

Zeiss AxioPlan II Installation Procedure

The procedure below outlines the steps necessary to install the ASI Microscope Focus Controller Drive onto the Zeiss AxioPlan II 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 left 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 left Fine Focus Knob

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



Figure 1a: Remove rubber boot



Figure 1b: Use 1.5 mm Allen wench to loosen set screw.



Figure 1c: Pull knob straight off to expose shaft.

- a) Use 1.5 mm Allen wench to loosen set screw
- b) Pull knob straight off to expose shaft

Part 2 - Installing the Baseplate



Figure 4: Uninstalled baseplate & Drive



Figure 5: Installed baseplate

Locate the baseplate / Drive assembly and remove the drive from the base plate if it is attached by removing the horizontal adjustment screw shown in figure 8. Lift the front of the microscope up and slide the baseplate under the microscope so that the area where the shaft was at is approximately centered under the left focus knob.

Part-3 Installing & Aligning the Motor Drive

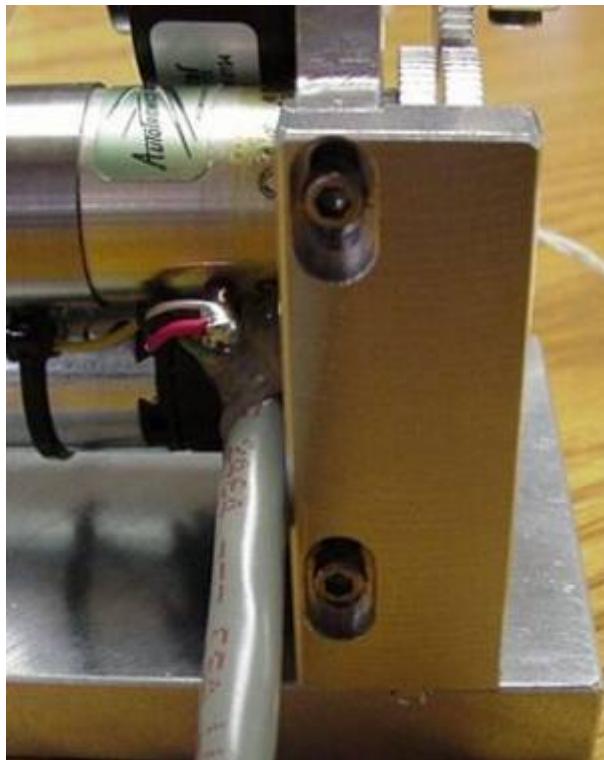


Figure 6: Loosen but do not remove adjustment screws



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



Figure 8: Install but do no 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 (Please Note the baseplate may need to be moved to properly align the adjustment bar.) Use the 3mm horizontal adjustment screw removed in part 2 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. Use the 7/64 inch hex wrench to tighten the drive shaft clamp, as shown in figure #9 below.

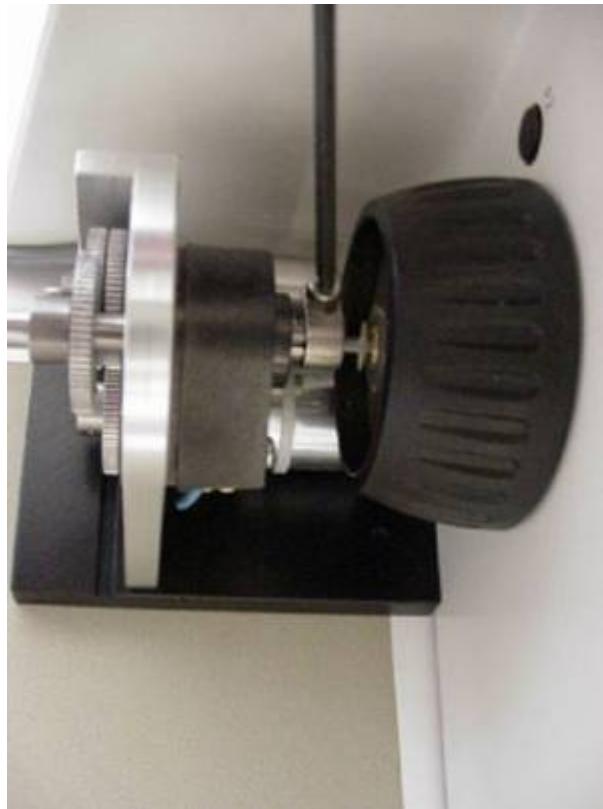


Figure 9a: Tightening the drive shaft clamp

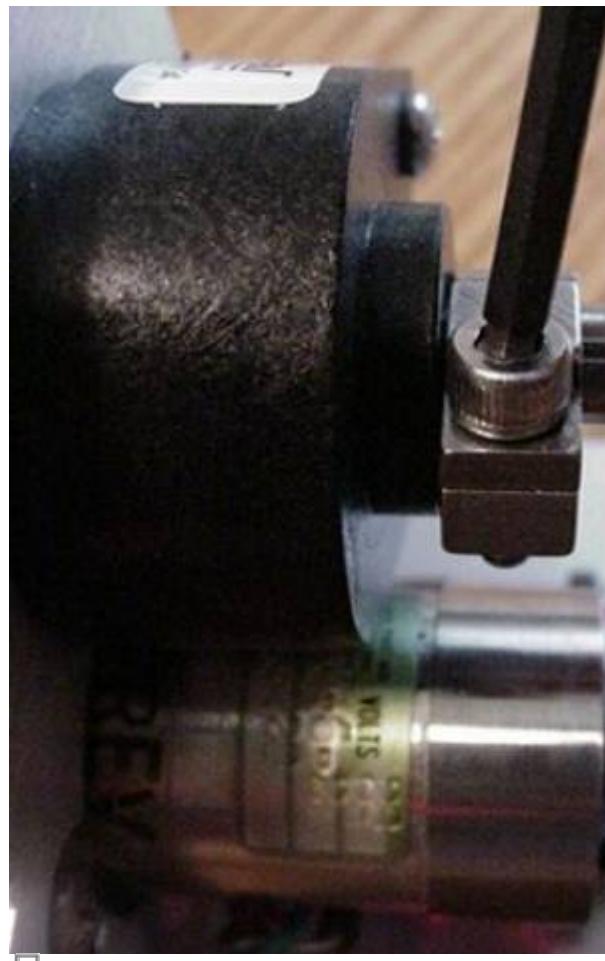


Figure 9b: Tightening the drive shaft clamp



Figure 11a: Tightening the vertical & horizontal adjustment screws



Figure 11b: Tightening the vertical & horizontal adjustment screws

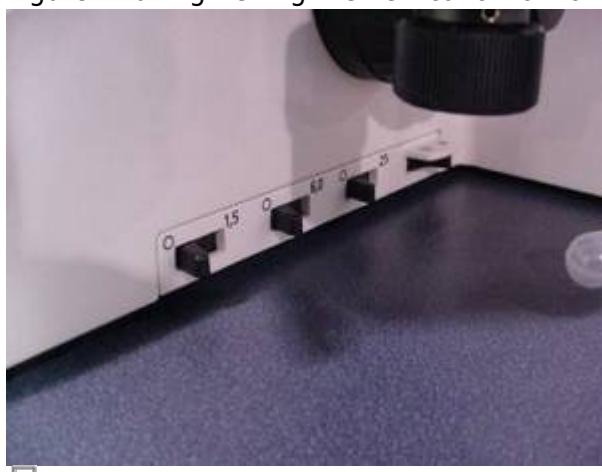


Figure 10a: Tighten baseplate clamp after drive is installed & roughly aligned



Figure 10b: Tighten baseplate clamp after drive is installed & roughly aligned

c) 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. Secure the motor drive into position by tightening the horizontal and vertical adjustment screws as shown in figure # 10. Use the 0.05" Allen wrench to tighten the baseplate clamp shown in figure # 11 above. NOTE: The baseplate clamp should be positioned so that the force of the two set screws presses up against an area that is In Between the switches as shown in the figure above. DO NOT tighten it in an area that is directly under a switch as excessive force may cause the plastic cover to break. There are two 4/40 Phillips head screws that can be removed and the baseplate clamp can be moved to a position that is in between switches as shown in the figure above. NOTE: The baseplate clamp should be tightened just enough to secure it in place. DO NOT over tighten it as excessive force may cause the plastic cover to break

d) 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.

a) Locate the motor drive cover. Loosen 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 11a: Installing the cover



Figure 11b: Installing the cover

b) 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 AxioPlan II Microscope.

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