

# Zeiss Axiovert 200 (AV200) Installation Procedure

The procedure below outlines the steps necessary to install the ASI Microscope Focus Controller Drive onto the Zeiss Axiovert 200 microscope.

To perform the following steps you will need the following tools:

1.5mm, 3mm, 1/16", 5/64", and 7/64" inch hex wrenches The hex wrenches are provided by ASI.

The procedure has four parts:

1. Removing the right fine focus knob
2. Installing the baseplate.
3. Installing and aligning the motor drive assembly.
4. Installing the motor drive cover plate & fine focus knob.

## Part 1 - Removing the right Fine Focus Knob

Remove the right fine focus knob from the microscope as follows:

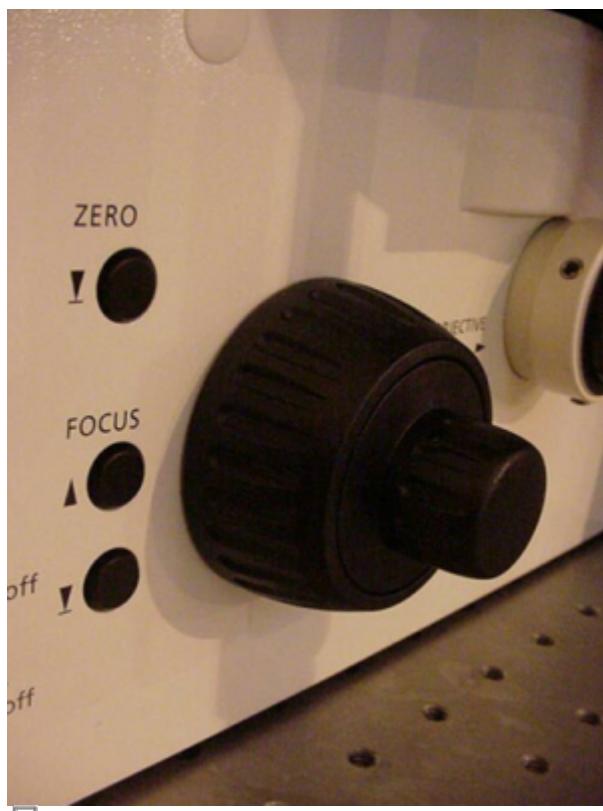


Figure 1: Use 1.5 mm Allen wrench to loosen set screw

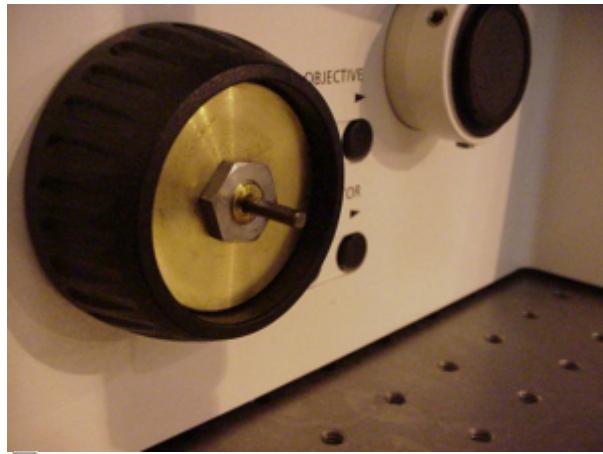


Figure 2: Pull knob straight off to expose shaft

1. Use 1.5 mm Allen wench to loosen set screw
2. Pull knob straight off to expose shaft

## Part 2 - Installing the Baseplate



Figure 4 :Uninstalled baseplate

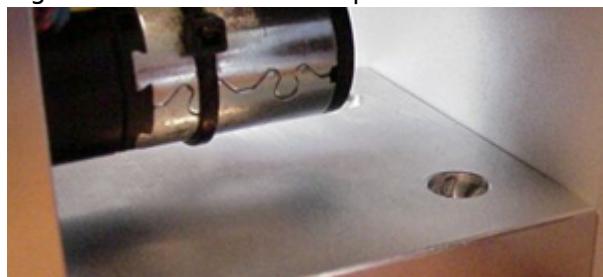


Figure 5: Installed baseplate

Locate the baseplate and position it so that the horizontal adjustment bar is on the right side of the microscope. Lift the front of the microscope up and slide the baseplate under the microscope so that the horizontal adjustment bar is centered under the right focus knob.

## Part-3 Installing & Aligning the Motor Drive



Figure 6: Loosen but do not remove adjustment screws

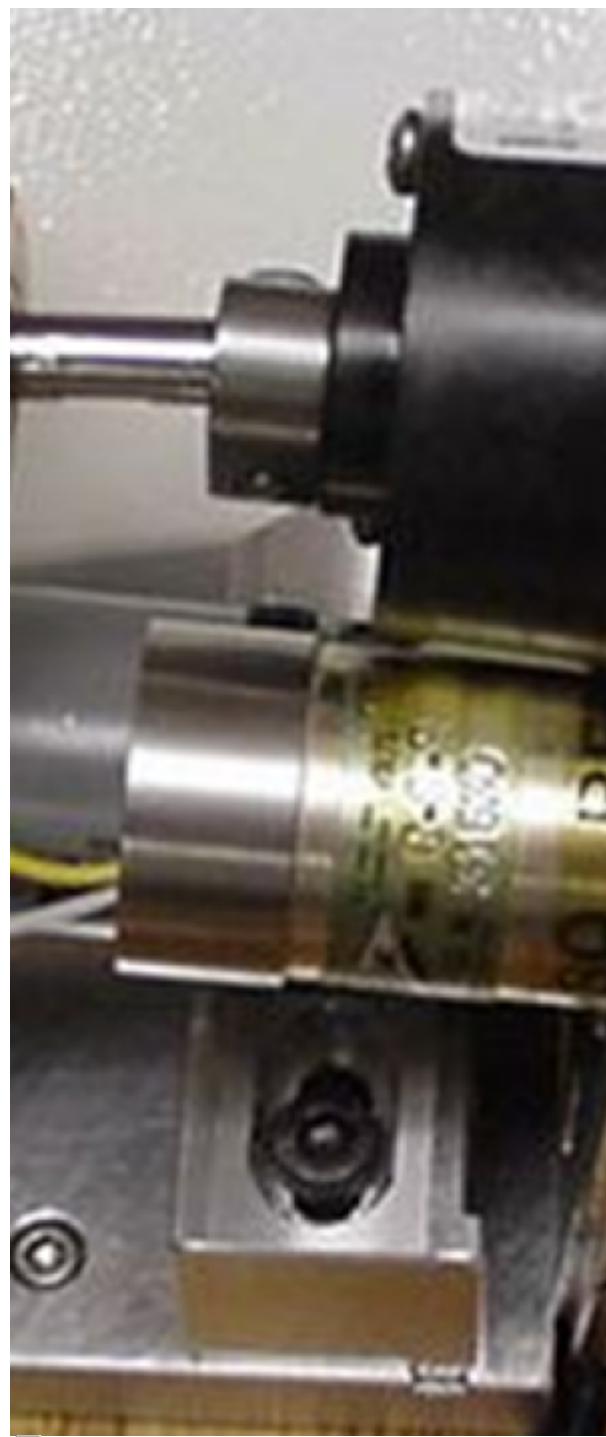


Figure 7: Slide ASI dive shaft onto microscope's fine focus shaft

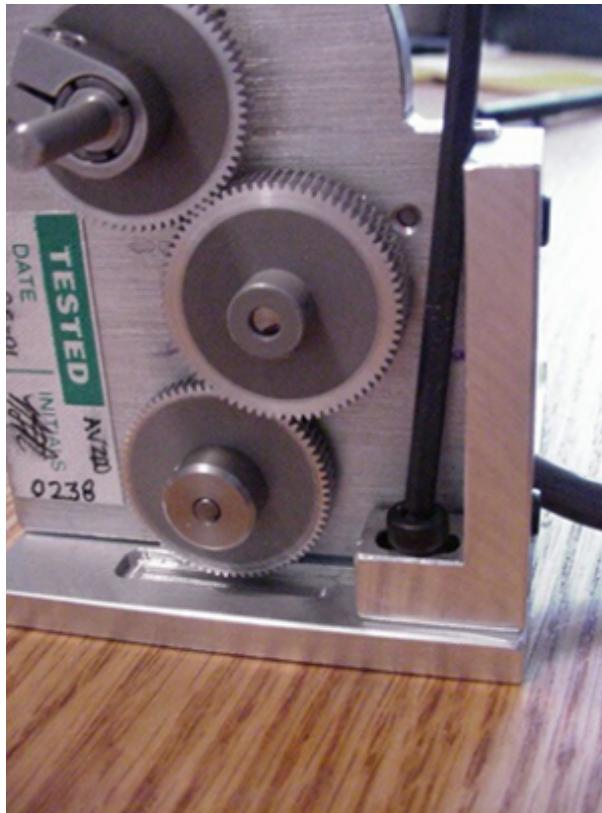


Figure 8: Install but do not tighten horizontal adjustment screw

Locate the ASI motor drive. Install the drive by using the 7/64" Allen wrench to loose the clamp at the end of the ASI dive shaft. This clamp is located near the black encoder case. Also loosen, but do not remove, the two horizontal adjustment screws located on the adjustment bar that is attached to the drive. After loosening the clamp & screws slide the ASI drive shaft over the microscope's fine focus shaft, and then slide the tab on the bottom of the adjustment bar into slot on the base plate. Remove the 3mm screw on the base plate and use it to secure the drive to the base plate. Leave the screw loose enough so that the adjustment bar can slide easily in the groove in the baseplate.

Please Note the baseplate may need to be moved to properly align the adjustment bar.



Figure 9: Tighten baseplate clamp after drive is installed & roughly aligned

Slide the motor drive up and down, forward and backward slightly while turning the right fine focus knob until it is in the position where minimum drag is felt on the right focus knob. Secure the motor drive into position by tightening the horizontal and vertical adjustment screws. Use the 7/64 inch hex wrench to tighten the drive shaft clamp, as shown in figure #10 below. Use the 5/64" Allen wrench to tighten the baseplate clamp shown in figure # 9 above.



Figure 10: Tightening the drive shaft clamp

Recheck the alignment by noting the drag on the right fine focus knob. No noticeable drag should be felt. Repeat the steps above if necessary.

## **Part 4-Installing the motor drive cover plate & fine focus knob.**

Locate the motor drive cover. Remove the 4/40 button head screws from the drive with the 1/16 " Allen wrench. Position the motor drive cover over the motor drive assembly and secure in place using the 4/40 button head screws.



Figure 11 Installing the cover

Slide the microscope fine focus knob over the shaft extension and secure in place using the 1.5mm Allen wrench. Please note that the set screw in the knob should mate with the flat on the shaft.

This completes the procedure for installing the ASI motor drive on to the Zeiss Axiovert 200 Microscope.

[zeiss, axiovert, av200, zdrive](#)

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