

Z Encoder Probe Installation Instructions

These instructions are specifically for mounting the Prior Scientific Z axis encoder probe and the Universal Mounting bracket to the Nikon TE 200/300 series microscopes.

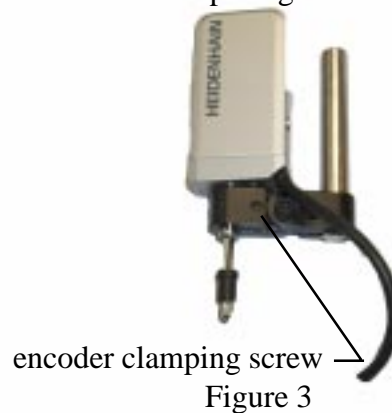
- (1) Remove existing manual or motorized stage.
- (2) Loosen set screw on the side of microscope nosepiece. Slide nosepiece towards rear of the microscope exposing the 2 threaded holes at the front. See figure 1



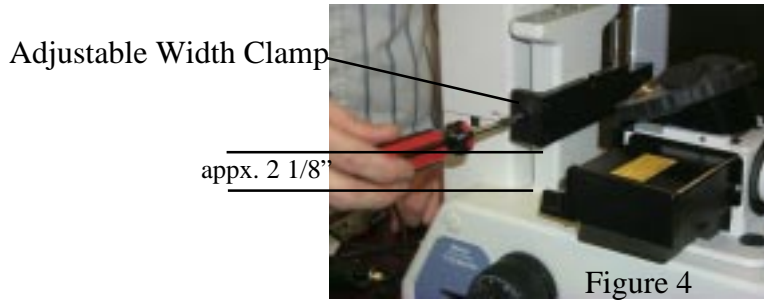
- (3) Mount probe reference bracket using 2 button head screws supplied. Tighten securely. See figure 2



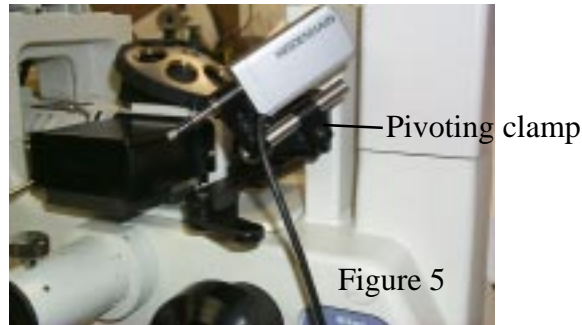
- (4) Completely insert Z encoder probe into rod clamp. Tighten encoder clamping screw securely. See figure 3



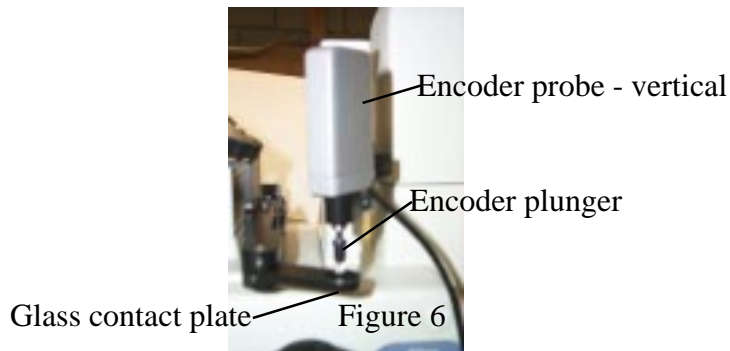
- (5) Using a slotted screwdriver, tighten the Adjustable Width Clamp onto the front stage pillar. The distance from the bottom of the clamp to the top of the microscope base should be approximately 2 1/8"(54mm). See figure 4



- (6) Insert the Heidenhain encoder and rod assembly into the pivoting clamp on the adjustable width clamp. Please note that the clamp must be at an angle to insert the rod. See figure 5



- (7) Rotate the pivoting clamp so as to align the Heidenhain encoder vertically. The encoder must be installed vertically to operate correctly. Compress the encoder plunger completely and move the glass contact plate underneath the plunger. Slowly release the plunger. The plunger should make contact with the contact plate in approximately the center of the plate. Tighten all screws securely. See figure 6



- (8) Move microscope nosepiece back into position and tighten set screw securely.

(9) Confirm proper installation by turning the coarse focus up to the highest focus position. At this position the encoder plunger should be almost completely compressed. If the encoder is completely compressed, then the adjustable width bracket must be moved upward to allow full range of focus.

(10) The bracket and Z encoder probe installation is complete. Plug encoder into either the DRO or controller provided and re-install stage. Note, if Heidenhain encoder comes into contact with the underside of the stage during installation, the adjustable width bracket must be moved downward.