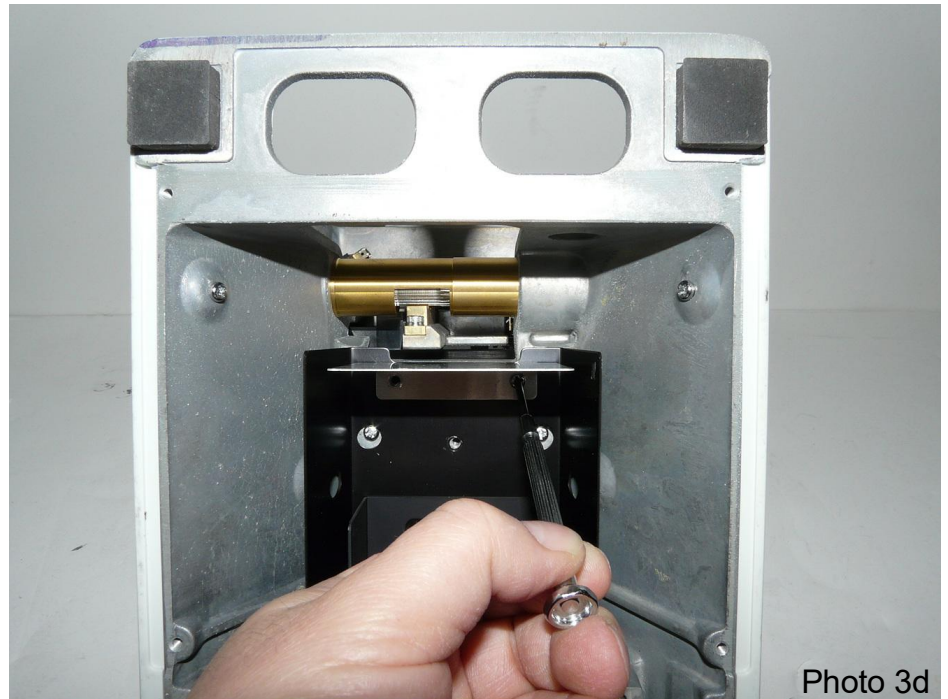
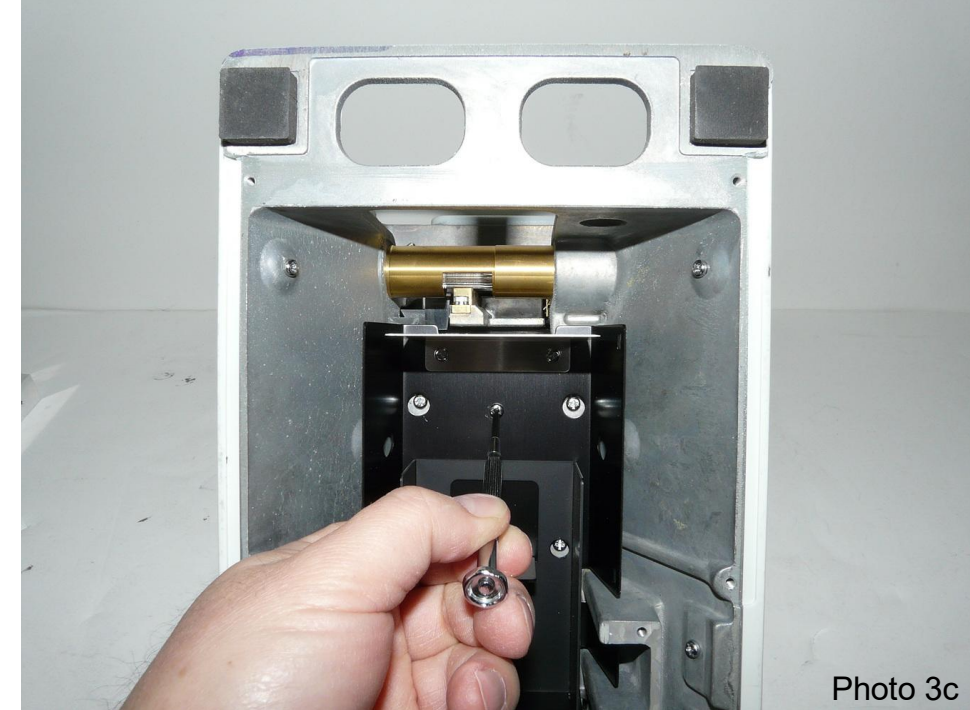
Nanodyne Replacement Illuminator for Olympus CX31 / 41 Microscope Installation Instructions - Step 3. Remove old lamp housing (continued).



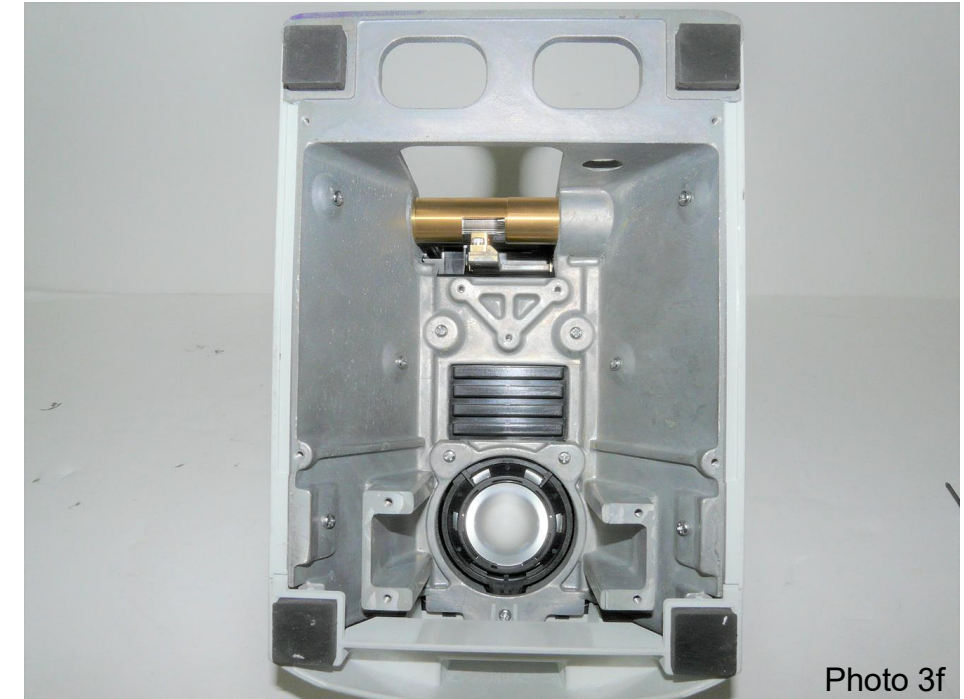
Unscrew and remove the metal bracket.



Old lamp house removed.



Unscrew and remove the black metal cover.



Unneeded old parts completely removed.

Nanodyne Replacement Illuminator for Olympus CX31 / 41 Microscope Installation Instructions - Step 4. Remove unneeded AC power receptacle. Install DC power plate.

B

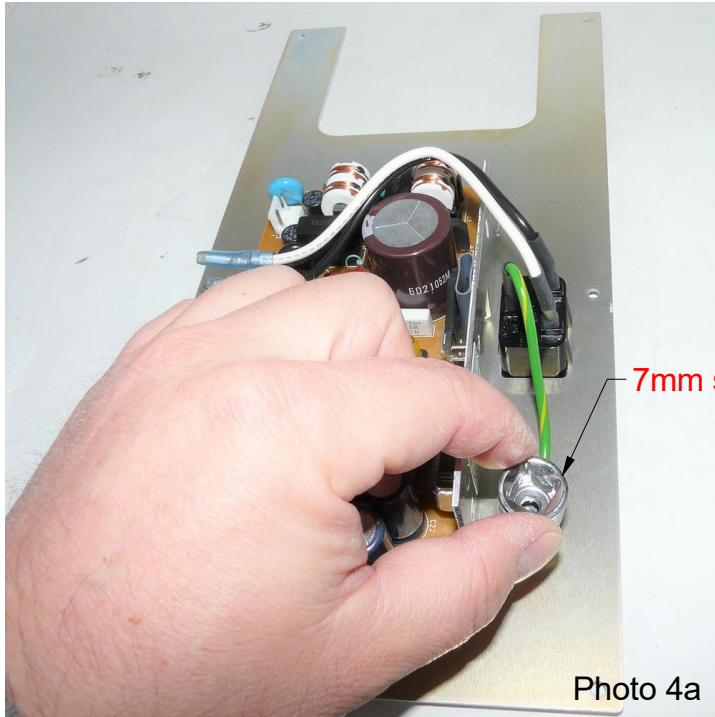


Photo 4a

Unscrew the ground cable from back cover using 7mm hex socket or wrench.

3

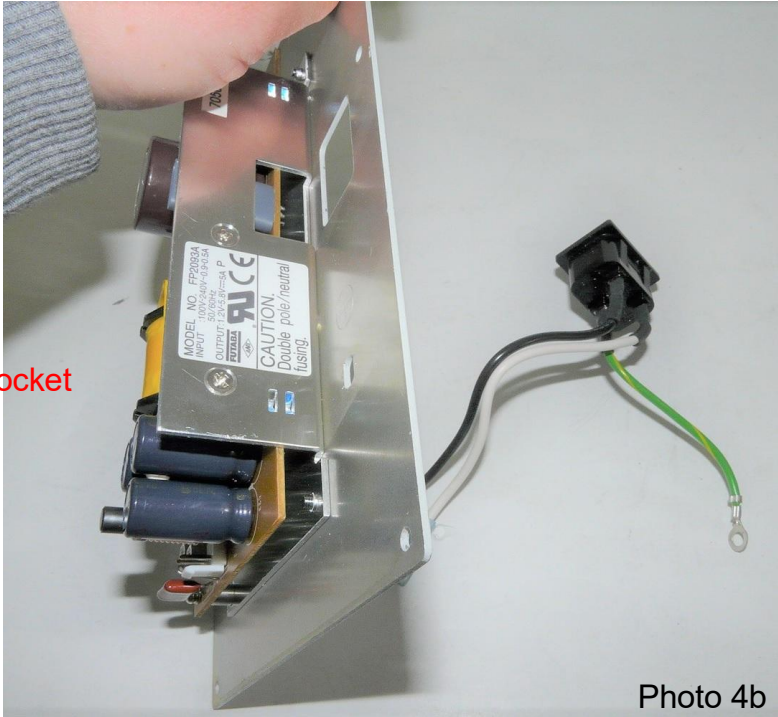


Photo 4b

Remove the AC power receptacle by pushing the plastic clip.

2



Photo 4c

Insert the DC power plate middle piece, then outside piece and power cable assembly.

1



Photo 4d

A



Photo 4e

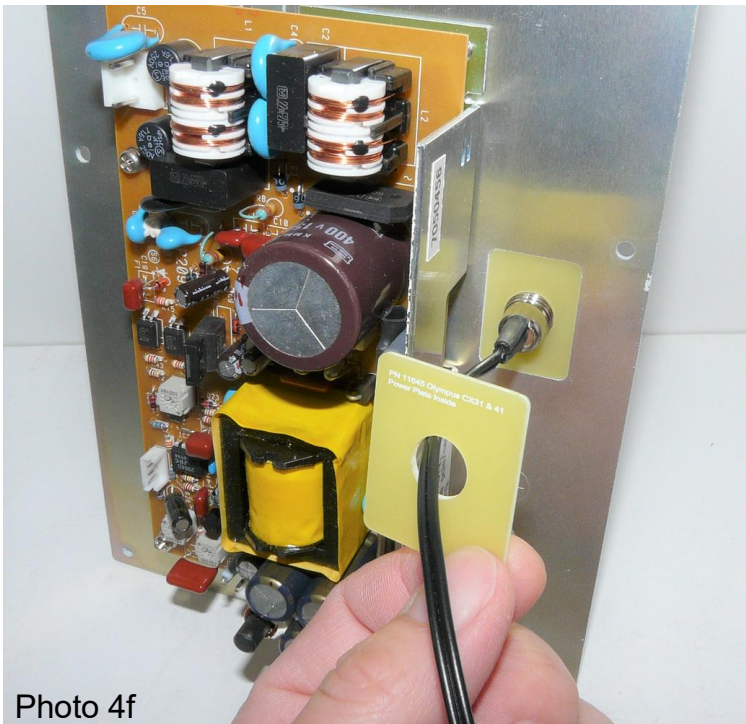


Photo 4f

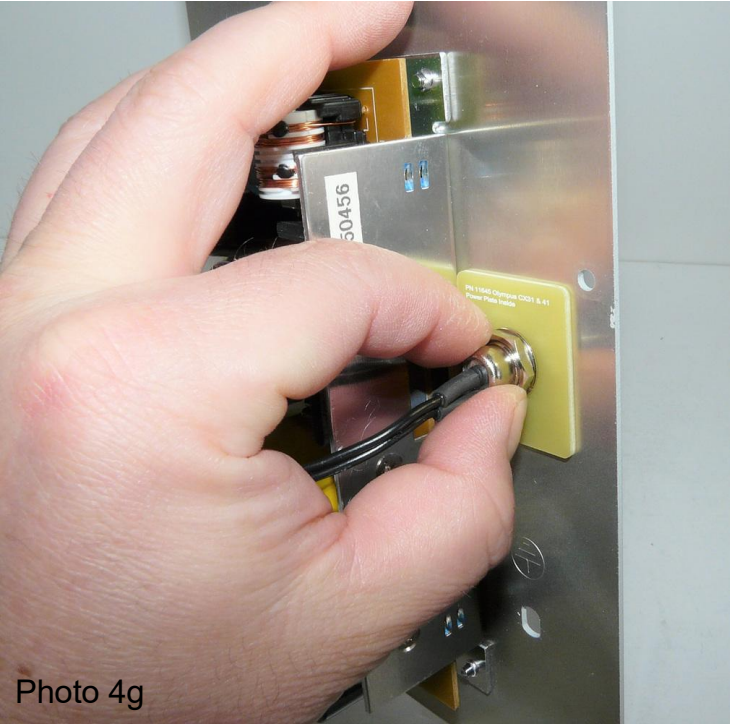
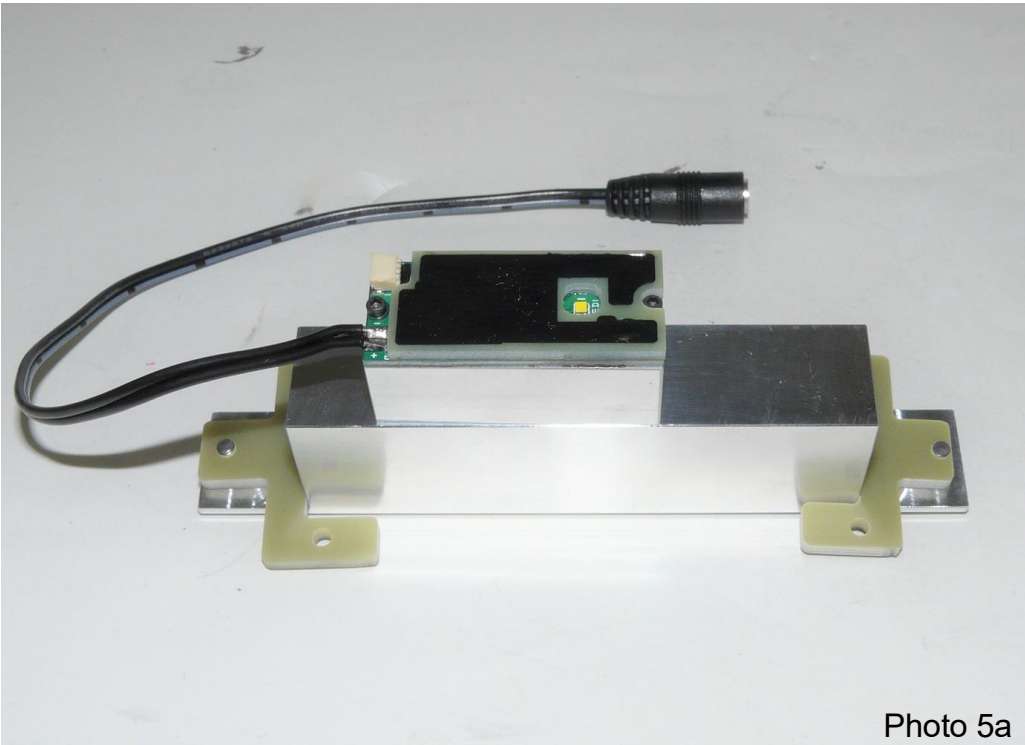


Photo 4g

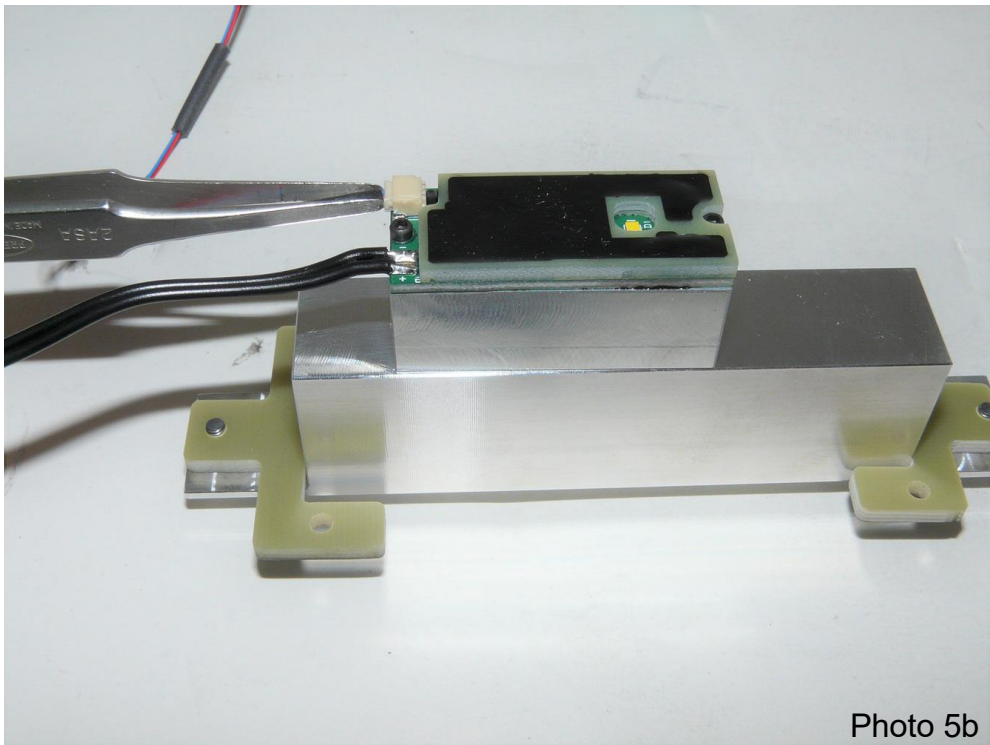


Photo 4h

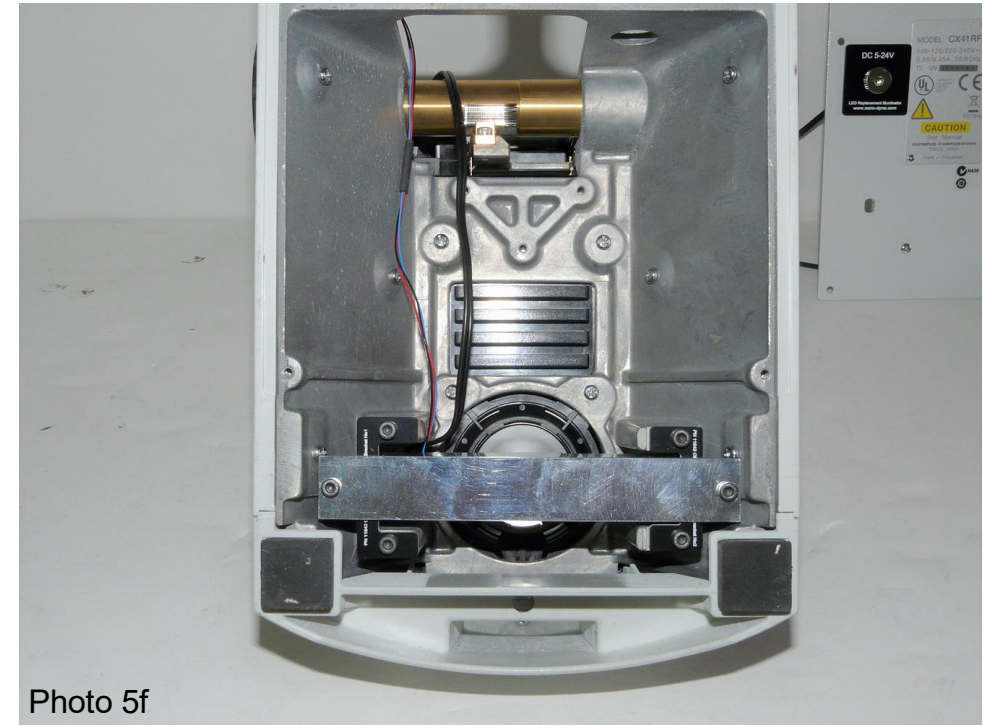
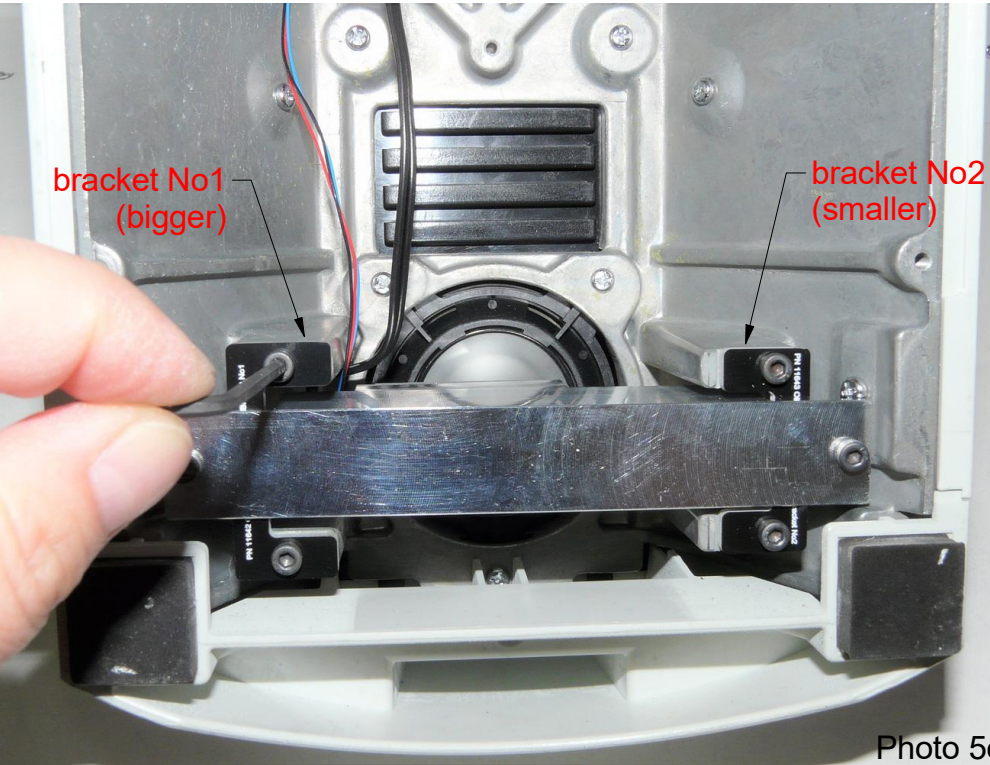
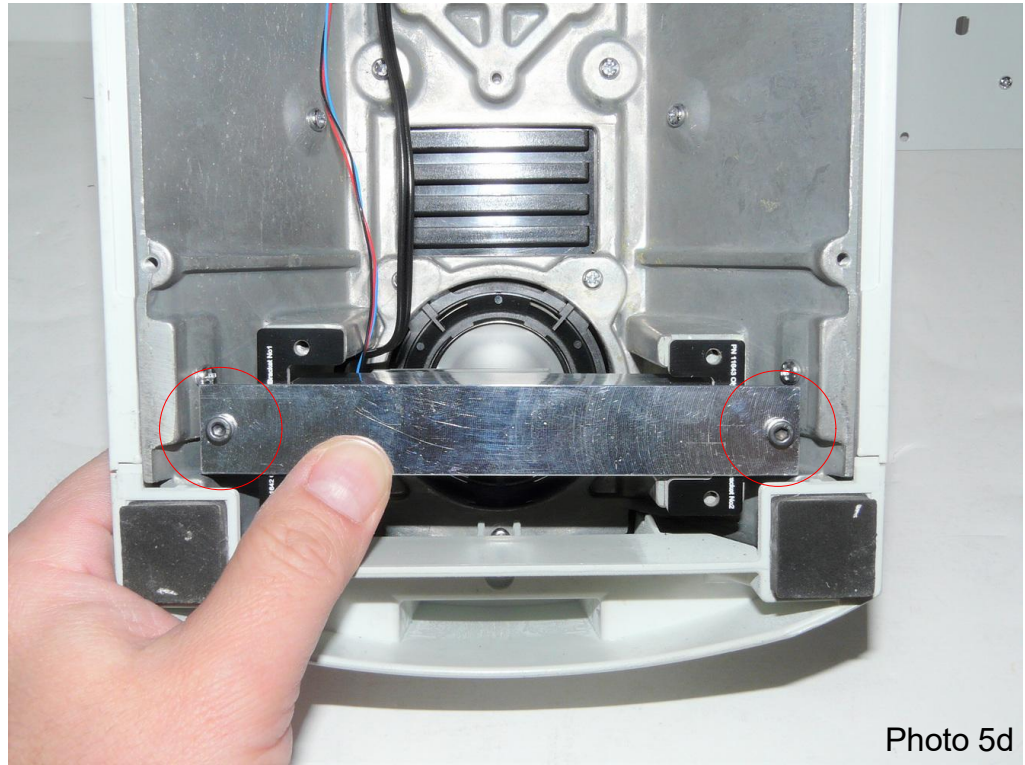
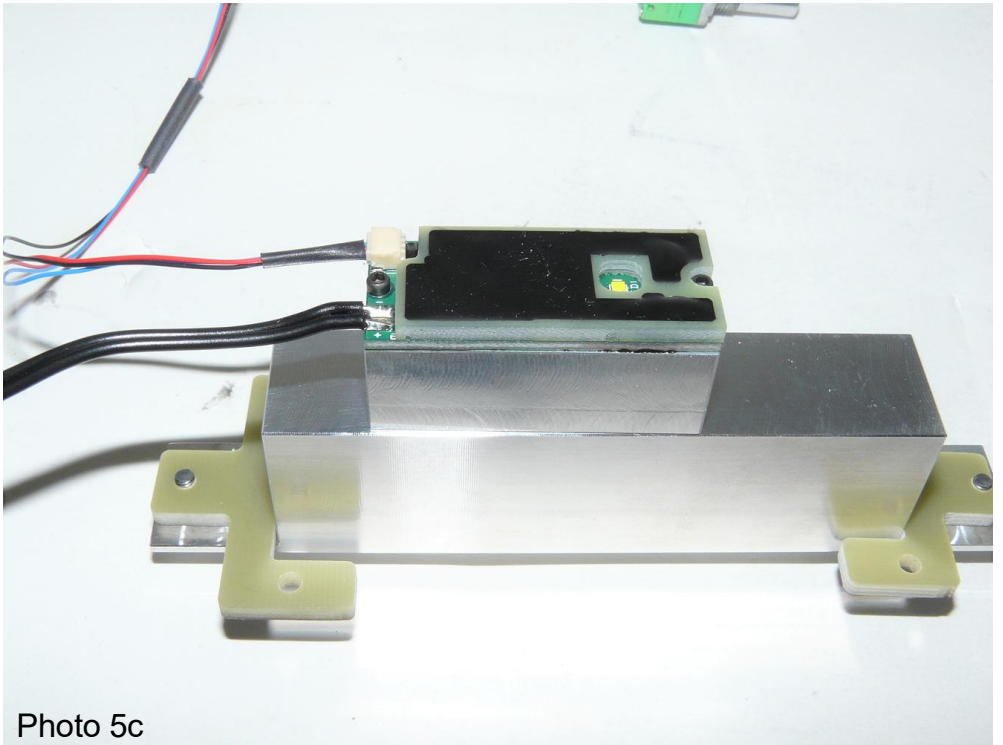
Attach DC power plate inside piece (photo 4f) and tighten the nut (photo 4g) to secure power plates. The new illuminator system runs on its own DC power supply, so the AC connections are no longer needed. In addition, removing the AC power lines is a safety measure to avoid electrical shock if the microscope was plugged in by mistake while being maintained.



Pre-assembled CX31 / 41 illuminator assembly.



Connect the pot cable to the white connector on the illuminator circuit as shown in photo 5b. Note that the connector is keyed to fit only one way. If it doesn't fit, do not force it but turn 180 degree.



Position the illuminator assembly as shown in the photo 5d, and secure it with the four M3 screws by using hex key provided. Make sure if pre-assembled two M3 screws (red circle) are tight. Note that the brackets fit only one way as the bracket No1 is bigger than No2 (shown in photo 5e). Route pot cable and power cable accordingly as shown in the photo 5f.

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Nanodyne Replacement Illuminator for Olympus CX31 / 41 Microscope Installation Instructions - Step 6. Attach new pot cable assembly and secure cables.



Install the new adjustment pot as shown in photo 6a, securing it in place with the original nut and washer (saved from the original pot) as shown in photo 6b. Getting the nut started may be rather difficult. Tilting the microscope so that the shaft of the pot points straight up will help, as gravity is then helping rather than fighting you. After getting the nut started on the threads of the pot, tighten it snugly by hand with the 11mm socket as shown in photo 6c.



Re-install the pot knob (saved from the original pot) as shown in photo 6d, securing it in place using Phillips screwdriver as shown in photo 6e. Secure the cables with the 3M VHB tape provided (red circle in photos 6f and 6g), so the cables cannot get caught in the rack and pinion mechanism, or hang out the bottom.

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Nanodyne Replacement Illuminator for Olympus CX31 / 41 Microscope Installation Instructions - Step 7. Re-install back and bottom covers and connect new power supply.

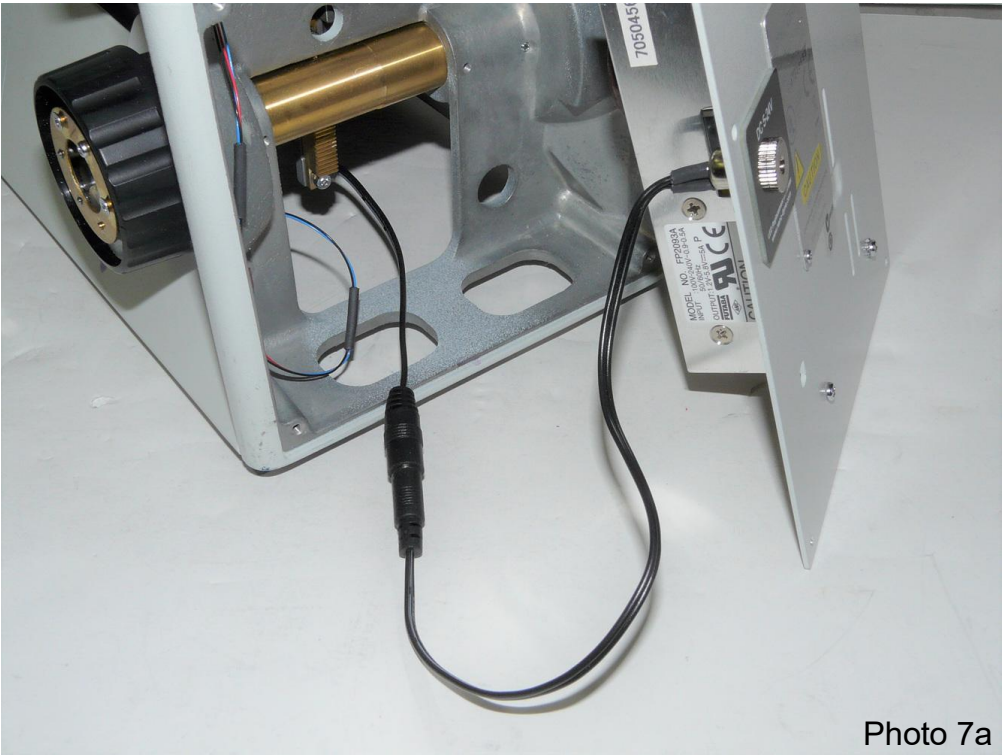


Photo 7a



Photo 7b



Photo 7c

Connect power cable (photo 7a), then replace the back cover on the microscope (photo 7b). The original bottom cover is integral with the old illuminator, and will not fit with the new illuminator installed without extensive modification. Install Nanodyne bottom cover provided (photo 7c).

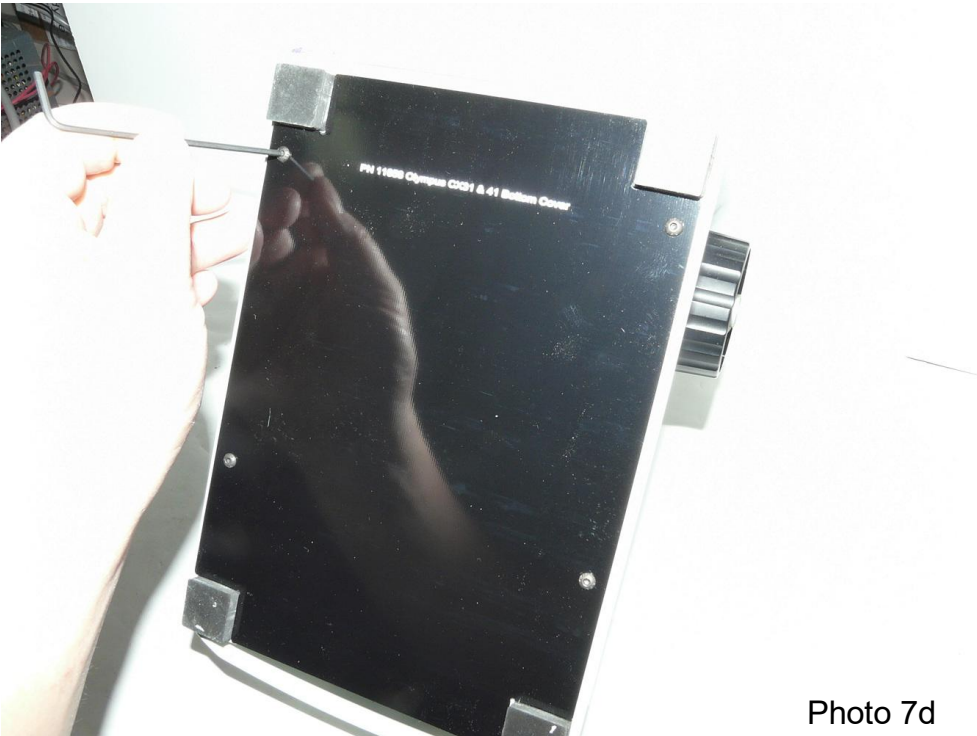


Photo 7d



Photo 7e



Photo 7f

Secure the bottom cover using M3 button head cap screws provided (photo 7d). Plug the power supply cable into the DC power plate (photos 7e and 7f). Now it is ready to operate.