



# Install Guide

**502004/505606**

Microscope Boom 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 504002 Boom Stand is showing without a focus mount.*

## INTRODUCTION

This manual shows how to setup the heavy boom microscope stand (**502004**), which can be used with a **PZMIII** or **PZMIV** microscope head. The **PZMIII** and **PZMIV** require the **502009** 76mm focus mount. The setup of the **505606** heavy boom stand is identical. The **505606** uses the **505610** focus mount that is designed for use with the Enhanced Reality Macroscope. The focus mounts are sold separately.

## PARTS LIST

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

- (1) Heavy Base
- (1) Vertical Post
- (1) Guard Ring
- (1) Horizontal Bar
- (1) Cross Block
- (1) Anchoring Screw with Locking Washer
- (1) Hex Key
- (1) Clutch Handle
- (3) Adjustment Knobs

(1) Boom Locking Screw

(1) Post Cap

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Fig. 2—The pieces for the boom 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 7 of this manual. Please contact WPI Customer Service if any parts are missing at (941) 371-1003 or [customerservice@wpiinc.com](mailto: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 100mm (four inches) of shock absorbing material. For further details, please read the section entitled “Claims and Returns” on page 7 of this manual.

## ASSEMBLY INSTRUCTIONS

### Setting Up the Boom Stand

1. Set the heavy base up on one edge. This may require two people, because the base is heavy. Have one person position the vertical post in the recessed circle in the center of the top side of the base. The post will be perpendicular to the base. Let a second person place the locking washer on the anchoring screw and insert it into the hole through the bottom of the base so that it fits back into the vertical post (Fig. 3). 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. 3—(Left) Put the locking washer on the anchoring screw and insert it through the hole on the bottom of the base into the threaded hole in the bottom of the vertical post.

Fig. 4—(Right) Use the hex key to securely tighten the anchoring screw.



Fig. 5—Set the base upright.

2. Screw an adjustment knob into the hole in the side of the guard ring support (Fig. 6). Then, slide the guard ring support onto the vertical post. The narrow side of the guard ring faces up and the thick side faces down. Tighten the adjustment knob to hold it in place (Fig. 7).



Fig. 6—(Left) Insert the screw on an adjustment knob into the threaded hole in the side of the guard ring.

Fig. 7—(Right) Slide the guard ring over the top of the vertical post with the narrow side up.



- Slide the cross block over the vertical post. Then insert the two remaining adjustment knobs into either side of the cross block (Fig. 8, Fig. 9). Tighten the adjustment knob against the vertical post to keep it from moving.

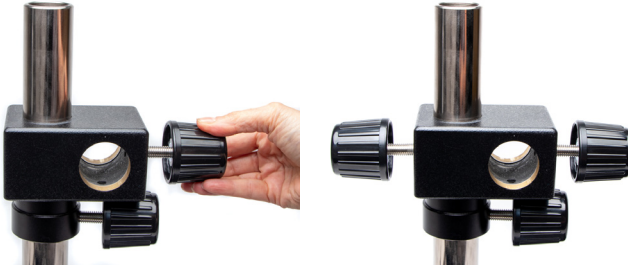


Fig. 8—(Left) Insert an adjustment knob into the cross block. This one secures the horizontal bar.  
Fig. 9—(Right) Insert the last adjustment knob into the other side of the cross block. This one secures the cross block position on the post.

- Then, screw the post top cap back into the top of the post (Fig. 10).



Fig. 10—Screw the vertical post top cap into place.

- Insert the horizontal bar through the horizontal hole in the cross block (Fig. 11). The groove on the horizontal bar must be positioned facing up. The boom locking screw fits into this groove to prevent the horizontal bar (boom) from rotating inside the cross block and prevent movement of the bar. Insert the boom locking screw and tighten it to secure the horizontal bar.



Fig. 11—(Left) Insert the horizontal bar (boom) with the groove on top.

Fig. 12—(Right) Install the boom locking screw in the cross block.



6. Install the clutch handle in the end of the horizontal bar by screwing it into place. This handle is used to secure the focus mount in the end of the boom stand.



Fig. 13—Screw the clutch handle into position at the end of the horizontal bar.

## Installing the Focus Mount

The focus mount (not included) may be installed on the boom stand in one of three positions. The small horizontal bar has a vertical hole and a horizontal hole in the end of 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. 14—(Left) The 502009 focus mount has a screw cap in the end of the mounting post.

Fig. 15—(Right) Remove the screw cap from this mounting post.

2. Position the focus mount on the horizontal bar in one of three ways.
  - Install the mounting bar through the vertical mounting hole of the horizontal bar from the top (Fig. 16).
  - Install the mounting bar through the vertical mounting hole of the horizontal bar from the bottom (Fig. 17).
  - Slide the mounting bar into the horizontal mounting hole in the end of the horizontal bar (Fig. 18).

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



Fig. 16—(Left) The focus mount is installed in the vertical mounting hole from the top.  
 Fig. 17—(Center) The focus mount is installed in the vertical mounting hole from the bottom.  
 Fig. 18—(Right) The focus mount is installed in the horizontal mounting hole in the end of the small horizontal bar.

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



Fig. 19—(Left) Reinstall the focus mount screw cap.  
 Fig. 20—(Right) The 505610 focus mount for the Enhanced Reality Macroscope mounts the same way as the 502009.



Fig. 21—The 505610 focus mount at the end of the 505606 boom stand has the Enhanced Reality Macroscope mounted on it.

## ACCESSORIES

Part Number	Description
504123	Post extension bar for microscope stands (502004, 502005, 502006)

## 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.

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



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