

H122AXIO Installation Guide

Notice

This installation should only be attempted by a qualified technician. It involves some minor disassembly of critical mechanical components. If you are not familiar with this type of mechanical assembly do not attempt this installation, consult your local microscope representative.

Introduction

The focus drive is compatible with all of the Zeiss Axio type microscopes listed below. However, it is not compatible with the Zeiss Axioskop 2 and AxioPlan 2. The focus drive must be attached to the fine focus ball reduction mechanism as follows:

Left Side	Right Side
AxioPlan	Axiotron
Axioskop	Axiovert 35
Axiovert 25	Axiovert 100/S100/135
	Axiolab
	Standard

Components

The focus drive assembly is comprised of the following:

- Drive motor, motor bracket and switch assembly
- Mounting block
- Anti backlash gear and locknut
- Cover and lead

Also included are screws and hexagon keys needed to install the focus drive unit.

Tools Required

14mm AF spanner or socket, 1pt Philips screw driver, 1.27mm hexagon key (supplied) 2.5mm hexagon key (supplied) 3.0mm hexagon key (supplied).

Prepare the focus drive

- Remove the cover.
- Remove bag containing anti-backlash gear, locknut and hexagon keys.
- Using 3.0 hexagon key remove the two 4mm cap head screws that hold the mounting block to the motor bracket assembly.

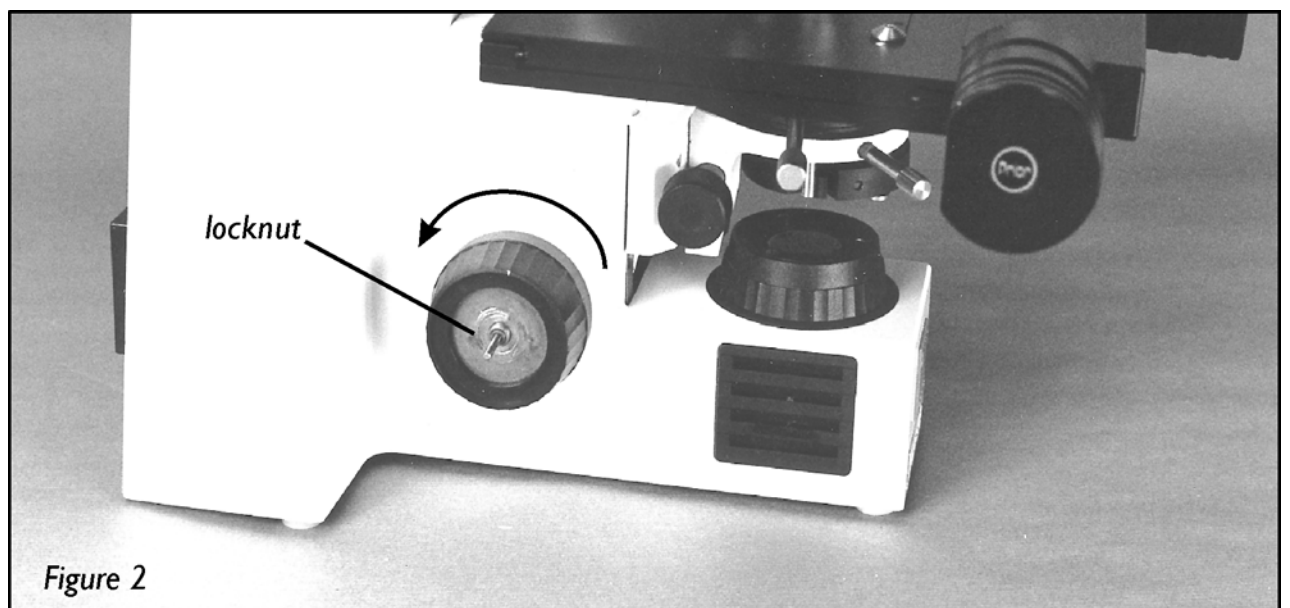
Installation of the focus drive



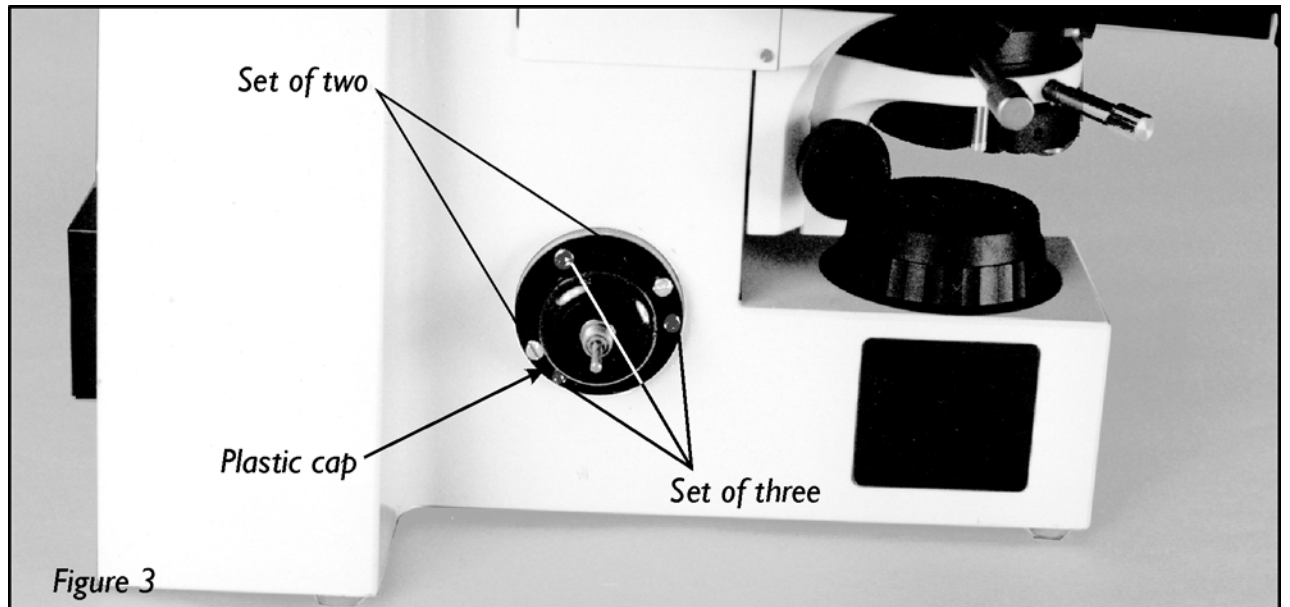
1. Determine which side the focus drive must go (see introduction).

Remove the fine focus knob by using the 1.27mm hexagon key to unscrew the set screw.

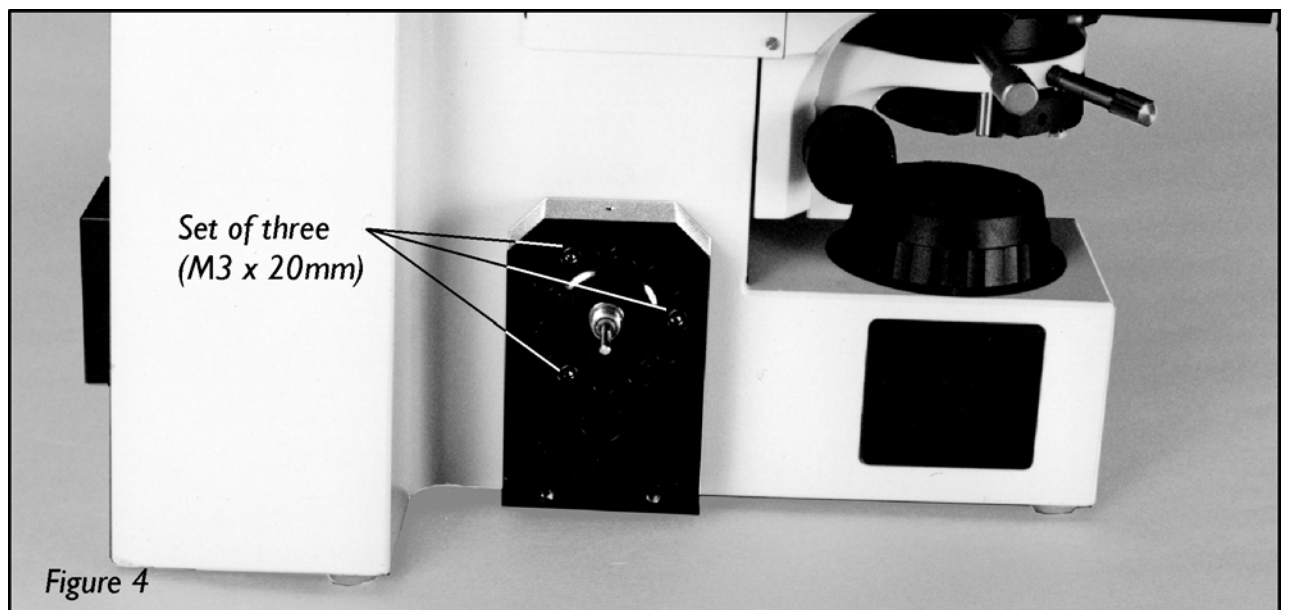
The knob can then be pulled off.



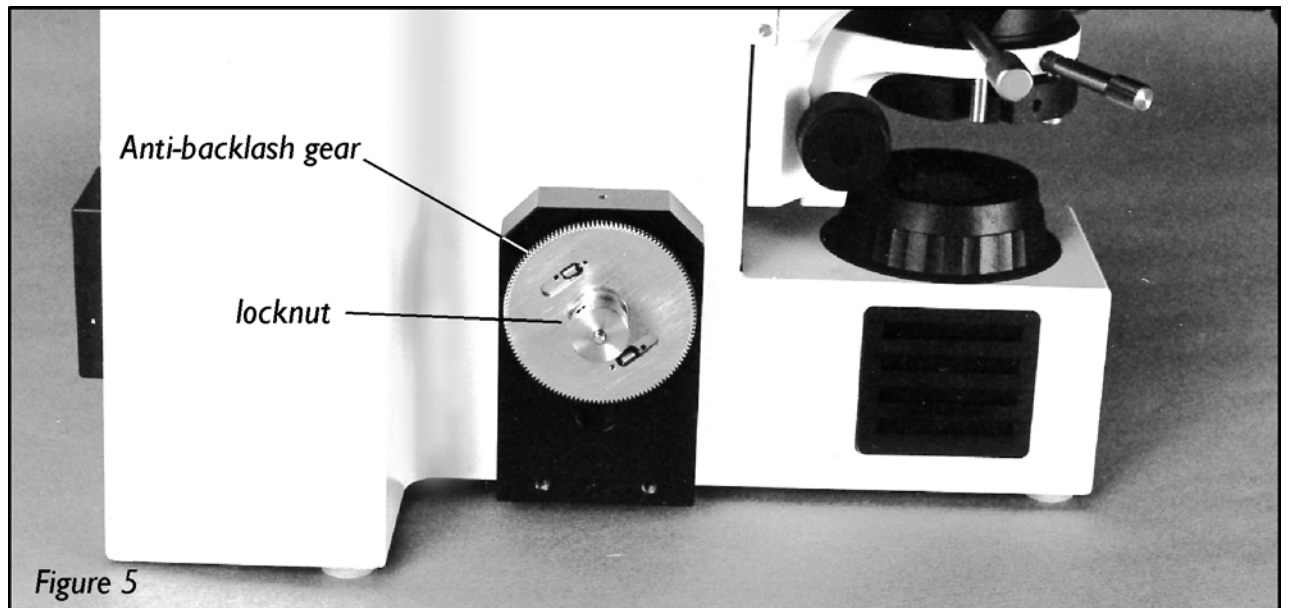
2. Using the 14mm spanner or socket to remove the lock nut. The coarse knob can now be removed by turning anti-clockwise and unscrewing from the coarse focus shaft.
3. A black plastic cover should now be visible (see fig. 3). If this is not the case, check the introduction to ensure you removed the knobs from the correct side. **It is very important that you replace both coarse and fine knobs before removing the knobs on the opposite side.**



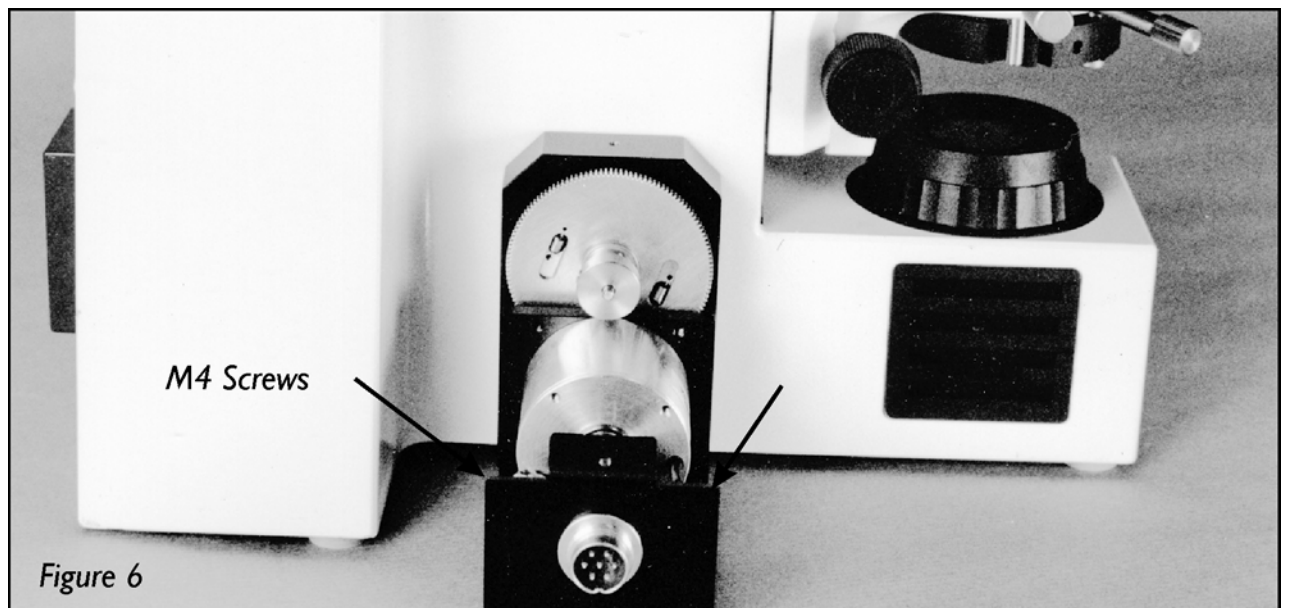
The plastic cap is held on with five screws, one set of two screws and one set of three. If the set of two screws are missing then install the two M3 x 6mm cap head screws supplied. Remove the set of 3 screws using the 2.5mm hexagon key.



4. Place the mounting block over the plastic cap and hold in place using the 3 M3 x 20mm cap head screws supplied.



5. Screw the anti-backlash gear onto the coarse drive shaft, making sure the gear's boss is facing outwards. Screw the locknut into the boss and tighten.



6. Attach the motor, bracket and switch assembly to the mounting block using the two M4 cap head screws. The anti-backlash gear has two gears, one fixed, the other spring loaded and free to rotate. Rotate this gear approximately 6 teeth before aligning with the motor gear.

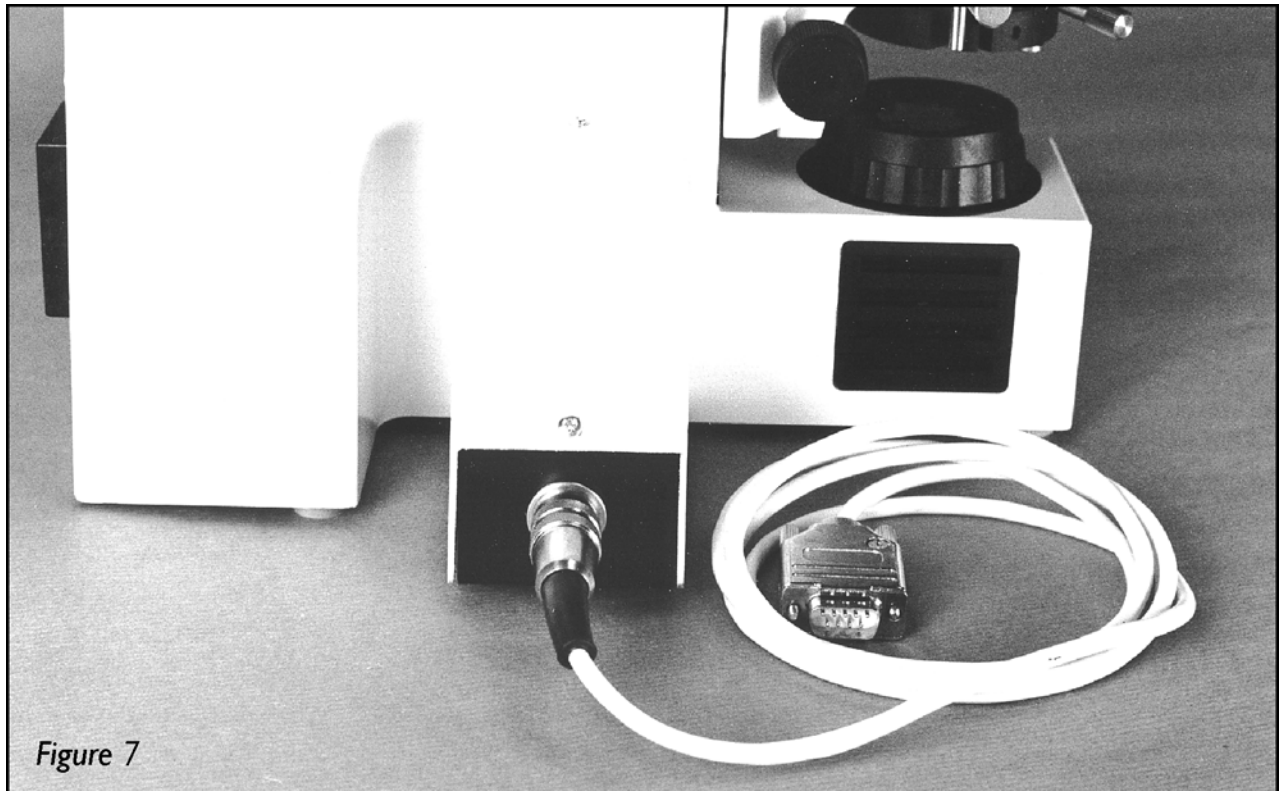


Figure 7

7. Replace the cover and attach the lead.

8. If the focus drive unit appears to drive in the wrong direction, i.e. you ask the controller to move up and the stage moves down, then the switch is set to the wrong position.
Disconnect the power supply to the focus drive, remove the cover, move the switch and then replace the cover.
The unit will now move in the correct direction.