



V I S T E K  
I N C O R P O R A T E D

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## Vibration Isolation Platform (VIP)

### Series 320 / 3200 Installation Instructions

Effective Date – August 2008

- Carefully unpack and remove the VIP.** You will find (i) a black powder coated plate with aluminum clips bolted to the plate, *and* (ii) three or four Vibration Isolation Bearings (VIBs). These VIBs may be threaded into the clips, depending upon whether packing your VIP fully assembled is possible. If not, then you will also find one rubber O-ring for each VIB. (Pic. No. 1) Place the O-ring around the top of the VIB and secure it around the bearing just below the threaded portion. (Pic. No. 2) Stand the VIP on one end (Pic. No. 3) and thread the VIBs into the clips. (Pic. No. 4) Turn the VIBs on the threads until the underside of the clips just touches the O-rings. Your VIP is assembled. (Pic No. 5)
- Put the VIP on a sturdy table.** The platform is most effective if the table beneath the VIP is rigid. The front end of the Platform is the end with label indicating the Platform's part number.
- Place the microscope on the VIP.** Locate the microscope so that it is centered on the platform. The weight of the microscope will deflect the VIBs. In the case of custom Series 3200 platforms, match the base to the footprint. **Warning: Do not slide platform, or move platform once a load has been placed and the bearings are compressed. Damage may occur to the bearings.**
- Check the VIBs for proper alignment.** The bottom portion of the bearing must be vertically aligned with the top portion. (The VIP can be displaced from side to side. When you push the VIP to the side with your hand, the top portion of each VIB will move relative to the bottom portion. When you remove the lateral force, the VIBs will re-center.) You may visually inspect the VIBs to see if the alignment is correct. Simply look at the sides of the VIBs and feel with your fingers to determine if they are aligned. If the alignment is not correct, move the bottom portion of the VIBs with your fingers to correct the alignment. (See Illustration No. 1)
- Leveling the Platform.** Various microscope configurations place more weight on one side or end of the platform than another, compressing one bearing more than another and thus causing the platform to sit un-level. In this case, determine which bearing is deflected more than the others and turn the top half of the bearing clockwise relative to the threads in the clip that is bolted to the plate. It may be necessary to lift upwards on the platform (though not lifting the VIB off the table) to reduce the pressure on the threads and make it easier to turn the threaded cap. This action will raise the plate relative to the tabletop and level the platform.
- Insuring Proper Bearing Deflection.** The platform bearings have a large vertical stroke, and will isolate if deflected a little or a lot. Inspect the gap on each bearing (See Illustration No. 2) with the enclosed gap-measuring tool (the "gap tool") (Pic No. 6) to determine whether the bearing has been properly deflected
  - Insuring enough weight is on a bearing.* When a microscope is placed on the plate, the bearings deflect. If you do not see the bearings deflect, then the VIBs are too stiff and need to be replaced. You can also determine whether there is sufficient weight on the bearing with the gap tool. If the width of the tool (0.6") will fit into the gap, then there is not enough weight on the bearing (Pic. 7); if you cannot fit the width of the gap tool into the gap, then there is sufficient weight on the bearing. (Pic. No. 8)
  - Insuring there is not too much weight on a bearing.* If there is too much weight on a VIB, it will be over-compressed and the gap will be too small or completely

closed. If you can fit the thickness of the gap tool (0.10") into the gap, then there is not too much weight on the VIB. (Pic. No. 9) If you cannot fit the thickness of the gap tool into the gap, then there is too much weight on the VIB. (Pic. No. 10)

### **Series 320 / 3200 Installation Illustrations**

Illustration No. 1 - - If one or more of the Vibration Isolation Bearings (VIBs) are offset, then the alignment is not correct. Alignment may be corrected by moving the bottom portion of the VIBs with your fingers.

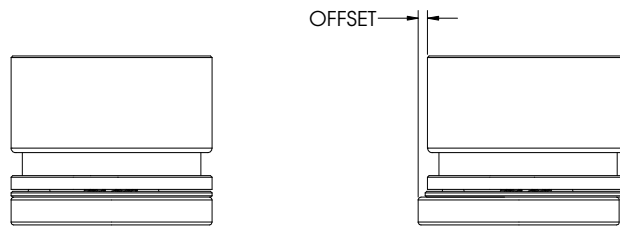
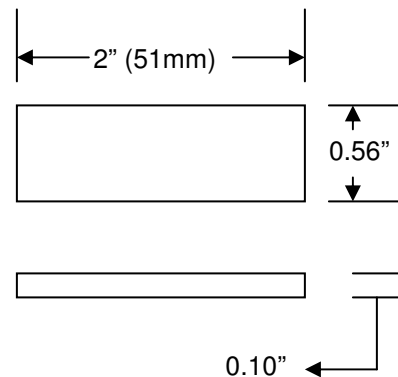


Illustration No. 2 - -



The gap tool is used to check this gap

#### The Gap Tool Dimensions



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