English Instructions

120/220 Magazine

[HM401]
Description of Parts

120/220 Magazine

1. Film Holder's LCD Panel
2. Down Button
3. Up Button
4. Back Cover Button
5. Back Cover Lock Release Button
6. Film Holder Detaching Button
7. Film Holder Detaching Lock Release Button
8. Film Holder Mounting Slot
9. Film Holder Mounting Bracket
10. Dark Slide
11. Battery Cover
12. Forced Film Advance Button
13. Memo Clip
14. Dark Slide Storage Slot
15. Spool Clip (FILM)
16. Electronic Contacts
17. Spool Clip (SPL)
18. Film Spool Stud
19. Take-Up Spool Stud
20. Release Latch
21. 120/220 Pressure Plate Switching Button
22. Pressure Plate
23. Holes

Thank you for purchasing a Mamiya product.

To use the camera at its maximum performance for as long period as possible, read the instruction manual thoroughly before use so that you can use the camera correctly based on full understanding of its functions and control items. After reading, retain the manual in an easily accessible location for future reference.
The button battery supplies power to the magazine's LCD when it is detached from the camera. When it is attached the power is supplied by the camera's batteries.

1. Remove the battery compartment cover screw.
   Use a coin or suitable screw driver and turn it counter clockwise. (Fig1)
2. Insert a battery.
   Insert the battery according to the polarity indication on the battery compartment, and close the battery cover. (Fig2)
   Battery used: Sony CR2032 or equivalent

- Be sure to watch correct polarity
- When the battery is exhausted, remove it immediately and replace with a new battery. Otherwise accidental battery fluid leakage may damage the contacts.

The film speed (ISO sensitivity value) is the reference for all exposure and must be set correctly. If the set value differs from the actual value of the film in use, under- or over-exposure may occur.

1. Press the up (up) button.
   When the LCD panel displays information, press and hold the up (up) button on the bottom part of the LCD for more than 1 second. The ISO indicator will blink. (Fig3)
   2. Set the film speed.
      Set the film speed of the film by pressing the up (up) or down (down) button. To lock the speed setting, press and hold the two buttons simultaneously for more than one second; the film speed will be written in memory in 5 seconds.

- The setting is not complete while the ISO indicator is blinking.
- The information on the film in use, such as the type, ISO sensitivity value and number of exposures, is stored in the back-up memory. However, when the battery capacity has dropped during stand-alone use of the magazine, the information may not be shown by the LCD panel.
- The information on the film (type, ISO sensitivity and number of exposures) is stored in the memory, but when the battery power is low this information may be displayed erroneously. Be sure to replace the batteries with new ones.

When there are no batteries in the camera, the shutter's "Safety Retraction" feature, keeps it in the open position and the magazine's dark slide cannot be pulled out, even when it is attached to the camera. Film winding and shutter release are also blocked in this case.
Attaching
1. Remove the camera's rear body cap and the magazine's protection cap.
2. Fit the body coupler of the magazine into the bottom channel of the camera, properly centered. Please note that A is in the wrong place. It belongs to the other illustration. (Fig E, F)
3. Push the magazine against the camera body until it snaps into place. (You will instantly hear the shutter closing) (Fig G)

Detaching
1. Insert the dark slide into the magazine. (Fig E)
2. With your thumb first push button D down and then simultaneously button E in. The magazine will separate itself from the camera body. (Fig F)
★When the magazine is removed, the shutter will automatically open, as explained on the previous page, under "Shutter Safety Retraction" Film winding and shutter release are also locked.

The magazine cannot be attached or detached unless the dark slide is in place.

Loading the Film in the Magazine
1. Open the back cover of the magazine. By first pushing the button then button D down and then simultaneously button E, (Fig F)
2. Take out the roll-film insert. Squeeze the center block "645" between your fingers and pull it out. (Fig G)

When you load film for the first time, remove and discard the protective paper cover which is attached to the film rails in the magazine.

3. Set the film type (120 or 220). Push and hold the pressure shaft D located under the 645 center block. This frees the pressure plate and permits it to be turned and set for either 120 or 220 film. (Fig H)
★Be sure to align the lock pins with the holes on the pressure plate. The film type should be displayed when the film is loaded on the LCD of the magazine.

When the pressure plate (120/220) is set erroneously:

<table>
<thead>
<tr>
<th>Plate Setting</th>
<th>Loaded Film</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>120</td>
<td>220 type</td>
<td>· Inaccurate focusing. · Film winding after 16 exposures.</td>
</tr>
<tr>
<td>220</td>
<td>120 type</td>
<td>· Inaccurate focusing. · After the 16th exposure has been made, the shutter can be released a few times until the film's leader paper has run out, but the shutter membrane may be damaged by the leader paper at the film end or by the film's sticker. Insert the dark slide in the magazine and press the shutter button and the forced film advance button simultaneously.</td>
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4. Attach an empty spool to the roll-film insert. Flip the roll-film insert's lower spool clip
“SPL” away from the spool, fit an empty spool between take-up spool studs 1, and return the spool clip “SPL” to the original position. (Fig11)

5. Set the film.
Flip the roll-film insert’s upper spool clip “FILM” away from the spool, fit a roll of film as shown in the illustration, and return the spool clip “FILM” to the original position. (Fig12)

6. Attach the leader paper of the film to the empty spool. (Fig13)
Gently pull out some of the leader paper, insert the tip of the leader paper into the take-up slot of the empty spool, and rotate the spool a few times to wrap the leader tape around it. (Fig14)

7. Insert the loaded film insert into the magazine.
While squeezing center latches together, place the film insert, with the feed spool on top, in the magazine and with pressure on the left and right blocks K push it into proper position. (You will hear a click). (Fig15)

8. Close the back cover.
Push in the upper part of the back cover firmly to close it.

9. After attaching the magazine onto the camera body, pull out the dark slide and press the shutter button halfway; this will feed the film automatically to frame No.1. Place the dark slide in the magazine’s rear storage pocket. (Fig16)
★It is not required to align the film start mark, for the magazine will automatically detect film frame No.1 from any position.

★When the magazine is mounted on the camera body, the mirror and shutter which has been freed will be set in position.  
★Do not wrap too much leader paper around the empty spool. Otherwise the film section may be exposed to light. 
★When the magazine is separated from the camera, the power save mode is activated in 5 seconds after the start of stand-alone operation and the LCD panel turns off. To release the power save mode and turn on the LCD panel, press the A (up) button.
★To prevent accidental film fogging, do not pull out the leader paper too far or load/unload film under direct sunlight. 
★When the film is not wound properly, the counter display disappears and the “- -” mark appears in the LCD.

Unloading the exposed film
When the fixed number of exposures have been taken, the camera automatically takes up the film till the end and stops. The LCD panel on the magazine should display End now.

1. Open the back cover.
While holding down the magazine’s back cover lock release button, push the back cover release button to open the back cover.

2. Remove the roll-film insert.
Squeeze the release latches of the roll-film insert in the film chamber from the left and right the roll-film insert out.

3. Remove the film.
Flip the roll-film clip’s spool clip “SPL”
away from the spool, and take out the film roll.
4. Fasten the film with a sticker. After unloading the film roll, attach the provided sticker onto it to prevent unrolling.
★ Move the empty spool from the top to the lower (take-up) compartment, ready for loading the next film roll.

Precautions for Film Unloading
- Do not unload an exposed film in direct sunlight.
- The exposed film should promptly be put in a light tight bag or box and send to the processing lab as soon as possible.
- Never try to remove the magazine from the camera body in the middle of film winding. Otherwise malfunction will result.

Removing a partially exposed film roll
To remove partially exposed film roll, insert the dark slide in the magazine and press the shutter button and the forced film advance button simultaneously. This causes the film to be taken up till the end and the magazine's LCD panel shows "End".

6-exposure film
- If you continue photographing after the 8th exposure when using 6-exposure film, the shutter membrane may be damaged by the leader paper at the film end or by the film's sticker. Use the procedure described below.

Photograph in the same way as with 120 film. Eight exposures can be taken. After taking the 8th exposure, insert the dark slide in the magazine, then half-press the shutter release button while pressing in the forced film advance button to wind up the film.

Maintenance and Inspection of the Magazine
- A frequently used product should be inspected periodically at your nearest Mamiya service center.
- To prevent contact failure or corrosion, do not leave stain, scratch or fingerprint on the electronic contacts.
- When the equipment is not to be used for a long period, remove the batteries to prevent malfunction.
- The magazine is not waterproof. When it is moistened, wipe with a clean, dry cloth. If it is exposed to a salt breeze, moisten a clean cloth, wring it well and wipe the lens with it.
- To prevent affecting the mechanism and film, do not leave the equipment in a place where chemical gas of naphthalene, formalin, etc. is produced. The surface finish may be deteriorated if it comes in contact with a solvent.
- When the equipment has not been used for a long period or before taking an important picture, always try shooting to make sure that they function normally. In case of problem, have your nearest Mamiya service center inspect them.