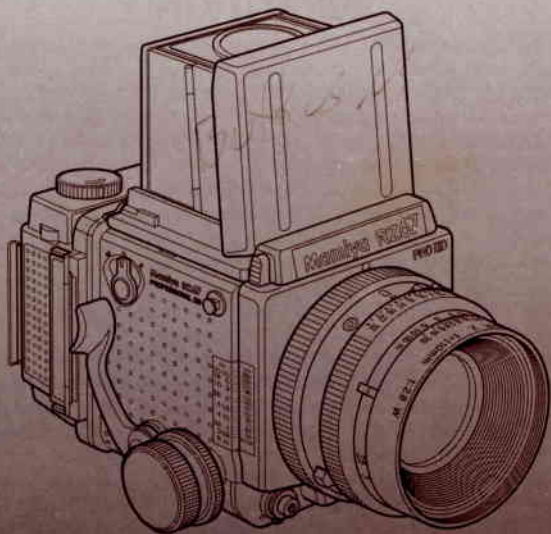


Mamiya


RZ67 PROFESSIONAL II D


Instructions



For proper use of the camera

- In order to prevent injury to you or others read the "Safety precautions" thoroughly.
- The symbols used in this manual and their meanings are as follows.

 **WARNING...** A WARNING calls attention to a procedure, practice, condition or the like, which, if not correctly performed or adhered to, could result in serious injury or death.

 **CAUTION...** A CAUTION calls attention to a procedure, practice, condition or the like, which, if not correctly performed or adhered to, could result in injury to people and may damage or destroy property.

Precautions: These items contain important safety descriptions. Make sure to follow the advice.

WARNING

- Store the batteries and small accessories out of the reach of infants and small children. If they are swallowed, contact a physician immediately.
- Store the camera out of the reach of infants and small children. They might wind the strap on the camera around their necks.
- If you detect an abnormality with the camera, such as generating heat, smoke, or a burning smell, stop using it immediately. Remove the batteries from the camera. Otherwise, a fire may break out or you may burn your skin. If removing the batteries because of an abnormal condition, do not touch them with your bare hands.

CAUTION

- Do not let the batteries' terminals ("+" and "-") come into contact with metal objects or carry or store batteries together with metal hair pins, chains, paper clips or other metal objects.
- When storing and disposing of batteries, insulate (apply tape to) the batteries' terminals ("+" and "-") so that they do not come into contact with metal objects or other batteries.
- Do not charge the batteries, take them apart, apply pressure to them, heat them or dispose of them in flames.
- Do not use new batteries together with used ones or mix batteries of different manufacturers or types.
- Do not bang or drop the camera. The camera may break and you may be injured by the broken parts. If it is banged or dropped, stop using it.
- Remove spent batteries from the camera immediately.
- Use a tripod providing sufficient strength for the camera and lens. Also do not transport the camera with it mounted on a tripod. Doing so could damage the camera or cause you to trip, resulting in injury or other accidents.
- Be sure to fasten the neck strap securely to the camera's strap mount. Failure to do so may result in the camera falling, causing injury or damage to the product.
- Do not look directly at the sun or strong light sources through the lens. Doing so could impair your vision.
- Put a cap on the Lens. Without the cap, sunlight can enter through the Lens and will be focused. This could cause a fire.
- Do not lift or hold the camera by the viewfinder. The viewfinder may break or the camera may fall, you could be injured or the camera may be damaged.
- Do not disassemble. Internal electrical circuitry may cause electric shocks if touched.
- Do not use the camera for purposes other than taking pictures.

Congratulations on your purchase of the Mamiya RZ67PRO IID and welcome to the world-wide family of happy Mamiya camera owners!

The Mamiya RZ67PRO IID is a 6 x 7 cm format single-lens reflex camera with a lens shutter on which is installed a revolutionary Rotating Back.

Complimented by its large selection of world-class Mamiya lenses, and many other system accessories, the RZ67 has become the camera of choice by the world's top photographers. The RZ67PRO IID is a versatile camera, ideally suited to many photographic applications, including commercial portraits, fashion, industrial documentation, nature and scientific photography.

Also, the Digital Back accessory for the RZ67PRO IID is compatible with Mamiya's special Digital Control System, so it can expand the applications of this camera for both film and digital work.

In order to take full advantage of its capabilities, and to insure proper operation, please read this instruction manual carefully before you use the camera. After reading the manual, store it in a handy location for further reference.

This manual gives general instructions for normal uses of the camera. However, the manual may not cover some uses of the camera when combined with other systems. In such cases, read the user's manual for each system and reread this manual.

Features of the RZ67PRO IID

- 1 Versatile range of lenses available from wide angle to telephotography.
- 2 Mirror-up and multiple exposure functions.
- 3 Rotating back that can change the view between horizontal and vertical.
- 4 Bellows extension focal adjustment mechanism (double focal point adjustment mechanism equipped with a fine feed knob)
- 5 Strobe flash is synchronized at all shutter speeds.
- 6 Intermediate shutter speeds can be used.
- 7 LED indicators in the viewfinder and an audible alarm.
- 8 Mamiya Digital Communication System creates the optimum conditions between the camera and the digital back.

In order to combine camera functions with digital processing, the RZ67PRO IID employs the MSCE* communication standard. Using this serial protocol the camera can operate the camera and digital back can be optimized, producing state-of-the-art, ultra high pixel, neutral control, digital imaging technology.

* Mamiya Serial Communication for External, or MSCE is Mamiya's proprietary digital communication standard for communicating data directly between the camera and the digital back.

Names of Each Parts

Body

Focusing Screen

(P56)

Gold Plated Contacts

R-M Lever

(P31)

Lens Alignment Dot

Alignment Mark

Mirror

Cocking Lever

(P18, 19
36, 41)

Auxiliary Electronic Shutter Release Contacts

Distance Scale

(P49, 51)

Shutter Release Button

(P16)

Dual Focusing Knob

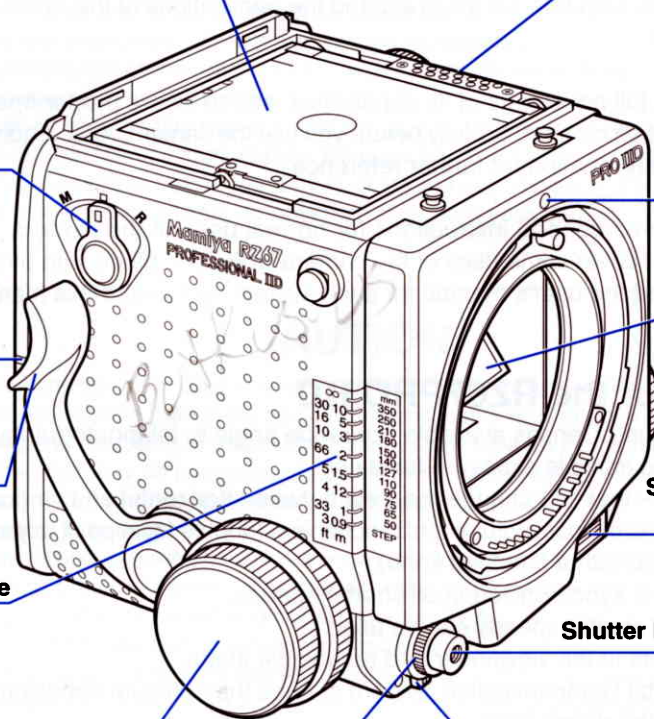
(P38, 41)

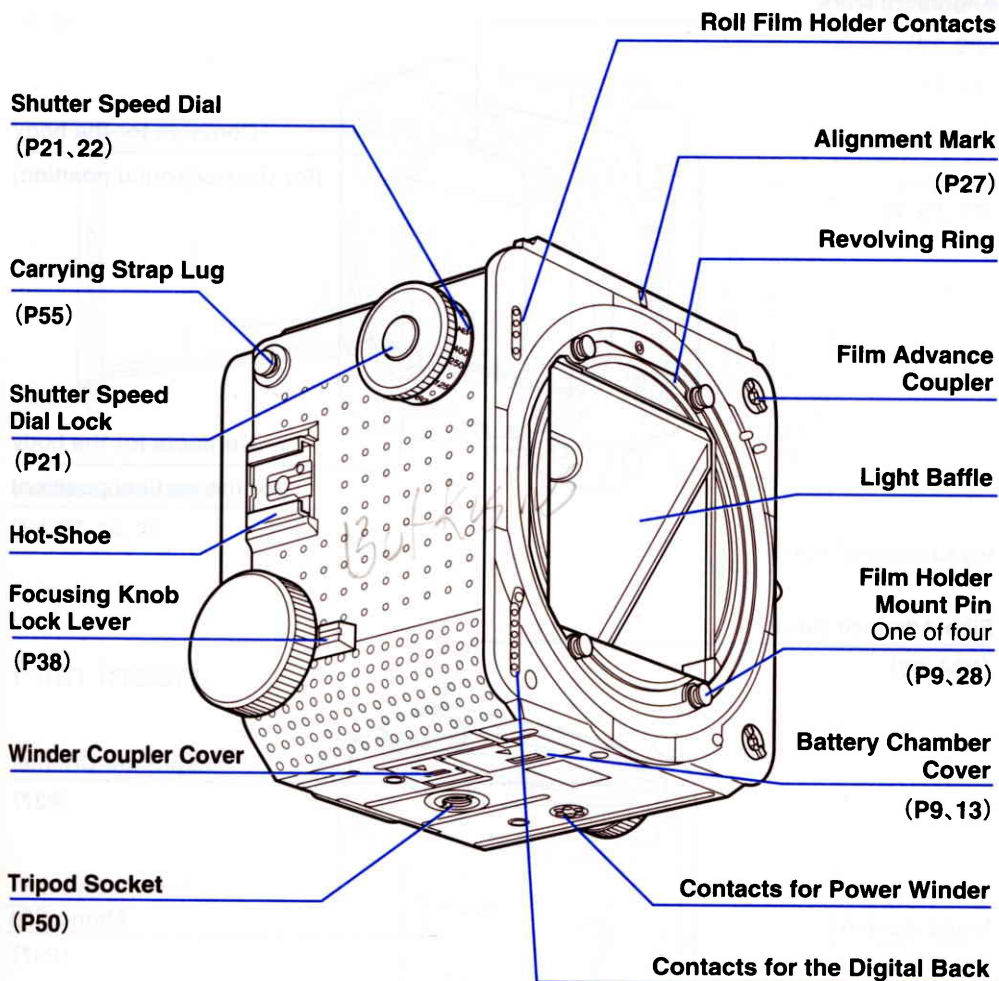
Collar Stop Lever

(P30)

Release Button Collar

(P30)

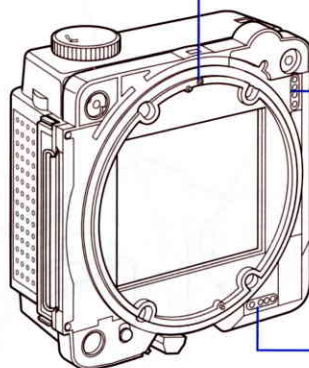




Roll Film Holder

Alignment Mark

(P9, 28)

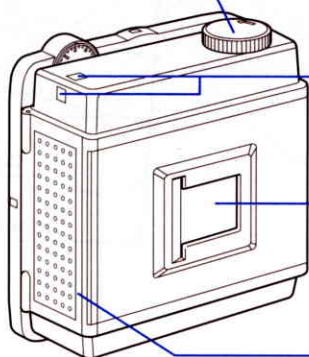


Contacts for the body
(for the horizontal position)

Contacts for the body
(for the vertical position)

Film Advance Knob

(P34, 36)



Exposure Counter
(P37)

Memo Clip
(P37)

Dark Slide Storage Slot
(P37)

Outer cassette

Film Speed Dial

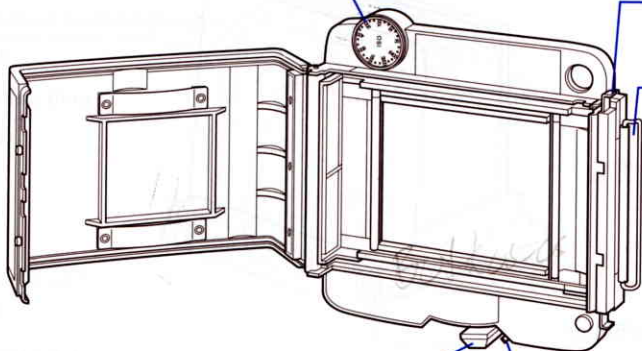
(P35)

Back Cover Latch
(Two positions:
upper and lower)

(P33, 35)

Dark Slide

(P10, 29,
37, 43, 47)



Holder Lock Lever

(P9, 27, 28, 29)

Lock Release Lever

Film insert

Film Spool Stud

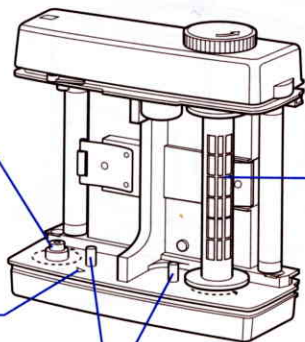
(P34)

Take-up Spool

(P33, 34, 42)

Start Mark

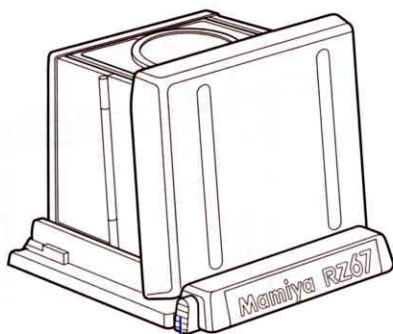
(P34)



Spool Release Pins

(P33, 34, 42)

Waist-Level Finder



Finder Release Button

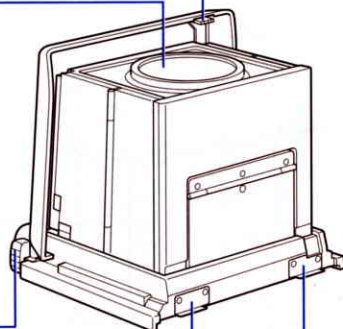
(P23)

Magnifier Release Lever

(P25)

Magnifier

(P25, 26)



Finder Release Button

(P23)

Finder Catch

(P23)

Lens

Alignment Mark

(P9, 19)

Bayonet Ring

(P9, 17, 19, 20)

Flash Sync Terminal (X-sync)

(P50)

Depth-of-Field Scale

(P49)

Aperture Ring

(P20)

Lens Distance Scale

(P49)

Depth-of-Field Preview Lever

(P49)

Time Lock Button

(P45)

Shutter Lock Pin

(P54)

Time Exposure Lever

(P20, 45)

Shutter Cocking Pins

(P18, 54)

Mirror Lock-up Cable Release Socket

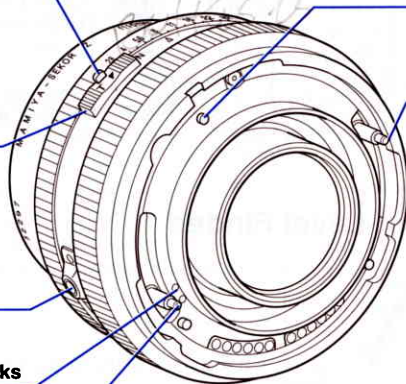
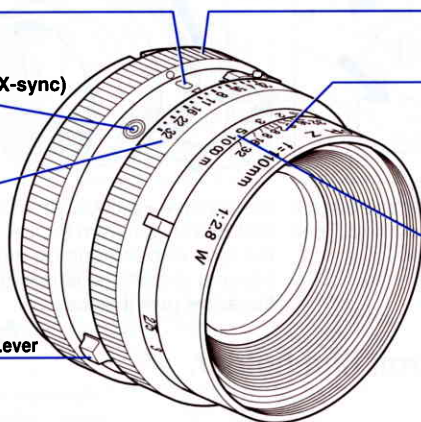
(P46, 48)

Cocking Position Marks

(P18)

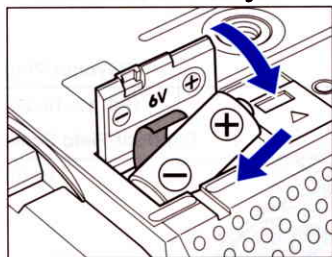
Shutter Cocking Pins

(P18, 54)



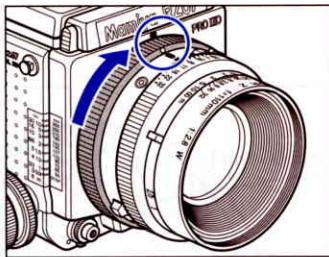
Camera operation test

1. Insert a battery



Open the Battery cover and insert a battery, negative \ominus end first. Then close the battery cover.

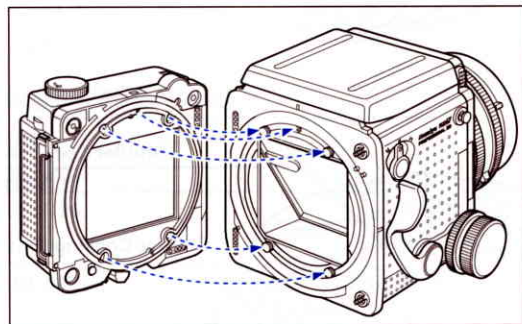
2. Attach the lens



※Make sure that the Mirror on the body is in the lowered position and that the Shutter is released.

Remove the Front Cap from the body and the Front and Rear Caps from the Lens. Match the mark on the lens with the one on the body. Then turn the bayonet ring on the lens in the direction shown by the arrow until it stops.

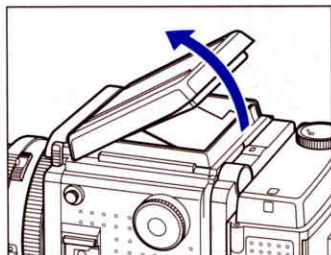
3. Attach the roll film holder.



Remove the Rear Cap from the body and the Protective Cap from the Roll Film Holder. Match the Alignment Mark on the Roll Film Holder with the one on the body. Then, slide the Holder Lock Lever on the Roll Film Holder to secure it.

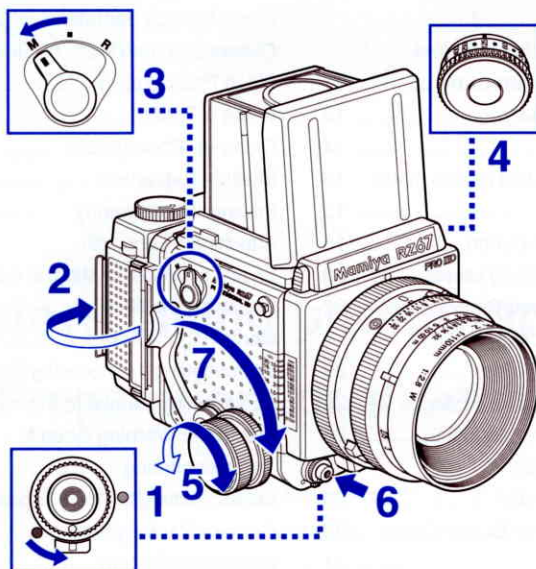
※You can test the camera's function without attaching the Roll Film Holder.

4. Lift the Waist-Level Finder.



Lift the back of the Waist-Level Finder to open it.

It is best to become acquainted with the method for releasing the shutter before using film in the camera.



[Attach the Lens and Roll Film Holder to the body.]

1. Rotate the Shutter Selector Ring so that the white dot on it is aligned with the white square just below.
2. Pull out the Dark Slide.
(You can test operation of the camera even if the Roll Film Holder is not attached.)
3. Set the R-M Lever to the "M" (multiple exposure) position.
4. Set the Shutter Speed Dial to any speed from B to 1/400 second, but do not use "AEF" or "RBL."
5. Adjust the focus using the Focusing Knobs on either side.
6. Press the Shutter Release Button.
7. Push the Cocking Lever all the way down to prepare for the next shot.
(Since this camera does not employ a quick return system, the Mirror remains in the up position. Set the Shutter and Mirror.)

■ After you complete test shot above, return the R-M Lever to its normal position (the white square position).

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Taking photographs 44~66

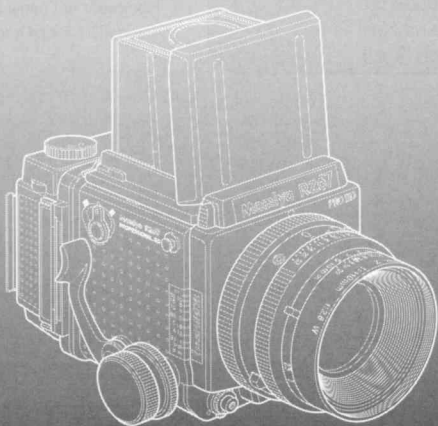
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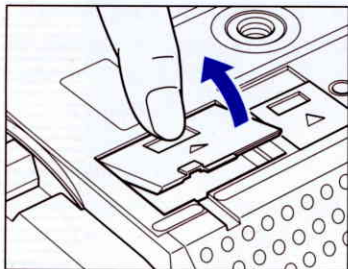
Before taking photographs

Preparation for shooting

This chapter describes how to insert a battery
and how to attach and detach the Lens
and the Roll Film Holder.

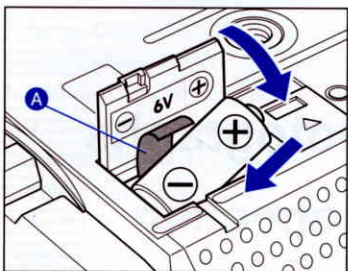


Loading the Battery (The camera will not operate unless battery is loaded.)



1. With your fingernail, slide the Battery Chamber Cover, on the bottom of the camera body, as indicated by the arrows in the illustration. Open the Battery Cover. The camera requires a 6V alkaline, silver oxide or lithium battery.

It is a good idea to wipe the battery terminals before insertion to assure proper contact. Observe polarity.

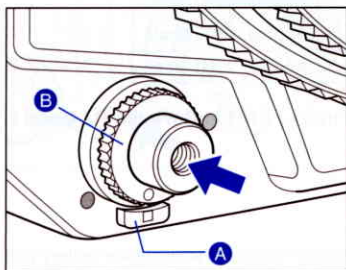


2. ⊕ position is marked in battery cavity. Insert the ⊖ side first at a steep angle and then push entire battery into place, making sure that the lift ribbon **A** wraps around battery. Close cover by pushing it down.

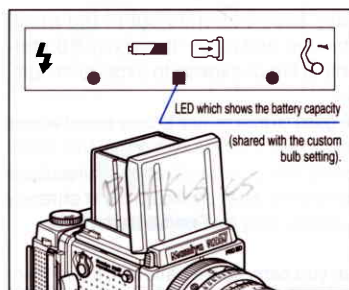
- ★ Be particularly careful not to let the lift ribbon cover the ⊖ terminal.
- ★ This camera cannot be operated without a battery. Be sure to insert a battery before operating the camera.
- ★ The camera requires a 4SR44 silver oxide, 4LR44 alkaline manganese or 2CR1/3 lithium battery.

Battery Check

By looking at the LED in the Viewfinder on the body, you can see the remaining battery capacity. Attach the Roll Film Holder to the body and leave the Dark Slide inserted.



Align the white ☐ on the Selector Lock Lever **A** on the body with the white ☐ on the Shutter Release Selector **B** so that the shutter is locked, to avoid accidental shutter release. Press the Shutter Release Button halfway down and the LED in the Viewfinder will light to show the battery level.



(This mark only appears when the Viewfinder screen is a type A Matte or a type A4 Checker.)

Battery capacity check

The battery capacity can be read by watching the LED in the Viewfinder (lit steadily or blinking, and the alarm sound):

Lit steadily...Battery full

Blinking...Battery is running low.
Obtain a new battery to replace this one.

Blinking and sounds an alarm...Battery is extremely low.
Replace with a new battery right away. You cannot release the Shutter.

Number of shots that can be made (under our test conditions)

At normal temperature (20°C)(68°F)

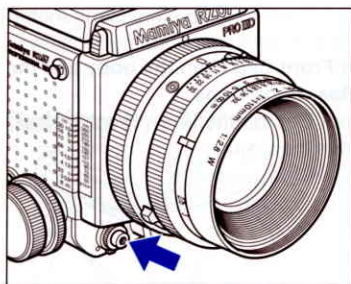
Silver oxide button cell battery (4SR44)	Approx. 2600 shots
Alkaline battery (4LR44)	Approx. 1300 shots
Lithium battery (2CR1/3)	Approx. 3300 shots

★ RZ67PROIID body with Z110mm f/2.8W, AE Prism Finder FE701 and Winder RZ Model 2.

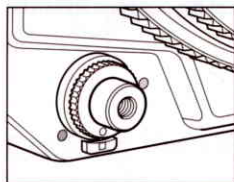
Batteries Care

1. The sealed, new battery which is supplied with this camera may have been subject to storage conditions which have reduced its service life. Therefore it is desirable to replace it with a fresh battery as soon as possible.
2. Carefully wipe the battery contacts before inserting into the chamber. Failure to do so may result in poor electrical contact and consequent malfunctioning of the camera.
3. Always remove battery when camera is not used for a while. Always carry spare batteries.
4. Battery life differs, depending on type, age, storage condition, ambient temperature, frequency of use etc.
5. Be sure to match the poles of the battery with those shown in the diagram in the chamber.
6. Always keep batteries out of the reach of children and never throw used batteries into a fire or expose to excessive heat.
7. When going on trips be sure to carry spare batteries to ensure that the camera will function. Also, as batteries tend to temporarily malfunction at temperatures below freezing, when photographing in extremely cold climates, carry the External Battery Case.
8. When you carry spare batteries, leave them in the original factory packaging. If they are "unpackaged", be sure to wrap them carefully in order to prevent them touching each other or any metal objects which can cause them to short circuit and become useless.

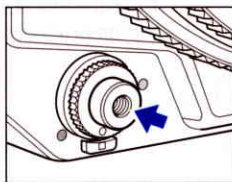
Shutter Release Button



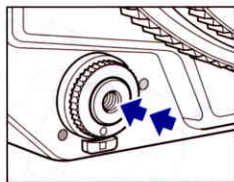
The Shutter Release Button uses a two-step system. At the 1st step of being pressed down, the LED in the Viewfinder lights. When the button is pressed further, the 2nd step, the Shutter will be released. After pressing the Shutter Release button halfway down, press it the rest of the way down to release the Shutter and take a picture. When the Shutter Release Button is pressed halfway down, the camera will measure light level of the scene in the AE Prism Finder FE701.



Normal position



Half-press

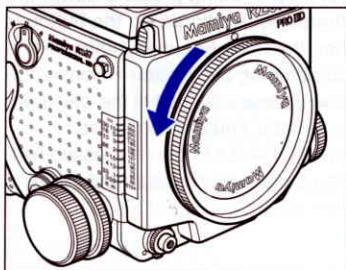


Release position

★When the R-M Lever is in the R position, press the Shutter Release Button half-way down and the R-M Lever will return to the normal (□) position.

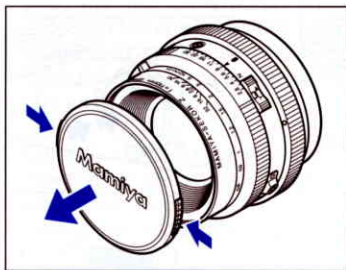
Attaching and Detaching Lenses

Before attaching the Lens

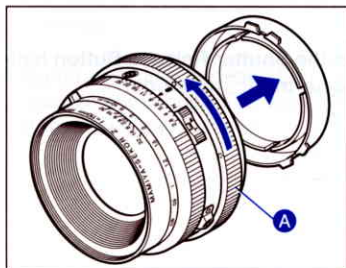


Remove the Front Cap from the body and the Front and Rear Lens Caps.

Turn the Front Cap on the body counter-clockwise to remove the Cap.



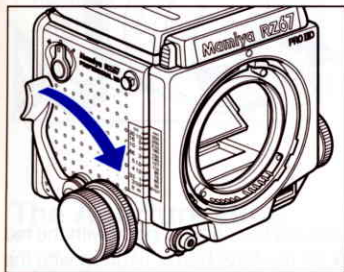
Push the Front Lens Cap at the positions shown on the left to remove it.



Remove the Rear Lens Cap by turning the Bayonet Ring **A** as shown until it stops.

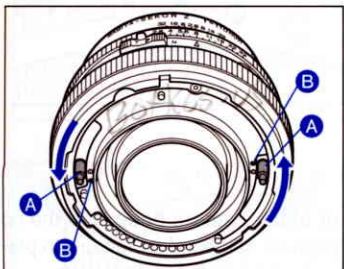
Before attaching a lens to the camera body, the mirror in the body must be set in the down position and the shutter of the lens cocked.

Setting the Mirror



Make sure the mirror is set (in the down position). If the mirror is in the up position, lower it by pushing the Cocking Lever as far as it will go in the direction of the arrow.

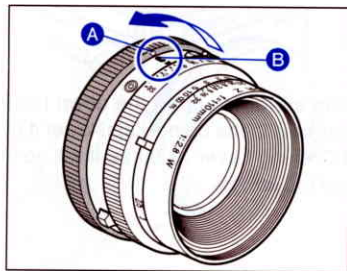
Cocking the Lens Shutter



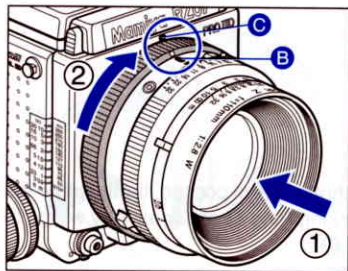
If the lens shutter is not cocked, firmly rotate the Shutter Cocking Pins **A** as far as they will go to the red dot **B**.

- ★ Moving the Shutter Cocking Pins only as far as the green dot will result in incomplete shutter cocking. Be sure to rotate them as far as the red dot **B**.
- ★ Whenever a lens is removed from the camera body, the shutter is already cocked.

Attaching the Lens



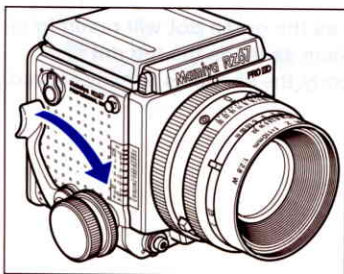
1. Rotate the Bayonet Ring as shown as far as it will go (the white dot **A** on the Bayonet Ring will be aligned with the central index **B** on the lens barrel).



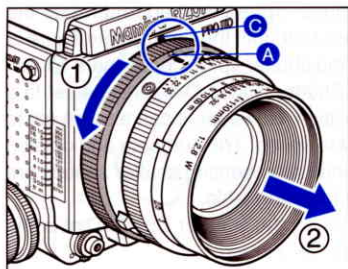
2. Seat the lens on the camera body with the red index line **B** on the lens barrel aligned with the red alignment dot **C** of the camera body. Next, rotate the Bayonet Ring of the lens firmly in a clockwise direction, securing the lens to the camera body.

Detaching the Lens

It is impossible to detach the lens when the mirror of the camera body is in the up position and the shutter of the lens is not cocked, because of the safety feature to prevent accidental exposure.

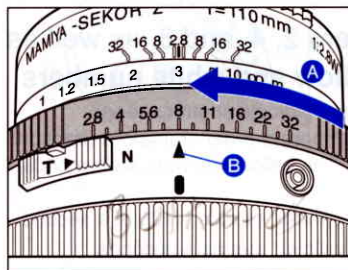


1. Push the Cocking Lever of the camera body completely down, which will set the mirror and cock the lens shutter.

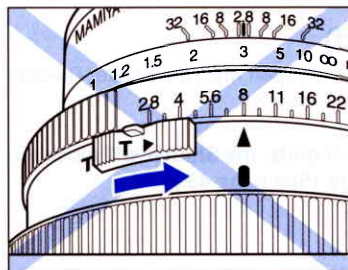


2. Rotate the Bayonet Ring of the lens counter-clockwise as far as it will go (the white dot **A** on Bayonet Ring will align with central red index line **A** of lens) and detach the lens.

The Aperture Ring



To set the diaphragm to a desired aperture, rotate the Aperture Ring **A** until the appropriate figure is aligned with the central index line **B**. It is perfectly acceptable to use the Aperture Ring at in-between click-stops. When the Shutter Release Button is depressed, the diaphragm will automatically stop down to the preselected aperture for the exposure.

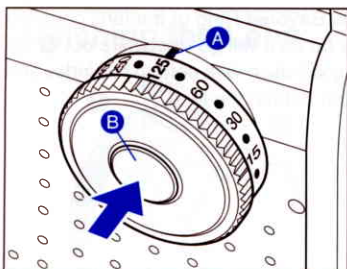


If the Time Exposure Lever stops in between the N (normal) and T (time) indicators, the Shutter cannot be released correctly.

Move the Time Exposure Lever to the left, until the N (green) indicator can be seen.

- ★ When you are adjusting the Aperture Ring, you might touch the Time Exposure Lever and it is possible that you will move it to a position in between the two marks. Please pay attention when adjusting the Aperture Ring.

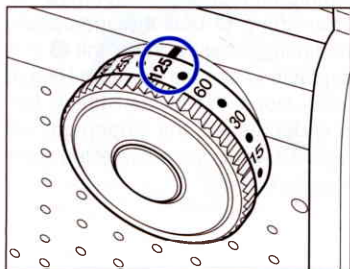
The Shutter Speed Dial



Select the shutter speed desired and rotate the Shutter Speed Dial until the appropriate figure is aligned with the shutter speed index mark **A**. Usually, the Shutter Speed Dial must be set to a click-stop position. However, it can also be set to an intermediate speed. The numbers and dots on the dial and their representing shutter speeds are shown in the following table.

The AEF mark on the Shutter Speed Dial is the position for the AE Finder.

When set at this position, the dial locks in place. To unlock it, rotate the dial while depressing the Lock Release Button **B** in the center of the dial.



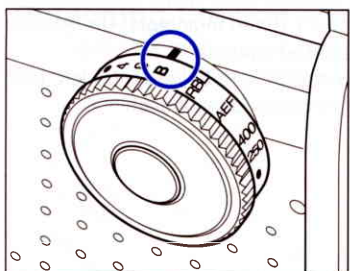
1. Numbers 2, 4, and 8, as well as the yellow and white numbers

These numbers indicate shutter speed.

The white numbers are denominators (fractions of a second). The yellow numbers are seconds.

[Ex.] "125 (white)" means 1/125 of a second

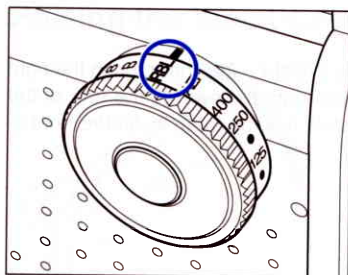
"4 (yellow)" means 4 seconds



2. B (red)

The Shutter is left open while the Shutter Release Button is pressed down.

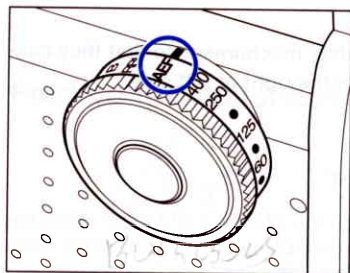
★ After 60 seconds, the Shutter will close automatically. (See page 45.)



3. RBL (red)

When using a lens designed for an RB67 camera, align it to this mark.

★ In the RBL position, the Shutter can be released even when there is no lens attached. Be careful about pulling out the Dark Slide.



4. AEF (red)

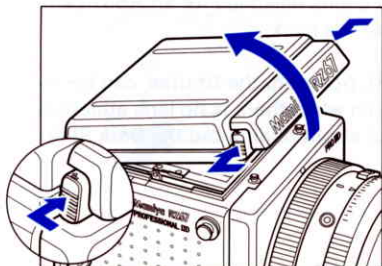
When using the FE701 AE Prism viewfinder that employs a TTL AE system for aperture priority AE, align it to this mark.

Intermediate Speed	400	1/400sec.
	250	1/250
1/180sec.	125	1/125
1/90	60	1/60
1/45	30	1/30
1/22	15	1/15
1/11	8	1/8
1/5.6	4	1/4
1/2.8	2	1/2
1/1.4	1	1
1.4	2	2
2.8	4	4
	8	8
	B	B
	RBL	for RB series lens
	AEF	for AE finders

★ Intermediate shutter speeds will be as shown above.

Detaching/Attaching the Waist-Level Finder

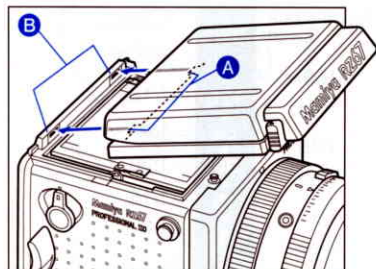
Detach the Waist-Level Finder



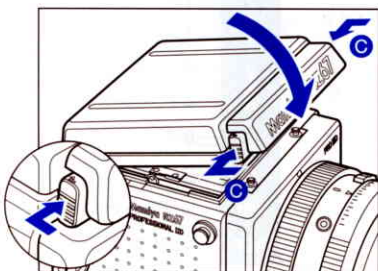
To detach the Waist-Level Finder, push the right and left release buttons towards the rear of the Finder and while holding them in, lift the front of the Finder.

★ These release buttons are equipped with a safety mechanism so that they cannot be unlocked merely by pushing them from the right or left side.

Attaching the Waist-Level Finder



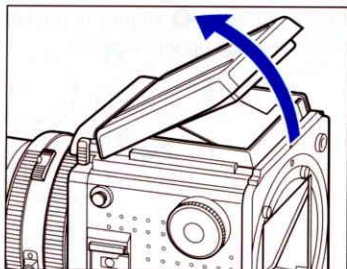
1. To attach the Waist-Level Finder, slide the Finder Catches **A** into the groove of the camera body **B**.



2. While holding in both Finder Release Buttons **C**, seat the front of the finder on the camera body. The finder will lock in place after releasing pressure from on the release buttons.

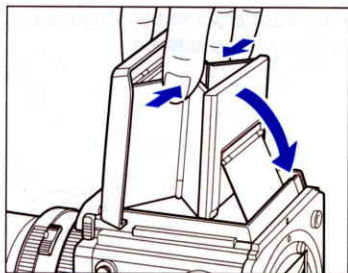
Using the Waist-Level Finder

Raising the Waist-Level Finder



Merely lift the back of the Finder until it opens completely.

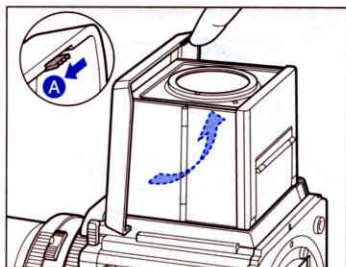
Folding the Waist-Level Finder



After lowering the Magnifier, gently squeeze the right and left panels of the finder together while closing it.

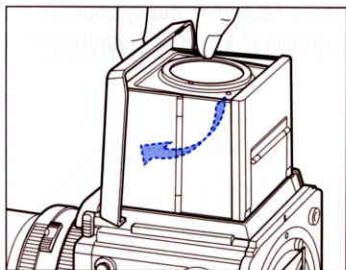
★When folding down the Waist-Level Finder, be careful not to catch your fingers.

Raising the Magnifier



Slide the Magnifier Release **A** slightly to the left and the Magnifier will pop up into position.

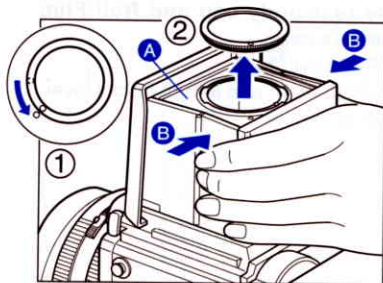
Lowering the Magnifier



Gently push the base plate of the Magnifier all the way down until it locks in place.

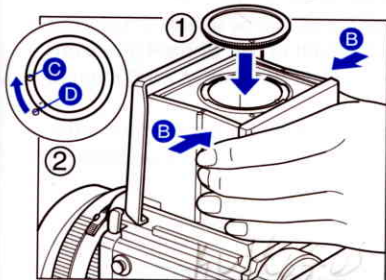
Interchanging the Magnifier

Detaching the Magnifier



To detach the Magnifier, gently squeeze the magnifier frame **B** with the sides of the finder and rotate the Magnifier counterclockwise.

Attaching the Magnifier

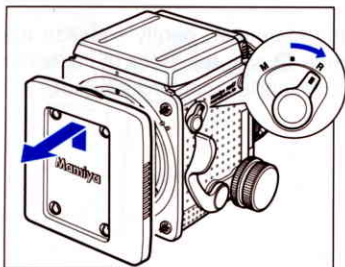


To attach the Magnifier, align the white dot on the Magnifier frame, and rotate the Magnifier clockwise.

★ The Magnifier is interchangeable. In addition to the standard (-1.5 diopter) lens, +1, 0, -1, -2 and -3 diopter lenses are also available. Please note that plus lenses are for the far-sighted and minus lenses are for the near-sighted.

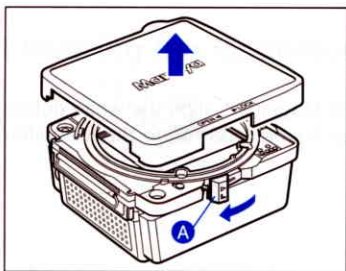
To attach or remove the Roll Film Holder

Before attaching



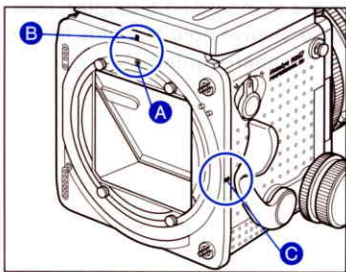
Remove the rear body cap and Roll Film Holder protective cap.

1. Turn The R-M Lever to R.
2. Hold both sides (right and left) of Back Cover and lift it up to remove.



The Protective cap on the Roll Film Holder can be removed by sliding the Lock Lever **A** on the Roll Film Holder to the left (towards "OPEN").

Confirmation

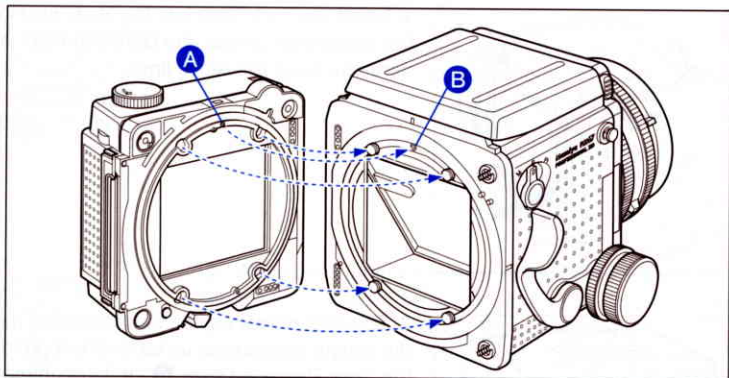


Align the orange circle **A** of the Revolving Ring (at the back of the camera) with one of the two white index marks **B** or **C** on the camera body.

★When the orange circle is aligned with Index mark **B** the camera will shoot with a horizontal format. When it is aligned with Index mark **C**, it will shoot using a vertical format. (See page 39.)

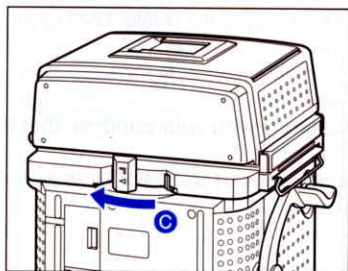
★The Roll Film Holder can also be attached in the **C** position.

Attaching the Roll Film Holder



1. Hold the Holder so that its orange circle **A** is at the same position as the one on the Revolving Ring **B** and fit the holder onto the camera back, making sure that the four Camera Back Mount Pins fit into the four openings of the holder.

★ **Do not touch the Light Baffle or mirror with your fingers. Touching the Baffle could result in light leaking in or other malfunction.**

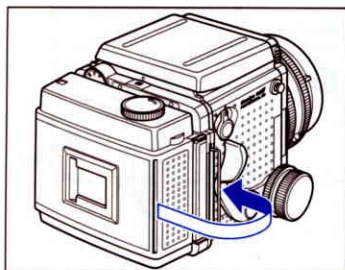


2. Lock the holder to the camera body by moving the Slide Lock **C** as far as it will go as indicated by the arrow.

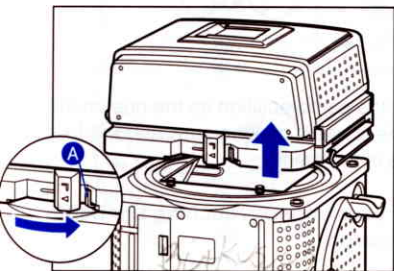
★ **Make sure that the holder securely couples with the camera body; otherwise light may leak in and cause film damage.**

Because of the revolving back feature, attaching the roll film holder to the camera requires a little practice. We find that a good method is to place the bottom edge of the holder against the bottom edge of the body, (preferably while resting on a flat surface) letting the top of the holder leave a slight gap, permitting you look down and to match the two bottom mounting pins of the revolving back to the corresponding holes of the holder.

Detaching the Roll Film Holder



1. Insert the Dark Slide into the Roll Film Holder. For instant recognition, the Dark Slide Slot is bordered by white reference lines.



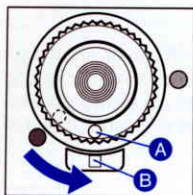
2. The Film Holder can be detached after moving the Holder Lock Lever as far as it will go toward the Lock Release Lever **A**. It is recommended that you remove the holder on a table or similar support, or in your lap, to avoid the possibility of dropping the holder or having it fall off the camera.

If you attempt to detach the holder without replacing the Dark Slide, the Holder Lock Lever will automatically lock in place, preventing accidental exposure of the film.

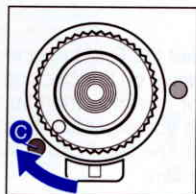
However, if you must remove the holder without the Dark Slide in place, the automatic lock can be overridden by pulling the Lock Release Lever toward the Holder Lock Lever, holding the lever there, and then moving the Lock Lever.

- ★When detaching the Roll Film Holder, hold it securely with your hand, so that it can't fall.
- ★Before detaching the Roll Film Holder, make sure to insert the Dark Slide as far as it will go. Otherwise, the film will be exposed.

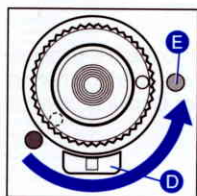
Using the Release Button Collar



1. For normal operation, align the white dot **A** on the Release Button Collar with the white square **B** on the lever below. When this is done, the Shutter Release functions electromagnetically and the various safety mechanisms operate electrically.



2. When the camera is not in use, lock the Shutter Release Button. This is done by aligning the white dot of the Release Button Collar with the red dot **C** on the camera body. By locking the Shutter Release Button, you can prevent not only unintentional exposure of film but also accidental battery depletion caused by pressure on the Release Button. For this reason, be sure to lock the Release Button when carrying the camera in a bag.

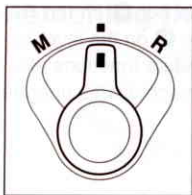


Emergency Shutter Operation

If you were to suddenly find yourself with a dead battery in the midst of a photographic session, switch over to the emergency shutter operation mode. In order to do so, push the Collar Stop lever **D** toward the camera body and while holding it there align the white dot of the Release Button Collar with the orange dot **E** on the camera body. The shutter will now operate (even without a battery) at approximately 1/400 sec., regardless of the setting of the Shutter Speed Dial. Because electricity is not being used in the emergency shutter operation mode, the Monitor Lamps in the viewfinder will not illuminate. Moreover, even if the Dark Slide is not withdrawn, the shutter can still be released, so exercise care.

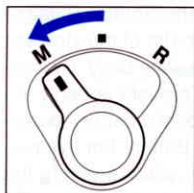
★ After installing a new battery, make sure to turn the release button collar to the normal position.

The R-M Lever



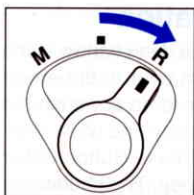
The Normal Position (□)

For normal operation of the camera, the R-M Lever should be kept in the center position, aligned with the index mark. Setting the lever to this position activates the double exposure prevention mechanism so that a photographer can shoot without fear of accidental double exposures.



Multiple Exposure Position

When desiring to make multiple exposures, set the R-M Lever to the 'M' position. When this is done, pushing down on the Cocking Lever will cock the lens shutter, but will not advance the film. Upon completion of the multiple exposure, do not forget to return the R-M Lever to its normal (center) position. The lever can also be set to 'M' when testing the shutter without film.



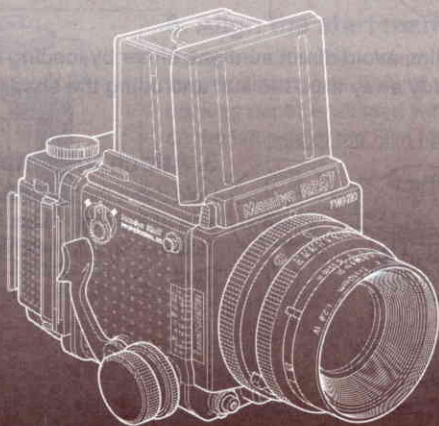
Revolving Back Position

Before revolving the back, set the R-M Lever to the "R" position. After this is done, the lever will automatically return to the normal position when the Shutter Release Button or Cocking Lever is next used.

★ The Revolving mechanism is used to take shots in horizontal or vertical formats by turning the Roll Film Holder 90°, without changing the position of the camera body. (See page 39.)

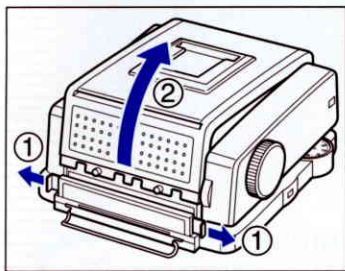
Taking photographs

This chapter describes how to install film and covers basic picture taking methods.



Loading the Film Holder

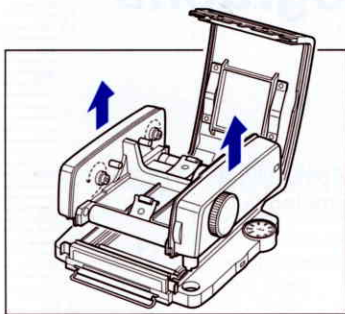
A roll of film can be installed before the Roll Film Holder is attached to the camera body, or after.



1. Open the Back Cover of the Roll Film Holder.

Pull out the upper and lower Back Cover Latches on the Roll Film Holder and the Back Cover will open.

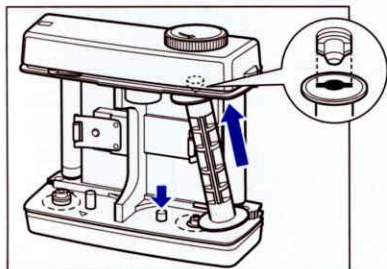
★Because of the double safety lock, the Cover will not open by pulling out just one of the two Back Cover Latches.



2. Take out the Film Insert

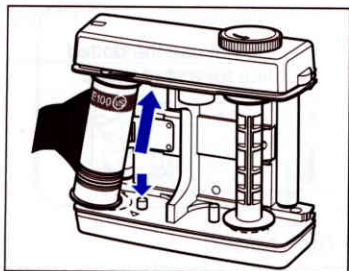
After opening the back cover of the Roll Film Holder, remove the Film Insert. When loading film, it is not necessary to remove the Film Holder from the camera body.

★When loading film, avoid direct sunlight, either by loading in a shady area or by turning your body away from the sun and using the shade of your own body.



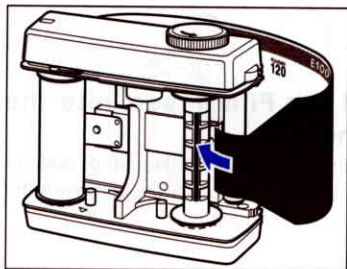
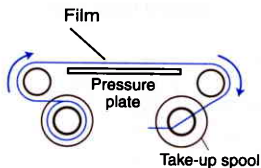
3. Attach the empty Take-up Spool

Hold down the Spool Release Pin on the right side of the Film insert. Then, install an empty Take-up Spool, matching it to the Film Spool Stud.



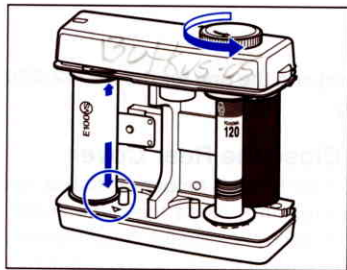
4. Loading film

Hold down the Spool Release Pin on the left of the Film Insert. Load a roll of film onto the Film Spool Stud as shown.



5. Attach the backing paper to the Take-up Spool.

Slowly pull the backing paper out of the fresh film and insert the tip of the paper into the groove on the Take-up Spool, on the right side of the Film Insert.



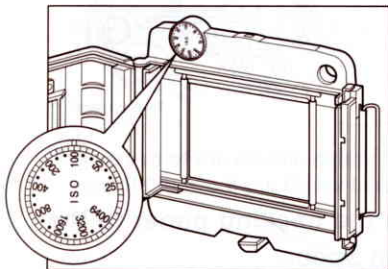
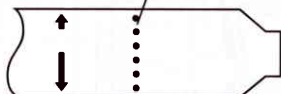
6. Align the start mark

Gently wind the Film Advance Knob on the Film Insert counterclockwise until the start mark on the backing paper is aligned with the white triangle on the left side of the Film Insert.

★ **220 Film Loading Caution:**

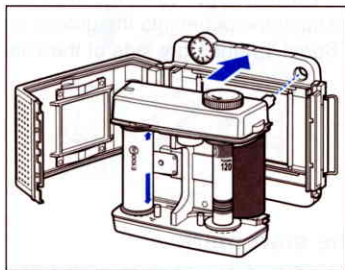
220 films have two types of Start Mark Lines across the paper leader. Always use the second one, a solid line with the legend "Start Mark for standard cameras", located about 14cm (5 1/2"), behind the first, dotted Mark line.

Do not use the dotted line for a start mark.



7. Set the film speed

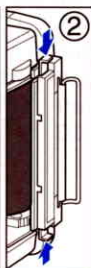
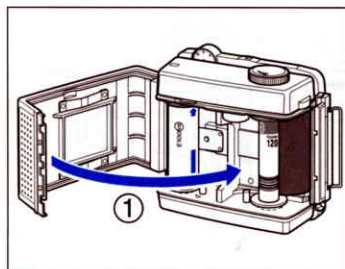
Set the Film Speed Dial on the Roll Film Holder to the correct film speed for the film you are using.



8. Install the Film Insert into the Housing.

Place the Film insert into the Housing, making sure the film advance coupler on the insert fits into the holes of the housing.

★ The housing for the HA703 (120 Roll Film Holder) and the one for the HB702 (220 Roll Film Holder) can be used interchangeably.

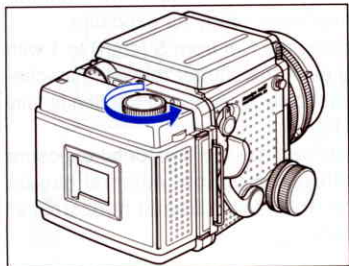


9. Close the Rear Cover

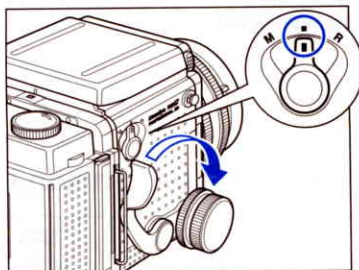
After the Insert is properly installed into the Housing, close the back cover. While gently holding the cover in place, push both of the Back Cover Latches as far as they will go to lock the Rear Cover.

Advancing the Film

The film can be advanced in either of two ways.



A. By turning the Film Advance Knob of the Film Insert until it stops.



B. By pressing down the Cocking Lever of the camera body several times, until it stops. (The lens shutter will not be cocked unless the Cocking Lever is moved all the way until it stops.