

Olympus BX41 Installation Procedure

The procedure below outlines the steps necessary to install the ASI Microscope Focus Controller Drive onto the Olympus BX41 microscope.

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

Medium flat blade screwdriver 3mm, 1/16, 5/64 and 7/64 inch hex wrenches ASI provides the hex wrenches.

The procedure has three parts:

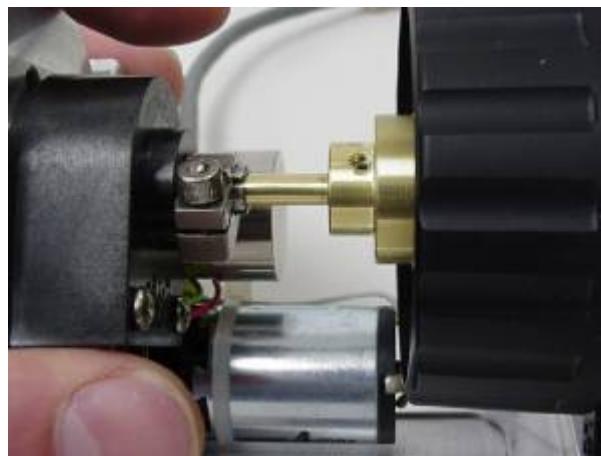
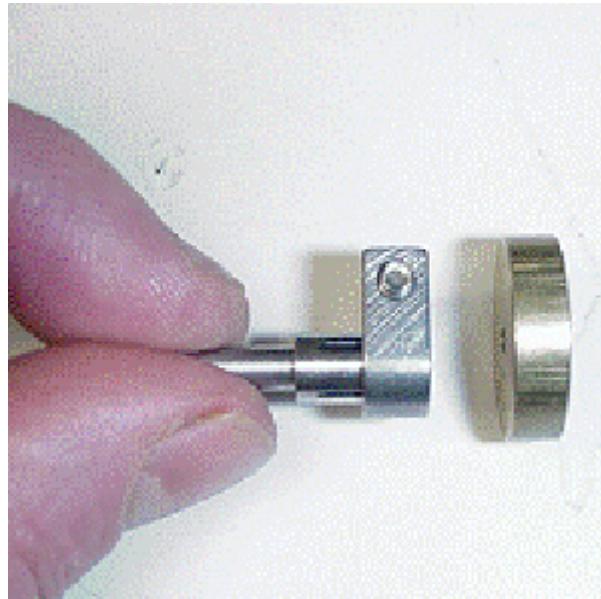
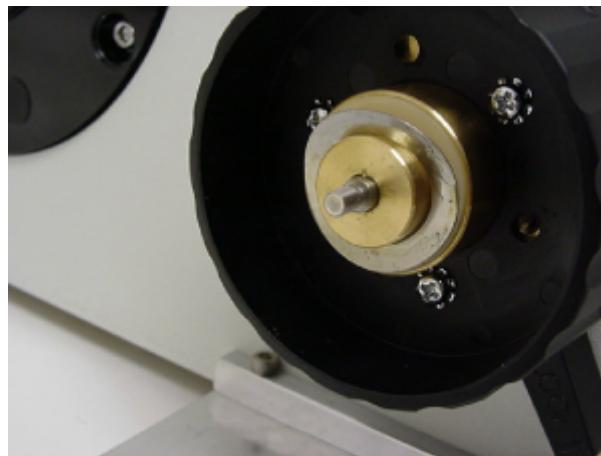
1. Removing the left fine focus knob & installing the clutch plate
2. Installing the baseplate
3. Installing and aligning the motor drive assembly.
4. Installing the motor drive cover plate & fine focus knob.

Part 1 - Removing the Left Fine Focus Knob & installing the clutch plate



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

Firmly hold the right fine focus knob with your right hand and turn the left fine focus knob counter clockwise to unscrew it from the fine focus shaft.



Install the clutch plate as follows:

Locate the small brass clutch plate and screw it onto the fine focus shaft in place of the fine focus knob that was just removed. After the clutch plate has been completely screwed onto the fine focus shaft locate the ASI drive and use the 7/64" Allen wrench to loosen the two shaft clamps located near

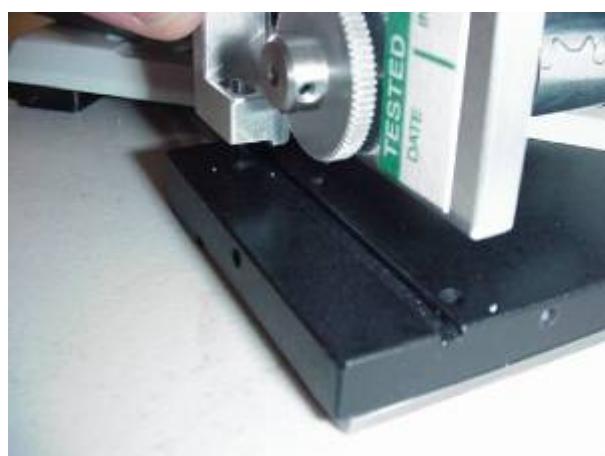
the black encoder case. Remove the outer shaft from the inner shaft; the outer shaft is threaded. Screw the outer shaft onto the fine focus shaft so that it presses against the brass clutch plate. Slide the clamp assembly against the brass clutch plate and tighten it with the 7/64" Allen wrench.

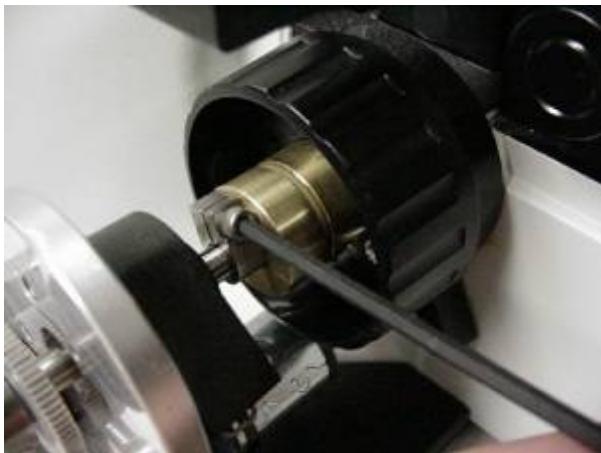
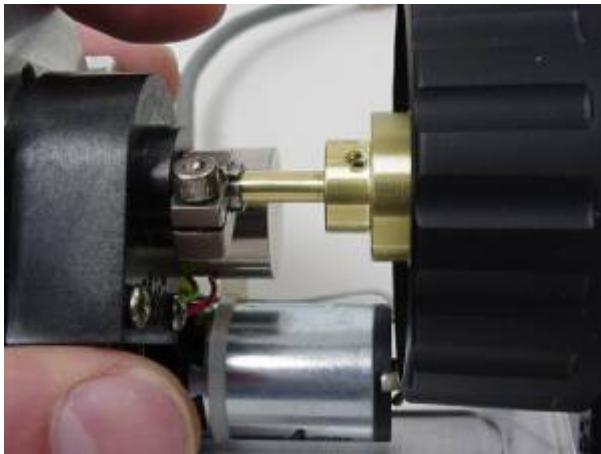


Part 2 - Installing the Baseplate

Locate the baseplate and remove the ASI drive from it if it is attached by using the 3mm Allen wrench to remove the Horizontal adjustment screw. Position the base plate assembly it so that the horizontal adjustment bar is on the left side of the microscope. Lift the front of the microscope up and slide the base plate under the microscope so that angled portion of the base plate is aligned with the contour of the microscope.

Part-3 Installing & Aligning the Motor Drive





Locate the ASI fine focus motor drive, vertical adjustment bar, and vertical adjustment screw (M4 x 12 hex screw). Use the 7/64" Allen wrench to loosen the two vertical adjustment screws located on the vertical adjustment bar that is attached to the rear of the drive. Align the drive shaft on the ASI drive with the microscope fine focus shaft / outer shaft that was installed in part #1 and slide the motor drive over the fine focus shaft.

Rotate the drive plate & vertical adjustment bar assembly so that the tab that is on the bottom of the vertical adjustment bar slides into the machined grove on the base plate.

Use the 3mm or 7/64" Allen wrench to screw in the horizontal adjustment screw but leave it loose enough so that the vertical adjustment bar assembly can slide within the grove. Use the 5/64 Allen wrench to tighten the setscrew located on the right side of the base plate. Tightening this setscrew will cause the silver clamp to press against the microscope and this will secure the base plate to the microscope. Use the 7/64 inch hex wrench to tighten the drive shaft clamp. This clamp is located on the drive shaft between the black encoder and the microscope. .

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

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. 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.

b) Slide the black microscope fine focus knob on to the shaft extension, positioning it so that one of the setscrews that secure it will mate with the flat on the shaft. Tighten the setscrews to secure the knob to the shaft.

This completes the procedure for installing the ASI motor drive on to the Olympus BX41 Microscope.

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