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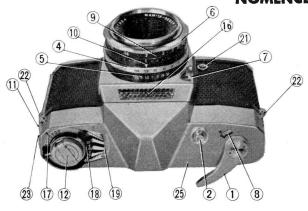
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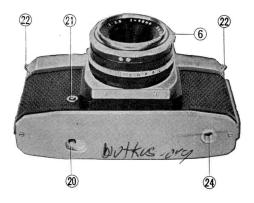
MAMIYA FAMILY





NOMENCLATURE



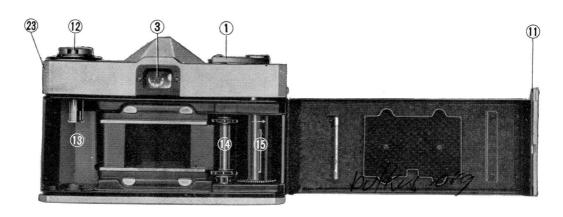


- 1. Cocking Lever
- 2. Shutter Button
- 3. Eyepiece
- 4. Shutterspeed Dial
- 5. Aperture Ring
- 6. Focusing Ring

- 7. Aperture Lever
- 8. Film Counter
- 9. Distance Scale
- 10. Depth of Field Scale
- 11. Backlid Catch
- 12. Rewind Crank

- 13. Cartridge Chamber
- 14. Sprocket
- 15. Take-Up Spool
- 16. Photocell Window
- 17. Filmspeed (ASA) Dial
- 18. Exposure Meter Dial

- 19. Exposure Meter Needle
- 20. Sprocket Release Button
- 21. Synchroflash Socket
- 22. Strap Eyelets
- 23. Accessory Mount Socket
- 24. Tripod Socket
- 25. Focal Plane Mark



BEFORE LOADING WITH FILM FOR PICTURE-TAKING

Read these instructions carefully so that you know the special features offered by the single-lens reflex construction of your camera.

PICTURES EXACTLY AS SEEN IN THE VIEWFINDER

By use of a special pentaprism in conjunction with the picture-taking lens, the image seen in the viewfinder is identical with the negative reproduction of the subject on the film. Although there is a brief black-out of the viewfinder image for a fraction of a second during shutter action, you can always see exactly what you are taking.

PRECISE FOCUSING

The light rays reflected by your subject pass through the main lens, and are deflected upward by the quick-return mirror to form an image on the viewing-focusing screen. This image is seen in correct orientation and size through the viewfinder eyepiece and the pentaprism which reflects the rays three times. When the focusing ring (6) is turned the image of the subject, formed on the viewing-focusing screen, can be adjusted to maximum sharpness. With the subject thus brought into correct focus, precisely as it will register on the film, the shutter button (2) can be pressed for actual shooting. Because the focusing and viewing

are done through the same lens as for picture-taking, there is no sighting error (parallax), while you are enabled to ascertain visually the extent of blurring of the areas in front of and behind the main subject which is in sharp focus. With the focus set at infinity (∞), the viewfinder image is $\times 0.8$ magnification.

QUICK-RETURN MIRROR

When the shutter button (2) is pressed to release the shutter mechanism, the reflex mirror flicks up to return to its original position the instant the action of the shutter is completed. Consequently, the subject is always clearly visible in the viewfinder except during the movement of the shutter.

FULL-APERTURE VIEWING AND FOCUSING

This camera is provided with a fully automatic aperture mechanism which closes down to pre-set aperture size only during shutter action. This means that maximum aperture size is always available for viewing and for utmost precision in focusing.

APERTURE LEVER

For checking the effects of pre-selected aperture size, there is provided a manual aperture lever (7) which permits viewing at any f/ stop desired. Releasing this lever immediately gives full aperture for viewing or focusing.

COCKING LEVER

This lever (1) simultaneously cocks the shutter and advances the film one frame in one stroke. It remains locked until the shutter button (2) is operated and the shutter mechanism is released. This arrangement positively prevents double exposures.

SHUTTERSPEED DIAL

This dial (4) can be set at any time, either before or after cocking. Click stops are provided at each setting. When position "B" (bulb—manual shutterspeed control) is used, the shutter remains open for as long as the shutter button (2) is kept depressed, and during this time the viewfinder will remain blacked out.

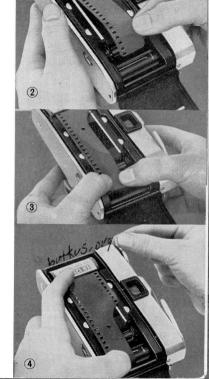


FILM LOADING

This camera will take any 35-millimeter film preloaded in safety cartridge. Monochrome or color in 20- or 36-exposure lengths may be used. When loading or unloading film, always avoid direct lighting. Work in the shade, using your own body as a shield if no other protection is available.

www.orphancameras.com

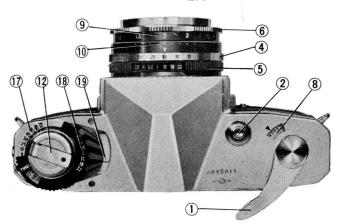
- 1. Pull out the backlid catch (11), swing open the backlid on its hinge, and pull out the rewind crank (12) fully. (Fig. 1)
- 2. Place safety cartridge containing unexposed film in the cartridge chamber (13). Secure by pushing back the rewind crank (12) seeing that it is fully seated. Pull out about four inches of film, fold inward about a quarter inch of the end, and secure to take-up spool (15). Wind a turn of film on to the take-up spool. (Figs. 2 & 3)
- 3. Turn rewind crank (12) clockwise in the direction indicated by the arrow mark to take up the slack in the safety cartridge. (Fig. 4) Check fit of film perforations on the lower side with the sprocket teeth, and turn the take-up spool (15) slightly to make sure that the film plays out properly. Close backlid, and secure by pushing in the backlid catch (11).
- 4. Cover the lens with the lens cap. Operate cocking lever (1) and the shutter button, making blank shots, until



the film counter (8) indicates numeral 1. The first frame of your film is now in position for exposure.

5. Finally, turn the filmspeed dial (17), and set the ASA rating of the film you have loaded in your camera against the triangular index mark. You are now ready for picture-taking.

EXPOSURE METER READING



The built-in exposure meter of your camera accurately indicates (light value) brightness the The red subject. of vour needle (19) will stop at one of the striped guide lines. The aperture (f/) value indicated by the guide line, and the corresponding shutterspeed showing in the dial window "TIME" are the settings for correct exposure of your film for the brightness of your subject-matter.

- 1. Make sure that the filmspeed (ASA) dial (17) is set at the ASA rating of the film you have in use.
- 2. Turn the exposure meter dial (18) so that the shutterspeed setting you wish to use appears in the dial window "TIME"
- 3. Point your camera toward your subject, then by noting the position of the exposure meter needle (19) obtain the proper aperture value for correct exposure. Adjust the aperture ring (5) to set at the indicated value.

CAUTIONS

- 1) When using the exposure meter, be sure that the photocell window (16) is not obstructed in any way.
- 2) When, with shutterspeed at 15 (1/15 second), the exposure meter needle (19) is not deflected sufficiently to indicate aperture setting 2.8 (f/2.8) or beyond, your subject is not bright enough for good exposure. Either the lighting must be improved or film of higher speed rating will have to be used.
- 3) When, with shutterspeed at 250 (1/250 second), the exposure meter needle (19) moves beyond 22 (f/22), the subject is too bright, and overexposure will result. Use a filter to

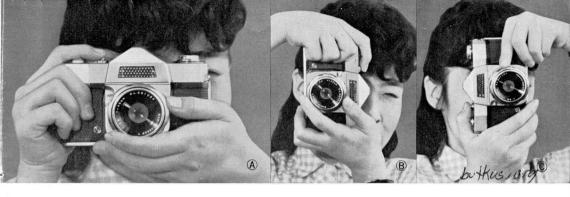
reduce the intensity of the light entering the lens. Proceed with caution however since extraneous light (from the sun or the sky) may be causing the exposure meter to indicate light value higher than that actually pertains to your subject.

4) When using a filter, change the filmspeed (ASA) setting of dial (17) according to the exposure factor of the filter. For instance, if you are using film of ASA 100 in conjunction with a filter with a factor of $\times 3$, you are in effect reducing your filmspeed to one-third of its rating, namely ASA 33. In this case set the filmspeed dial (17) at a position between 50 and 25.

HOLDING YOUR CAMERA FOR PICTURE-TAKING

Supporting the camera on the palm of your left hand, the thumb and forefinger should rest lightly on the focusing ring (6), ready to make focusing adjustments. The right hand should lightly grip the right side of the camera, with the index finger free to rest lightly on the shutter button (2). The thumb may be lightly hooked on the end of the cocking lever (1).

Raise the camera to eye level, and sight through the eyepiece (3). You will then have a stable grip and stance. The left hand is used mainly for steady support, while the right



hand gives added stability.

When using the vertical position, the cocking lever side may be either raised or lowered. If raised, use a modification of the horizontal grip, supporting the left end of the camera in the palm of the left hand, keeping your left elbow in firm contact with your body.

If the cocking lever side is lowered, firmly clamp the camera between the base of your right thumb and your fingers. The shutter button is operated by the right thumb, while your right elbow should be kept tight against your body. You left hand steadies the camera from above, with the index or middle finger turning the focusing ring (6).

FOCUSING

Focusing is done by turning the focusing ring (6) while sighting your subject through the eyepiece (3). While it is easier to sight and focus at full aperture, you may wish to know how much focusing tolerance (depth of field) you have at the aperture setting you have selected. Actual picture-taking conditions can be immediately checked merely by pressing the aperture lever (7) to close down the iris diaphragm to the pre-set aperture size.

When the subject-matter is too dark for accurate focusing by sight through the viewfinder, set measured or judged distance on the distance scale (9), and note available depth of field (focusing tolerance) by means of the color-coded depth of field scale (10). The colors correspond to those of the aperture scale on the aperture ring (5). For precise depth of field computations, consult the depth of field table.

NOTE

4000

Color-coding of the aperture scale (5), depth of field scale (10) and the exposure meter dial (18) is as follows:

red-orange2.8 (f/)	orange-yellow4
vellow-green5.6	green8

DEPTH OF FIELD TABLE

MAMIYA-SEKOR T. F 2.8, 48 mm (circle of confusion, 1.7/1,000 inch)

A montune	Distances focused on (in feet)							
Aperture	∞ ,	30	15	10	7	5	4	3. 5
2.8	62′ 6¹/ ₄ ″	20' 4 ¹ / ₂ " 57' 1 ³ / ₄ "	12' 2" 19' 7"	8' 8" 11' 9 ³ / ₄ "	6′ 4″ 7′ 10″	4′ 8″ 5′ 4³/ ₄ ″	3' 9 ¹ / ₂ " 4' 3"	3' 4" 3' 8 ¹ / ₄ "
4	43′ 9¹/₂″ ∞	17′ 11″ 93′ 6¹/₄″	11' 3" 22' 6 ¹ / ₂ "	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	6' 1" 8' 3"	4' 6 ¹ / ₄ " 5' 7"	3' 8 ¹ / ₂ " 4' 4 ¹ / ₄ "	3' 3 ¹ / ₄ " 3' 9 ¹ / ₄ "
5. 6	31′ 3³/ ₄ ″	$\begin{array}{ccc} 15' & 5^{1}/_{4}'' \\ 624' & 5^{1}/_{4}'' \end{array}$	10' 2 ³ / ₄ " 28' 3"	$7' 8'' 14' 5^{1}/_{2}''$	5′ 9¹/2″ 8′ 10¹/2″	$4' 4^1/_4'' 5' 10^1/_4''$	3' 7" 4' 6 ¹ / ₄ "	$\frac{3'}{3'} \frac{2^1/_4''}{10^1/_2''}$
8	21′ 11¹/₂″ ∞	12′ 9¹/₂″ ∞	9' 1/4" 45' 7 ³ /4"	$\frac{6'11^{1}/_{2}''}{17'10^{3}/_{4}''}$	5' 4 ³ / ₄ " 10' ¹ / ₂ "	4' 1 ³ / ₄ " 6' 4"	3' 5 ¹ / ₄ " 4' 9 ¹ / ₂ "	3' 3/4" 4' 1"
11	16′ ∞	$10'_{\infty}6^1/_2''$	$7' 10^{1}/_{4}'' 200' 6^{1}/_{4}''$	6′ 3″ 25′ 6″	4' 11 ¹ / ₂ " 12' ¹ / ₄ "	$\frac{3'10^3/_4{''}}{7'}$	3' 3 ¹ / ₄ " 5' 2"	$2' 11^1/_4'' \ 4' 4^1/_4''$
16	$11'$ $^{1}/_{2}''$	8′ 1³/ ₄ ″	$6'_{\infty}5^1/_2{''}_{\infty}$	5' 4 ¹ / ₄ " 88' 8 ³ / ₄ "	4' 4 ³ / ₄ " 17' 11"	3' 6 ¹ / ₂ " 8' 8 ¹ / ₄ "	3′ 1/4″ 5′ 11³/4″	2' 8 ³ / ₄ " 4' 10 ³ / ₄ "

UNLOADING FILM

When you have taken the number (either 20 or 36) of pictures available on your film, stop trying to squeeze in any more. Rewind your exposed film into its safety cartridge before opening your camera.

- 1. Press sprocket release button (20), making sure it remains depressed. Erect rewind crank (12), and turn clockwise in the direction indicated.
- 2. When the end of the film separates from the take-up spool (15), you will sense this by feel. Do not wind film fully into the safety cartridge. Open backlid, pull out rewind crank (12) and remove safety cartridge. The depressed sprocket release button (20) will return to normal position automatically upon operation of the cocking lever (1).

CAUTIONS

- 1) If at the end of your film (sometimes before the film counter (8) indicates the full number of frames available) the cocking lever (1) jams part way through its stroke, do not force. Press the sprocket release button (20), and complete cocking action. Rewind film into safety cartridge.
- 2) If jammed cocking lever is forced, the film may be stripped or the end may come

loose out of the safety cartridge making it impossible to rewind. If this happens, and you wish to save your film, open camera only in complete darkness.

SYNCHROFLASH PHOTOGRAPHY

This camera is provided with a synchronizing mechanism for setting off photoflash simultaneously with the action of the shutter. Since there is no provision made for time lag, accurats synchronization is possible with electronic flash (strobo) at all shutterspeeds, and with class M and class F flashbulbs up to speeds of 1/30 and 1/60 second respectively.

On the front of the camera, there is provided a synchroflash socket (21) of the JIS-B type (German type).

To mount flashgun on your camera, screw adaptor into the accessory mount socket (23).

SPECIAL ACCESSORIES

Lens Hood (with leather carrying case); Filters (Toshiba screw-in type, 40.5 mm diameter); MAMIYA BC III flashgun.

In preparation: PROXAR auxiliary lens for close-range photography (.55 to 1 meter range); Conversion Lens for portraiture (focal length increased to 65 mm, magnification ×1.36).