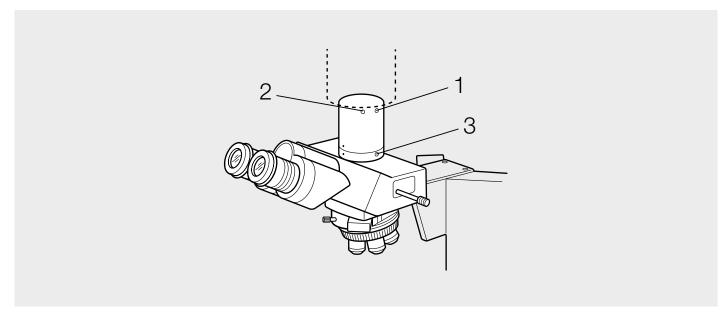# Adjusting the Parfocality of a Camera Adaptor

1. Before you begin the camera adaptor's parfocality adjustments, ensure that the microscope is properly adjusted for Köhler illumination.

2. Observing through the eyepieces, focus precisely on a sample by adjusting the eyepiece diopters:

   a. Turn the diopters to set the mark at zero.

   b. Set the microscope to the lowest magnification and rough focus on the sample.

   c. Set the microscope to the highest magnification setting and focus using the fine-focus knob until a sharp image is obtained. If your microscope has only one diopter on either the left or right eyepiece, use only one eyepiece without diopter for this fine-focus adjustment.

   d. Without touching the focus handle, change the magnification setting to the lowest setting, and then use the diopter focusing ring to obtain a sharp focus, first for the left eyepiece, and then the right eyepiece.

   e. Repeat steps c and d again to make sure that the focus for the left and right eyepieces have been adjusted for both the highest and lowest magnification settings.

3. Switch to the lowest magnifying objective lens (or lowest zoom position) without touching the focus handle of the microscope.

4. Focus the monitor image by adjusting the parfocality of the camera adaptor:

   a. Loosen the mechanical locking screw on the camera adaptor (see 1 in the image below).

   b. If the adaptor's magnification is 0.35X, 0.5X, or 0.63X, turn the parfocal adjustment screw (see 2 in the image below).

   OR If the adaptor's magnification is 1X, loosen the clamping screw (see 3 in the image below), and counterturn its two mechanical sections to adjust the optical pathway length.

   c. Firmly tighten the mechanical locking screw.

5. Loosen the straight phototube clamping screw (see 3 in the image below), rotate the camera to the desired position, and then firmly tighten the straight phototube clamping screw.