

# **MANUAL**



# INTRODUCTION TO THE ACCU-SCOPE 3065 ZOOM STEREO MICROSCOPE

#### INTRODUCTION

Congratulations on the purchase of your new ACCU-SCOPE zoom stereo microscope! ACCU-SCOPE'S 3065 zoom stereo microscope series incorporates the highest quality optical elements to produce high resolution, three-dimensional images at all magnifications. Versatile, multi-functional and built to withstand years of heavy use the 3065 zoom stereo microscope series is ideal for electronics, industry, research, life science, education and photomicrography applications.

#### IMPORTANT FEATURES

All ACCU-SCOPE zoom stereo microscopes have zoom magnification systems. Total magnification power is the product of objective magnification multiplied by the eyepiece magnification:

EYEPIECES	X	OBJECTIVES	<b>= ZOO</b> I	M MAGNIFICATION
10x	X	0.7x to 4.5x	=	7.0 to 45x

Inclined eyepiece tubes allow for interpupillary distance of 52m to 75mm and diopter adjustment from –5 to +5. Working distance is 118mm. The 3065 and 3063 zoom stereo microscopes feature a three-way illumination system, which maybe used to provide transmitted light, reflected light or a combination of both. The 3065 zoom stereo microscope comes completely assembled and ready for use. Simply follow the step-by-step operating procedure outlined in section 5.0 for years of use from your stereomicroscope.

#### **MAGNIFICATION SYSTEM**

Standard magnification range of the 3065 zoom stereo microscope series is 7.0x-45x. The small knobs numbered 0.7x thru 4.5x are the zoom control knobs. Once in focus (see section 5.0) the user may view specimens through the entire magnification range while remaining in focus by rotating the zoom control knob. Additional magnification ranges can be obtained through the use of auxiliary objectives or different eyepieces. Information, product availability and pricing information is available from your authorized ACCU-SCOPE distributor.

#### ILLUMINATION SYSTEM

ACCU-SCOPE'S 3065 and 3063 zoom stereo microscopes are equipped with a built-in, three-way illuminator system. The convenient on/off switch is located on the side of the instrument and controls both the incident and transmitted illumination. The illumination system consists of a variable 6 volt 10 watt halogen diachrohic bulb for incident light from above and a cool, white (5 watt) fluorescent transmitted light from below.

#### **OPERATING INSTRUCTIONS**

Follow these simple instructions to begin using your zoom stereo microscope:

- Your stereomicroscope should always be used on a hard, flat and stable surface.
- Plug the stereomicroscope power cord into a grounded electrical outlet. A grounded 3-wire line cord is provided.
- Select the appropriate light switch for the specimen. There are three types of illumination:

Incident Light (top) – to view opaque specimens.

Transmitted Light (bottom) – to observe translucent specimens.

Incident & Transmitted – to develop contrasting conditions on any variety of specimens.

- Place a specimen on the stage plate area directly below the center of the stereo microscope body. While looking through the eyepieces with both eyes, slowly adjust the distance between the eyepiece tubes until you see a complete circle of light at the same time without moving your head. The eyepiece tubes are inclined at 45 degrees to maximize your viewing comfort.
- Focus the stereomicroscope at the highest power by turning the zoom control knob to 4.5x and then use the large focusing knob(s) to bring the specimen into focus. Rotate the zoom control knob to the lower powers, making focal corrections by rotating the diopter collar off of the zero setting for proper focus. This will keep the specimen in close focus at any magnification. A slight turn of the focus knobs may be needed to sharpen the focus.

## TENSION ADJUSTMENT OF FOCUSING KNOBS

Turn one focusing knob with other focusing knob held tight by your opposite hand. This will increase or decrease the rotation tension, depending on which direction the knobs are turned. This adjustment is intended to prevent the microscope body from drifting, which will occur if the knobs are loosened too much.

#### CLEANING THE OPTICS

Do not attempt to disassemble the inclined binocular or trinocular body or focusing mechanisms. These have been aligned and scales for protection against dust, dirt, or other particles by our factory technicians. Only exposed surfaces should require cleaning. To clean the zoom stereo microscope:

- Blow dust particles from the lens surface with an ear syringe.
- Using a lens cleaning solution (available from most camera stores) moisten a cotton swab, cover the swab with lens paper and carefully clean the lenses and eyepieces. This method may also be used to remove oily smears and fingerprints, which detract from the image quality. Glass surfaces should be cleaned very carefully and only when necessary.

#### LAMP REPLACEMENT

If replacement is necessary follow these simple instructions:

**DANGER!!!** Do not attempt to change the lamp before allowing it to completely cool.

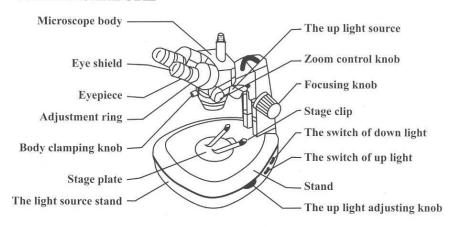
### TRANSMITTED (BOTTOM) ILLUMINATION

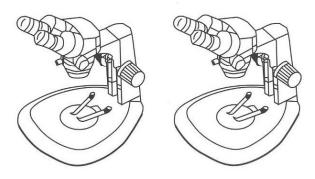
- Unplug the electrical cord.
- Carefully lay the instrument on its back and unscrew the base assembly.
- Remove the old lamp, and insert the new lamp being careful to avoid leaving fingerprints on the lamp surface. The bulb number to reorder is # 3368
- Reattach the base assembly. Do not operate the microscope unless the base is securely attached.

## INCIDENT (TOP) ILLUMINATION

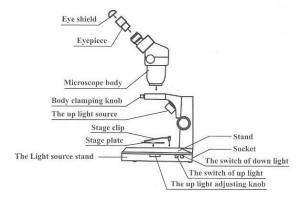
- Unplug the electrical cord.
- Raise the body to the highest position by turning the focusing knob.
- Unscrew the black collar around the bulb.
- Remove the bulb socket from the lamp socket in the lamp housing with a small Phillips screwdriver.
- Detach the bulb and replace it with a new bulb. Leave the new bulb in its envelope while placing it in the socket to avoid leaving fingerprints on the bulb. The bulb number to reorder is # 3370
- Reinstall the black collar around the bulb.

## **NOMENCLATURE**





# **ASSEMBLY**



# LIMITED MICROSCOPE WARRANTY

This microscope and its electronic components are warranted to be free from defects in material and workmanship for a period of five years from the date of invoice to the original (end user) purchaser. The LED lamp is warranted for a period of two years from the date of invoice to the original (end user) purchaser. This warranty does not cover damage caused in-transit, misuse, neglect, abuse or damage resulting from improper servicing or modification by other then ACCU-SCOPE approved service personnel. This warranty does not cover any routine maintenance work or any other work, which is reasonably expected to be performed by the purchaser. Normal wear is excluded from this warranty. No responsibility is assumed for unsatisfactory operating performance due to environmental conditions such as humidity, dust, corrosive chemicals, deposition of oil or other foreign matter, spillage or other conditions beyond the control of ACCU-SCOPE INC. This warranty expressly excludes any liability by ACCU-SCOPE INC. for consequential loss or damage on any grounds, such as (but not limited to) the non-availability to the End User of the product(s) under warranty or the need to repair work processes. Should any defect in material, workmanship or electronic component occur under this warranty contact your ACCU-SCOPE distributor or ACCU-SCOPE at (631) 864-1000. This warranty is limited to the continental United States of America. All items returned for warranty repair must be sent freight prepaid and insured to ACCU-SCOPE INC., 73 Mall Drive, Commack, NY 11725 - USA. All warranty repairs will be returned freight prepaid to any destination within the continental United States of America, for all foreign warranty repairs return freight charges are the responsibility of the individual/company who returned the merchandise for repair.

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