

## H122AXIE Zeiss Axio Series Encoded Focus Drive Installation Instructions

The H122AXIE focus drive is only compatible with the microscope models listed below and it is very important that it is attached to the correct side of the instrument.

Axioplan	Left side
Axioplan 2 *	Left side
Axioskop/Axioskop 20	Left side
Axiovert 35	Right side
Axiovert 100/S100/I35	Right side
Axiovert 135	Right side

\* Please note that the H122AXIE is not compatible with the Axioplan 2ie and Axioplan 2 Imaging models). For these instruments the H122X2 is required.

**Please note 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, we recommend that you do not attempt this installation and instead contact your local microscope dealer or Prior representative.**

### Tools required

1.3mm Hex. Wrench  
2.5mm Hex. Wrench  
3mm Hex. Wrench  
Medium Flat Blade Screwdriver  
1 pt Philips Screwdriver  
14mm AF Spanner or socket

### Fitting Instructions

- 1) Firstly determine on which side of the microscope the focus drive must be fitted (see above).
- 2) Remove the fine focus control knob using a 1.3mm hex. Wrench.
- 3) Using the 14mm spanner/socket undo the locknut holding the coarse control knob in position. The coarse knob can now be removed by turning anti-clockwise and unscrewing from the mounting shaft. A black plastic cover should now be visible (see fig.1). If this is not the case, check above to ensure that the knobs have been removed from the correct side. **It is very important that both the coarse and fine control knobs are replaced before removing knobs from the opposite side.**



**Figure 1**

- 4) Attach coarse focus shaft and tighten using a hex. wrench through the 2nd of the two clearance holes as shown in fig. 2.



**Figure 2**

- 5) Align the machined flat on the microscope fine focus shaft with the first hole in the coarse focus shaft. Push the extension shaft onto the microscope fine focus shaft and tighten the fixing screw as shown in figure 3.



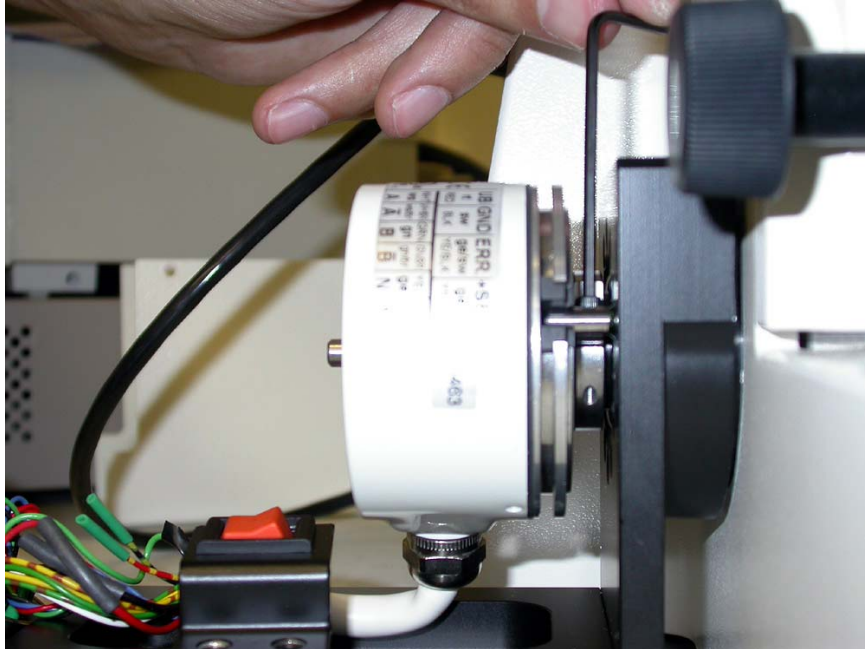
**Figure 3**

- 6) It is now necessary to remove three of the five screws that hold the black plastic cap onto the microscope. Only remove the three screws, which are equally spaced, the remaining two are positioned directly opposite each other, these need to remain in position.
- 7) Remove the main cover from the H122AXIE assembly and attach the frame to the microscope using the three M3 x 20 socket cap screws provided. It will be necessary to remove the frame end plate and also the motor direction switch mounting bracket as shown in fig .4.



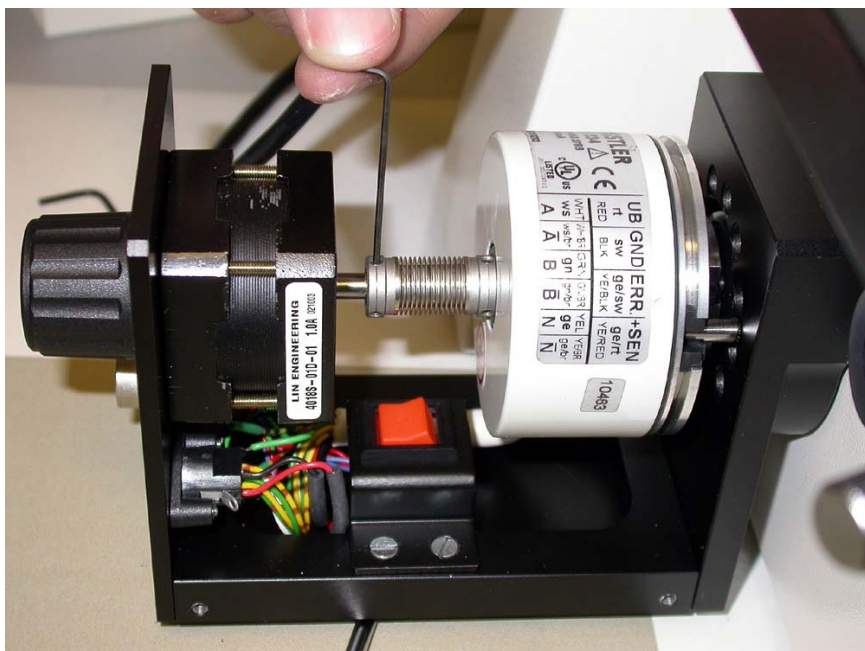
**Figure 4**

- 8) Push the rotary encoder assembly over the coarse shaft ensuring that the dowel pin is positioned into the locating slot on the encoder. Tighten the screw on the encoder clamping collar as shown in fig. 5



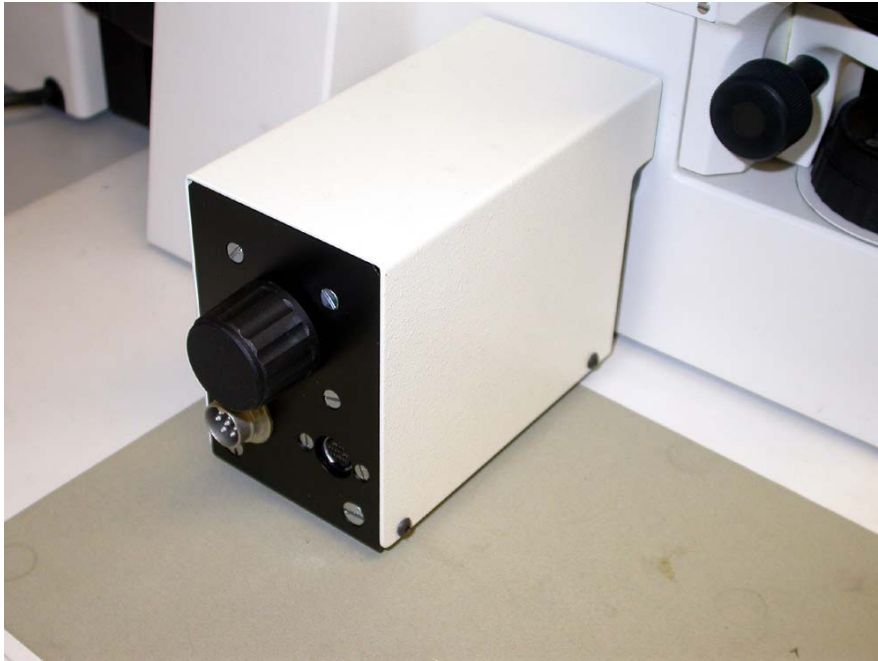
**Figure 5**

- 9) Attach the flexible coupling to the extension shaft, which should be protruding from the centre of the encoder. Re-assemble the switch mounting bracket and frame end plate so that the free end of the flexible coupling can be attached to the drive motor (see fig. 6).



**Figure 6**

- 10) Re-fit the main cover and the installation is complete, Figure 7.



**Figure 7**

**Note**

If the focus drive appears to drive in the wrong direction, i.e. if you ask the controller to move up and the stage/objective carrier moves down, then the motor direction switch is set to the incorrect position. Simply disconnect the power supply, remove the cover and adjust the switch. Re-assemble and the unit will now drive in the opposite direction.