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[back to my "Orphancameras" manuals /flash and light meter site](#)

Only one "donation" needed per manual, not per multiple section of a manual !

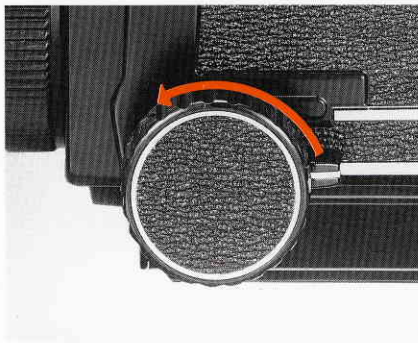
The large manuals are split only for easy download size.

12 Focusing and Focusing Knob Fixing



Focusing

When the shutter is cocked, the mirror is cocked simultaneously, and an image is visible on the ground glass focusing screen. By turning either the left or right focusing knob, adjust the focus and compose the picture.

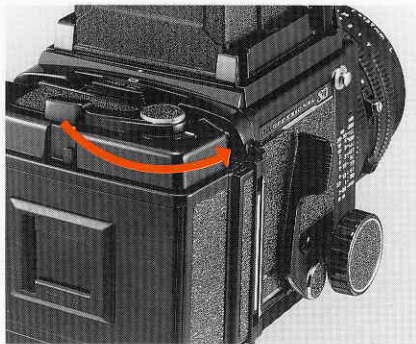


Focusing knob fixing

After adjusting the focus, turn the focusing knob fixing lever forward and clamp it to secure the focusing mechanism.

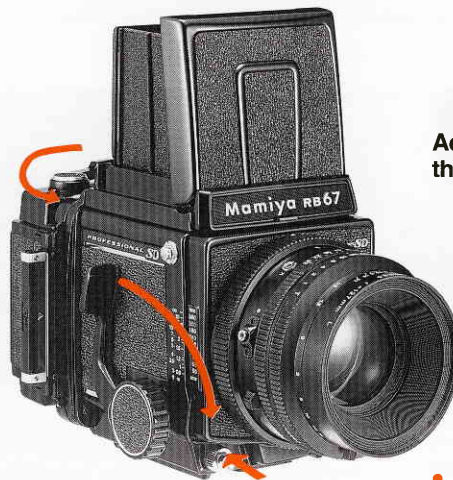
- Once secured deviations in focusing are prevented-ideal for conditions of continuous photo taking.

13 Taking Photographs



Advancing the film

1. Take out the dark slide and release the shutter. When the shutter is released, the red mark will appear in the exposure counter indicating that the film has been exposed.
2. As the shutter is released, simultaneously the film wind-stop mechanism is automatically disengaged, and the film can be advanced to the next frame. When film is advanced one full frame, the figure in the exposure counter advances and the red mark will disappear.

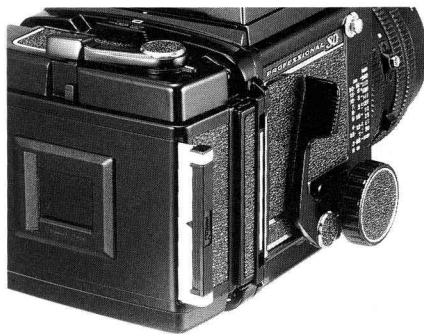


Advancing the film and cocking the shutter

- ① Film advancing
- ② Shutter cocking
- ③ Shutter releasing

However, either advancing the film or cocking the shutter can be conducted first.

- The multiple-exposure coupler will prevent shutter release unless the exposed film frame is advanced.
- A multiple-exposure photographic mode is an added feature.
- Wind the film advance lever in a slow, steady manner to avoid film advance problems.
- Although the film advance lever cannot be reversed until it is wound up to the initial 70°, it can be moved in several short, definite strokes thereafter.



Storing the dark slide

When photographing, the dark slide may be conveniently kept in the storage on the back of the holder. It can be inserted either from the right or left side.



The dark slide can also be stored on the side of the camera body as pictured.



Memo clip

The clip on the back cover can be used for holding the cover of a film box or a slip of paper to record photographic data.

14 Testing the Shutter When the Film is Loaded



When the shutter is cocked with the dark slide partially pulled out (approx. 5mm) and the shutter release button is pressed, the shutter can be released without exposing the film in the roll film holder to light. This operation can be utilized for testing the shutter prior to photographing.

- When pulling out the dark slide, stop when the entire triangular hole on the dark slide becomes visible. If the shutter is released when the dark slide is pulled out beyond that hole, the film will be exposed to light.
- When the shutter is released, a red mark will appear on the exposure counter.
- When taking the first photograph subsequent to this test, cock the shutter in the multiple exposure mode (see page 32), and pull out the dark slide. After the first photo is taken, move the multiple exposure lever back to its normal position and continue photographing.

15 Unloading the Film

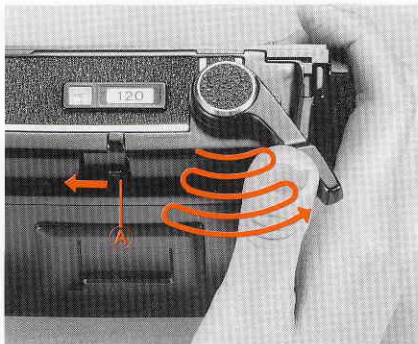


After completing the last exposure, completely wind the backing paper on to the take-up spool.

1. Open the back cover of the holder and remove the film insert. Press the right side spool release pin, remove the full spool, then wrap and seal the film to protect it from loosening.

2. Move the empty spool to the take-up side and the camera is ready for reloading.

- The exposure counter automatically resets to S (start) as soon as the back cover is opened.
- When the exposure counter shows other than S, film is in the holder. Be careful not to open the back cover in this mode!



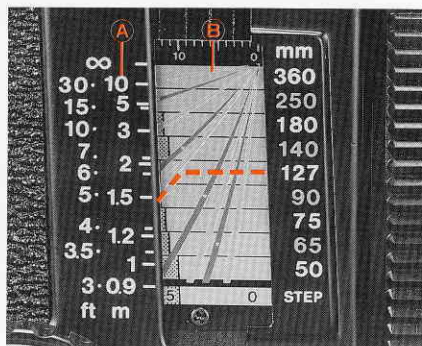
Winding up film when unexposed frames remained in the holder

To wind up unexposed frames, push the film wind-stop release lever (A) to the left and continuously wind the advance lever until all the film is reeled up.

Handling of Exposed Film

- DO NOT remove exposed film from the camera under direct sunlight. Find a shaded area or turn your back to the sun and shade the camera before you open it.
- When removing the exposed film, be careful to prevent it from unraveling on the spool. Gently tighten the paper trailer, moisten the attached seal, and secure the film to prevent light leaks.
- Immediately place exposed film in your camera case or a bag, away from sunlight.

16 Distance Scale



Distance from the film plane to the subject can be determined by the distance scale (A).

Each lens features different distance scale curves as pictured above. The figure on the distance graduation (B) which align with the curve indicates the distance to the subject.

For example, if the distance graduation and the curve are as shown in the photo after focusing with the 127mm lens, distance to the subject is 1.5m (5ft).

The curve for each lens is marked with a white dot. Since the dot coincides with the right-hand lens indicator, use it to quickly find the curve on the scale for the lens used.

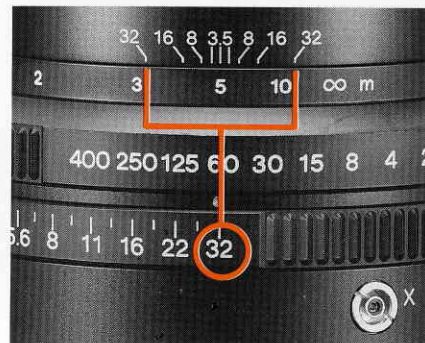
17 Depth-of-field



The focusing screen

1. Set the desired aperture by turning the aperture scale ring and then adjust the focus.
2. Depress the depth-of-field preview lever (A) and the depth-of-field can be observed on the ground glass focusing screen.

Upon removing your finger, the lever will return to its original position and the lens aperture will fully reopen.

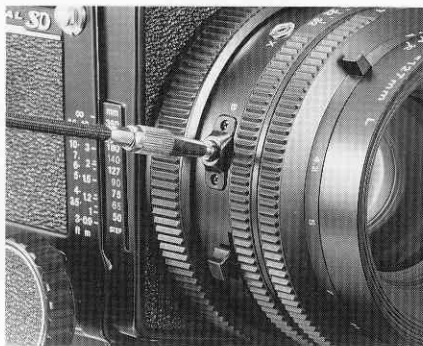


Using the depth-of-field scale

1. Turn the distance scale lever and align the figure representing the focused distance with the center index on the depth of field scale.
2. The two distances (on both sides of the center index) opposite the same figures as the actual lens aperture on the depth-of-field scale are the near and far limits of depth for a given distance and lens aperture.

For example, when photographing a subject 5 meters away with the 127mm lens at an aperture of $f/32$, objects from about 3 to 13m will be in focus.

18 Time (T) exposures, Flash Photography



To make a time exposure, first set the shutter speed ring to T and screw a cable release into the bulb socket. After doing so, the shutter will remain open upon depressing the shutter release button.

The shutter will be closed by pressing the plunger of the cable release without giving any shock to the camera.

The shutter can also be closed by following procedures.

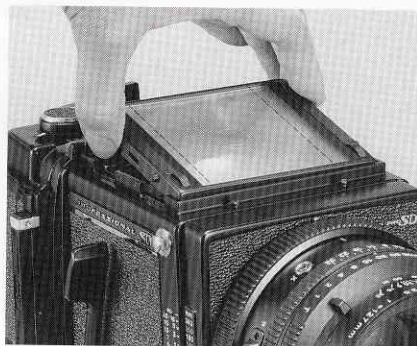
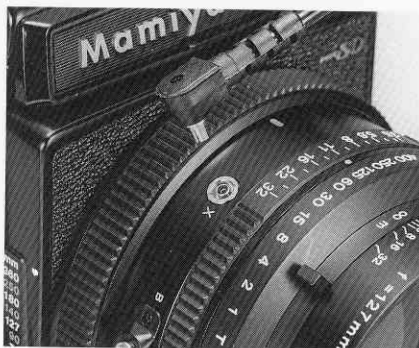


1. depressing the bulb socket by finger
2. turning the shutter speed ring toward 1sec.
- (1)
3. pressing down on the shutter cocking lever about 30°

- Do not move the shutter cocking lever until just before closing the shutter.
- When the shutter is closed by the shutter cocking lever, the light baffle in the camera body drops down slightly; however no fogging occurs.

When the shutter is closed by the shutter cocking lever, the lever is locked by the reverse motion stopper and does not return to its original position. When the shutter is cocked by further depressing the lever, the lever returns to its original position.

19 Changing the Focusing Screen



Flash photography

Connect the cord of the flash unit to the synchroflash terminal (X contact).

- The flash unit synchronizes at all shutter speeds.

Determining the aperture

The aperture setting for flash photography is determined by dividing the guide number of the flash unit by the subject distance.

For example, when photographed with ISO100 in m.

$$\frac{\text{(Guide number) } 40}{\text{(Subject distance) } 5 \text{ (m)}} = \text{(Correct aperture setting) } 8$$

Attaching and detaching

First remove the waist-level finder, then while holding both sides take out the focusing screen.

To attach it, hold each side and insert the focusing screen into the top of the camera body and press down lightly.

NOTE:

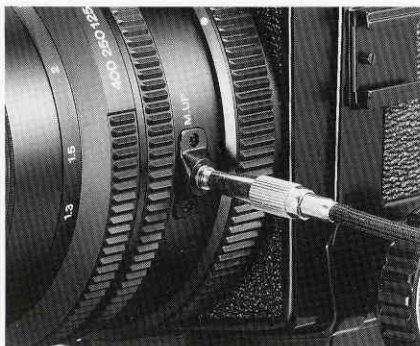
When the focusing screen has been detached, do not touch the picture format red rod indicator on the side of the camera body.

Seven types of interchangeable focusing screens are available to meet various photographic applications.

- The focusing screen is made of acrylic resin, and since its surface is soft and susceptible to damage, be carefully so as to not get fingerprints or other foreign matter on it.

When dust is wiped off with a cloth or lens paper, static electricity attracts more dust. So, use a blower brush to remove dust.

20 Mirror Lock-up Photography



The mirror lock-up technique, whereby the mirror is raised beforehand and only the lens shutter is released is ideal for situations where vibrations must be completely eliminated. Specifically close-up photography, using telephoto lenses and in applications where long or slow exposures are necessary mirror lock-up is ideal. With a tripod and cable release, the mirror lock-up mode ensures the utmost in sharpness.



Preparations

1. For mirror lock-up operation, securely screw a cable release into the lens socket as pictured. When the socket slightly elevates the camera will be in the mirror lock-up mode.
2. To cock the shutter and the mirror, press the cocking lever forward as far as it will go.

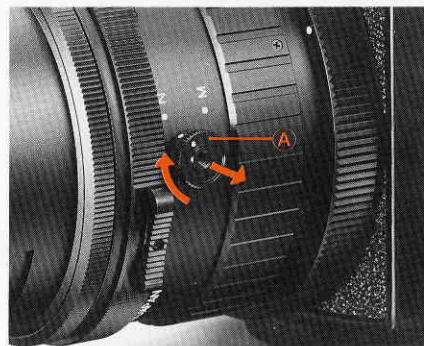
Either Step 1 or 2 can be performed first.

3. Upon depressing the shutter release button the mirror will rise, but the shutter will remain closed.

4. Press the plunger of the cable release and the shutter will operate.

NOTE:

- Unless the cable release is removed from the mirror lock-up socket, the camera will remain in the mirror lock-up mode and the film



cannot be exposed even when the shutter release button is pressed.

When mirror lock-up photography is completed, be sure to remove the cable release. If the red line around the mirror lock-up socket is still visible, when the cable release is removed, the camera is still in the mirror lock-up mode. So, be sure that the cable socket sinks and the red line disappears.

- As shown in the photo, some lenses use a mirror release operating knob. When using a lens with a knob, pull out the mirror release operating knob (A), turn it clockwise, and screw the cable release into the knob aligning the red dot on the knob with the MIRROR LOCK-UP indicator.

When mirror lock-up photography is completed, be sure to remove the cable release and return the knob to its original position.

Using the Mirror Lock-up Cable Release

1. When exposure is shorter than 1 second:

(1) Screw the short cable into the mirror lock-up socket, and screw the long cable into the shutter release button.

(2) By pressing the cocking lever forward as far as it will go, cock the shutter and the mirror.

(3) The first stroke will make the mirror rise, and the second will release the set speed.

•For lenses which use the mirror lock-up operating knob, align the knob with the MIRROR LOCK-UP indicator, screw in the short cable, and screw the long cable into the shutter button. The first stroke will make the mirror rise, and the second will release the set speed.

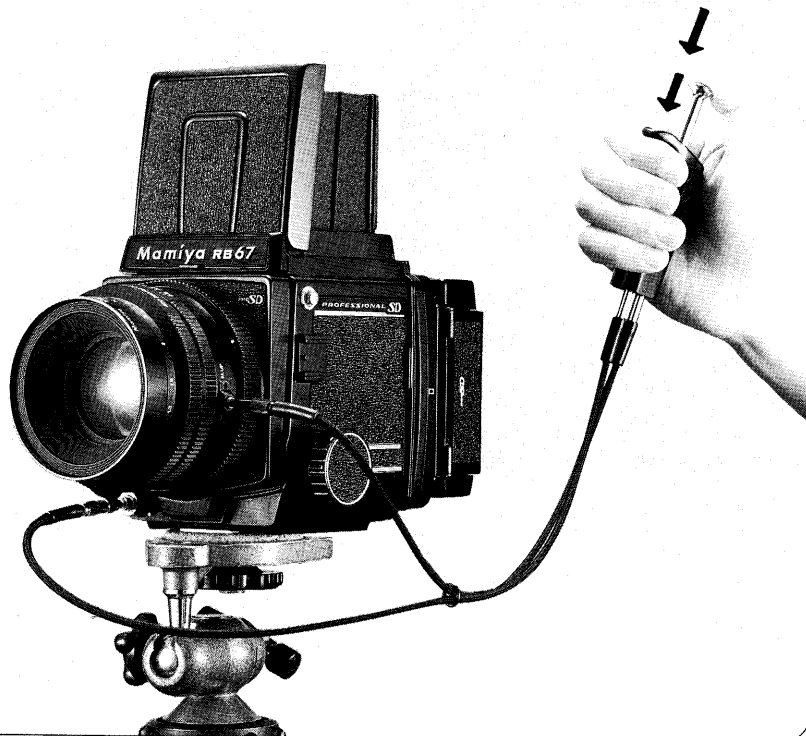
2. When exposure is longer than 1 second, it is convenient to integrate with time (T):

(1) Screw the short mirror release cable into the bulb unit of the lens, and screw the long cable into the mirror lock-up socket.

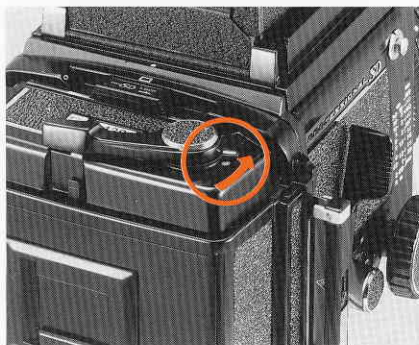
(2) Set the shutter speed ring to T.

(3) Raise the mirror by pressing the shutter release button on the body.

(4) The first stroke of the mirror release will open the shutter and the second stroke of the mirror release will close it.



21 Multiple Exposure Photography



When the multiple exposure lever of the roll film holder is moved forward, the multiple-exposure prevention coupling pin disengages. In this mode the shutter can be cocked and released without limit.

- The multiple exposure lever can be changed over before or after the shutter is cocked, and also before or after the shutter is released for the first multiple exposure photograph.
- When the multiple exposures are completed, never fail to return the multiple exposure lever to its original position; otherwise, subsequent photos will also be multiple exposures.

22 Close-up Photography

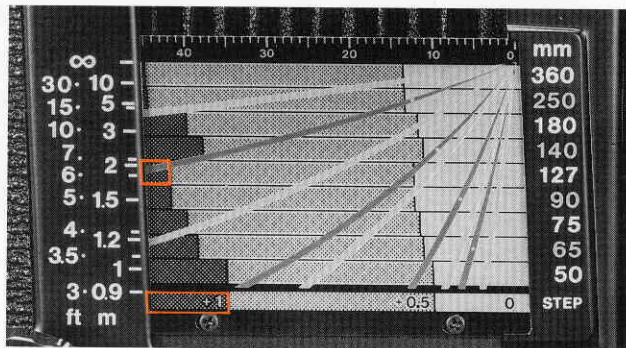
Exposure compensation for close-up photography

When the bellows of the camera is extended for close-up photography, and distance between the lens and the film plane increases, image brightness on the film plane decreases, thus requiring an increase in exposure. To adjust the exposure, refer to the exposure compensation scale on the camera body.

When a finder with built-in exposure meter (i.e. PD Prism Finder or PD Magnifying Hood) is used, exposure compensation is unnecessary, since TTL metering takes place.

When making exposure compensation, refer to the exposure compensation scale on the camera body.

Maximum close-up photography table with belows fully extended.



Lens	Lens-to-subject distance	Magnification	Subject size
Sekor C 50mmf/4.5	49mm	0.88	63× 79mm
KL 65mmf/4	85mm	0.70	80×100mm
KL 75mmf/3.5	125mm	0.61	92×114mm
KL 90mmf/3.5	196mm	0.51	111×138mm
KL127mmf/3.5	408mm	0.36	155×192mm
Macro KL140mmf/4.5	512mm	0.33	173×214mm
KL180mmf/4.5	830mm	0.26	217×270mm
KL250mmf/4.5	1578mm	0.19	299×371mm
KL360mmf/6	3378mm	0.13	432×536mm

1. After focusing the lens, read the exposure compensation factor on the scale.

For example, assuming that the focus was adjusted with the 127mm lens, the result will be as shown in photo above.

Look for the same pattern in the bottom column where the side panel lines meet the 127mm lens scale. The numerical value of that pattern (+1 in this case) is the exposure compensation value.

2. Change either the shutter speed or the aperture for exposure compensation.

When the exposure compensation value is +1, open the aperture one step, or slow the shutter speed 1 step. For a 0.5 step compensation, use the half-stop aperture scale settings.

For example, if your exposure meter shows an exposure setting of (1/60 sec. at f/16), it must be adjusted in the case of the +1 compensation value to (1/30 sec. at f/16) or (1/60 sec. at f/11).

- When using the 50mm and 65mm lenses closer than 1 meter (3¼ ft), it is necessary to use a lens aperture of f/16 or smaller to obtain satisfactory lens performance.
- Graduations on the upper side of the distance scale represents the belows extension values (mm).

This scale is used to obtain exposure compensation values for close-up photography with extension tubes.



Lens hood

The lens hood attached to the standard 127mm lens can be used for the 90mm lens.

- Screw the attachment ring into the front of the lens mount.
- Pull the folded rubber hood straight out.
- The lens hood may be left on when the camera is being carried — simply push back and turn out the hood while it is attached to the lens.
- A filter can be screwed in between the lens and the hood, or in front of the lens hood.

Using a tripod

The use of a large, sturdy tripod is recommended for optimum picture quality.

1. The standard tripod has a 1/4 inch tripod screw. Simply attach the RB67 Pro-SD as you would any other camera with standard threads.
2. When using a tripod with a 3/8 inch screw, first remove the small screw in the base of the tripod socket by turning it counterclockwise with a coin or an appropriately sized screw driver. Next, remove the 1/4 inch adapter (A) from the tripod socket by rotating it counterclockwise. The camera can then be mounted on a 3/8 inch screw tripod.



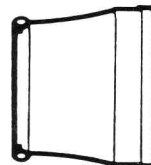
Used on 50mm, and
65mm lenses
(80mmø slip-on type)



Used on 90mm, and
127mm lenses
(77mmø screw-in type)



Used on 140mm, 150mm,
180mm, 210mm, 250mm,
and 350mm lenses
(77mmø, screw-in type)



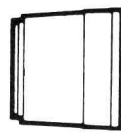
For the 500mm lens
(108mmø, slip-on type)



For the 75mm lens
f/3.5 lens
(80mmø, slip-on type)



For the 100~200mm
zoom lens
(60mmø, slip-on type)

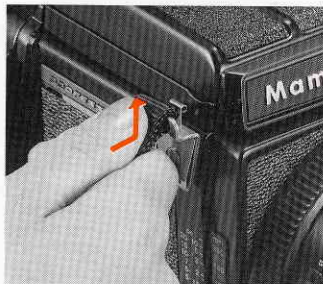


For the 360mm lens
(77mmø, screw-in type)

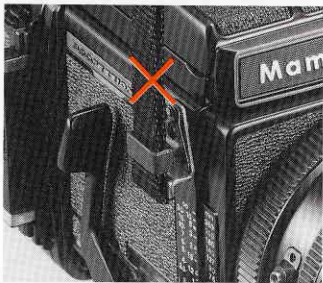
23 How to use the Carrying Strap

Attaching the Strap

Hold the metal clamp of the strap so that the key-hole shaped opening faces the Carrying Strap Lug on the camera body. Gently fit the upper part of the key-hole opening over the lug. Next, gently push the bottom of the metal clamp upwards and it will lock in place with a click.

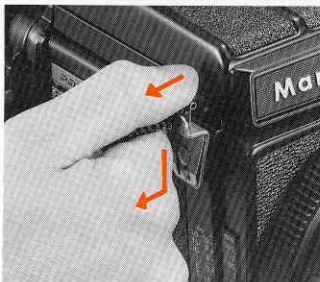


If the clamp is attached to Accessory-shoe side of the camera upside-down, it will be difficult to remove, so be careful to attach the clamp rightside-up.



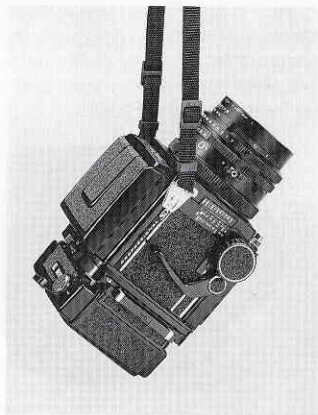
Removing the Strap

Reach behind the strap and while gently squeezing the top of the protruding front plate (leaf spring), slide the clamp downward and off the lug.



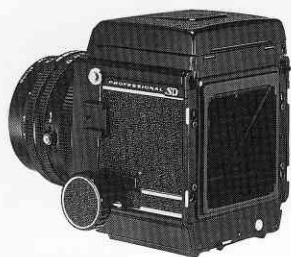
Three Carrying Positions

Depending upon the way the strap is attached to the camera, there are three ways of carrying the camera as shown in the accompanying illustrations. Since the Carrying Strap Lug is not rotary, the carrying strap will not become twisted.



24 Back Locking System

The unique back locking system of the Mamiya Pro-SD is designed to allow it to accept a large variety of film holders. All Pro-SD series film holders mount and lock directly on the back of the Pro-SD.



Pro-SD
Revolving adapter
AR-701



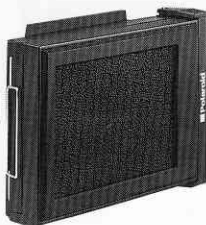
Pro-SD

120 Roll film holder HA-701
220 Roll film holder HB-701
6×4.5 Film holder HA-702 (exclusively for 120):
to be released soon.
6×4.5 Film holder HB-704 (exclusively for 220):
to be released soon.



RB

Pro-S 120 Roll film holder
Pro-S 220 Roll film holder
120/220 Power drive roll film holder 6×8
120/220 Power drive roll film holder 6×7
6×4.5 Film holder (exclusive for 120)
Double cut film/plate holder
70mm Film holder







Pro-SD
Polaroid pack film holder
HP-701

25 Lens Mount Adapter Ring

When using Mamiya Sekor C interchangeable lenses with the RB67 Pro-SD, the lens mount adapter ring must be used. It should be attached to the rear lens mount. (When using Mamiya KL lenses with the RB Pro-S and RB67, remove the lens mount adapter ring.)

- The lens mount adapter ring comes with Sekor C lenses.
For KL lenses it is attached to the rear lens mount.
- Both the 75mm shift and APO 500mm lenses are L lenses.
- Make sure to securely tighten the lens mount adapter ring onto the lens mount.

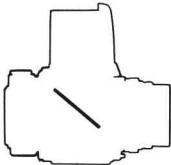

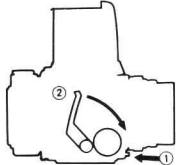
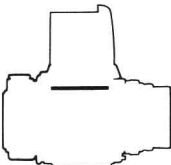
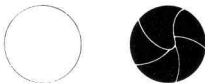

Body \ Lens	Sekor C	KL	L
RB67 Pro-SD	The lens mount adapter ring should be attached.		
RB67 Pro-S		The lens mount adapter ring should be detached.	Cannot be used 

Mamiya RB67 Pro-SD Operation Diagram

Attaching a lens with the shutter released or the mirror raised

When a lens is removed from the body, the mirror is set (lowered) and the lens shutter cocked. Conversely, when attaching a lens, the same conditions should prevail (mirror set and shutter cocked). However, should a lens be attached with either the mirror raised or shutter released, or both, the camera can be reset by following the procedures outlined below.

1. If the mirror is raised (regardless of whether the lens shutter is cocked or released), simply depress the Cocking Lever to reset the camera.
2. If the mirror is set and lens shutter released (closed), remove the Dark Slide from the Film Holder and depress the Shutter Release Button (the film will not be exposed). Next, depress the Cocking Lever to reset the camera.

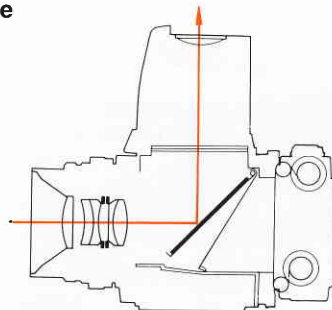
	Mirror condition	Shutter blade condition	Operation
1		 Closed	
2		 Opened or Closed	

1 Shutter setting mode

Shutter blade



Aperture blade



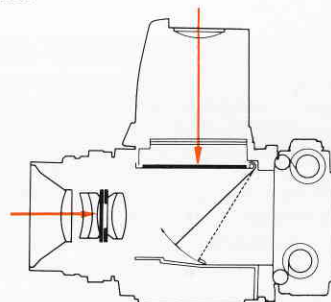
- Both the shutter blade and the aperture blade are opened.
- The mirror and the light baffle are lowered to the set position.

2 Just after pressing the shutter release

Shutter blade



Aperture blade



- The Shutter blade is closed and the aperture blade begins stopping down.
- The mirror is raised and the light baffle starts rising.

Mirror-up photography

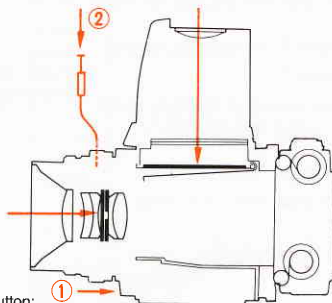
Shutter blade

(1)

(2)



Aperture blade



(1) When pressing the shutter release button:

- The shutter blade is closed and the aperture blade stops down to a preselected aperture.
- The mirror and the light baffle are raised.

(2) When releasing the shutter, using the mirror-up release:

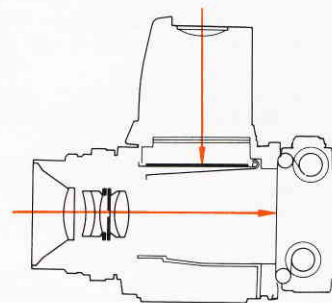
- Only the shutter blade operates, closing after being fully opened.

3 Exposure

Shutter blade



Aperture blade



- The light baffle is raised to its limit.
- The aperture blade stops down to a preselected value.
- The shutter blade is closed after being fully opened.

26 Trouble Shooting

Various safety interlocking device are incorporated in the Mamiya RB67 Pro-SD to eliminate careless operational mistakes. When the shutter is not released, or when the lens or the roll film holder cannot be removed, do not hastily conclude that this indicates a camera malfunction. Check the following conditions: the numbers in parentheses indicate the page number in the Instruction Manual that cover relevant malfunctions.

Shutter release button cannot be depressed

1. Is the shutter release button locked?

Turn the shutter release lock ring counterclockwise and align it with the white dot. (p.13)

2. Is the mirror set?

Set the mirror by pressing the shutter cocking lever down.

3. Is the roll film holder loaded with film and has the film and has the film been advanced to the first exposure?

4. After the shutter was released during ordinary exposure (not during multiple exposures), did you advance the film?

5. Was the dark slide pulled out?

Pull out the dark slide.

6. Is the revolving adapter turned to the click stop position?

Turn the adapter until it stops with a click. (p.20)

7. Has the slide lock on the revolving adapter stopped halfway?

Move the slide lock until it stops. (p.4)

Lens cannot be removed

To remove, press the shutter cocking lever down. Set the mirror and the shutter. (p.10)

When mounting the film holder, won't the slide lock move?

While pressing the side lock release lever, move the slide lock to the left. (p.14)

Can't the roll film holder be removed?

After inserting the dark slide, the slide lock should operate.

27 Camera Storage and Maintenance

- If the camera is not to be used for a long time, remove the film.
- Do not store the camera at temperature exceeding 40°C or below -10°C. Also avoid storing in a damp or a sea air environment.
- As your camera is a precision instrument, avoid exposing it to vibrations or severe shocks. When handholding your camera, always exercise extreme caution so that it is not dropped or hit against something.
- Prolonged disuse does not lengthen camera life, but shortens it. So, when storing it for a long time, periodically take the camera out and release the shutter several times to keep it in good condition.

When using the RB67 Pro-SD for special important photos for on location photography, weddings, overseas trips and or other important photography, be sure to take some trial photos and check all functions.

It is advisable to put your camera in for periodic check-ups (at intervals of one to two years) to thus ensuring the best photography at optimum performance.

Cleaning

- Never touch the surface of the mirror! If it needs cleaning, use a blower brush or lens paper to gently remove dust particles. Please note the surface should never be touched!
- Do not touch the lens surface. If a fingerprint gets on the surface, first remove the dust particles with a blower brush. Then gently wipe the fingerprint off with a lens cleaning paper with a drop of lens cleaner on it; finally, gently wipe dry with dry lenspaper.

Periodic Check

Periodically check the camera to make sure it is in working order. This is especially important before beginning a photographic session or assignment. Check the battery, flash synchronization, mirror and shutter operation, diaphragm functioning and film advance. Also check any accessories you plan to use.

For a general overhaul, cleaning, or minor repair, take the camera to your nearest authorized Mamiya Service Center or see your camera shop for advice.