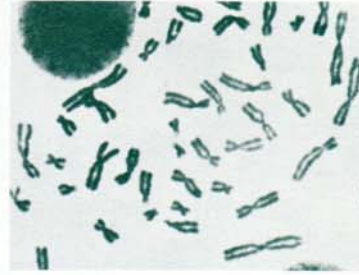
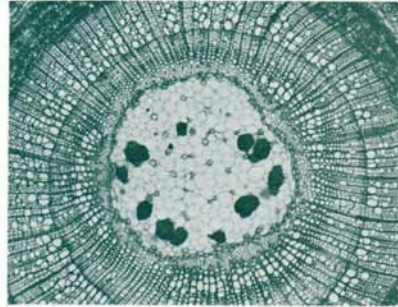
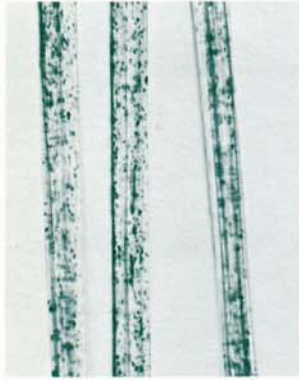


# AO Photomicrographic CAMERAS

Series 682 and 1070



**AO INSTRUMENT COMPANY**  
BUFFALO, NEW YORK 14215



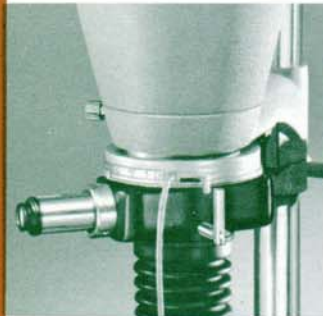


AO Photomicrographic Cameras allow you to make top-quality photomicrographs with minimum effort. Coupled visual and photographic systems . . . as you focus visually, the specimen is simultaneously brought into focus at the film plane or on the ground glass.

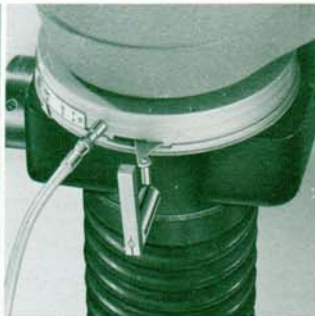
You are provided with a rigid, compact, permanently aligned camera-microscope-illumi-

nator . . . with a sturdy vertical pillar, adjustable camera support, and precise camera with dependable shutter. Easy mechanical adjustments simplify use of this equipment.

In addition, the wide selection of interchangeable camera backs allows you to choose the outfit best suited to your requirements.



Convenient focusing telescope



Self-cocking Universal shutter



Adjustable locating device



Convenient camera lock screw



AO Model 682F Camera

## features

### Camera Arm:

Sturdy horizontal arm supports camera back, focusing telescope and shutter. Locking clamp allows you to adjust arm to any position on vertical pillar (24 $\frac{5}{8}$ " high) for easy alignment over microscope.

### Locating Device:

Clamp with fine adjustment arm stop permits precise repositioning of camera over microscope.

### Camera Lock Screw:

Camera backs are rotatable 360° on camera arm, and eliminate need for revolving circular stage on microscope. Camera lock screw holds camera back or 657 adapter in desired position.

### Heavy Base:

Heavy base is of compact size, 24 $\frac{1}{2}$ " x 12".

### Positioning Clamps:

Two sets of clamps lock microscope and illuminator to base in a choice of positions.

### Rubber Vibration Absorbers:

Large rubber mounts firmly level the base and reduce effect of shock and vibrations.

### Focusing Telescope:

The camera eyepiece of Series 682 is focusable with built-in cross-hair reticle to correct eye differences and critically coincide visual to photographic focus.

### Universal Shutter:

Cameras are equipped with a Universal shutter with speeds of 1/100, 1/50, 1/25, 1/10, 1/5 and 1 second; also Bulb and Time settings. A flexible cable release is provided.

### Reflex Mirror Trip Lever:

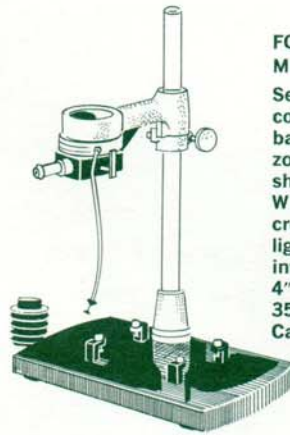
Series 682 lever automatically removes the 45° internal first surface mirror from light path when shutter is tripped and directs 100% of light to film. Resets manually.

### Light-Tight Adapter:

Unique, flexible light-tight adapter. Provides perfect seal against extraneous light.

a  
 photomicrographic  
 camera  
 for every purpose

## AO Series 682



**FOR USE WITH ALL TYPE MICROSCOPES**

Series 682 Cameras are supplied complete with: 24½" x 12" heavy base; 23" high vertical pillar; horizontal camera arm; Universal flex shutter; focusing telescope with Wide Field type eyepiece and cross-hair reticle; flexible bellows light-tight adapter; choice of five interchangeable camera backs . . . 4" x 5" fixed, 4" x 5" Graflok, 35mm, Bantam, Polaroid® Land Camera, as selected.



**682B** Photomicrographic Camera complete with base and arm, flexible bellows-type light-tight adapter, focusing telescope with Universal shutter, No. 657 adapter, No. 687 4" x 5" fixed camera back with ground glass viewing screen, two No. 675 4" x 5" Double Cut Film Holders.



**682C** Photomicrographic Camera complete with base and arm, flexible bellows-type light-tight adapter, focusing telescope with Universal shutter, No. 668 35mm camera back with built-in compensating lens.



**682D** Photomicrographic Camera complete with base and arm, flexible bellows-type light-tight adapter, focusing telescope with Universal shutter, No. 657 adapter, No. 687 4" x 5" fixed camera back with ground glass viewing screen, No. 668 35mm camera back with built-in compensating lens, two No. 675 4" x 5" Double Cut Film Holders.



**682E** Photomicrographic Camera complete with base and arm, flexible bellows-type light-tight adapter, focusing telescope with Universal shutter, No. 669 Bantam camera back with built-in compensating lens.



**682F** Photomicrographic Camera complete with base and arm, flexible bellows-type light-tight adapter, focusing telescope and Universal shutter, No. 657 adapter, No. 688 4" x 5" Graflok camera back, two No. 675 4" x 5" Double Cut Film Holders.



**682G** Photomicrographic Camera complete with base and arm, flexible bellows-type light-tight adapter, focusing telescope with Universal shutter, No. 657 adapter, No. 690 3¼" x 4¼" Film Pack Polaroid camera back.



## AO Series 1070



### FOR USE WITH SERIES 10 MICROSTAR MICROSCOPES

Series 1070 Cameras are the same as Series 682, but without focusing telescope assembly. They are designed specifically for use with the new AO Series 10T MICROSTAR Microscopes to utilize the full potential of the remarkable infinity-corrected optical system and constant tube length benefits of these microscopes. Catalog Nos. 1059, 1058 photographic eyepieces and 1154 Field of View Eyepieces make it possible to focus critically through the binocular portion of the trinocular body.

**1070B** Photomicrographic Camera complete with base; post; arm; No. 1070 shutter, cable, adapter assembly; No. 1059 photographic eyepiece; No. 1154 field of view eyepiece; No. 656 light-tight adapter; No. 657 cone adapter; No. 687 4" x 5" fixed camera back with ground glass viewing screen; two No. 675 Double Cut Film Holders for 4" x 5" cut film.

**1070C** Photomicrographic Camera complete with base; post; arm; No. 1070 shutter, cable, adapter assembly; No. 1058 photographic eyepiece; No. 1154 field of view eyepiece; No. 656 light-tight adapter; No. 1069 35mm camera back.

**1070D** Photomicrographic Camera complete with base; post; arm; No. 1070 shutter, cable, adapter assembly; No. 1058, No. 1059 photographic eyepieces; No. 1154 field of view eyepiece; No. 656 light-tight adapter; No. 657 cone adapter; No. 687 4" x 5" fixed camera back with ground glass viewing screen; two No. 675 Double Cut Film Holders for 4" x 5" cut film; No. 1069 35mm camera back.

PLEASE NOTE: Bantam Size Camera Back is not available for use with Series 1070 Camera.

**1070F** Photomicrographic Camera complete with base; post; arm; No. 1070 shutter, cable, adapter assembly; No. 1059 photographic eyepiece; No. 656 light-tight adapter; No. 657 cone adapter; No. 688 4" x 5" Graflok camera back; two No. 675 Double Cut Film Holders for 4" x 5" cut film.

**1070G** Photomicrographic Camera complete with base; post; arm; No. 1070 shutter, cable, adapter assembly; No. 1059 photographic eyepiece; No. 1154 field of view eyepiece; No. 656 light-tight adapter; No. 657 cone adapter; No. 690 3 1/4" x 4 1/4" Film Pack Polaroid camera back.



Series 1070 — Model 1070G



Series 682 — Model 682F



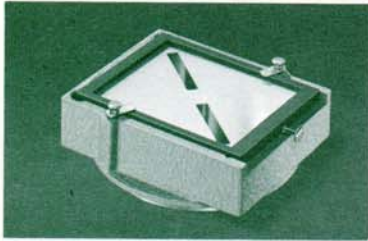
**AO INSTRUMENT COMPANY**  
BUFFALO, NEW YORK 14215



a wide  
selection  
of  
**CAMERA  
BACKS**

Series 682 will accommodate five readily interchangeable camera backs:

- 4" x 5" Fixed Back
- 4" x 5" Graflok Back
- Polaroid Land Camera Back
- 35mm Back
- Bantam Back



**No. 687** 4" x 5" Fixed Camera Back has a ground glass viewing screen with clear glass strips to aid focusing and orientation. Accepts cut film holders, 4" x 5" Polaroid No. 500 cut film adapter and plate holders. (The latter is not available through AO.)



**No. 688** 4" x 5" Graflok Camera Back has a ground glass viewing screen, accepts all Graphic accessories including cut film holders, film pack adapters and 4" x 5" Polaroid No. 500 cut film adapter. (The latter is not available through AO.)



**No. 690** 3 1/4" x 4 1/4" film pack Polaroid Land Camera Back gives you "on the spot" photomicrography in color or black and white.



**No. 668** 35mm Back, with built-in compensating lens, is ideal for economical photomicrography in black and white or color film. For use with Series 682 Cameras only.



**No. 669** Bantam Back, with built-in compensating lens, uses standard 828 eight-exposure roll film. For use with Series 682 Cameras only.



**No. 657** Adapter is required for Nos. 687 4" x 5", 688 Graflok and 690 Polaroid Land Camera Backs. It is rotatable 360°

★ Series 1070 will accommodate Camera Backs Nos. 687, 688, 690 described above . . . and No. 1069

## Accessories for Series 1070



1058

1059

1154

**No. 1069** 35mm Camera Back similar to No. 668, but without built-in compensating lens.

**No. 1058** 35mm Photographic eyepiece, used with No. 1069.

**No. 1059** 4" x 5" and 3 1/4" and 4 1/4" Photographic eyepiece for use with Nos. 687, 688 and 690.

**No. 1154** Field of View and Focusing Eyepiece (Is also useful with Series 682 as a Field of View Eyepiece.)

**Note:** Nos. 1058, 1059 and 1154 **MUST** be used with Series 1070, and are included in all catalog listings on page 4.

## HOW TO DETERMINE RESULTANT MAGNIFICATION

The resultant magnification at the plane of the photographic film or plate of Nos. 687, 688 and 690 is equal to the product of the initial magnification of the objective and magnification of the eyepiece. For example: a 10X objective used in combination with a 10X compensating eyepiece produces a resultant magnification of 100X.

The resultant magnification at the film plane of Nos. 668 and 669 is equal to 40% of the product of the objective and eyepiece powers. For example: resultant magnification =  $.40 \times 10 \times 10 = 40X$ .

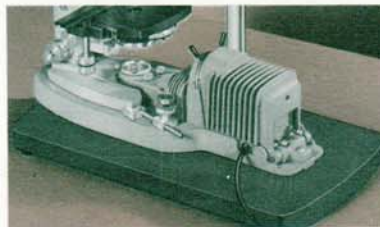
## ALTERNATE PARTS and ACCESSORIES FOR AO PHOTOMICROGRAPHIC CAMERAS

FOR SERIES 682		FOR SERIES 1070	
Catalog Number	Description	Catalog Number	Description
656	Flexible, bellows-type light-tight adapter	675	4" x 5" Double Cut Film Holder for Nos. 687, 688
657	Adapter required for Nos. 687, 688 and 690	687	4" x 5" Camera Back
668	35mm Camera Back	688	Graflok Camera Back
669	Bantam Camera Back (uses 828 Roll Film)	690	3 1/4" x 4 1/4" Film Pack Polaroid Camera Back
675	4" x 5" Double Cut Film Holder for Nos. 687, 688	1058	35mm Photographic Eyepiece for use with No. 1069
687	4" x 5" Fixed Camera Back	1059	4" x 5" and 3 1/4" x 4 1/4" Photographic Eyepiece for use with Nos. 687, 688, 690
688	4" x 5" Graflok Camera Back	1069	35mm Camera Back
690	3 1/4" x 4 1/4" Film Pack Polaroid Camera Back	1154	Field of View and Focusing Eyepiece
1154	Field of View and Focusing Eyepiece		

## ILLUMINATORS



**735C** Microscope illuminator with multiple filter holder, iris diaphragm, blue and ground glass filters, rack and pinion focus condensing system, screw type tilting adjustment in base, integral heat absorbing glass, 100 watt, 120 volt bulb and 8 foot cord with switch. UL and CSA approved. (Ask for Brochure SB735 for details.)



**600** Ortho-Illuminator complete with three point positioning device for microscope base; turret-mounted intensity and color filters; auxiliary lens; pinhole eyepiece; one 100 watt, 115 volt bulb; two-way switch, cord and plug. (Ask for Brochure SB600 for detailed information.)



**645** AO Fluorolume 200 watt mercury arc lamp; compact power supply for 115 volt, 60 cycle AC; accessory case with three exciter filters; one heat-absorbing glass; opal glass, white light dark field filter and aperture plate; metal light excluding slide; very low fluorescent immersion oil (Cargille's Type A) one ounce. (Ask for Brochure SB10 Fluor. for details.)



# PRICE LIST

## AO Photomicrographic Cameras

Brochure SB682-9/67

Page Number	Catalog Number	Price
<b>3</b>	682B	\$405.00
	682C	420.00
	682D	487.00
	682E	422.00
	682F	423.00
	682G	494.00
<b>4</b>	1070B	378.00
	1070C	401.00
	1070D	490.00
	1070F	396.00
	1070G	467.00

Page Number	Catalog Number	Price
<b>6</b>	656	\$ 10.00
	657	16.00
	668	82.00
	669	84.00
	675	NET 6.00
	687	39.00
	688	57.00
	690	140.00
	1154	44.00
	<b>6</b>	675
687		39.00
688		57.00
690		140.00
1058		22.00
1059		22.00
1069		90.00
1154		44.00
<b>6</b>	735C	119.00
	600	205.00
	645	775.00

All prices, deliveries and terms of sale are subject to change without notice.

Applicable taxes are in addition to prices stated.

Orders are subject to final acceptance by the Sales Office at Buffalo with the understanding that prices and terms prevailing at time of delivery will apply.

The equipment supplied may not agree in all details with the descriptions or illustrations in literature as instruments are subject to modification and improvement.



**AO INSTRUMENT COMPANY**  
**BUFFALO, NEW YORK 14215**

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