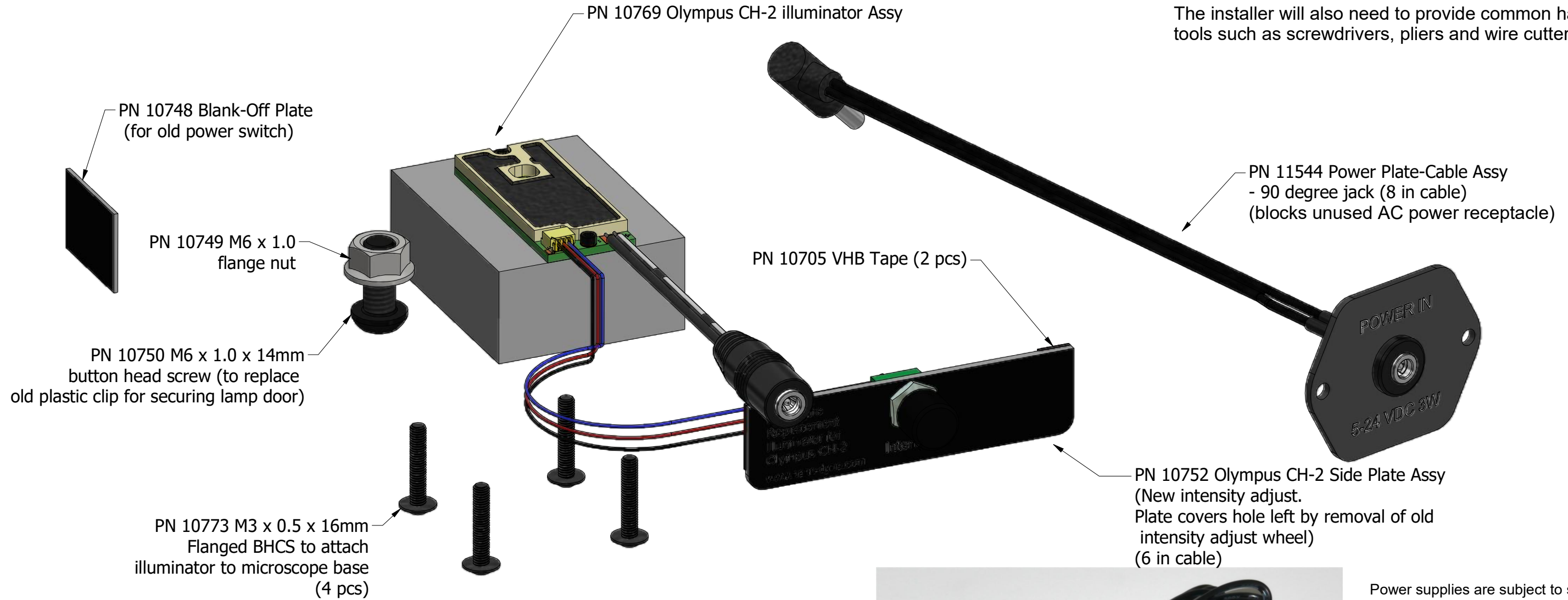


Nanodyne Replacement Illuminator for Olympus CH-2 Microscope Installation Instructions: Included Items

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



Additional Items Included But Not Shown:

- PN 10337 Hex Key 2mm (for 3mm (M3) screws)
- PN 10747 Hex Key 3mm (for 4mm screws holding microscope base in place)
- PN 10460 Hex Key 4mm (for 6mm (M6) screw)

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 Fixed Blade US Input/USB Output and PN 10734 Cable Assy 1.35mm ID x 3.5mm OD RA plug to USB A, 6 foot.

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 CH-2 Microscope Installation Instructions - Step 1. Remove microscope base.

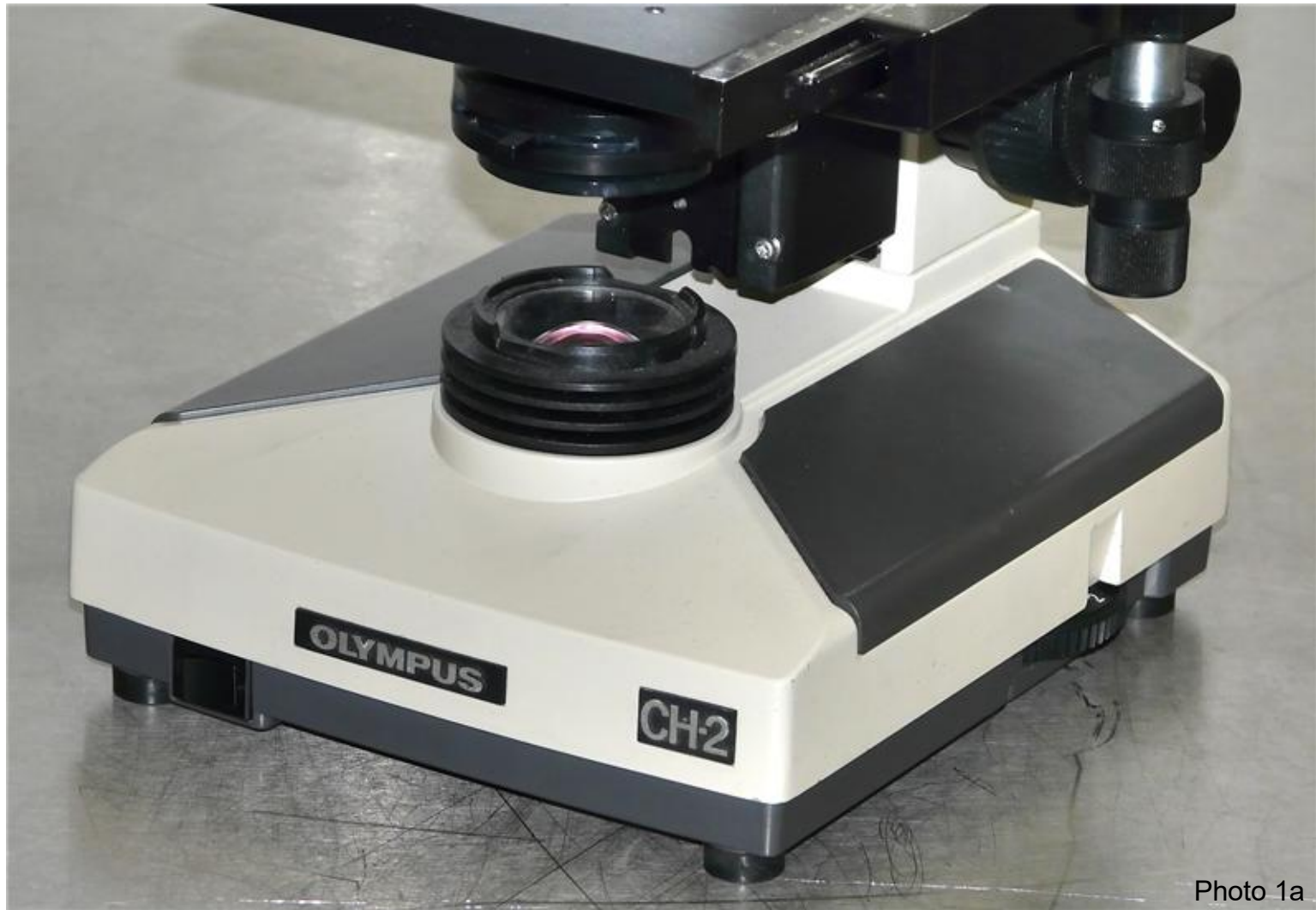


Photo 1a

The photo 1a shows the microscope this illuminator system was designed for.

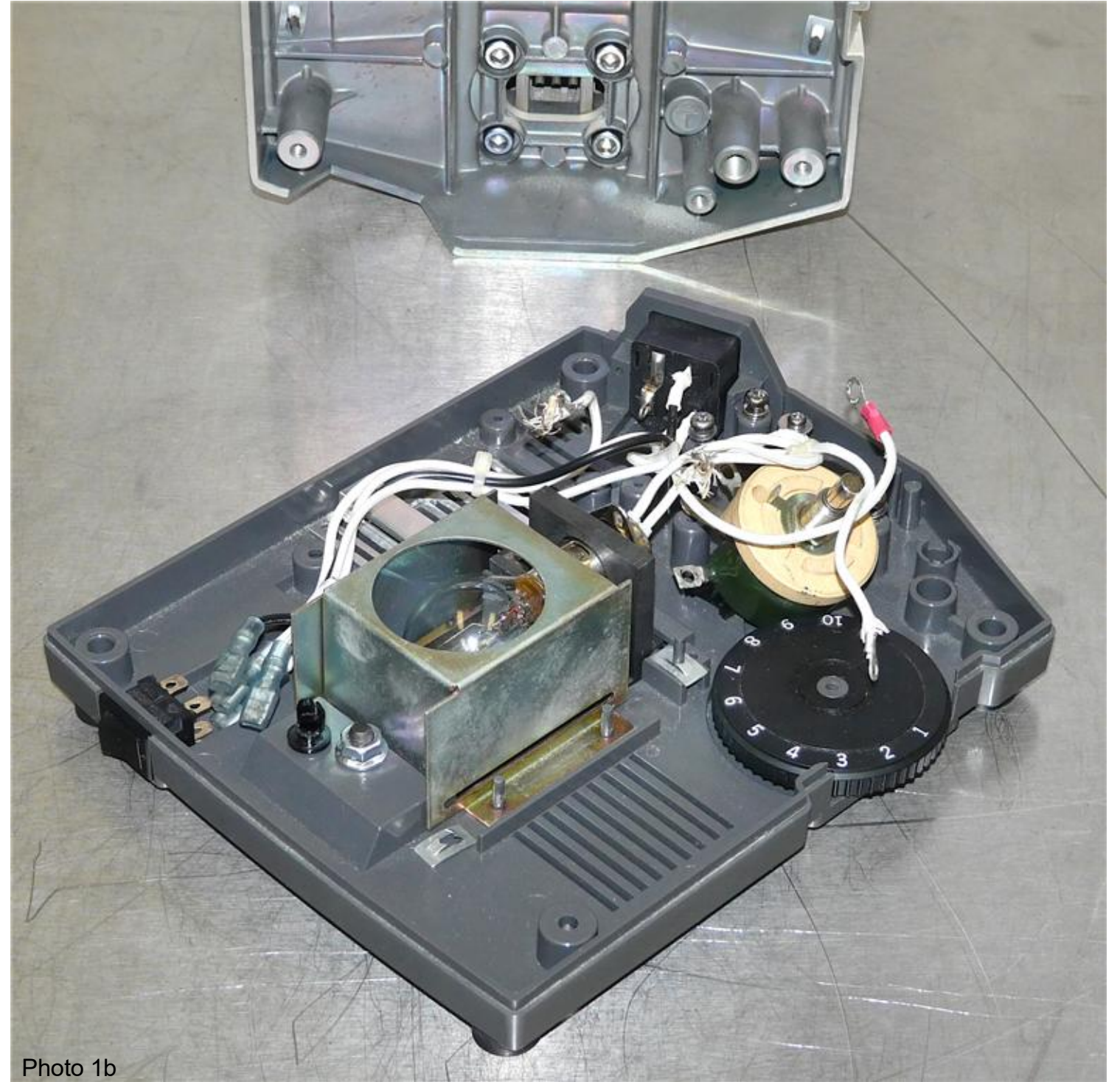


Photo 1b

Tip the microscope onto its back and remove the screws holding the base using the 3 mm hex key provided. The unit we obtained for these photos had already been partially disassembled, as shown in the photo 1b.

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Nanodyne Replacement Illuminator for Olympus CH-2 Microscope Installation Instructions - Step 2. Remove old lamp, housing and other unneeded components.

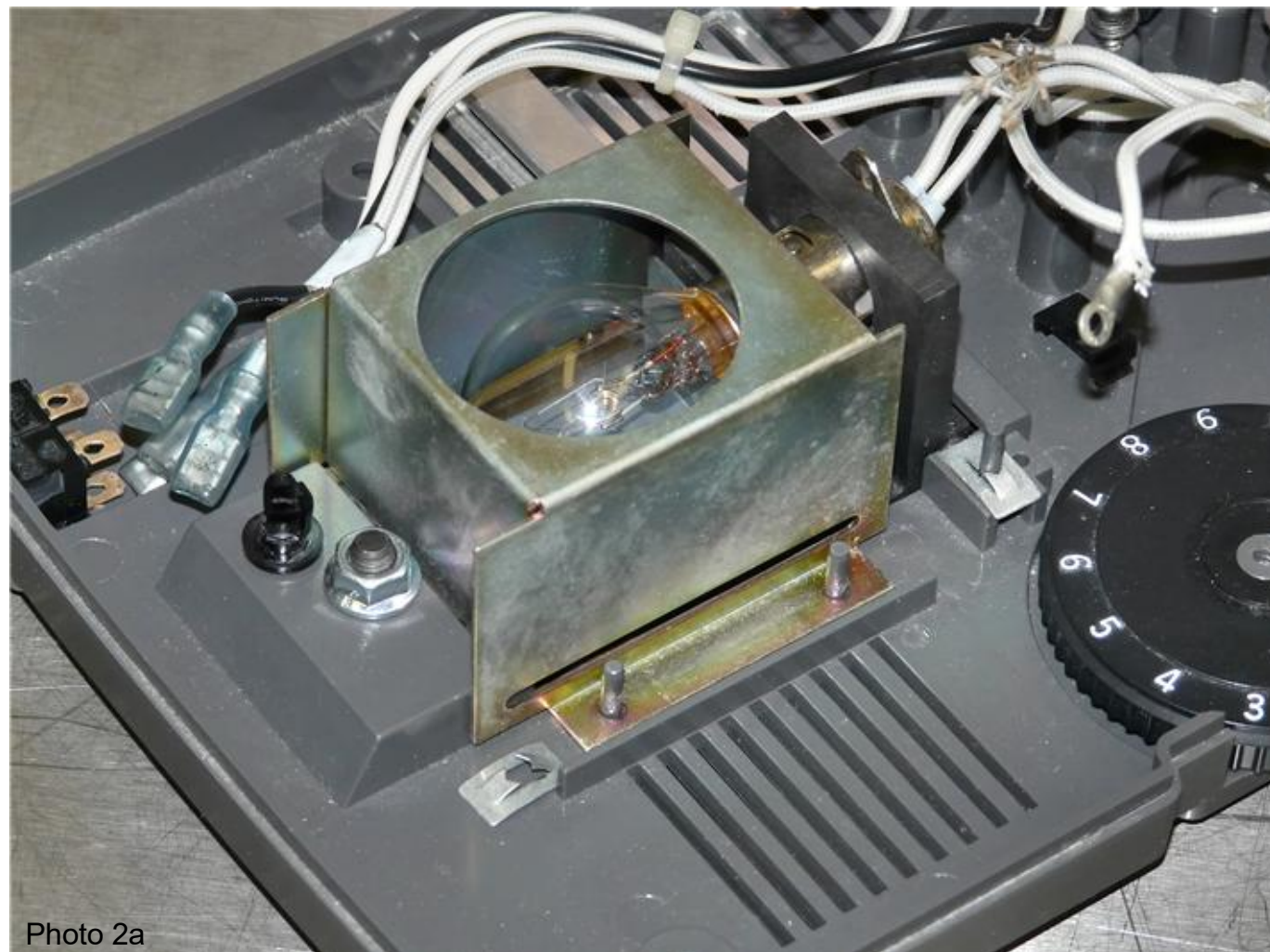


Photo 2a

Remove unneeded components including the power switch, all electrical wiring, the old rheostat and adjustment wheel, the heat shields around and under the bulb, the bulb, and its socket. Be careful when removing the bulb from the socket. Sometimes the bulb can stick in the socket requiring excessive force to remove it. Wearing heavy gloves is advised to protect your fingers in case the bulb breaks.

Also remove the black plastic clip that holds the trap door for bulb changes in place. The one in the photo above had 2 of its 4 prongs broken off and it no longer worked. Replace it with the 6mm nut and screw using the 4mm hex key provided to tighten the screw. The nut will need to be held using a wrench or pliers (not provided), unless you have very strong fingers.

The power switch is held in place with plastic springs on each side that need to be compressed with a thin putty knife or similar tool while pushing it out from the inside.

The most difficult part is removing the 4 metal clips that hold the heat shield in place. See photo 2a - one clip is next to the plastic post that it was removed from. Bending the part of the clip holding it to the post with a small needle nose pliers or other tool will allow the clip to be removed without breaking the post, but the posts are no longer needed so breaking them is not a problem.

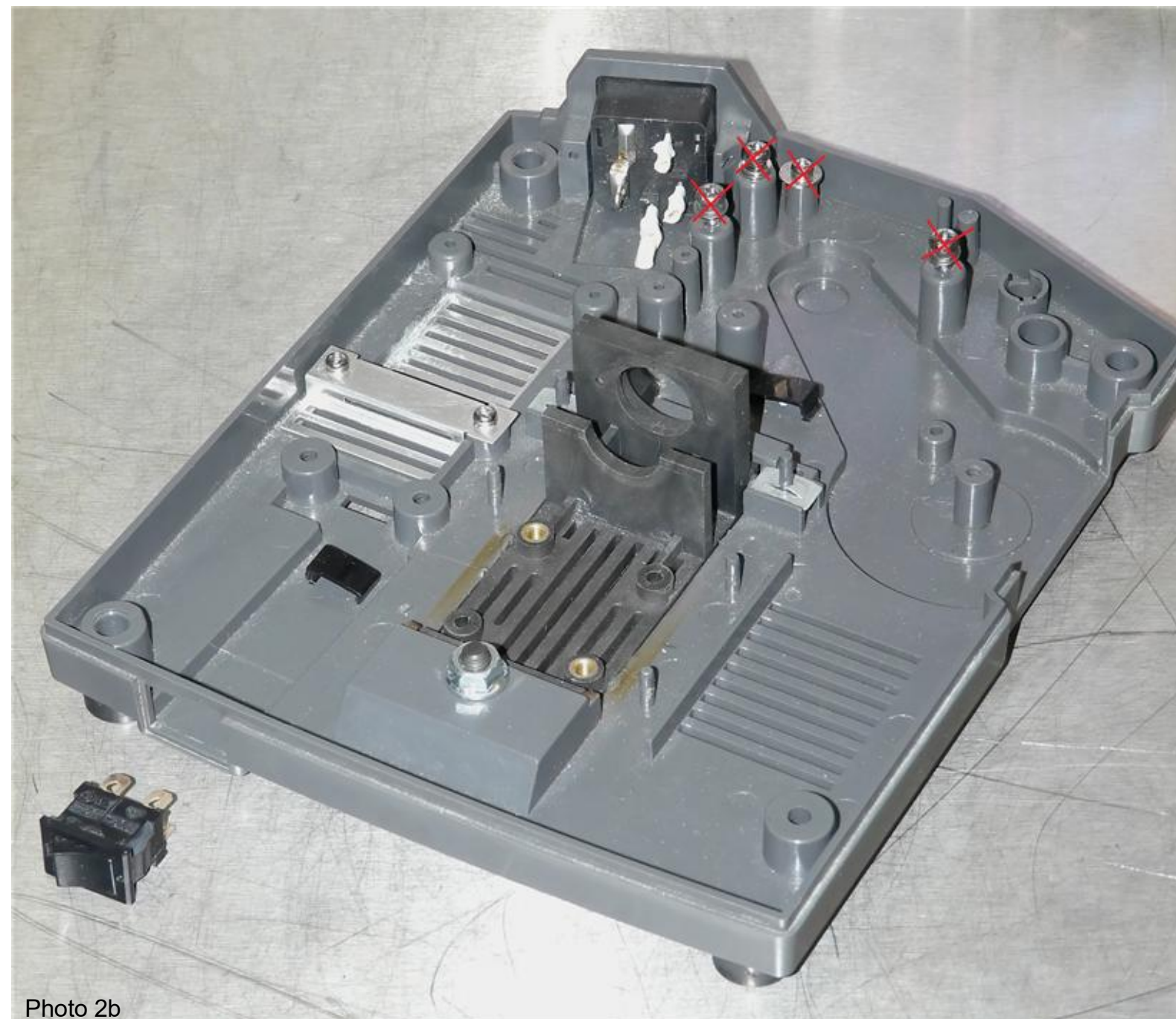


Photo 2b

After removing unneeded components, the microscope base should look like the photo 2b. Note that only the 4 clips holding the heat shield have been removed. **Do not remove the other two clips which hold the hinge for the trap door.** The 4 screws in the photo above with red X's are not needed and there is no reason to replace them after removing the rheostat (the large wire wound ceramic part in the photo on the previous sheet next to the black adjustment wheel).

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Nanodyne Replacement Illuminator for Olympus CH-2 Microscope Installation Instructions - Step 3. Cover old power switch hole.

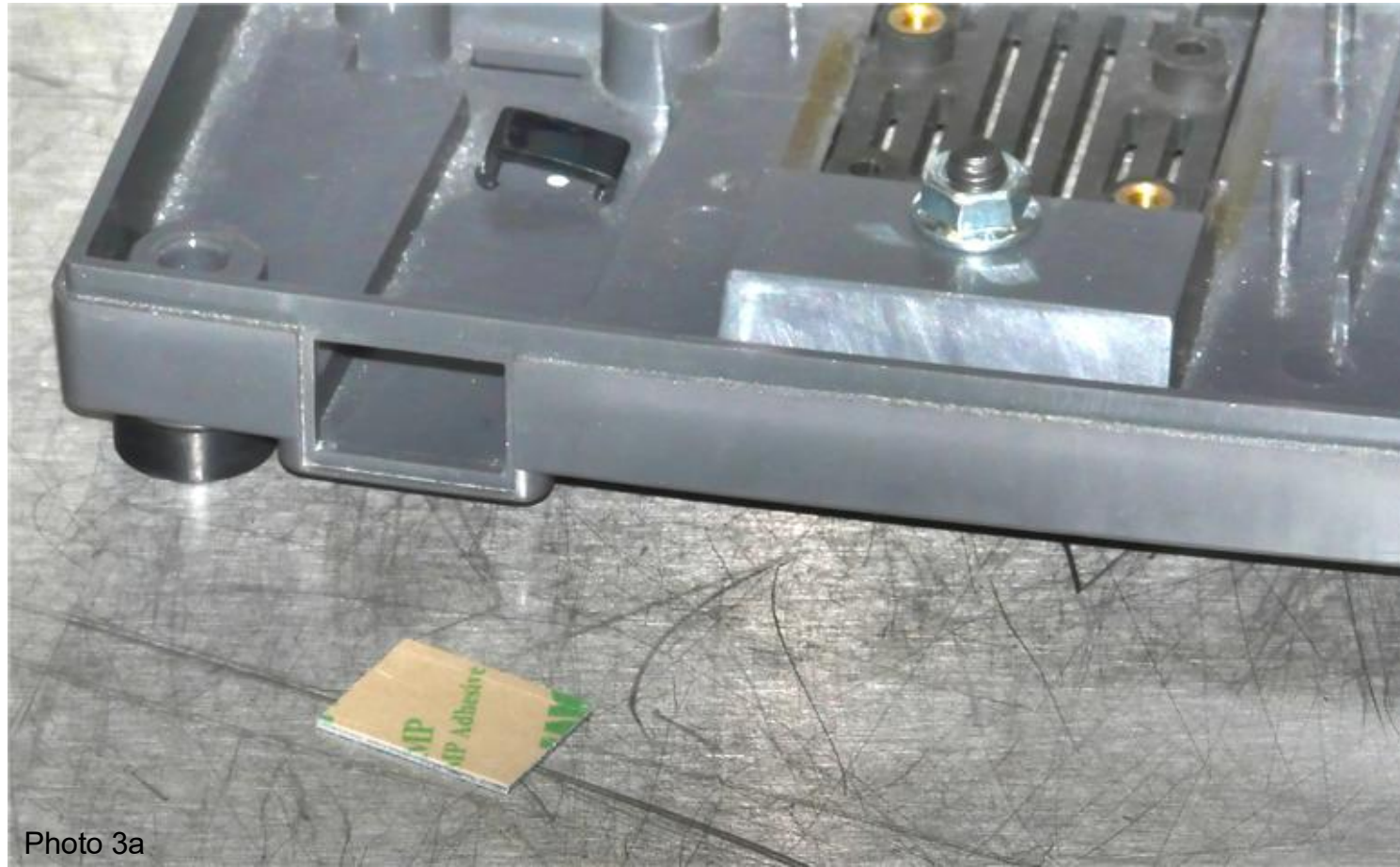


Photo 3a

Power switch blank-off plate next to empty hole where power switch was removed.

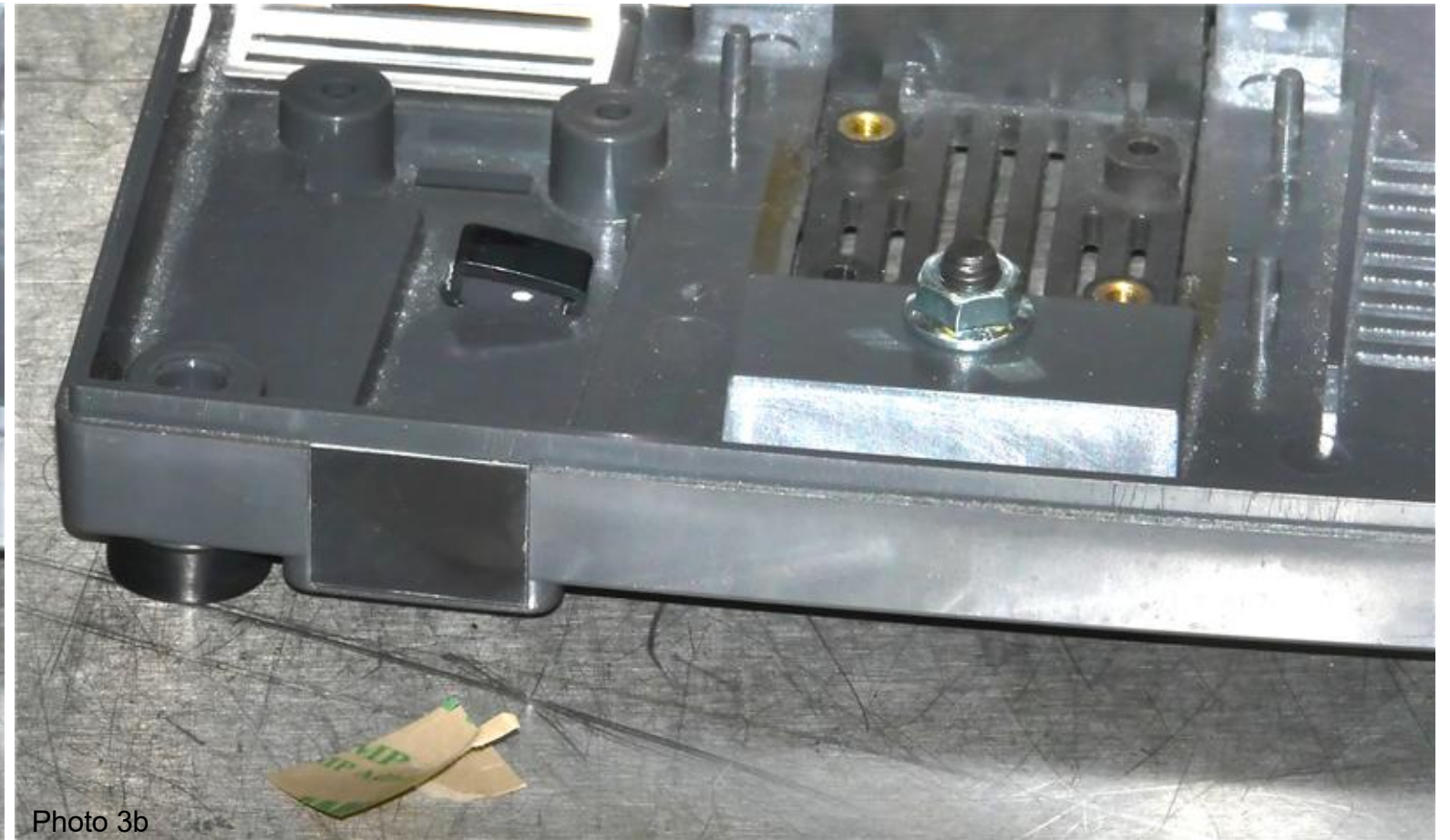


Photo 3b

Release film removed and blank-off plate installed in hole left from removed power switch.

Cover the old power switch hole with the blank-off plate. Remove the release film to expose the adhesive, and press the adhesive side into the opening as shown. Press it firmly in place to be sure it is secure. Also be sure the top edge is aligned with the lip on the base as shown in the photo 3b and does not protrude above the lip on the base, or the plate could get dislodged when the base is re-attached to the microscope.

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Nanodyne Replacement Illuminator for Olympus CH-2 Microscope Installation Instructions - Step 4. Install side plate.

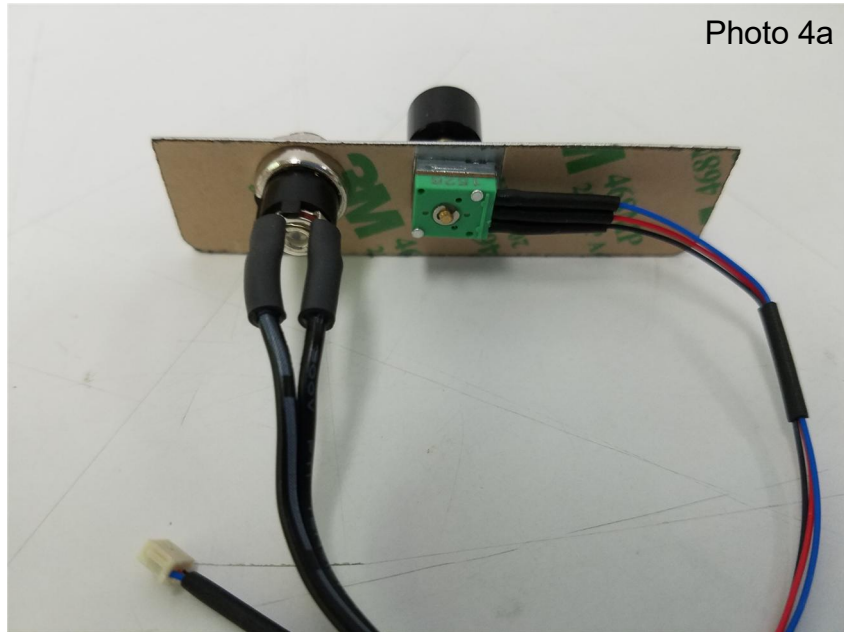


Photo 4a



Photo 4b

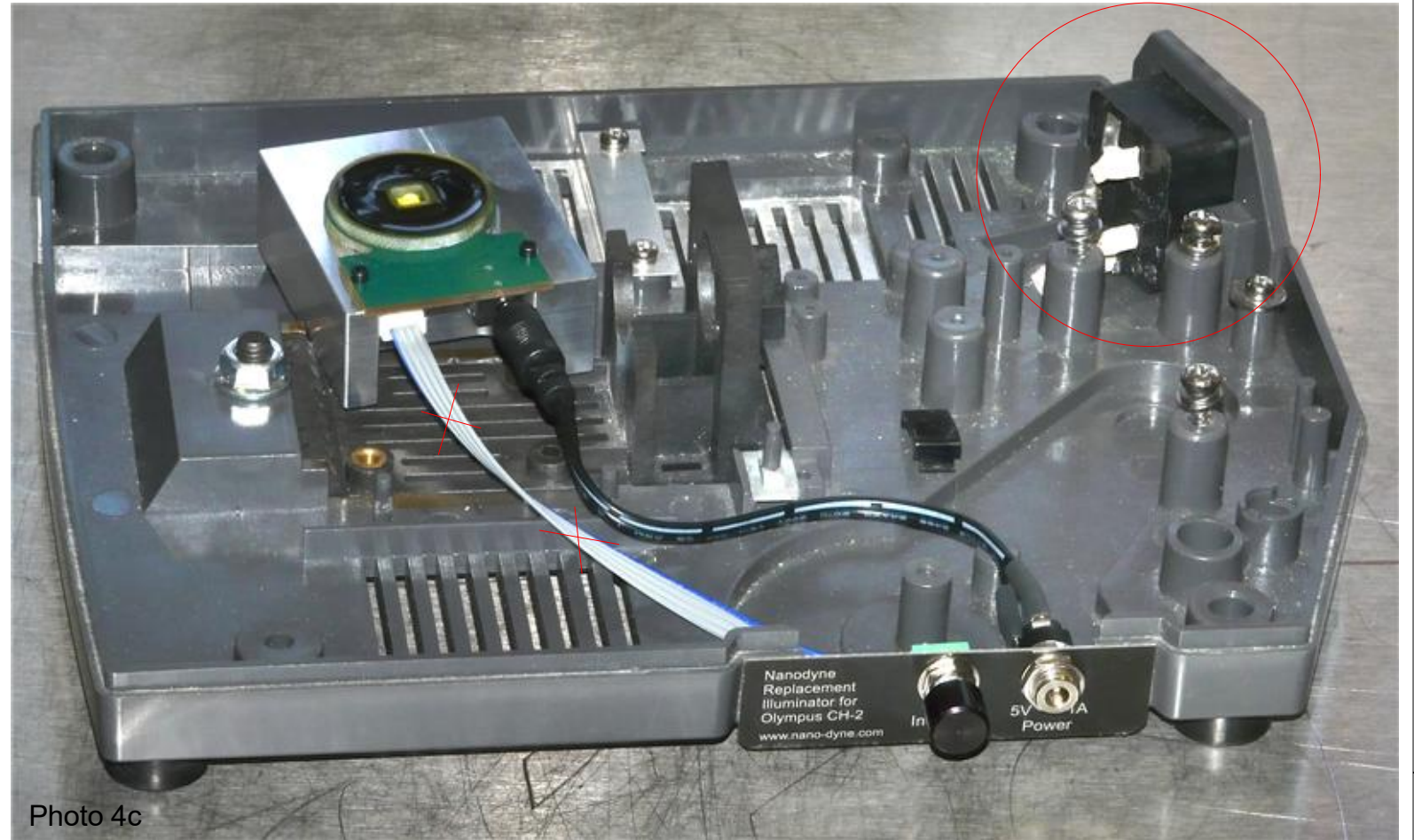


Photo 4c

Note: The cables shown in photos 4c and 4d are out dated (marked with red X), and new Cable is shown in photos in 4a and 4b. PN 11544 Olympus CH-2 Power Plate-Cable Assy replaces now-obsolete AC power receptacle (red circle).



Photo 4d

A Remove the release film from the back surface of the side plate assembly as shown in photo 4a. (the rough edges are adhesive residue from the laser cutting of the panel and do not effect the adhesion of the part to the microscope)

Press the side plate firmly into place against the recess in the microscope base as shown in the photos 4c and 4d. Be careful to align the top edge of the plate with the lip on the base as shown in the photos.

If the cables on the side plate assembly are not already connected to the connectors under the circuit board of the illuminator assembly (green color in photos 4b and 4c), do that before continuing to step 5.

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Nanodyne Replacement Illuminator for Olympus CH-2 Microscope Installation Instructions - Step 5. Attach Nanodyne illuminator.

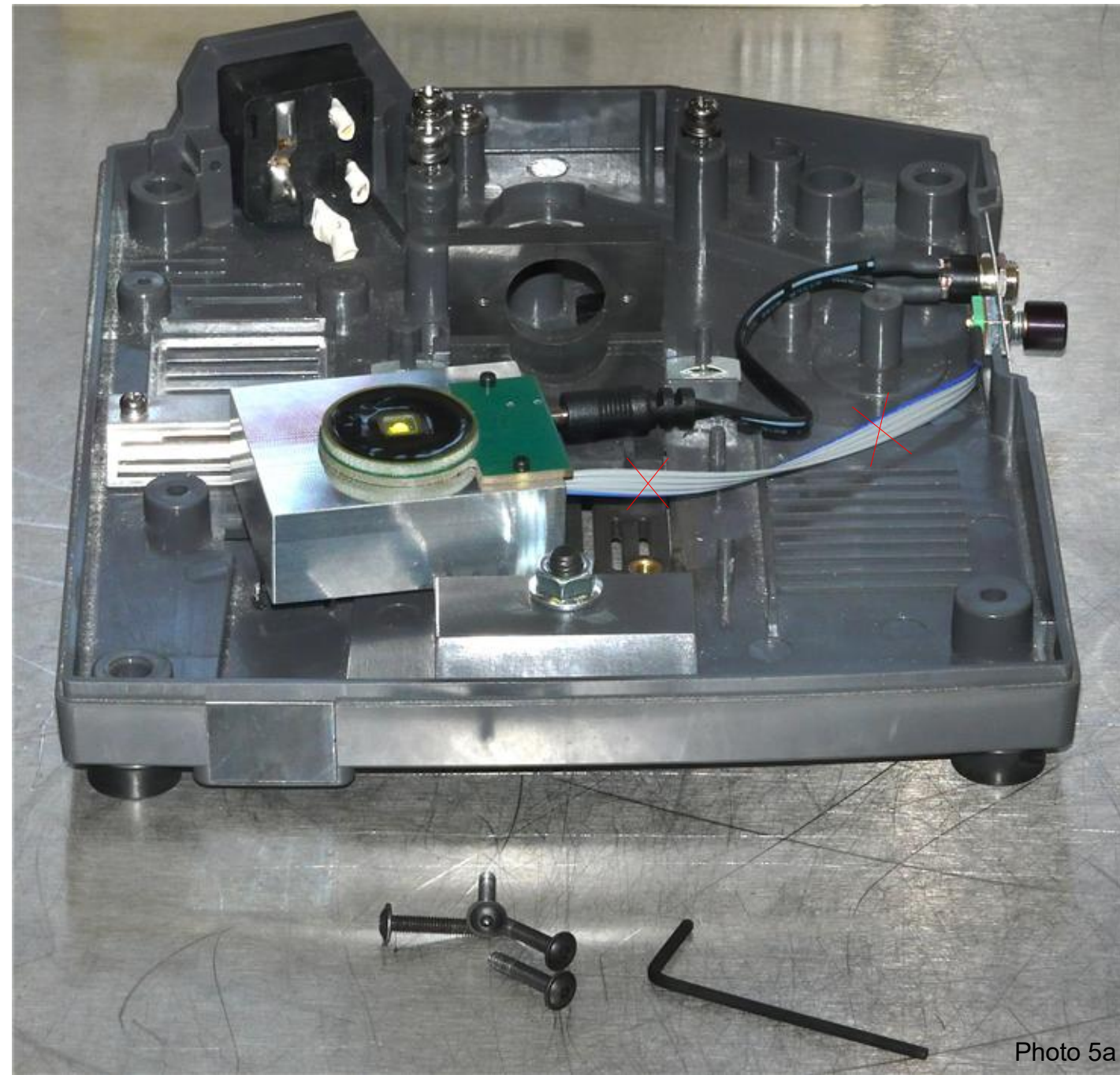


Photo 5a

Attach the illuminator assembly to the base of the microscope.

The heat sink/base of the illuminator assembly (the aluminum block) is attached to the trap door in the microscope base using the 4 screws in the photo 5a (PN 10773 shown on sheet 1). The photo 5b shows the screws being inserted through the trap door and into the aluminum block (hidden by the trap door). Use the 2mm hex key provided to tighten the screws. The photo 5c shows the completion of step 5.



Photo 5b

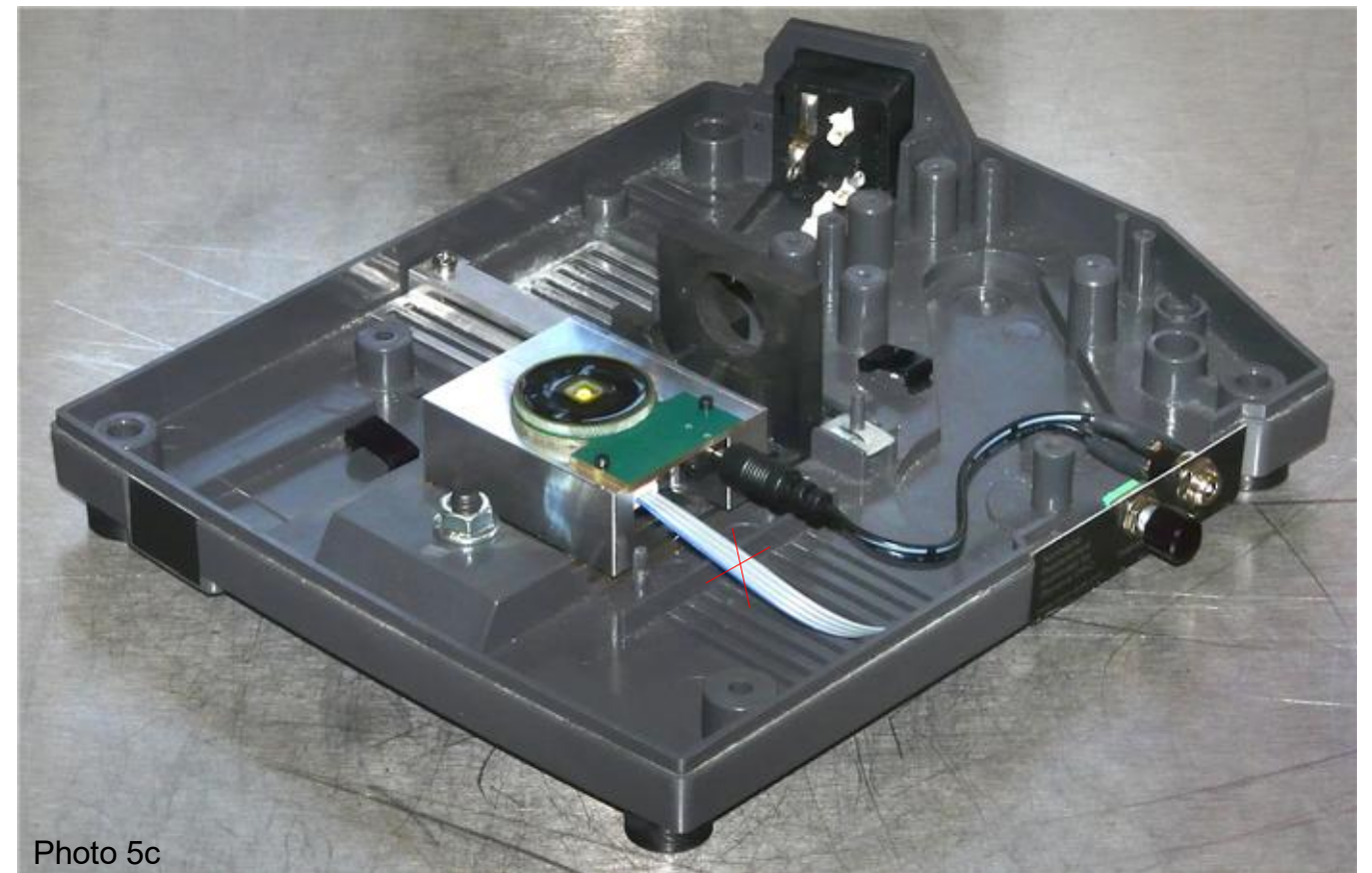


Photo 5c

Note: The cables shown in the photos are out dated (marked with red X), and new Cable is shown in photos in 4a and 4b at step 4.

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Nanodyne Replacement Illuminator for Olympus CH-2 Microscope Installation Instructions - Step 6. Re-install microscope base to microscope.



Photo 6a

Re-attach the microscope base to the microscope using the original screws and the 3mm hex key provided. Note that this microscope had only three of the 4 corners drilled and tapped for base mounting screws. We do not know if this was an error or an innovative cost saving measure by Olympus.



Photo 6b

Plug in the new power supply and Step 6 completed.

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