

# **INSTRUCTION MANUAL**

502005

Microscope Trombone Stand

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## **ABOUT THIS MANUAL**

The following symbols are used in this guide:



This symbol indicates a CAUTION. Cautions warn against actions that can cause damage to equipment. Please read these carefully.



This symbol indicates a WARNING. Warnings alert you to actions that can cause personal injury or pose a physical threat. Please read these carefully.

NOTES and TIPS contain helpful information.



Fig. 1—The trombone stand is shown with a 502009 focus mount (sold separately). This is perfect for a PZMIII stereo microscope.

# **PARTS LIST**

After unpacking, verify that there is no visible damage to the unit. Verify that all items are included:

- (1) Heavy base
- (1) Dual arm bar
- (1) Vertical post with anchoring screw
- (2) Hex keys
- (3) Adjustment knobs
- (1) Guard ring
- (1) 5/8" Adapter
- (1) Instruction Manual



Fig. 2—The pieces for the trombone stand are shown here.

# **Unpacking**

Upon receipt of this instrument, make a thorough inspection of the contents and check for possible damage. Missing cartons or obvious damage to cartons should be noted on the delivery receipt before signing. Concealed damage should be reported at once to the carrier and an inspection requested. Please read the section entitled "Claims and Returns" on page 11 of this manual. Please contact WPI Customer Service if any parts are missing at 941.371.1003 or customerservice@wpiinc.com.

**Returns:** Do not return any goods to WPI without obtaining prior approval (RMA # required) and instructions from WPI's Returns Department. Goods returned (unauthorized) by collect freight may be refused. If a return shipment is necessary, use the original container, if possible. If the original container is not available, use a suitable substitute that is rigid and of adequate size. Wrap the instrument in paper or plastic surrounded with at least 100 mm (four inches) of shock absorbing material. For further details, please read the section entitled "Claims and Returns" on page 11 of this manual.

## **ASSEMBLY INSTRUCTIONS**

# Setting up the trombone stand

1. Remove the cap from the top of the vertical post.



Fig. 3—Unscrew the cap from the top of the vertical post.

2. Set the heavy base up on one edge and hold it in place. This will require two people, because the base is heavy. Have one person position the vertical post in the recessed circle in the base. The post will be perpendicular to the base. Let a second person put the locking washer on the anchoring screw and then insert the anchoring screw into the hole through the bottom of the base so that it fits back into the vertical post. Insert the large hex key into the center of the anchoring screw and rotate the hex key clockwise to tighten the anchoring screw (Fig. 4). Then, carefully set the base flat on the table so that the vertical post is standing upright (Fig. 5).



Fig. 4—(Left) Anchor the post on the base.

Fig. 5—(Right) The base is assembled and positioned with the vertical post upright.

2. Slide the guard ring onto the vertical post with the wider side down. While holding the guard ring in position, align the screw on an adjustment knob with the hole in the side of the guard ring and tighten the adjustment knob. (Fig. 6). This is the safety support. Adjust it so that if the primary support fails, the microscope will not be damaged.

3. The guard ring slides on with the smaller end toward the bottom.



Fig. 6—(Left) Slide the guard ring on the vertical post and secure it.

4. Slide the dual arm bar onto the vertical post (Fig. 7). Install an adjustment knob on each side of the dual arm bar (Fig. 8).



Fig. 7—(Left) Slide the dual arm bar over the vertical post. Fig. 8—(Right) Install the two adjustment knobs.

5. Screw the cap back into the top of the post (Fig. 9).



Fig. 9—(Right) Reinstall the cap in the top of the post and screw it clockwise to tighten it.

6. Place the 5/8" adapter on the end of the dual arm bar (Fig. 10). Using the small hex wrench, tighten the set screw located on the side of the adapter. This locks the position of the adapter and keeps it from rotating.





Fig. 10—(Left) Slide the adapter onto the end of the dual arm bar. Fig. 11—(Right) Tighten the set screw.

# Installing the focus mount

The focus mount (not included) may be installed on the dual arm bar in one of two positions. The 5/8" adapter has a vertical hole in it for attaching the focus mount.

**NOTE**: The 502009 focus mount in the images that follow is normally used with the PZMIII style microscope heads.

1. Remove the screw cap from the end of the mounting post on the 502009 focus mount by rotating the cap counterclockwise.



Fig. 12—(Left) The 502009 focus mount has a screw cap in the end of the mounting post. Fig. 13—(Right) Remove the screw cap from this mounting post.

- 2. Position the focus mount on the adapter in one of two ways.
  - Install the mounting bar through the vertical mounting hole of the adapter from the top (Fig. 14).
  - Install the mounting bar through the vertical mounting hole of the adapter from the bottom (Fig. 15).

Once the focus mount is in position, screw the clutch handle all the way in to securely hold the focus mount in place.



Fig. 14—(Left) The focus mount is installed in the vertical mounting hole from the top. Fig. 15—(Center) The focus mount is installed in the vertical mounting hole from the bottom.

3. Reinstall the focus mount screw cap in the end of the 502009 focus mount mounting post.



Fig. 16—Reinstall the focus mount screw cap.

#### **OPERATING INSTRUCTIONS**

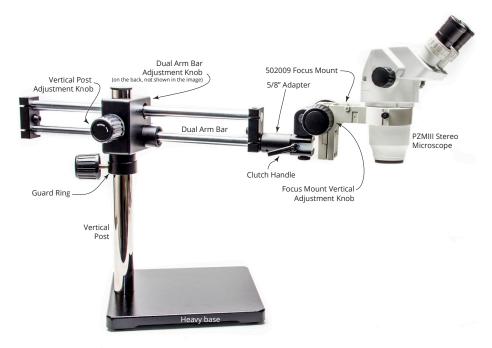


Fig. 17—The assembled stand is shown with a 502009 Focus Mount and a PZMIII Stereo Microscope head.

- Set the vertical position of the guard ring and tighten its adjustment knob. This is the safety support. Adjust it so that if the primary support fails, the microscope will not be damaged.
- 2. Position the dual arm bar at the appropriate vertical height and rotate it around the vertical post until it is properly positioned. Then, secure the vertical post adjustment knob.
- 3. The dual arm bar slides in and out like a trombone. Position it as desired, and then tighten the dual arm bar adjustment knob to secure it in place. The dual arm adjustment knob is located on the opposite side of the dual arm bar as the vertical post adjustment knob. In Fig. 17 it is hidden from view on the back side of the stand.
- 4. The focus mount is jointed, allowing the microscope head to pivot (Fig. 18) and rotate (Fig. 19) giving you an infinite number of positions.



Fig. 18—Pivot the focus mount into the desired position. Fig. 19—Rotate the focus mount into the desired position.

5. To adjust the tension on the focus mount support, use the hex key supplied with the 502009 focus mount. Insert the hex key into the adjustment screw near the articulating arm. Rotate the hex key counter clockwise to loosen the tension or clockwise to apply more tension. This tension prevents the focus mount from sliding once the microscope head is installed.



Fig. 20—Adjust the tension on the focus mount hinge using the hex key provided with the 502009 focus mount.

## **ACCESSORIES**

**504123** Post extension bar for microscope stands (**502004**, **502005**, **502006**)

## **SPECIFICATIONS**

Stand type	Dual arm
Vertical post height	384 mm
Maximum vertical post extended length	254 mm
Vertical post diameter	
Length of horizontal bar	530 mm (20.9")
Diameter of horizontal bar	
Base type	Heavy duty base
Base shape	Rectangle
Base dimensions	285 x 260 x 18 mm (11.2 x 10.2 x 0.7")
Surface treatment	Electroplating black
Material	
Color	Black
Color	
Dimensions	500 x 330 x 422 mm (19.7 x 13 x 16.6")
Extension Bar	
	280mm
Extension bar length Extension bar diameter	27.2 mm
Cingle/devalle and threaded nest	Cinals and threaded
Single/double end threaded post	
Surface treatment	
Material	
Color	
Net weight	2.31 kg (5.09 lbs.)

## **WARRANTY**

WPI (World Precision Instruments) warrants to the original purchaser that this equipment, including its components and parts, shall be free from defects in material and workmanship for a period of one year\* from the date of receipt. WPI's obligation under this warranty shall be limited to repair or replacement, at WPI's option, of the equipment or defective components or parts upon receipt thereof f.o.b. WPI, Sarasota, Florida U.S.A. Return of a repaired instrument shall be f.o.b. Sarasota.

The above warranty is contingent upon normal usage and does not cover products which have been modified without WPI's approval or which have been subjected to unusual physical or electrical stress or on which the original identification marks have been removed or altered. The above warranty will not apply if adjustment, repair or parts replacement is required because of accident, neglect, misuse, failure of electric power, air conditioning, humidity control, or causes other than normal and ordinary usage.

To the extent that any of its equipment is furnished by a manufacturer other than WPI, the foregoing warranty shall be applicable only to the extent of the warranty furnished by such other manufacturer. This warranty will not apply to appearance terms, such as knobs, handles, dials or the like.

WPI makes no warranty of any kind, express or implied or statutory, including without limitation any warranties of merchantability and/or fitness for a particular purpose. WPI shall not be liable for any damages, whether direct, indirect, special or consequential arising from a failure of this product to operate in the manner desired by the user. WPI shall not be liable for any damage to data or property that may be caused directly or indirectly by use of this product.

#### **Claims and Returns**

Inspect all shipments upon receipt. Missing cartons or obvious damage to cartons should be noted on the delivery receipt before signing. Concealed loss or damage should be reported at once to the carrier and an inspection requested. All claims for shortage or damage must be made within ten (10) days after receipt of shipment. Claims for lost shipments must be made within thirty (30) days of receipt of invoice or other notification of shipment. Please save damaged or pilfered cartons until claim is settled. In some instances, photographic documentation may be required. Some items are time-sensitive; WPI assumes no extended warranty or any liability for use beyond the date specified on the container

Do not return any goods to us without obtaining prior approval and instructions from our Returns Department. Goods returned (unauthorized) by collect freight may be refused. Goods accepted for restocking will be exchanged or credited to your WPI account. Goods returned which were ordered by customers in error are subject to a 25% restocking charge. Equipment which was built as a special order cannot be returned.

## Repairs

Contact our Customer Service Department for assistance in the repair of apparatus. Do not return goods until instructions have been received. Returned items must be securely packed to prevent further damage in transit. The Customer is responsible for paying shipping expenses, including adequate insurance on all items returned for repairs. Identification of the item(s) by model number, name, as well as complete description of the difficulties experienced should be written on the repair purchase order and on a tag attached to the item.

<sup>\*</sup> Electrodes, batteries and other consumable parts are warranted for 30 days only from the date on which the customer receives these items.

