Mamiya RB

70 mm Film Holder
70-mm-Rückteil
Dos pour Film 70 mm
Portapelículas de 70 mm
Magazzino 70 mm
70 mm Rolfilmhouder

INSTRUCTIONS
BEDIENUNGSANLEITUNG
MODE D’EMPLOI
INSTRUCCIONES
ISTRUZIONI D’USO
GEBRUIKSAANWIJZING
The 70 mm Film Holder is used by attaching it to the revolving adapter of the Mamiya RB 67 Pro-S. It also can be used for the following cameras:

- Mamiya RB 67
- Mamiya Universal with G-Adapter

The following instructions are for attaching the 70 mm Film Holder to the Mamiya RB 67 Pro-S. As the Mamiya RB 67 and Mamiya Universal coupling differ from that of the RB 67 Pro-S, separate instructions are found on page 13.

The figure numbers throughout the text refer to pictures on the fold-out pages at the back.

Das 70-mm-Rückteil dient zum Ansetzen an den Drehrahmen der Mamiya RB 67 Pro-S; läßt sich jedoch auch mit den folgenden Kameras verwenden:

- Mamiya RB 67
- Mamiya Universal mit Adapter G.

Im Anschluß hieran finden Sie die Bedienungsanleitung zur Benutzung des 70-mm-Rückteils mit der Mamiya RB 67 Pro-S. Da sich die Anschlüsse der Mamiya RB 67 und der Mamiya Universal von denen der RB 67 Pro-S unterscheiden, finden Sie getrennte Hinweise hierfür auf Seite 25.

Die Nummern im Text beziehen sich auf die Bilder auf den ausfaltbaren Seiten am Ende der Broschüre.

Le dos 70 mm s’utilise sur l’adaptateur Rotatif du Mamiya RB 67 Pro-S. On peut également l’utiliser avec le RB 67 et la Mamiya Universal équipée de l’adaptateur “G”.

Les instructions qui suivent concernent l’utilisation de ce dos avec le RB 67 Pro-S. Pour l’utilisation avec les autres appareils, consulter les instructions particulières en page 37.

Les chiffres inclus dans le texte permettent de se reporter aux différentes vues qui se trouvent en dernière page.
• Specifications

Pro-S 70 mm Film Holder
6 x 7 cm format, 54 exposures
Film type: 70 mm (perforated and in cassettes)
Film advance: Single or multiple stroke; maximum 180° throw, 20° play;
double exposure prevention, double exposure provision; film wind-stop
automatic release (with manual provision)
Exposure counter: Automatic resetting to zero; red warning signal disappears
when film is advanced.
Additional: Built-in Dark Slide safety lock; built-in Dark Slide Holder; built-on Memo Clip
Accessory: Suction Bulb

Note:
Since the 70 mm Film Holder has built-in double exposure prevention, the
shutter cannot be released when the film holder is not loaded with film.
When desiring to release the shutter with an unloaded Film Holder attached,
refer to page 5.
Most interchangeable compact 70 mm cassette loading roll film holders presently available have a common potential problem. A partially exposed roll of film that is left in the holder may tend to take a "set" over the curved roller in front of the pressure plate. This could result in the next frame advanced not being flat against the pressure plate and thus part of the image may be out of focus. The usual common solution for this situation is to wind off one blank frame to get past the "set" curved part of the film. In continuous shooting, however, there is no problem whatsoever.

Mamiya has devised an accessory that will minimize this potential occurrence. The Suction Bulb supplied with the holder that can be attached to the Film Holder and squeezed to help assure flatness of the film plane.

NOTE THAT THIS SUCTION BULB WILL ONLY BE NEEDED WHEN A PARTIALLY EXPOSED ROLL OF FILM IS LEFT IN THE HOLDER AND THEN ONLY WHEN YOU DO NOT WANT TO ADVANCE ONE BLANK FRAME OF FILM.

Of course, if it is known that the roll of film will not be finished for sometime, the film can be manually advanced several frames, the back opened, and the film cut to remove the partially exposed cassette. This is explained in detail on page 10.

● Attaching the holder

1. Before attaching the holder, be certain that the upper and lower Slide Locks (A) are on the left end of the indented portion when viewed from behind the camera body. (Fig. 1)

   Note:
   Should either Slide Lock be moved to the right while nothing is attached to the Revolving Adapter, the Slide Lock Release Lever (B) will engage and the Slide Lock will not move. If this happens, press the Release Lever (B) and return the Slide Lock to the open position.

2. Attach the 70 mm Film Holder and slide both Slide Locks firmly in the direction indicated by the arrow. (Fig. 2)

   * If the Slide Lock of the Revolving Adapter is not pushed fully in or out, the shutter will not release because of the shutter locking safety device. Always move the Slide Lock until it stops and locks.
* If the lower Slide Lock is not closed, the safety device of the holder will prevent the Dark Slide from being removed.
* If the Dark Slide is completely inserted, or if the holder is not loaded, the Shutter Release Button cannot be pressed.

- **Detaching the holder (Fig. 3)**

1. Insert the Dark Slide in the Film Holder. Two white lines on the side of the holder indicate the position of the inserting slit.
2. Remove the Film Holder by sliding both Slide Locks in the opposite direction indicated by the arrow on the Slide Lock.
* If the Dark Slide is not inserted, the Slide Lock will be locked by the safety device, and the Film Holder cannot be detached.
* When a Dark Slide is completely inserted, the Slide Lock Release Lever is automatically disengaged, and the Slide Locks can be moved without pressing the release levers.

- **When desiring to release the shutter with an unloaded Film Holder (Fig. 4)**

Move the Multiple Exposure Slide completely to the left so that the red dot becomes fully visible. The shutter can now be released after setting the Shutter Cocking Lever.
* When the Dark Slide is completely inserted, the Shutter Release Button will be locked. Therefore, either remove the Dark Slide or draw it outward to a position where the entire triangular opening in the top center of the Dark Slide becomes visible.
* The sequence that these two steps are done in does not matter.
- Names of operating parts (Fig. 5)

1. Multiple Exposure Slide
2. Alignment Dot
3. Dark Slide
4. Safety-catch for Dark Slide
5. Film Advance Lever
6. Exposure Counter Window
7. Film Wind-Stop Release Lever
8. Memo Clip
9. Bottom Cover Lock Handle
10. Dark Slide Holder Slot

Film Insert Case
11. Back Cover Lock Button
12. Back Cover Latch
13. Back Cover

14. Film Cassette Stud
15. Film Sprockets
16. Bottom Cover Guide Pin
17. Film Direction Guide Mark
18. Take-up Stud
19. Bottom Cover
20. Film Cassette
21. Suction Bulb Receptacle
22. Bulb Receptacle Cover

Suction Bulb (Accessory)
23. Suction Bulb
24. Air Inlet Button
25. Suction Bulb Tube
26. Suction Bulb Coupling Tip

- Loading Film

* Insert a loaded cassette into the film holder in as dark a place as possible. It is not unusual for light streaks (from perforation to perforation) or fogging to occur on the first few (2 or 3) frames.

* The film holder can be loaded whether attached to or detached from the camera body.

1. While depressing the Back Cover Lock Button (11), pull down on the Back Cover Latch (12) to open the Back Cover and remove the Film Insert. (Fig. 6)
2. Move the Bottom Cover Lock Handle (9) of the Film Insert counterclockwise (approx. 45°) aligning the white index line with the red alignment dot. Pull down on the Bottom Cover to remove it, and take out the empty Film Cassette. (Fig. 7)
3. Remove either the top or bottom cap of the Film Cassette and take out the Film Spool, removing the attached Film Clip (A). (Fig. 8)

* If you find it difficult to remove a cap of the Film Cassette, insert the tip of a small screwdriver into the small opening found between the cassette cap
and film slit of the cassette body and gently twist the screwdriver, opening the cap (Fig. 9). Care should be taken not to bend the portion (B) of the cassette in order to prevent the possibility of a light leak or film damage. If the portion (B) is accidentally bent while removing a cap, be sure to restraighten it before loading the cassette with film.

4. Pull out a small amount of film from a loaded cassette and wrap the tip of the film, emulsion-side up, half way around the empty Film Spool and fasten it in place with the Film Clip (A). The emulsion must be wound to face the inside of the take-up spool. (Fig. 10)

5. Insert Film Spool with film attached into the empty cassette and securely attach the cassette cap, making sure the Film Spool freely rotates. (Fig. 11)

6. Place the loaded cassette (C), emulsion-side up, into the left-hand side compartment of the Film Insert, as indicated by the diagram appearing inside the Top Cover of the insert. (Fig. 12)

7. Swing the empty cassette (D) below and then above the Film Insert so that the film travels, emulsion-side out, over the pressure plate. Next attach the cassette to the Take-Up Stud of the right-hand compartment of the Film Insert.

8. Slide the Bottom Cover Guide Pin (16) into the opening of the Bottom Cover, and after pushing the Bottom Cover all the way in, lock it in place by turning the Lock Handle (9) clockwise, aligning the white index line with the white alignment dot. (Fig. 13)

9. Gently wind the Film Advance Lever to take up the film slack and see that the film perforations are properly engaged in the film sprockets (15).

10. With the left hand, hold the dark slide section of the Film Insert Case with the Alignment Dot (2) upwards, and fit the four corners of the Film Insert over the dark slide section (Fig. 14). After securely fitting the dark slide section and Film Insert together, close the case. (If either the Film Insert or its case is upside-down, they can not be fitted together).

11. While firmly holding the Back Cover shut, push in the Back Cover Latch (the Back Cover Lock Button will then pop out with a click) to lock the cover shut. (Fig. 15)
- **Film winding for first exposure (Fig. 16)**

By winding the Film Advance Lever until it stops, the figure "1" will appear in the Exposure Counter Window (6) — the red warning signal indicating incomplete film winding will disappear — and the film will be positioned for the first exposure.

* Unless the Exposure Counter advances from S to 1, the shutter cannot be released.

- **Film advancing**

1. Pull out the Dark Slide and release the shutter. When the shutter is released, the red warning signal appears in the Exposure Counter Window, indicating that the film is exposed.

2. When the shutter is released, the Film Wind-Stop mechanism is also automatically disengaged, and the film can be advanced to the next frame. When film is advanced one full frame, the numeral in the Exposure Counter Window is advanced, and the red warning signal disappears.

* Unless the exposed film frame is advanced, the shutter can not be released because of built-in double-exposure prevention.

* Shifting to multiple exposure photography is possible. Refer to page 12.

* Even if the film has been completely advanced, the shutter cannot be released if complete return of the Film Advance Lever is hindered by your fingers or by another object.

* Wind the Film Advance Lever gently to avoid film winding problems.

* Although the Film Advance Lever cannot return until it is first wound approximately 70°, it can be moved in several short, definite strokes to complete the winding cycle.

* The Film Wind-Stop Release Lever on the 70 mm Film Holder is to be used
when the holder is used on the Mamiya Universal, or when it is desired to wind the remaining unexposed film into the holder.

3. When using a standard fifteen (15) foot cassette, it is possible to take several exposures after the fixed number of 54 exposures has been taken. Also, when using a specially loaded cassette where the film length is more than fifteen (15) feet, you may take over 54 exposures. In this instance, the exposure counter numerals will advance up to 65 (55 to 65 are presented in green).

4. At the end of the roll, the pressure on the Film Advance Lever will disappear. To prevent light streaking, remove the cassette from the holder just after the pressure on the Film Advance Lever has disappeared to prevent the film from being completely wound into the cassette.

**Removing exposed film**

1. Open the Back Cover and remove the Film Insert.
2. Turn the Bottom Cover Lock Handle counterclockwise; remove the Bottom Cover, and take out the cassettes.
   * Remove the exposed (take-up) film cassette from the film holder in as dark a place as possible.
   * Since fogging or light streaking may occur on the last several frames if you take pictures until the end of the roll of film and wind it completely into the cassette, it is recommended that you wind off several blank frames on the end of the film after 55 exposures shows in the Exposure Counter Window. If the film is wound completely into the take-up cassette light could enter the film slit and fog some of the end of the film. Therefore, it is recommended that a short piece of film should be left protruding from the cassette to minimize the possibility of fogging. When the possible fogging of even the last few frames must be prevented, remove the take-up cassette from the 70 mm Film Holder in a darkroom, or a changing bag, and place the cassette into a sealed light-tight container.
   * Upon opening the Back Cover, the Exposure Counter will return to S (Start).
   * If S does not appear in the Exposure Counter Window, it indicates there is film in the holder.
Suction Bulb (Accessory)
The limited depth-of-field encountered when shooting with the lens wide open, or when shooting close-ups, or when shooting a large group of people, makes absolute flatness of the film plane necessary. Proper use of the Suction Bulb helps assure flatness of the film plane, thereby offering corner-to-corner sharpness even under the most difficult photographic situations. The Suction Bulb does not function when the film is not loaded.

Using the Suction Bulb
1. Remove the Bulb Receptacle Cover (22) by pulling it out and store it in a safe place. (Fig. 17)
2. Insert the Coupling Tip of the Suction Bulb Tube (25) securely into the Suction Bulb Receptacle (21). (Fig. 18)
3. Before taking the picture, squeeze the Suction Bulb (23). The bulb will remain compressed (Fig. 19). Trip the shutter while the bulb is compressed (at this time, the film is held flat against the pressure plate by suction).
4. The Suction Bulb will return to its normal, round, bulb shape when the Air Inlet Button (24) is pressed.

* The Suction Bulb is functioning only when it remains compressed. When returned to its normal bulb shape, the film is no longer held against the pressure plate by suction. Therefore, before tripping the shutter, be certain that the bulb is compressed. If it is not, squeeze the Suction Bulb once again.
* Although it is possible to advance the film with the Suction Bulb compressed, the back of the film may be scratched. To minimize the possibility of scratches, return the bulb to normal by pressing the Air Inlet Button before advancing the film.
* When attaching or removing the Suction Bulb Tube from the 70mm Film Holder, handle it only by its Coupling Tip. Do not try to remove the tube by pulling on the tube itself.
* When the Suction Bulb is not in use, be sure to replace the Bulb Receptacle Cover to prevent dust or dirt from entering the film holder.
- **Multiple exposure provision (Fig. 20)**
When the Multiple Exposure Slide is moved to the left, a red warning dot appears. At this time the automatic double exposure prevention mechanism is disengaged, and the shutter may be released as often as the Shutter Cocking Lever is set.
  * The Multiple Exposure Slide can be moved to the left before or after shutter cocking, and also before or after releasing the shutter for the first multiple exposure photograph.
  * When finished taking multiple exposure pictures, be sure to return the Multiple Exposure Slide to its original position.

- **Winding up unexposed film to unloaded the holder (Fig. 21)**
When the Film Advance Lever is continuously wound, with the Film Wind-Stop Release Lever (7) pushed to the left, the film can be completely wound into the take-up cassette.

- **Cutting a partially exposed roll**
  1. Move the Film Wind-Stop Release Lever to the left, and after releasing it, advance the film one frame. Repeat the above procedure a second time.
  2. Remove the cassettes and cut the film.
  3. The tip of the remaining film can be loaded into an empty cassette, and the film can then be used in the holder in the normal manner.
  * The same precautions indicated in the section above “Removing exposed film” also apply.
• **Dark Slide Holder Slot (Fig. 22)**
  After the Dark Slide is removed, it can be safely stored in either the Dark Slide Holder Slot (10) on the Film Holder, or inserted into the place provided for it on the left-hand side of the camera body.

• **Memo Clip (Fig. 22)**
  The film box top will fit into the Memo Clip (8) and serve as a film reminder.

• **Removing the dark slide of the film holder when it has been removed from the body (Fig. 23)**
  When the film holder is removed from the camera body, a built-in safety feature prevents the Dark Slide from being removed carelessly or accidentally. However, if you desire to remove it, it can be pulled out by using your fingernail tip to press the Dark Slide Safety-catch (4).

• **Shutter testing when the film is loaded (Fig. 24)**
  When the shutter is cocked, the Dark Slide slightly pulled out (approx. 1/4 in.) and the Shutter Release Button is pressed, the shutter can be released without exposing the film in the Film Holder to light. This operation can be utilized for shutter testing prior to photographing.
  * When pulling out the Dark Slide, stop pulling at a point where the entire triangular opening on the Dark Slide becomes visible. If the shutter is released when the Dark Slide is pulled out beyond that opening, some of the film will be exposed to light.
  * When the shutter is released, a red warning signal appears in the Exposure Counter Window.
  * When taking the first photograph subsequent to this test, cock the shutter after moving the Multiple Exposure Slide to the left, and pull out the Dark Slide. After the first exposure, be sure to return the Multiple Exposure Slide to its normal position.
When the 70 mm Film Holder is used on the earlier RB 67 camera body

The 70 mm Film Holder functions in the same manner on both the RB 67 and the Pro-S with the exception that there is no built-in double exposure prevention on the earlier (non-Pro-S) model of the RB 67.

When the 70 mm Film Holder is used on the Mamiya Universal

Attaching the holder to the camera
First attach the G-Adapter to the camera back and slide the upper and lower Slide Locks (A) on the G-Adapter completely to the left. (Fig. 25)
Attach the 70 mm Film Holder to the G-Adapter, and secure it by pressing the upper and lower Slide Locks completely to the right.
If it is difficult to move the Slide Locks because of the limited space between the camera body and the Film Holder, an object such as a pencil may be used as an aid. (Fig. 26)
The Slide Locks will be easy to move if the Film Insert Case is first attached to the G-Adapter; the Film Insert can then be placed into its case after adjusting the Slide Locks. If the lower Slide Locks are not pushed all the way in, it will be impossible to remove the Dark Slide. Be sure all the Slide Locks are pushed until completely seated.
* When the 70 mm Film Holder is used on the Mamiya Universal, double exposure prevention and automatic release of the film wind-stop do not function.
To release the film-wind stop, move the Film Wind-Stop Release (7) to the left. When the lever is moved, a red warning appears in the Exposure Counter Window, the wind-stop is released, and the film is ready for winding.
* Remove your finger from the Film Wind-Stop Release Lever during film advancing.
• Extension Eyepiece (Optional Accessory) (Fig. 27)
An Extension Eyepiece (magnification of 0.75 X) is available for use with the 70 mm Film Holder. Even with the holder attached to the Mamiya Universal camera, the entire field of the viewfinder is clearly visible when the Extension Eyepiece is used.
To attach the Extension Eyepiece to the camera, merely unscrew the Eyepiece Retainer Ring of the camera by turning counterclockwise, and then screw in the Extension Eyepiece in its place.
In addition to being a necessary accessory for the 70 mm Film Holder, the Extension Eyepiece will also prove to be a valuable aid when used with other Mamiya Press Film Holders.

• Care of the Film Holder
To prevent possible scratches from appearing on the film, all parts of the Film Holder should be kept clean. A blower and/or soft brush should be used to remove dirt from the Film Insert and Film Insert Case. The rollers appearing on both sides of the film plane, beneath the Dark Slide, are of extreme importance. They should always be kept clean, and should freely rotate. Protect your Film Holder from dirt and rough handling.

• 70 mm Film Cassettes
Keep the felt lips of the cassettes clean. Because the accumulation of dirt on the felt lips may cause scratches on the film, be careful when using a cassette more than once. TO MINIMIZE THE POSSIBILITY OF SCRATCHING OR FOGGING THE FILM, IT IS RECOMMENDED THAT YOU DO NOT USE A CASSETTE MORE THAN 3 OR 4 TIMES.