

MAMIYA CAMERA CO., LTD.

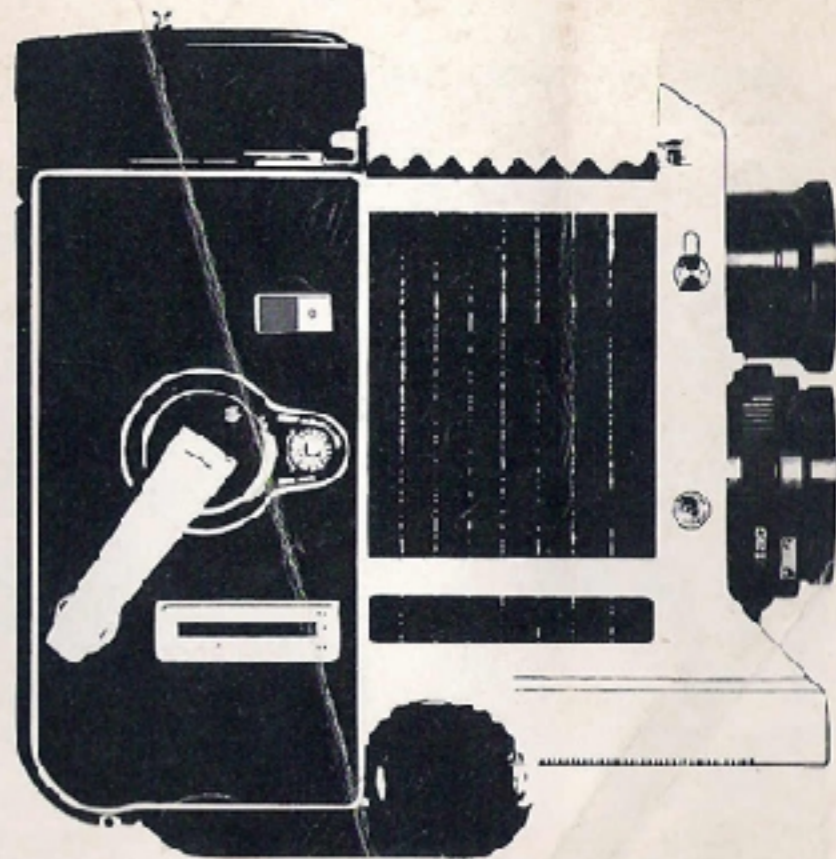
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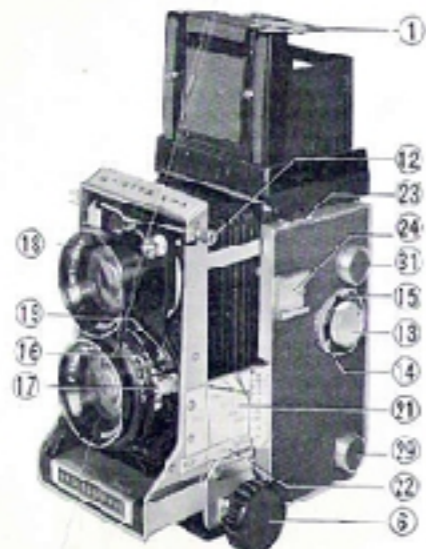
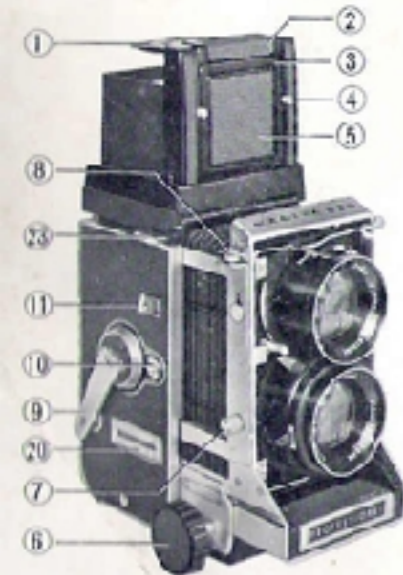
MAMIYA C33

Professional

OWNER'S MANUAL



NAME OF OPERATING POINTS

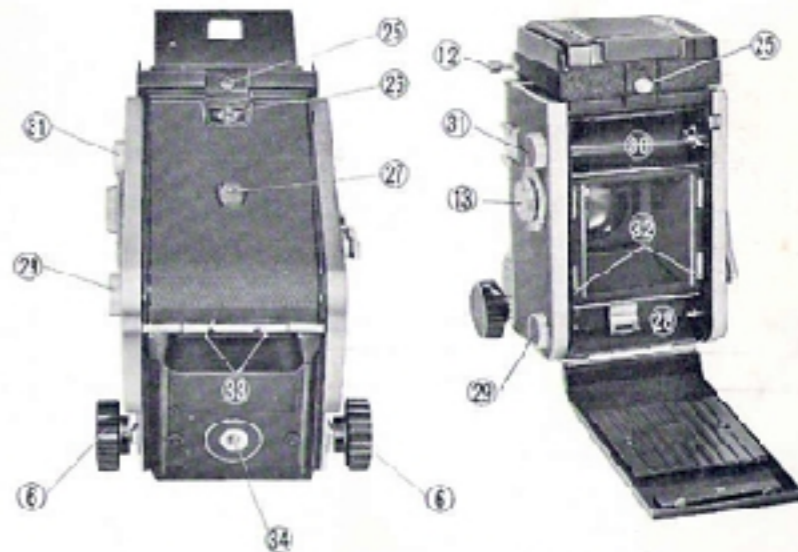


1. Magnifying Glass
2. Focusing Hood Front
3. Frame Viewfinder (for 80 mm lens)
4. Frame Viewfinder Mask Studs (right and left)
5. Frame Viewfinder Flap
6. Focusing Knobs (right and left)
7. Shutter Release Button
8. Cable Release Socket
9. Filmwind Crank
10. Multiple Exposure/Filmstop Selector
11. Exposure Counter
12. Lens-Shutter Assembly Catch
13. Lens-Shutter Assembly Change Knob

14. Parallax Correction Lever
15. Filmspeed (ASA) Dial
16. Shutter Cocking Lever (body assembly)
17. Shutter Cocking Lever (lens-shutter assembly)
18. Synchroflash Terminal (lens-shutter assembly)
19. Synchroflash M-X Selector (lens-shutter assembly)
20. Distance Scale (right)
21. Distance Scale (left)
22. Distance Scale (left)
23. Strap Eyelets (right and left)
24. Accessory Clip
25. Focusing Hood Lock Screw
26. Backlid Catch Button
27. Red Window Cover

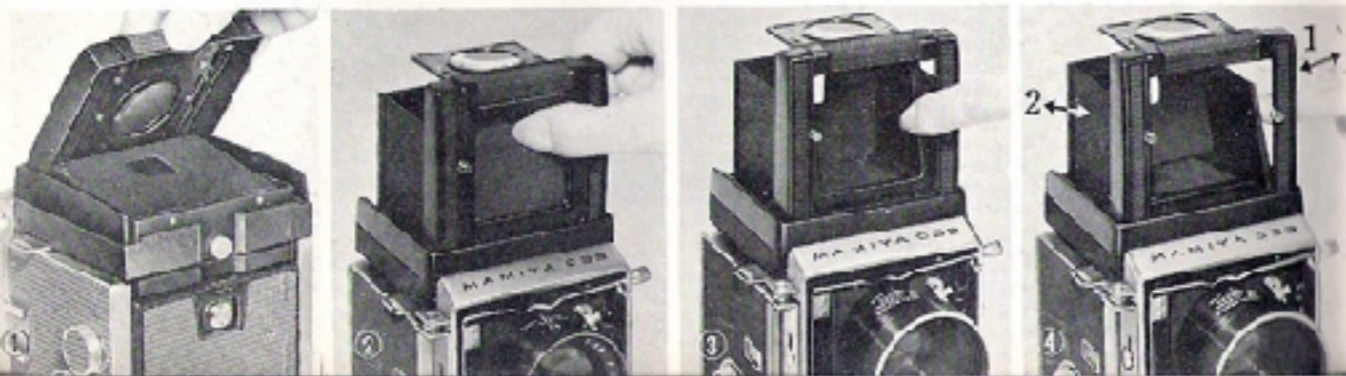
28. Film Chamber
29. Film Spool Catch Stud
30. Take-Up Spool Chamber
31. Take-Up Spool Catch Stud

32. Start Marks (right and left)
33. Backlid Hinge Release
34. Tripod Socket



FOCUSING HOOD OPERATION

1. The focusing hood will snap erect when the focusing hood front ② is lifted up from the rear. (Fig. 1)
2. Slight pressure on the upper section of the viewfinder flap ③ will release the magnifying glass ① which will spring into proper position over the ground glass viewing and focusing screen. (Fig. 2)
3. When the frame viewfinder flap ④ is pushed down fully it will catch and remain over the ground glass. This permits eye level viewfinding for the 80 mm lens. When frame viewfinder ④ is pushed down until it catches the direct view covers the area of the 55 mm lens. (Fig. 3)
4. To release the frame viewfinder ④ and flap ③ for returning the original position, first push



in the left side plate (as seen from the rear) of focusing hood then in the right side plate. (Fig. 4)

5. To collapse and fold the focusing hood, first see that the frame viewfinder flap ④ is closed, then fold down the magnifying glass ①. Fold down the side plates and the back: hold momentarily while folding back the focusing hood front ②.

FOCUSING

1. The method of focusing is the same as for any twin-lens reflex camera. Turn either of the focusing knobs ⑥ while keeping the image of your subject centered on the ground glass screen.
2. When using the frame viewfinder with 105 mm, 135 mm, 180 mm or 250 mm lenses mounted on the camera, be sure to attach proper auxiliary mask to the mask studs ①.



LENS CHANGING

1. Before removing or fitting a lens-shutter assembly turn focusing knob ④ to make certain that the lens mount is fully retracted into the camera body.
2. Turn the filmwind crank counterclockwise and reset in body housing position. (Fig. 5)
3. Turn lens-shutter assembly change knob ⑩ to "UNLOCK". (Fig. 6)
4. Press down knurled head of the lens-shutter assembly catch ⑧, and allow it to swing out forward. The lens-shutter assembly can then be lifted out. (Fig. 7)
5. When exchanging the lens, press down and set the shutter cocking lever ⑨ beforehand. This procedure not only speeds up and ensures proper lens mounting, but protects the mechanism. To attach a lens-shutter assembly, lower carefully into position on the lens mount. As the cocking lever for a 130 mm lens, an auxiliary lever for coupling is provided on the side of the lens barrel. As this lever is under spring tension, press it down while

mounting the lens so that it will not interfere with mounting. (Fig. 8)

Then secure in place by replacing the lens-shutter assembly catch ⑧, turn the lens-shutter assembly change knob ⑩ to "LOCK".

★ Shutter cocking lever ⑨ cannot be meshed with the shutter cocking lever ⑦ in lens-shutter assembly unless the filmwind crank is returned to its original position.

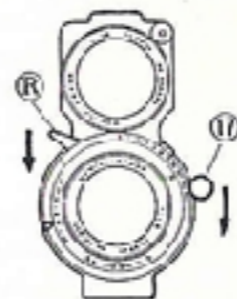
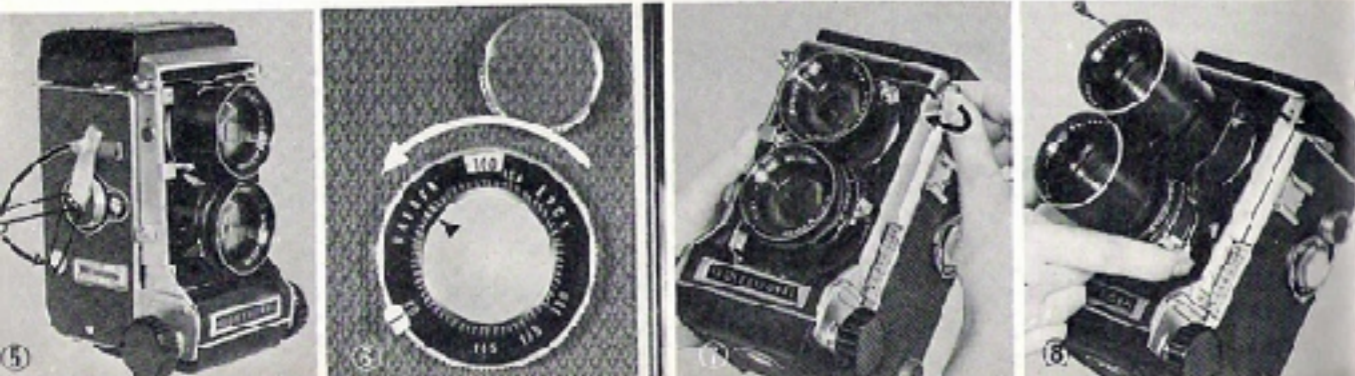
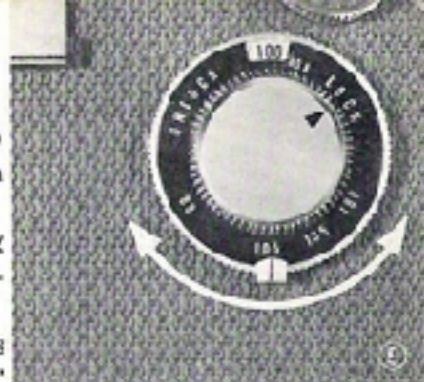
★ A red warning signal visible under the ground glass screen indicates that the lens-shutter assembly change knob ⑩ is at "UNLOCK" position; shutter becomes inoperative and film is automatically protected from light.

6. After lens changing is completed, adjust the parallax correction lever to the index figure given on the lens mount (Fig. 9). However, when the 55 mm or 65 mm lens is mounted, set the lever at 30 and attach the accessory parallax correction plate to the hood. When the 250 mm lens is mounted, set the lever at 180.

Note: There are two kinds of lens shutters: those with double-exposure prevention devices and those without.

To release the shutter of the lens, set the cocking lever ⑨ by pressing it down; then press down the release lever ⑫.

A shutter equipped with a double-exposure prevention device, cannot be released unless the cocking lever is set each time. In the case of a shutter without the double-exposure prevention device, the release lever can be pressed without setting the lever but the shutter vanes will not open.

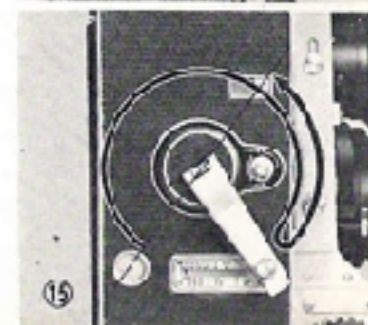
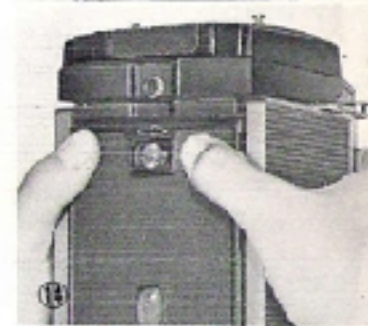
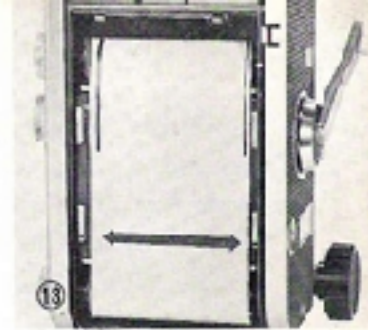


LOADING AND UNLOADING FILM

1. To open backlid, first turn backlid catch button ⑩ so that the red dot is aligned vertically, then push to the right, in the direction indicated by the arrow mark (Fig. 10). The backlid will be released, and the exposure counter ⑪ will be reset at "0".
 2. Before loading always make certain that the multiple exposure/filmstep selector ⑨ is turned to "ROLL FILM". In this position, you are assured that the shutter button ⑦ cannot be operated for release of shutter unless the film has been wound and advanced one frame. (Fig. 11)
 3. Loading and unloading film is done in the same way as with other twin-lens reflex cameras. However, on the right-hand take-up spool holder there is a yellow mark which moves when the crank is turned. This mark is provided for your convenience: align the yellow mark with the white mark on the camera body for easy loading and unloading of film. (Fig. 12)
- ★This camera can also be used to take 24 pictures when using 220 film, by replacing the standard back with the accessory backlid. When either 120 or 220 film is used, the correct back

must be attached.

4. After the film has been positioned over the film gate, and the end has been secured to the take-up spool, turn the filmwind crank ⑫, winding until the start mark (double-headed arrow) printed on the paper backing of the film comes into alignment with the start marks ⑬ near the lower side of the film gate. (Fig. 13)
5. Close backlid, and lock by turning the backlid catch button toward the left. When closing the back, always press the both sides of the catch button tightly so that both right and left sides of the back are securely engaged to the body. (Fig. 14)
6. Turn filmwind crank ⑫ in clockwise direction until it stops. The first frame of film will be in correct position for exposure, while the exposure counter ⑪ will indicate numeral 1. Shutter will be cocked by one stroke of the filmwind crank. If it is wound up a little at a time, the shutter will not be set.
7. After advancing the film the filmwind crank must be turned in counterclockwise direction until it stops. Shutter will not operate unless the crank is returned to its original position; never force the shutter release. (Fig. 15)
8. Repeat the above step after each operation of the shutter. When



the full number of exposures have been made (12 or 24), continue advancing the film until the film is completely wound on the take-up spool. Remove film.

★When the film is to be wound completely after a short length of film (six exposure color film, etc.) has been exposed, or after exposing a specific number of frames, to take up the film, first wind up the exposed frame, then while depressing the shutter release button of the camera body, turn the filmwind crank. The entire film may be wound in one operation.

★The red window cover (2) is provided only on the backlid for 120 film and is used to check whether or not the camera is loaded.

★The exposure counter has numerals up to 24. However, numerals 13 through 24 appear only when the back for 220 film is used.

★When the multiple exposure/filmstop selector (3) is set at "ROLL FILM", the shutter button (7) is operable once only for each numeral, from 1 to 12 or 24, appearing in the exposure counter (4). This automatic locking of the shutter button for prevention of multiple exposure does not occur when the selector is on "SHEET or Multi-exp." side.

★When there is no film in the camera, crank operation will not advance exposure counter. Consequently, the shutter button cannot be operated even with the shutter cocked when the multiple exposure button (5) is turned to "ROLL FILM". However, if the take-up spool remains in, the same effect as film loading may result, depending on the type of spool. In such case it is not desirable to operate the crank. Avoid doing so if possible.

If the shutter does not operate, it does not necessarily mean trouble.

This camera is provided with devices to prevent careless release of the shutter under the following conditions.

1. When the lens change knob is on "UNLOCK".
2. When the filmwind crank is not returned to the retracting position in the camera body.
3. When the multiple exposure button is on "ROLL FILM" and no film is loaded or the film is not advanced.

To release the shutter when the camera is not loaded with film (0 is showing at the exposure counter window) or when the film is still in the camera after the full number of pictures are taken, match the multi-exposure button to "SHEET or Multi-exp." side. Of course, the shutter must be set each time.



TO TAKE MULTIPLE EXPOSURES

First bring the red mark on the multiple exposure/filmstop selector (3) to "SHEET or Multi-exp." Shutter can be cocked by pushing down the shutter cocking lever (7) of the lens-shutter assembly. (Fig. 16) The procedures will be the same when the single-exposure attachment is employed.






CHANGING FOCUSING HOOD

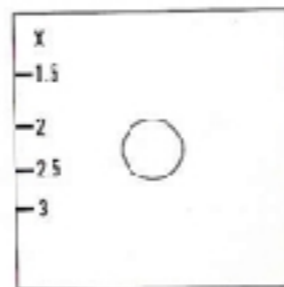
1. The focusing hood can be easily removed by loosening the lock screw  and lifting up the rear end of the assembly.
2. To mount, match the groove on the front side of the hood to the two pins on the body; match the rear groove to the lock screw  and tighten. (Fig. 17)

PICTURE TAKING

With this camera, an exposure index and a parallax correction scale are provided on the ground glass. The indicator needle starts to appear in the upper part of the ground glass while the focusing knob is being operated. Position of this indicator needle shows the exposure index and parallax. In this instance, the parallax correction lever  must be set at the index shown on the lens being used.

EXPOSURE INDEX SCALE

As the distance between the lens and film becomes greater, the exposure value will be lower provided the aperture is constant. In this case, the exposure must be increased. First, take an exposure meter reading to obtain the exposure and make the correction based on the exposure index given by the camera.



Figures given on the left side of the ground glass show exposure index. If the reading of the scale is 2 with object in focus, this indicates the necessity of doubling the exposure. For example, if the exposure meter calls for F 8 at 1/60 sec., it is necessary to adjust to 1/60 at F 5.6 or 1/30 sec. at F 8.

PARALLAX CORRECTION SCALE

When taking pictures with the camera held in hand, the portion seen above the indicator needle on the ground glass is cut off on the film. Adjust the camera so that the subject will come under the needle.

When a tripod or stand is used, the interpositioning of the PARAMENDER (parallax compensation mount) will permit you to sight and focus without any parallax whatsoever.

PRECAUTIONS

When the 55 mm or 65 mm lens is to be used, mount the accessory parallax correction plate on the hood. Remove the hood and place it with the front side to the back. The correction plate must be turned over also. Attach the plate to the hood by means of two plate catches and slide lock. In this instance, insert the edge of the plate with chamfer into the plate catches. (Fig. 18)

Figures on the left side of the correction plate show the exposure



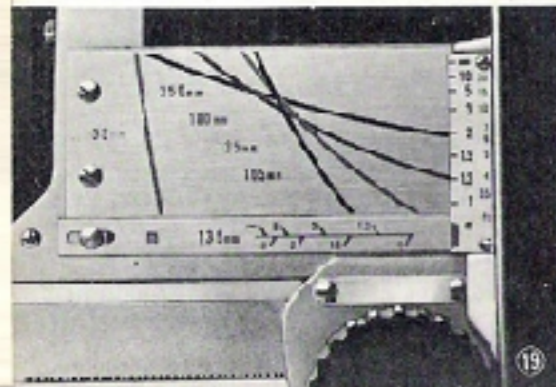
index; lines on the right side are for parallax. If the indicator needle points to 1.5, the section of picture above the top line will be cut off. When the scale reading is 2, the section of picture above the second line from the top will be cut off. In this way, this scale can be used for 2.5 and 3 as correction scale. Parallax correction lever ⑬, in this case, is set for 80 mm lens.

DISTANCE SCALE AND DEPTH OF FIELD

1. When the exact distance from the camera to the subject must be determined, take a look at the distance scale. Hold the camera in shooting position; the scale ⑭ on the right side is for 80 mm and 65 mm lenses and the distance is shown on the scale by the indicator needle. On the scale ⑮ on the left side, the value is read in the intersecting points of curves representing the interchangeable lenses and the scale figures on the side of the body.

However, the reading for 135 mm lens is separately provided under this scale and it can be directly read on the distance scale ⑭. (Fig. 19)

2. When it is necessary to check the available depth of field, obtain the distance to the subject either by referring to the distance scale or by actual measurement, then make use of the depth of field table.

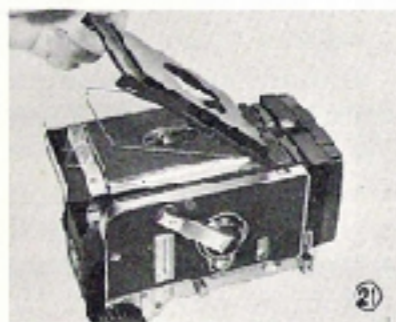


SINGLE EXPOSURE PHOTOGRAPHY

Turn multiple exposure/filmstop selector ⑩ to "SHEET or Multi-exp". At this position, the shutter button can be operated at will, regardless of the filmwind crank and exposure counter.



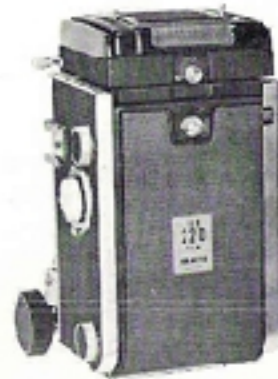
To remove backlid, first release the backlid catch button so as to open the backlid, then push inward on the backlid hinge release ⑪, and lock pivots by turning up into the slots. The backlid will come off completely.



Remove the spool from inside the camera, then attach the special single-exposure back, reversing the removal procedure. Insert loaded holder into the single exposure back. Then close and lock the frame while keeping the plate holder in proper position.



You are now ready for single picture photography.



WHEN USING 220 FILM

Remove the backlid (for 120 film) and attach the back for 220 film.

Loading and unloading of 220 film is exactly the same as for 120 film.

Twenty-four pictures are possible by using the 220 roll film back.

★When the back for 220 film is attached, the use of 120 film is not possible.

★220-film can be used only in the C-33 camera marked with the letter "H" in front of camera serial number or in camera converted at the authorized repair shops at additional charge.

SYNCHROFLASH PHOTOGRAPHY

- By attaching a flashgun or electronic flash unit to the accessory clip and connecting up with the synchroflash terminal Ⓢ, you have a handy set up for synchroflash photography. It is convenient to make use of eye-level sighting by means of the frame finder, the Porrofinder or the Prism finder.

- Set the synchroflash M-X selector Ⓢ for the type of flash used. This adjustment may be done after the shutter has been cocked.
- Position "M" gives correct delayed shutter action for class M flashbulbs (about 20 milliseconds to peak), permitting accurate synchronization at all shutter speeds including 1/500 second.
- Position "X" gives no time lag, and is used in conjunction with electronic flash (xenon strobo) for all shutter speeds, or with ordinary flashbulbs at shutter speeds not exceeding 1/30 second.
- When not using synchroflash, keep selector Ⓢ at position "X".

TABLE OF FLASH SYNCHRONIZATION

Contact	Flash Bulb	Shutter Speed (sec.)											
		B	1	1/2	1/4	1/8	1/15	1/20	1/30	1/45	1/60	1/125	1/250
M	M. class	○	○	○	○	○	○	○	○	○	○	○	○
X	Electronic Flash	○	○	○	○	○	○	○	○	○	○	○	○
	F. class	○	○	○	○	○	○	○	○	×	×	×	×
	M. class	○	○	○	○	○	○	○	○	×	×	×	×

○...will synchronize

×...will not synchronize

INTERCHANGEABLE LENS-SHUTTER ASSEMBLIES

(MAMIYA-SEKOR lens with SEIKOSHA-S shutter)

Among interchangeable lenses, there are two different types of lenses for the same focal length: (1) Side Reading System lenses which indicate the shutter speed and aperture scale on side of the lens, observable from above the camera being hand held; (2) Front Reading System lenses which indicate those scales on the front of the lens. Those of you who own older type lenses, of course, can use them with your Mamiya C33.

However, the lens-shutter assemblies of Mamiya C series with SEIKOSHA-MX shutter (B, 1-1/400 sec.) cannot be used for this camera, also the conventional 180 mm lens for the Model C cannot be mounted on this camera; use the 180 mm lens for Model C33.

PRECAUTION

- ★ When the 65 mm lens is used on this camera, it is not necessary to employ a viewfinder auxiliary mask with concave lens.
- ★ Since the 250 mm lens is not a self-cocking type, set the shutter cocking lever of the lens manually.
- ★ Filters and lens hoods can be commonly used between the front reading system and the side reading system lenses except the 80 mm F/2.8 lens and 105 mm F/3.5 lens, because the diameter of the filters and of lens hoods for these two lenses differ according to the design.

LENS SPECIFICATIONS TABLE

* Front Reading System Lens

** Side Reading System Lens

Lens	Composition	Picture Angle	Filter Size (Screw-in)	Hood Size (Slip-on)	Minimum Distance from Film to Subject	Subject Coverage at Minimum Distance
55mm F4.5	9 element 7 group	70°30'	** 46mm	48mm	9 ⁹ / ₁₆ ' 23.93cm	2 ³ / ₄ " × 2 ³ / ₄ " 5.7 × 5.7cm
65mm F3.5	6 element 5 group	63°	* 49mm ** 49mm	50mm	10 ¹ / ₁₆ ' 26.80cm	2 ³ / ₈ " × 2 ³ / ₈ " 6.0 × 6.0cm
80mm F2.8	5 element 3 group	50°40'	* 40.5mm ** 46mm	* 42mm ** 48mm	1' 1 ¹ / ₂ ' 34.33cm	3 ¹ / ₈ " × 3 ¹ / ₈ " 7.9 × 7.9cm
105mm F3.5	4 element 3 group	41°20'	* 40.5mm ** 46mm	* 42mm ** 48mm	1' 10 ¹ / ₁₆ ' 57.90cm	7 ¹ / ₁₆ " × 7 ¹ / ₁₆ " 17.9 × 17.9cm
135mm F4.5	4 element 3 group	33°	* 46mm ** 46mm	48mm	2' 8 ¹ / ₁₆ ' 82.40cm	9" × 9" 22.9 × 22.9cm
180mm F4.5	4 element 3 group	24°30'	* 49mm ** 49mm	50mm	3' 9 ⁹ / ₁₆ ' 116.32cm	9 ³ / ₄ " × 9 ³ / ₄ " 23.6 × 23.5cm
Super 180mm F4.5	5 element 4 group	24°30'	** 49mm	50mm	3' 9 ⁹ / ₁₆ ' 116.32cm	9 ³ / ₄ " × 9 ³ / ₄ " 23.6 × 23.5cm
250mm F6.3	6 element 4 group	18°	** 49mm	50mm	6' 2 ³ / ₄ ' 189.89cm	10 ⁷ / ₁₆ " × 10 ⁷ / ₁₆ " 27.6 × 27.5cm

ANGLE OF VIEW CHANGES BY INTERCHANGING LENSES

All these pictures were taken from the same position, at an identical distance from the subject.

55 mm



65 mm



80 mm



105 mm



135 mm



180 mm



250 mm



SPECIAL ACCESSORIES

LENS HOODS

There are five different types of lens hoods available for interchangeable lenses.

Lenses marked * are Front Reading System.

Lenses marked ** are Side Reading System.

Lens hoods marked † have a side plate which can be inclined.

All of these lens hoods are the comparatively new type attached only to the taking lens.

Old type lens hoods are also acceptable.

For the 80 mm F/2.8 lens and 105 mm F/3.5 lens, attach a 48 mm ϕ lens hood to lenses

with S.R.S., and a 42 mm ϕ lens hood to lenses with F.R.S. Lens hood of 48 mm ϕ can also be attached to 135 mm lenses. In the above table, lens hoods marked (†) are hoods whose a side plate can be inclined. Attach the hood to the lens with this plate upward. When reflected light from the lens hood to the viewing lens becomes annoying while focusing, due to a certain light condition, incline the plate so that the annoying reflection is eliminated.

‡ Lens hood for 55 mm lens

† Lens hood for 65 mm lens

Lens hood 42 ϕ for

80 mm F/2.8 *

105 mm F/3.5 *

Lens hood 48 ϕ for 80 mm F/2.8 **

105 mm F/3.5 **

135 mm F/4.5

† Lens hood for 180 mm

Super 180 mm

250 mm

FILTERS

There are five different types of filters (Y2, YG, O2, UV and SL) for each filter size described in the lens specifications table.

PRECAUTIONS

There are two different diameters for the 80 mm F/2.8 lens and the 105 mm F/3.5 lens. When you order filters for these lenses, always specify the diameter of your lens.

Lenses with a 49 mm filter diameter have a particular filter mount and do not accept other than Mamiya filters. When you order filters for these lenses, always specify the MAMIYA C type.

For attaching filters to lenses of 49 mm filter diameter, put your palm on the protective ring screwed into the front barrel of the lens, turn the ring counterclockwise to remove it, then screw in the filter. When filters are not used, always replace the ring to protect the lens barrel.

CLIP-ON DISTANCE SCALE

When this scale is mounted on the accessory shoe, quick focusing becomes possible by setting estimated distance on the scale graduation. This is particularly convenient in flash photography or when pictures are to be made at a pre-determined distance.

MAGNIFIER

A very convenient accessory for accurate focusing, this magnifying glass, used by attaching it to the side plates of the focusing hood from above, magnifies the picture on the ground glass focusing screen 5.5 times. By turning the eye lens ring of the magnifier, visibility can be adjusted.



FOCUSING KNOB ADAPTER

An adapter for attaching to the focusing knob to facilitate precise focusing.



MAGNIFYING HOOD

This magnifying hood may be used instead of the focusing hood. By turning the knob on the side of this hood, either 3.5× or 6× magnification can be selected.



PISTOL GRIP

This grip, which supports the camera from the bottom, has a trigger type shutter release button which many persons prefer when following sports action.



PRISM FINDER

As with the magnifying hood, this prism finder may be used instead of the focusing hood. Through this prism finder, the image on the ground glass focusing screen appears exactly as the subject is seen. Really an indispensable accessory for eye-level photo-journal photos or candid shots.

Finder magnification nearly 2.5 times ground glass image, particularly bright and clear.



CdS PORROFINDER

This is a Porrofinder with built-in CdS exposure meter. Match the index needles within the finder by turning the dial on the back of the finder, and read the dial scale. This device measures the amount of light traveling through the viewing lens, offering correct exposure setting even for amateurs. Especially important... there is no need to worry over exposure correction on close-up shots by extending the bellows camera. However, when a filter is attached to the taking lens, the exposure must be adjusted according to the filter factor. An eye-cup prevents disturbing light from entering the finder through the finder eyepiece.

EYE CORRECTION LENS

This lens, designed to correct visibility, is installed inside the eyepiece ring of the Porrofinder, CdS Porrofinder, or Prism Finder.

The image in the finder coincides with persons with ordinary eyesight who easily visualize objects without becoming fatigued. Persons who do not wear glasses in spite of their nearsightedness or farsightedness, or whose sight is not sufficiently corrected by glasses, usually find it very difficult to observe the finder image. Such persons may find this lens a boon to facilitating picture taking.

Nine types of lenses are provided from +2.5 to -2 diopter (each diopter is +2.5, +2.0, +1.5, +1.0, +0.5, -0.5, -1.0, -1.5, and -2.0).

The diopter has no relation to values such as 1.0 in a test of visual power, and cannot be converted to other values; therefore, have an optician determine the diopter suitable to your glasses.

Supposing that your glasses were +1.5 diopter, it would be very easy to view the finder image when using a lens having +1.5 diopter. Of course, if the individual wears glasses perfectly fitted to his eyes, this accessory lens is unnecessary.

When installing the lens on the finder, hold the milled portion of the eyepiece ring with the thumb and finger, and turn it counterclockwise to remove the ring. When the lens is a plus (convex) lens, position it with the flat surface outside; and when it is a minus (concave) lens, place the concave surface on the exterior, then screw the ring into its original position.

SINGLE-EXPOSURE ATTACHMENT

By using the single-exposure back in place of the standard backlid, the special plate and cut film holders permit the taking of single frame negative pictures, by using $2\frac{1}{2} \times 3\frac{1}{2}$ in. dry plate, $2\frac{1}{2} \times 3\frac{1}{2}$ in. cut film or "one-quarter" size of $4\frac{3}{4} \times 6\frac{1}{2}$ in. cut film.

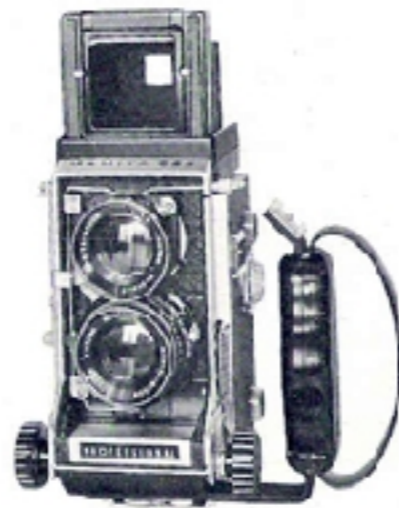
For $2\frac{1}{2} \times 3\frac{1}{2}$ in. cut film, use type D sheath.

For "one-quarter" size of $4\frac{3}{4} \times 6\frac{1}{2}$ in. cut film, use type J sheath.

It is so useful in professional and advanced amateur work. Immediate checking of results is possible.

GRIP HOLDER

Special grip-form handle is particularly handy for steady holding of camera during picture-taking. It also provides a mount for the flash unit.



MAMIYA FILM CUTTER

For easy and accurate cutting of sheet film in a darkroom.

220 ROLL FILM BACK

By using this back, 24 pictures can be taken with 220 film.

PARAMENDER (Parallax Correction Mount)

An accessory interposed between the camera and tripod or other mount, the PARAMENDER permits the lowering of the viewfinding lens down to level of picture-taking lens for parallax-free viewing during focusing and composing. Before releasing the shutter, raise the camera until it stops. The picture-taking lens comes into the position of the viewfinding lens and parallax is thus completely eliminated.

COMPARTMENT CASE

A large portable case in which the camera and practically all its accessories can be stowed.

