

USE AND CARE OF SWIFT M23
STEREO MICROSCOPE

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SWIFT®

THE USE AND CARE OF YOUR SWIFT STEREO M23

FEATURES OF YOUR SWIFT M23 STEREOMICROSCOPE

Optical System: No mirrors are used in Swift optical systems; only the highest quality prisms are used. All optical surfaces are hard coated to reduce reflection and increase light transmission.

Eyepieces: Your M23 stereomicroscope is corrected to a standard mechanical tube length of 160mm. This means any of the many Swift eyepieces may be utilized.

The M23 stereomicroscope has an easily adjusted interpupillary control to space the eyepieces exactly the proper distance apart for those whose eyes are very close together or very far apart.

Focus controls: The focus knobs are located on both sides of the microscope and may be used with either hand. These controls incorporate a unique clutch system which prevents over or under-focusing. The rack travel is restricted by upper and lower limiters which prevent the body from traveling either low or high enough to disengage the pinion or contact the stage. When either limiter is contacted, further turning of the focusing knobs engages the clutch system, thus preventing damage to mechanical parts.

The incident illuminator is used for opaque specimens. Note that the entire contrast plate is illuminated which prevents shadows and more evenly exposes the specimen.

All wiring is of the three-wire, grounded system and includes a molded plug, meeting the requirements of the most critical electrical and safety codes, and is tamper-proof.

OPERATING YOUR SERIES M23 STEREOMICROSCOPE

1. Place the specimen onto the contrast plate.
2. View through the eyepieces and rotate the focus controls to image the specimen sharply in the field of view.

3. Grasp the eyetubes and move them either closer together or farther apart, to see one field of view.
4. Addressing microscope from the rear, close your left eye and adjust the focus controls to be sure the image is sharp, while viewing with the right eye only.
5. Close your right eye and, while viewing with the left eye only, adjust the diopter ring on the left eyetube to bring the image of the specimen into sharp focus.
The optical system is now adjusted to your particular vision.

SERVICE

The bulb in the top illuminator is a 12W, 6 volt bayonet mount. Reorder Swift MA21 bulb for replacement.

The focus tension adjustment is unique and exclusive, and is easily adjusted by using Swift Wrench No.MT202. This wrench fits the tension collar found on the focusing controls, between the knob and upright support. A clockwise turn of this collar moves it toward the upright support and increases tension, while a counter-clockwise turn moves the collar toward the knob and decreases tension.

CLEANING

Eyepieces should be cleaned as often as necessary to maintain them in good condition to allow easy viewing. Clean the eyepieces by brushing away dust particles, using a soft, camel's hair brush, then moistening the lens by breathing onto it. Wipe the lens carefully with good quality lens tissue folded several times. If dirt or other foreign matter still remains, it may be necessary to use a mild solvent such as Xylol. Note, the lens tissue should be moistened, not saturated, with Xylol for cleaning, after which the lens should be dried, also with good quality lens tissue.

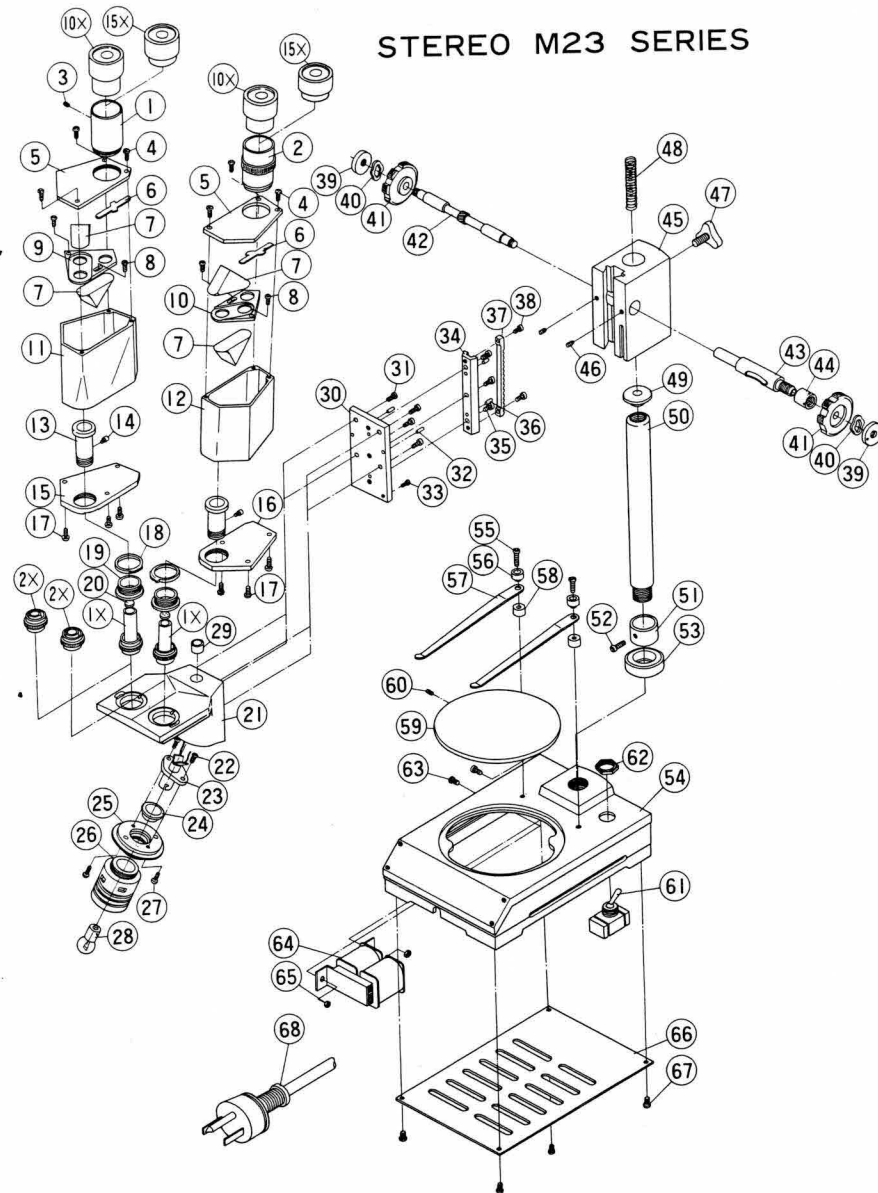
Painted surfaces should be cleaned frequently with mild detergent and a soft cloth.

TROUBLE SHOOTING

- A. PROBLEM the image goes out of focus of its own volition.
CORRECTION . use Swift Wrench MT202 to tighten the tension collar found on the spindle of the focus controls.
- B. PROBLEM unable to adjust your eyes to see one image.
CORRECTION . look to infinity, or at a distant object, then quickly view through the stereomicroscope.
- C. PROBLEM the focus knobs slip at either upper or lower limits of travel.
CORRECTION . this is normal. A unique slip clutch is built in to prevent damage to precision gears. This is activated at both upper and lower limits of travel.

Your Swift M23 stereomicroscope is designed to function satisfactorily with only ordinary maintenance. The instrument should be periodically serviced by a qualified, authorized service technician, who will clean, relubricate and perform routine adjustments at that time. Unauthorized personnel should never disassemble lens assemblies or other precision components. For information regarding service, contact your authorized Swift dealer or write to: Swift Instruments, Inc., Scientific Instrument Division, P.O. Box 562, San Jose, California 95106.

STEREO M23 SERIES



PARTS LIST

Parts Number	Description	Parts Number	Description
1	Eyepiece tube	36	Knock pin
2	Eyepiece tube with diopter	37	Rack
3	Screw	38	Screw
4	Screw	39	Nut
5	Upper plate	40	Washer
6	Spring	41	Coarse adj. knob
7	Prism	42	Pinion
8	Screw	43	Pinion metal
9	Prism seat	44	Adjuster Pinion Tension
10	Prism seat	45	Coarse adj. block
11	Prism housing	46	Screw
12	Prism housing	47	Screw
13	Retaining ring	48	Spring
14	Screw	49	Cap
15	Lower plate	50	Pole
16	Lower plate	51	Down Stopper
17	Screw	52	Screw
18	Gear	53	Washer
19	Retaining ring	54	Base
20	Objective IX	55	Screw
21	Holder block	56	Washer
22	Screw	57	Stage clip
23	Bulb holder	58	Washer
24	Washer	59	Stage plate
25	Plate, bulb holder	60	Screw
26	Lamp cover	61	Switch
27	Screw	62	Washer
28	Bulb 6V 12W MA21	63	Screw
29	Washer	64	Transformer
30	Rack guide plate	65	Nut
31	Screw	66	Bottom plate
32	Knock pin	67	Screw
33	Screw	68	Plug
34	Rack guide		
35	Screw		

