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BRONICA

*RF*645

Rangefinder 6x4.5 Medium Format Camera

CAMERA BODY *INSTRUCTIONS*

Thank you for your purchase of the Bronica RF645 medium format rangefinder camera. Incorporating the best of Bronica's know-how and technological expertise, the Bronica RF645 achieves a new dimension in compactness as the world's first medium format 6 x 4.5 rangefinder camera to feature interchangeable lenses, and comes with a superb line up of lenses to take full advantage of the rangefinder camera. The RF645 employs manual film advance lever and dual-image superimposing rangefinder focusing for maximum user control where it counts, while enhancing handling ease with Program AE, automatic shutter cocking via a motor incorporated in the lens unit, and an automatic light shielding curtain to protect film as the lens being removed. This is a camera designed for the maximum enjoyment of photography in mind.

The features and handling procedures described in this owner's manual are based on use of the Bronica RF645 in combination with the Zenzanon RF65mm f/4 standard lens. To obtain best results from your new camera, please read this instruction manual carefully before use. With proper care and handling, the unit will continue to provide pleasure and performance for many years to come.


In this package, along with the camera body and the standard lens, you will find the following accessories.


- 1) 1 camera body cap RF (attached to the mount section on camera; remove when mounting a lens),
- 2) 1 sync terminal cover (attached to sync terminal),
- 3) 1 hotshoe cover (attached to hotshoe),
- 4) 1 interchangeable eyepiece lens RF (-1) (attached to viewfinder eyepiece),
- 5) 1 rubber eyecup RF (attached to viewfinder eyepiece),
- 6) 1 protective sheet for light shielding curtain (attached to film aperture of camera. Remove prior to using camera.),
- 7) 1 film take-up spool (installed in take-up side film chamber),
- 8) 1 camera strap RF (N),
- 9) 2 CR2 type 3V lithium batteries, and
- 10) 1 Owner's Manual (this booklet).

Note: The batteries included are intended for initial use, and the battery life may not be adequate for normal photographing. Please be prepare to purchase a new set of batteries of the same type to ensure best results








Important Safety Information

- Please read these safety precautions and the owner's manual and follow the instructions carefully.
- This product is not to be used for purposes other than photography.





 **Warning:** This designation indicates that death or serious injury may result from ignoring these instructions.

 **Caution:** This designation indicates that personal injury or damage to equipment may be caused as a result of ignoring these instructions.



Warning

-  • Never disassemble the unit. Electric shock may be sustained.
-  • If internal parts are exposed by dropping the equipment by accident etc., never touch these internal parts. High-voltage circuitry may cause electric shock.
-  • When attaching the Speedlight to the hotshoe or sync socket, do not touch the electric contacts. Electric shock may be caused. Always attach the appropriate cover to the hotshoe and sync socket when these are not in use.
-  • If the camera or batteries become hot, gives off smoke or a burning smell, immediately switch the unit off and remove the batteries. Fire and burn injuries may be caused. (When removing the batteries take proper precautions to avoid burns).
-  • Never use the camera unit in locations where flammable gases are present, or near flammable liquids such as gasoline, benzene, or paint thinner. Explosion or fire may break out, causing personal injury.
-  • Keep the camera unit out of the reach of infants and young children. Failure to do so may result in injuries such as choking caused by the camera strap.
-  • Never disassemble, heat, burn, recharge or short-circuit the batteries. Explosion may be triggered.

Warning

-  • Do not use batteries other than the type as specified. Doing so may result in overheating or fire.
-  • Do not use new and old batteries together. Also, be sure not to align the + and - polarities incorrectly. Doing so may result in rupture or leaking, causing fire, injury and damage to equipment.
-  • Always keep batteries out of the reach of infants and young children to prevent accidental swallowing. If batteries are swallowed, seek immediate emergency medical attention.
-  • Do not look through the camera at direct sunlight or strong light sources. Eye injury may be caused.

Caution

-  • Do not touch the camera with wet hands or allow the equipment to become soaked. Electric shock may be caused.
-  • Do not point the Speedlight toward people who are operating bicycles, automobiles or trains. Traffic accidents may be caused.

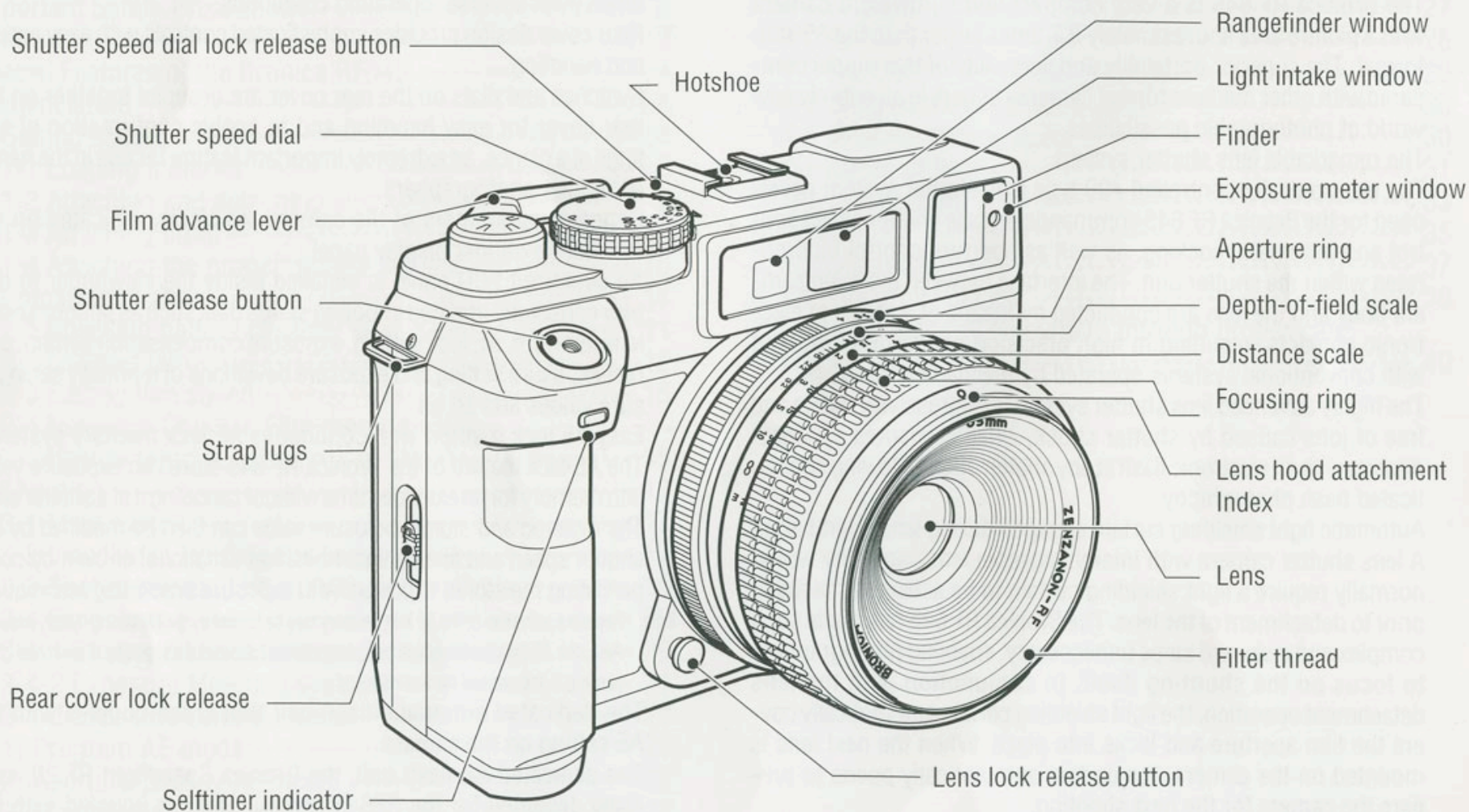
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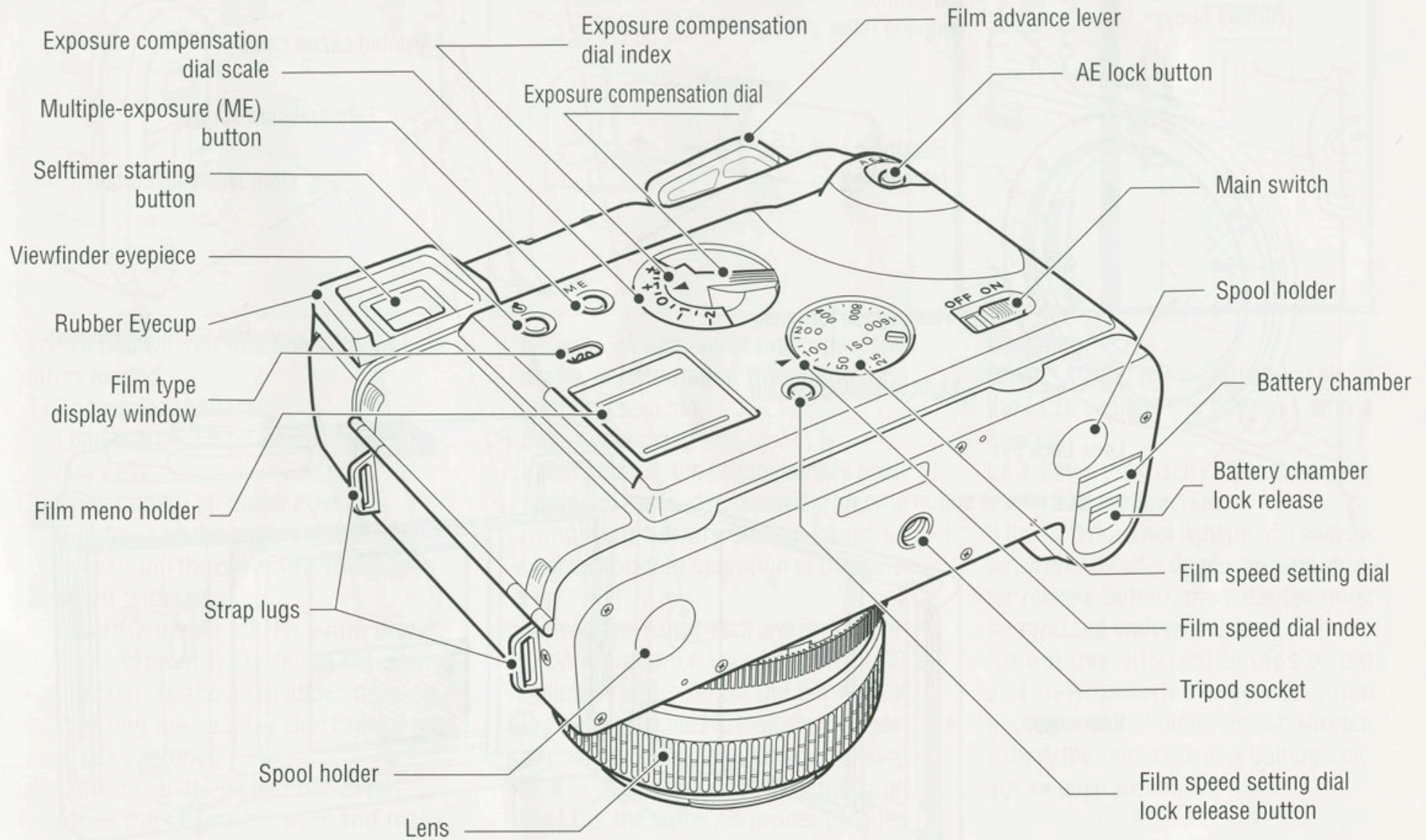
Special Features of the Bronica RF 645

- * A medium format coupled-meter rangefinder camera
The Bronica RF 645 is a very compact and lightweight camera with a picture area approximately 2.7 times larger than the 35-mm format. The superior portability and versatility of this model compared with other medium format cameras ushers in an entirely new world of photographic possibilities..
 - * The remarkable lens shutter system
The electronically-controlled #00 type lens shutter system developed for the Bronica RF 645 commands precise shutter speed control and automatic cocking, as well as aperture control incorporated within the shutter unit. The interface between the main camera body and the lens are conducted by means of a series of electronic contacts, resulting in high precision operation compared with conventional systems operated by mechanical couplers. The highly advanced lens shutter system is impressively stable and free of jolts caused by shutter shock, while it ensures synchronization with an electronic flash at any shutter speed allowing sophisticated flash photography.
 - * Automatic light shielding curtain engaged during lens interchange
A lens shutter camera with interchangeable lens capability would normally require a light shielding curtain to be activated manually prior to detachment of the lens. The Bronica RF 645 has made such complex and awkward steps unnecessary, enabling photographers to focus on the shooting itself. In conjunction with the lens detachment operation, the light shielding curtain automatically covers the film aperture and locks into place. When the next lens is mounted on the camera, the curtain automatically opens to prepare the camera for the next shooting.
 - * Hi-tech magnesium alloy Thixomolding
The top cover of the Bronica RF 645, a lightweight and extremely sturdy camera, is manufactured with an advanced Thixomolding technique. This technology enables a hard and rigid magnesium alloy to be molded into intricate and complex forms required to hold and protect internal mechanisms with precision in various, at times even adverse, operating conditions.
 - * Rear cover design provides sophisticated controls with easy access and handling.
Switches and dials on the rear cover are grouped together on the rear cover for easy handling and to enable confirmation of settings at a glance, an extremely important feature for use in the hands of serious photographers.
 - * Shooting parameters of the camera are clearly indicated on the internal viewfinder display panel.
An oversized LCD panel is installed inside the viewfinder to display constantly updated shooting status data such as shutter speed, lens aperture, AE lock setting, exposure compensation setting, correct exposure setting and exposure deviations of manually set exposure values and so on.
 - * Easy AE lock method with continuous AE lock memory system
The AE lock feature of the Bronica RF 645 stores an exposure value into memory for an extended time without canceling it at a shutter click. The metered and stored exposure value can then be modified by the shutter speed and aperture combination variations, or even by compensating the stored exposure with exposure bracketing technique.
- Note: Repeated activation of the AE lock memory may be limited by the remaining battery capacity. Also, the AE lock memory will be automatically canceled if the power is switched off or camera is left unused for five minutes.
- * The dedicated automatic flash unit that cross-couples with the AE setting on the camera
The dedicated AE flash unit, the Bronica Speedlight RF 20, specially designed for the RF645 camera body, is coupled with the camera control system. The unit utilizes the electronic contacts of the hotshoe on the camera to transmit and receive lens aperture values, the aperture control signals and other control data, enabling the flash unit to compensate for the flash illumination by a half stop within -3 to +2 exposure compensation range.

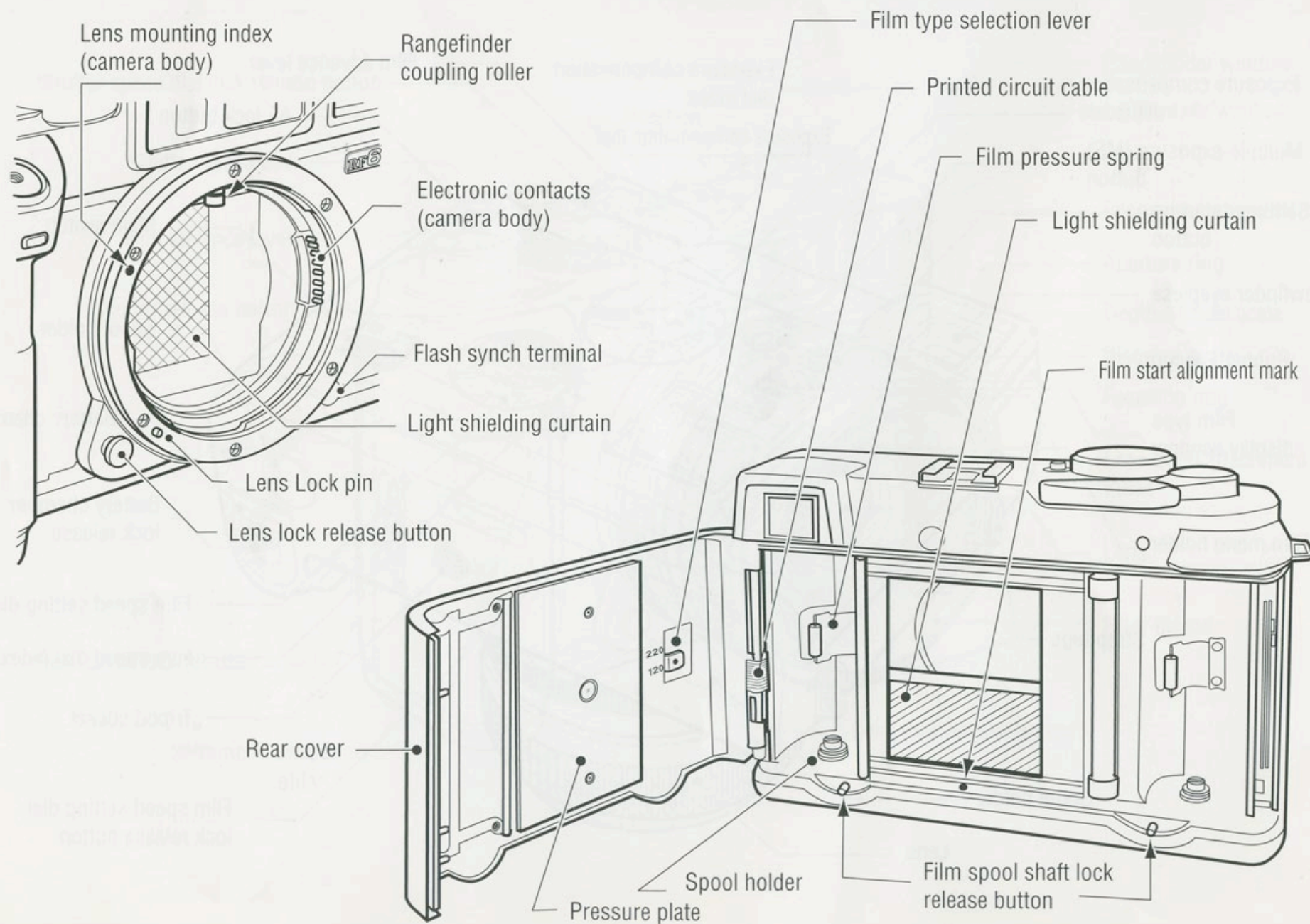
Nomenclature



Nomenclature

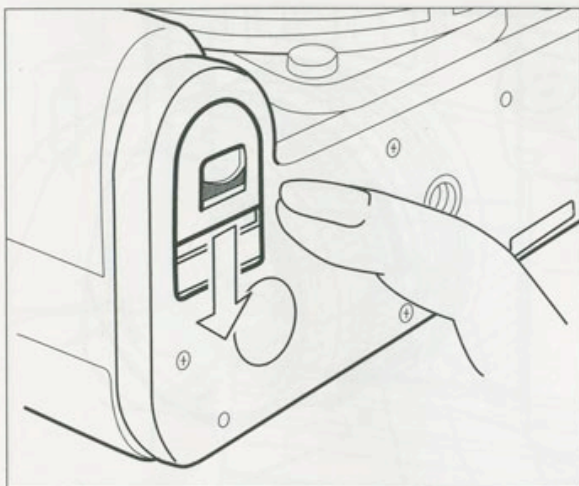


Nomenclature



1. Getting started

1-1 Loading batteries



The RF645 will not function without batteries loaded.

1) Appropriate batteries

Load two CR2 type 3-volt lithium battery cells.

2) Open battery chamber cover.

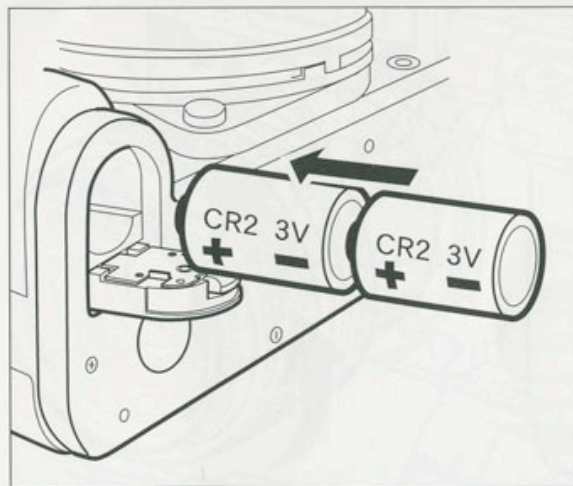
Pull down on the battery chamber lock release and the cover will swing open.

3) Insert batteries.

Insert two cells of the same brand, same type of batteries in the same direction as shown in above drawing, directing the plus (+) side toward the inside chamber.

4) Close the battery chamber cover.

Close the chamber cover and make sure the cover is securely locked.

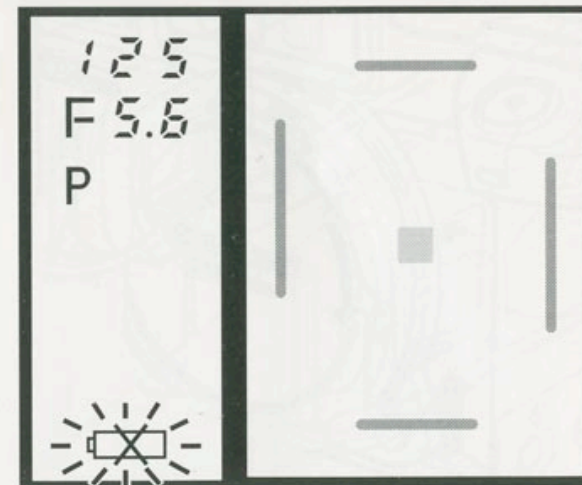


Loosely locked cover may open and drop the batteries in the middle of a shooting session.

5) Battery checking

Battery status, the proper battery positioning of the loaded batteries, and the remaining battery power, must be checked prior to operation of the camera.

Turn on the main switch and press lightly on the shutter speed dial. An LCD indicator lights up on the left side of the viewfinder field to indicate the operational status of the camera. As long as a "X" mark does not appear on the LCD, the battery is properly loaded and the battery power is sufficient for



shooting.

- * When "X" mark starts to blink on the LCD, replace the batteries with a new set.

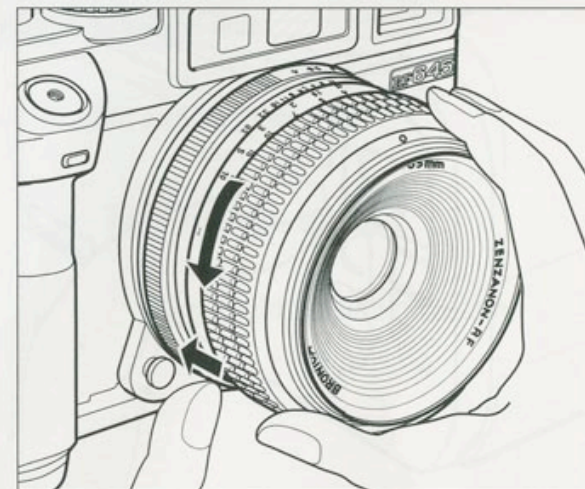
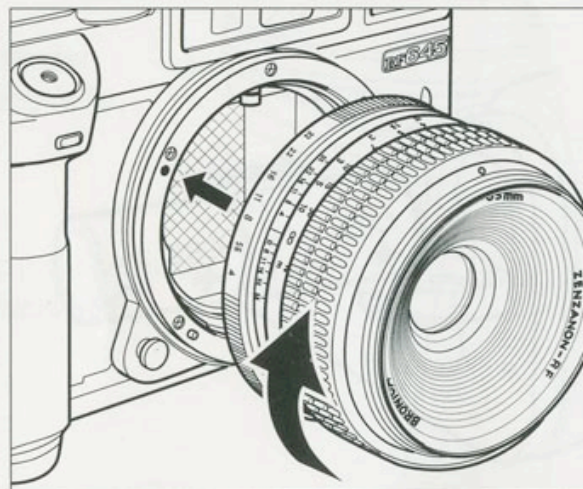
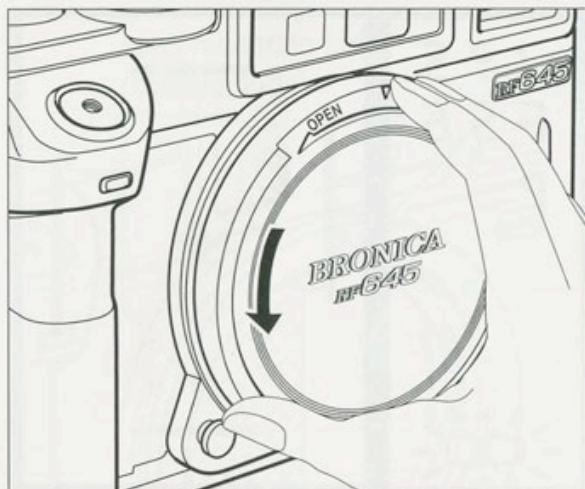
Low battery capacity may cause the camera to malfunction.

- * If the LCD does not light up or it switches off shortly after depressing the shutter release button, the batteries must be replaced with new ones.

- * Do not use different brands or old and new batteries together. Such improper use of batteries will shorten battery life and may cause battery leakage or even explosion.

1. Getting started

1-2 Attaching and detaching the lens



1-2-1 Attaching the lens

- 1) Rotate the rear lens cap of the lens counterclockwise about 70°, and lift it off when it comes to a mechanical stop.
 - 2) Align the lens mounting index on the lens barrel with its counterpart on the camera body. Place the lens into the lens mount on the camera body, and then rotate the lens barrel clockwise until it clicks to a stop. Make sure the lens is locked in position before using.
- Note: Do not touch the electronic contacts, the rangefinder coupling roller, or the light shielding curtain located around and behind the camera mount section. Contact with these may cause

damages and/or leave stains on vital systems, leading to malfunctioning of the camera.

1-2-2 Detaching the lens

- 1) Depressing the lens lock release button, rotate the lens barrel counterclockwise, until it comes to a mechanical end.
- 2) Pull out the lens barrel from the mount of the camera.

Note 1: The 65mm and 100mm viewframes in the viewfinder are automatically switched as the respective lenses are attached.

Note 2: When mounting the 45mm lens, insert the dedicated viewfinder into the accessory hotshoe on the camera body.

Refer to the instruction manual of the 45mm lens for more information.

Note 3: When attaching or detaching lenses, do not use excessive force to rotate or twist the lens.

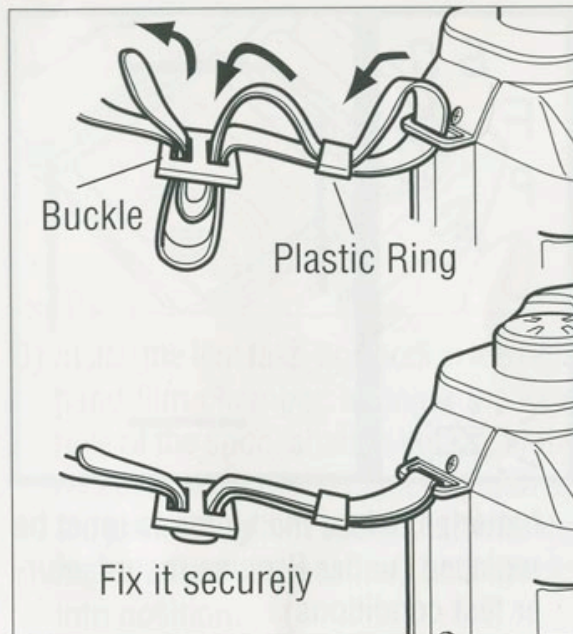
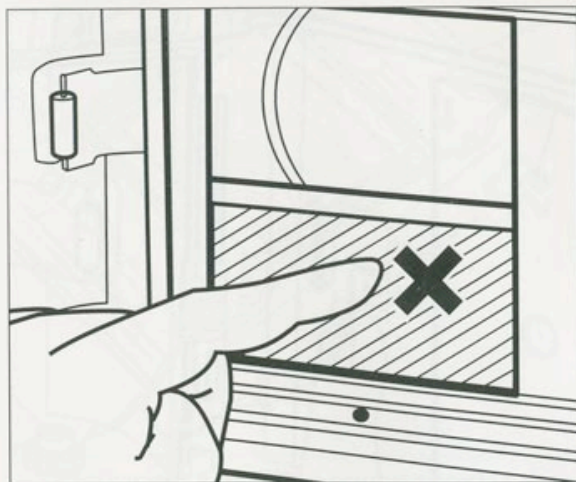
Note 4: Never attempt to detach the lens while the shutter is open in B (bulb) shooting.

Note 5: This camera employs a lens shutter, so normally the film would be improperly exposed when changing lenses. To prevent this, a light shielding curtain is automatically drawn out by the lens detaching action, covering and protecting the film. Do not press or touch this curtain with fingers or sharp objects.

1. Getting started

1-3 Attaching strap

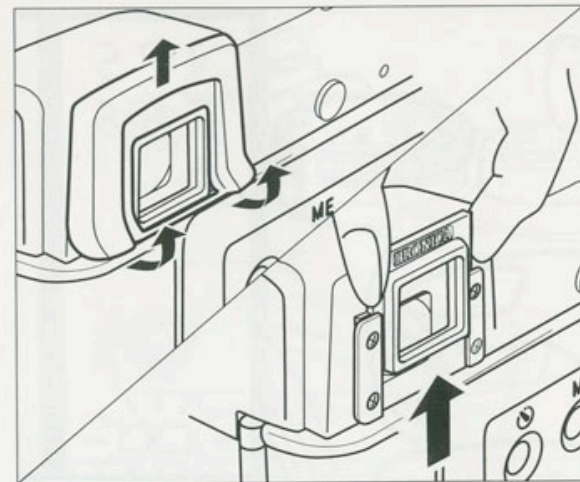
1-4 Attaching the proper diopter adjustment lens



1-3 Attaching strap

Three camera strap lugs are provided with this camera. To carry the camera in horizontal position, attach the strap to the upper lugs on both sides. To suspend the camera in a vertical position, use the upper and lower lugs on the right side of the camera body. Follow the procedure illustrated above to thread the strap through the lugs and rings.

Note: Make sure the strap is properly attached to the lugs or the camera may be accidentally dropped.



1-4 Attaching the proper diopter adjustment lens

1) A set of nine viewfinder eyepiece lenses are prepared as optional accessories, from -5 to +3 diopter, including the normal eyepiece lens of -1 diopter that comes attached to the camera.

-5	-4	-3	-2	(-1)	0	+1	+2	+3
close view ←			standard			→ far view		

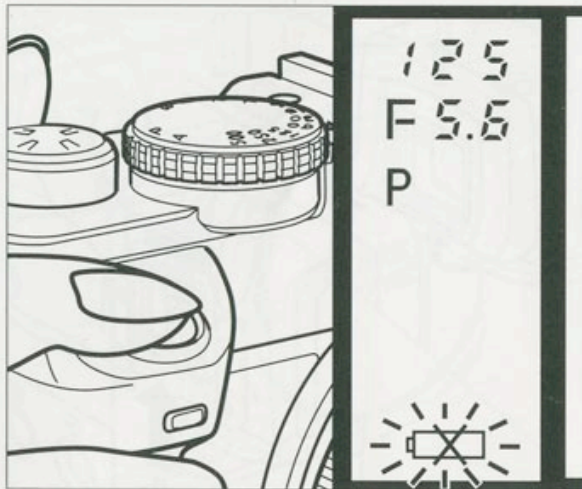
2) Detach the rubber viewfinder cup as shown above, and slide the standard viewfinder eyepiece lens out from the eyepiece frame.

3) Replace the proper diopter adjustment eyepiece lens by sliding it into the eyepiece frame. Attach the rubber eyecup.

2. Preparing to shoot


2-1 Check battery capacity

2-2 Loading film

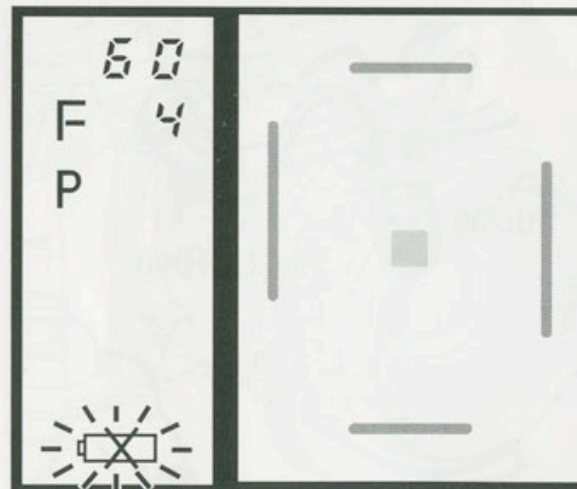


2-1 Check battery capacity

The Bronica RF 645 requires a set of batteries to function, since the camera employs an electronically controlled shutter.

- 1) Check the battery level before each shooting session.
- 2) Turn on the main switch and lightly press the shutter release button while looking through the viewfinder. The battery power is at a satisfactory level for shooting if the LCD on the left side of the viewfinder turns on and the battery warning mark "  " does not appear.

Note 1: Approximately 100 rolls of 120 type film can be shot on a fresh set of



batteries before the batteries must be replaced (under Bronica manufacturer test conditions).

Note 2: Replace depleted batteries with new ones as soon as the battery warning mark begins to blink on the LCD. Low battery capacity may cause the camera to malfunction.

Note 3: If the LCD does not light up or switches off shortly after depressing the shutter release button, it is time to replace the batteries with new ones.



2-2 Loading film

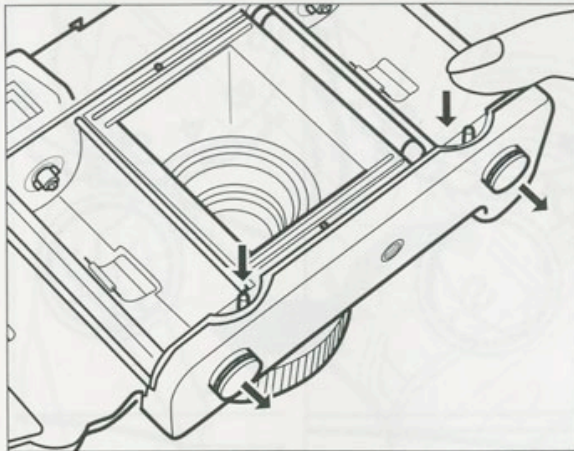
- 1) Choose a suitable film. The Bronica RF 645 can take either 120 or 220 film type. 120 type of film with light shielding back paper takes 16 frames to a roll while the 220 type without back paper takes 32 frames to a roll.

To load the film, open the rear camera cover and set the film type selection lever to either 120 or 220 position according to the film to be loaded. Make sure that the film type display window on the camera back shows the number you set on the lever.

Note 1: Take the cover sheet attached to the film gate section of the camera before loading the very first roll

2. Preparing to shoot

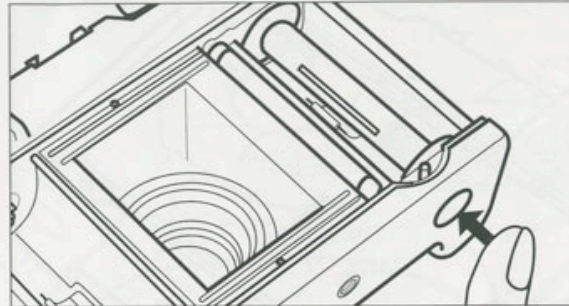
2-2 Loading film



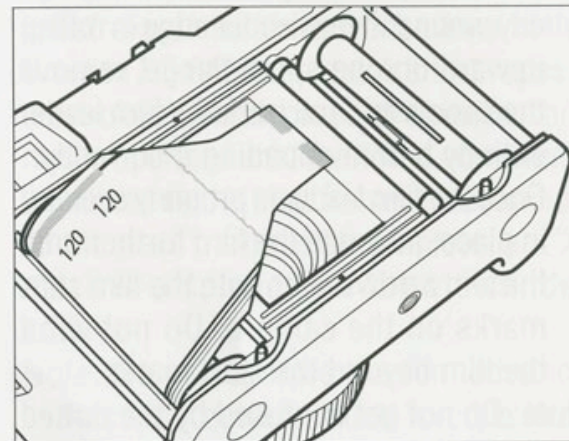
of film you use. The cover sheet is provided to protect the light shielding curtain.

Note 2: When loading a film, first attach a lens on the camera body so that the light shielding curtain opens. This precaution will protect the light shielding curtain from any accidental damage.

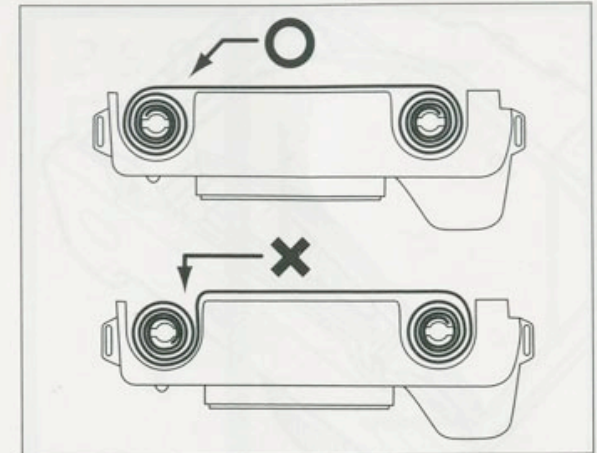
2) Depress both left and right side film spool shaft lock release buttons with the camera back open. The shafts pop downward from the bottom of the camera and are identified by red rings.



3) Install the film take-up spool in the right hand film chamber, aligning the key-hole of the spool shaft to the key of the receptor shaft of the camera. Push up the protruding film spool shaft into the bottom plate of the camera until it locks into position.



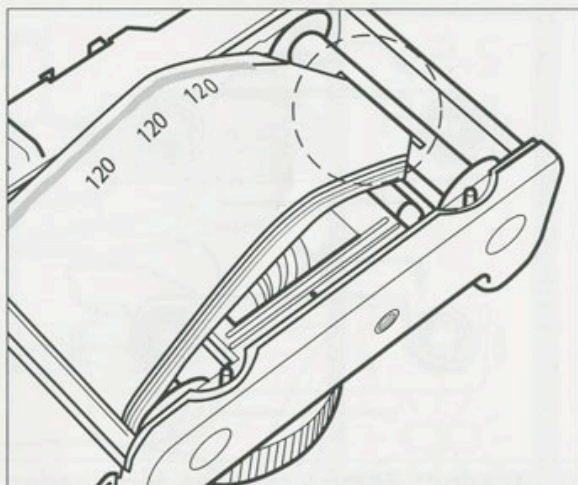
4) Load a fresh roll of film into the left hand film chamber as illustrated in the



drawing. Ensure that the film leader rolls off the outer edge as shown instead of the inside edge of the film chamber. The inside black surface of the leader must face outward coming out of the chamber. If it faces inward, roll back the film, turn the roll upside down and then reload into the film chamber. Push the fresh film spool shaft into the bottom of the camera.

2. Preparing to shoot

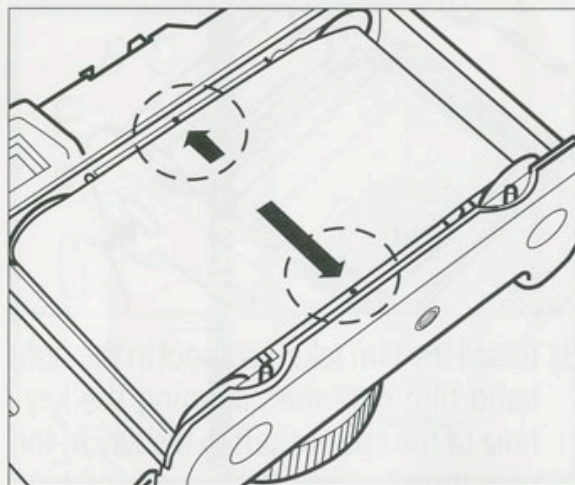
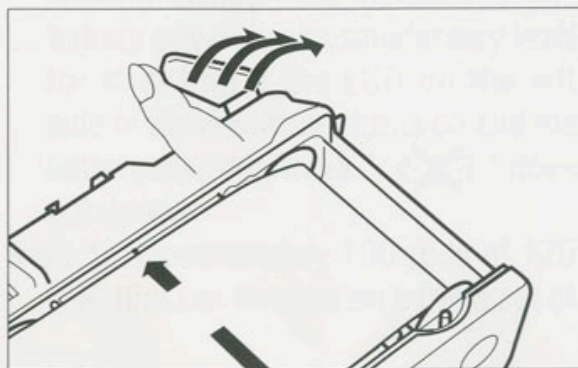
2-2 Loading film



5) Roll out the film leader and insert the leading edge into the slit of the take-up spool shaft as far as possible.

Note: When a take-up spool is already installed in the right-hand film chamber, 2) and 3) procedures described above are not necessary.

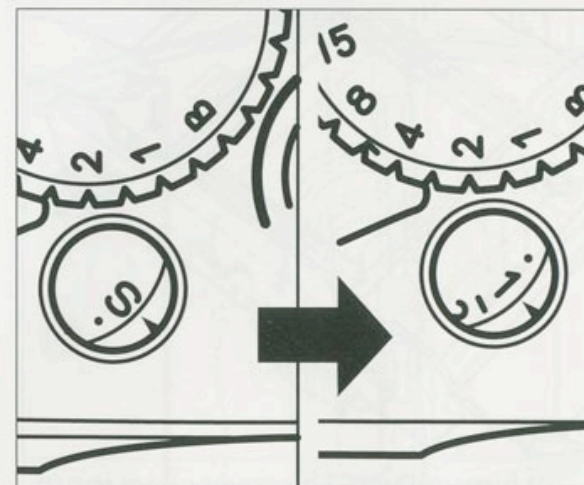
6) Advancing the film gradually with short repeated strokes of the film advance



lever, check if the film leader is skewed on the take-up spool. When both film leader edges are evenly positioned between spool flanges, the film is properly wound. If one leader edge is rolling upward on one spool flange, remove the spools and roll back the film leader entirely before reloading it correctly.

7) Once the film leader is properly secured in place, advance the film further until the film arrows align with the film start marks on the camera. Do not wind the film beyond the start marks.

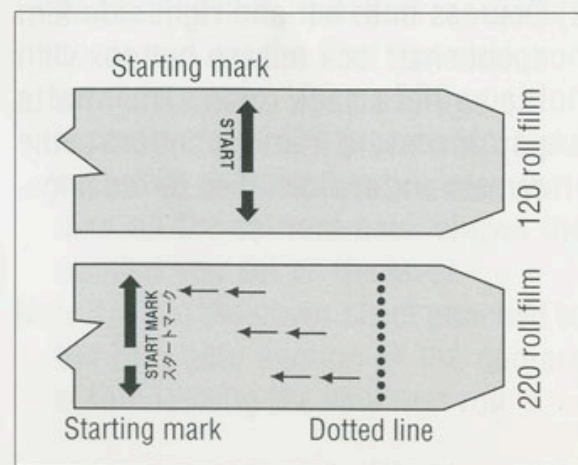
Note: Do not get confused by the dotted line printed on the leader paper of the 220 type of film right in front of the real starting arrow mark for the start mark



itself.

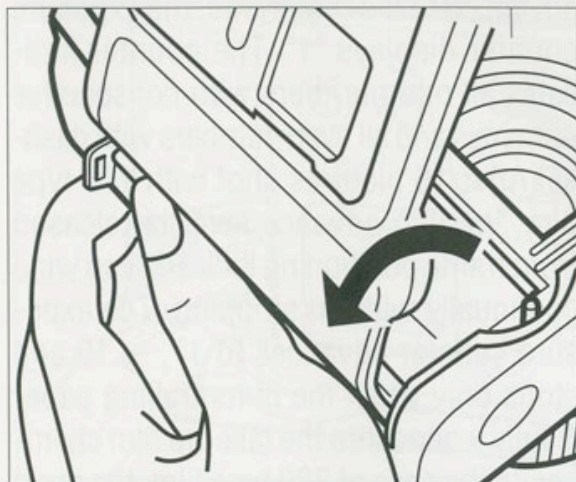
8) Close the back cover and lock it securely. Operate the film advance lever with few strokes until it stops. At this point, the exposure counter window displays a "1".

Note: After closing the camera back, make



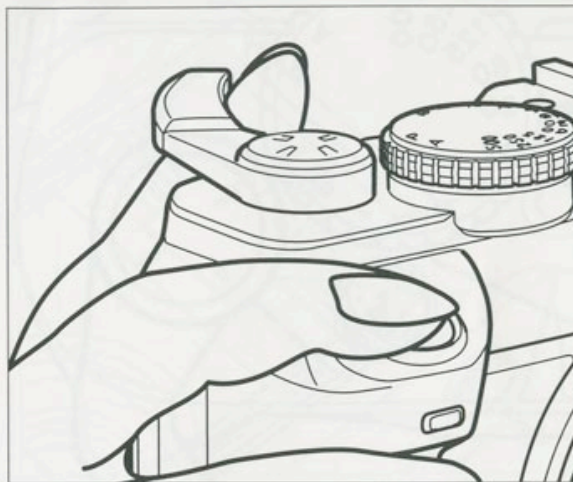
2. Preparing to shoot

2-2 Loading film



sure both film shafts are completely pressed back into the camera bottom.

Caution: Be careful not to pinch your finger or hand between the back cover and the camera body as you open or shut the cover. Be alert to prevent the skin of the hand from being pinched between the back hinge and one of the strap lugs in the rear cover, and to prevent the palm from being pinched between the closing cover and the camera body. Even minor pinching pains may cause you to drop the equipment and damage it. As an added precaution, hold the camera in a secure location during the film loading

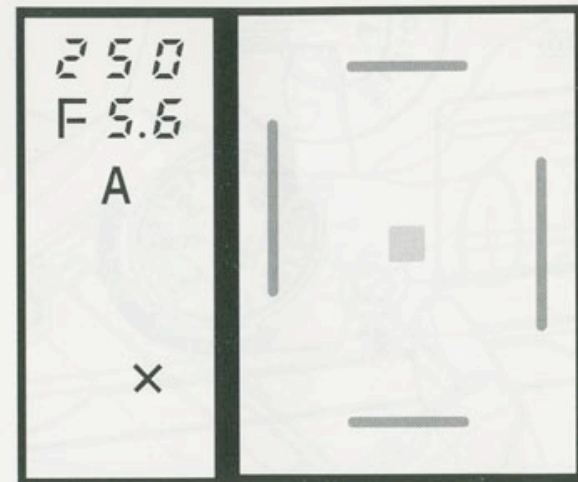


process.

Film winding and ratcheted winding lever

The film can be advanced either in one full stroke of the film advance lever of the Bronica RF 645 or in quick short repeated strokes. In both cases, the shutter cannot be operated until the film is completely advanced to the next frame. If advancing to the next frame is incomplete, an "X" mark is displayed on the viewfinder LCD.

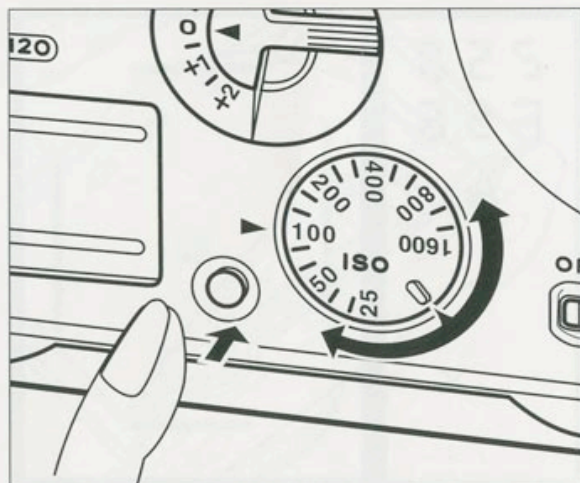
Note: Do not operate the film advance lever too quickly. Such forcible handling may result in skewed film surface or uneven spacing between picture frames.



2. Preparing to shoot

2-3 Setting film speed

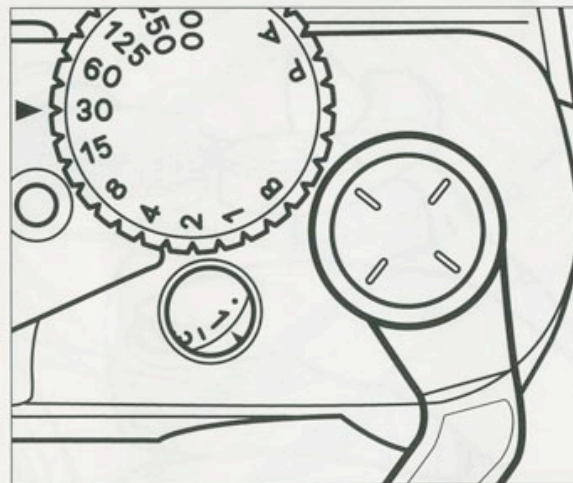
2-4 Exposure Counter



2-3 Setting film speed

- 1) To set the film speed, rotate the film speed setting dial located on the rear operational panel by pressing the film speed setting dial lock release button positioned at the side of the dial.

Adjust the speed number on the dial to the exposure index number of the film loaded in the camera. The film



speed setting dial automatically locks as you reduce pressure on the release button.

2-4 Check the number on the exposure counter.

2-4-1 Exposure Counter

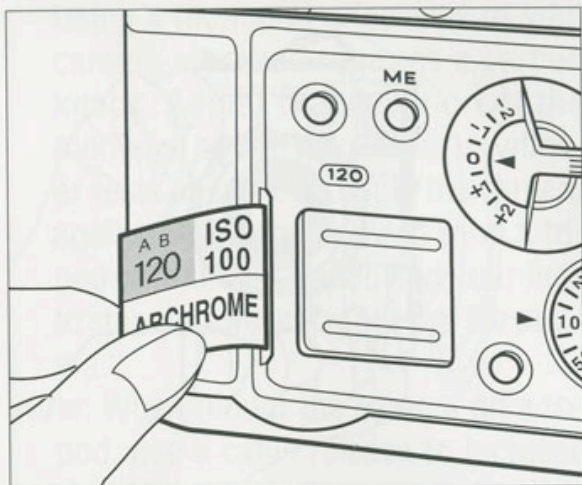
The exposure counter resets itself to the "S" (start) position as the camera back is opened. When the fresh film is loaded and

advanced to the first frame, the exposure counter displays "1". The counter indicates all odd numbers with consecutive numerals and all even numbers with dashes. After 16 pictures shot with 120 type film, the film advance lever is released from frame positioning lock and can wind continually without stopping. The exposure counter advances to 17, -, 19 and stops only when the film's trailing paper is fully wound into the take-up film chamber. In the case of 220 type film, the rapid wind lever is released when the film is fully used, and the exposure counter displays "E".

ISO speed	25	32	40	50	64	80	100	125	160	200	250	320	400	500	640	800	1000	1250	1600
Film speed dial scale	25			50			100			200			400			800			1600
DIN speed	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33

2. Preparing to shoot

2-4 Film memo holder, How to remove a used roll of film

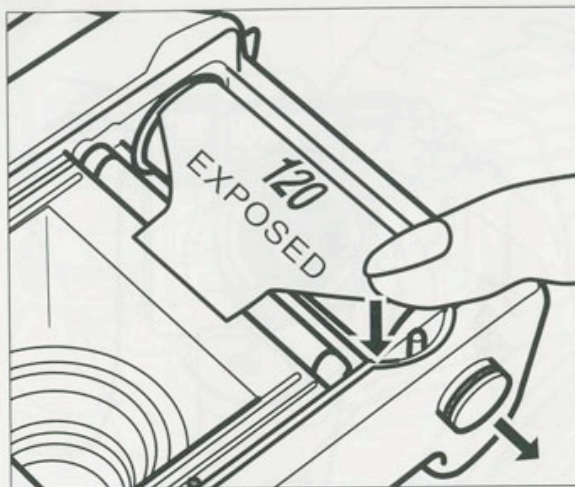


2-4-2 Film memo holder

It may be necessary to reconfirm the type of film being used in the heat of a photo shooting session. To facilitate this, clip off the top or bottom flap of the film box and insert it into the memo holder located on the rear cover of the camera. Make sure to replace the film box flap when a new roll of film is loaded.

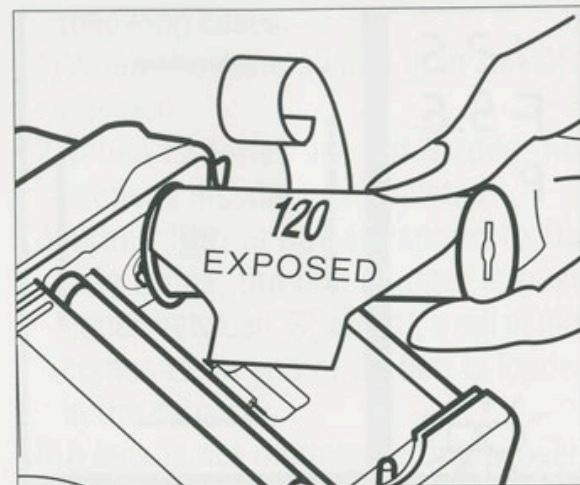
2-4-3 How to remove a used roll of film.

- 1) The film advance lever will be released from the frame positioning lock mechanism and wind continually after the 16th frame in the case of 120 type film and the 32nd frame in the case of 220 type film, until the trailing paper is fully



wound into the take-up film chamber. At that point, all the torque is removed from the film advance action.

- 2) Press the rear cover lock release of the camera upward to open the rear cover. Press down on the film spool shaft lock release button and push the top of the film spool lightly as illustrated and remove the spool from the film chamber. Hold the film roll so that the film's trailing light shielding paper does not slacken, and seal the film tightly with the adhesive paper band attached to the film trailing paper.
- 3) Remove the empty film spool from the feeding side film chamber and transfer it to the take-up film chamber in

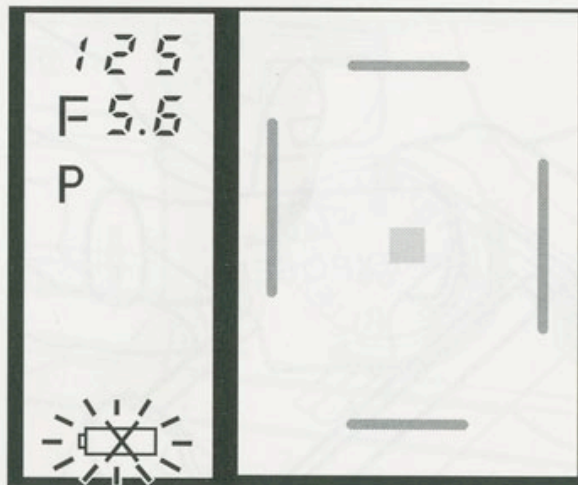


preparation for loading of the next roll of film.

Note: When opening the camera rear cover for film loading and removal, avoid exposing the camera to direct sunlight. Also, handle films in the shade at all times.

3. Shooting

3-1 Main switch 3-2 Viewfinder 3-2 Holding the camera

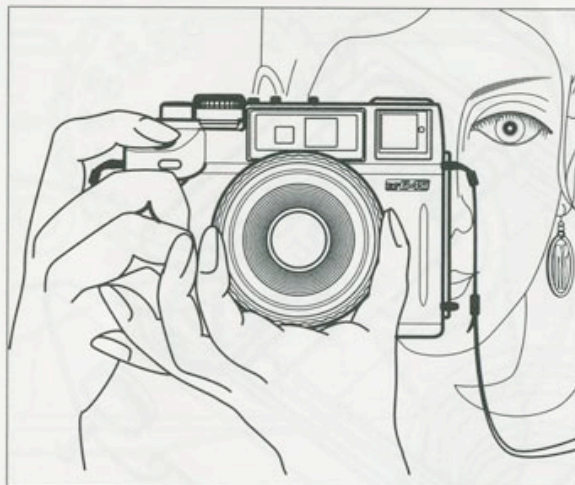


3-1 Main switch

Turn on the main switch and take off the lens cap to prepare for shooting.

3-2-1 Viewfinder

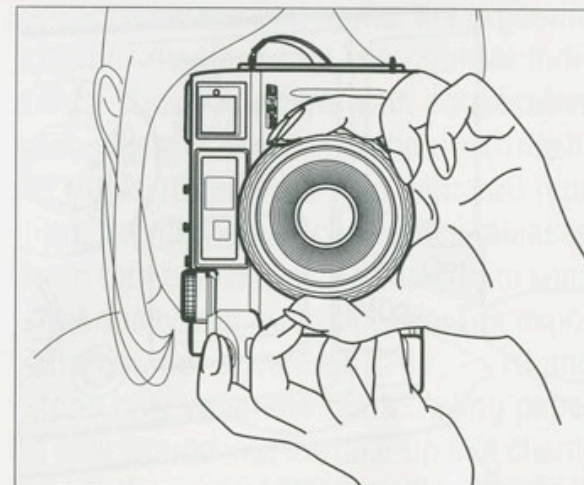
- 1) Check whether the battery warning mark is displayed on the LCD displayed to the left side in the viewfinder field. Also confirm that the proper exposure mode, shutter speed and aperture are set and displayed.
- 2) Bring your subject into focus in the focusing frame.
- 3) Compose a picture within the viewframe.



3-2-2 Holding the camera

The Bronica RF 645 is a coupled rangefinder camera. If the view of the rangefinder is obstructed by a hand or other object, the camera cannot focus.

- 1) Holding the camera for a vertical composition
Hold the camera normally as illustrated, and a vertical picture can be photographed.
- 2) Holding the camera for a horizontal composition
Hold the camera with your right hand and turn the camera 90 degrees as illustrated, orienting the camera grip toward the bottom. Rotate the focusing ring with your left hand, being careful not



to obstruct the rangefinder view with your fingers or the camera strap.

- 3) Taking advantage of a tripod or a monopod

The difference between sharp pictures and shots blurred by a camera shake is one second away. When using a 100-mm lens, 1/100 sec. is the limitation for holding the camera steady. A faster shutter speed is strongly recommended for shooting with a medium format camera, since this unit is larger and heavier than a 35-mm camera. If a shutter speed slower than 1/60 second is required when using a 65 mm, a tripod or monopod is highly recommended.

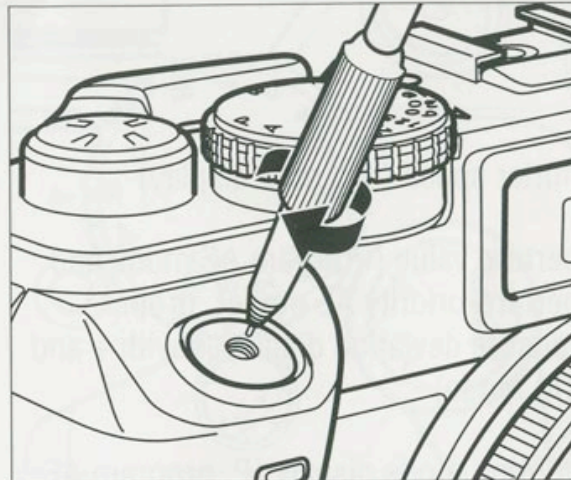
3. Shooting

3-2 Holding the camera

3-3 Shutter release button

Using a monopod effectively to stop camera vibration requires a certain knack. Adjust the elevation of the monopod so that the camera viewfinder rests at eye level. Hold the camera against your forehead and form a tripod with the monopod and your legs to stop the swaying motion of the camera.

Note: When mount the camera on a tripod, use a cable release to increase stability of the unit.



3-3-1 Shutter release button

- 1) The Bronica RF 645 applies an electromagnetic release, and therefore requires batteries to operate the shutter mechanism.
- 2) The viewfinder LCD is automatically activated with the shutter release button pressed halfway. The next stroke triggers the shutter itself.
- 3) When released, the shutter opens and shuts with light clicking sounds followed by a low motor noise as the shutter cocks for the next shot.

Note 1: A standard mechanical cable release can be attached to the shutter release button of the Bronica RF 645.

Note 2: The shutter will not operate in the

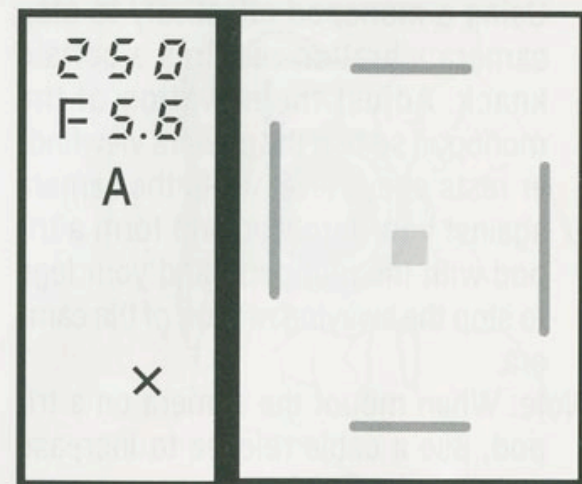
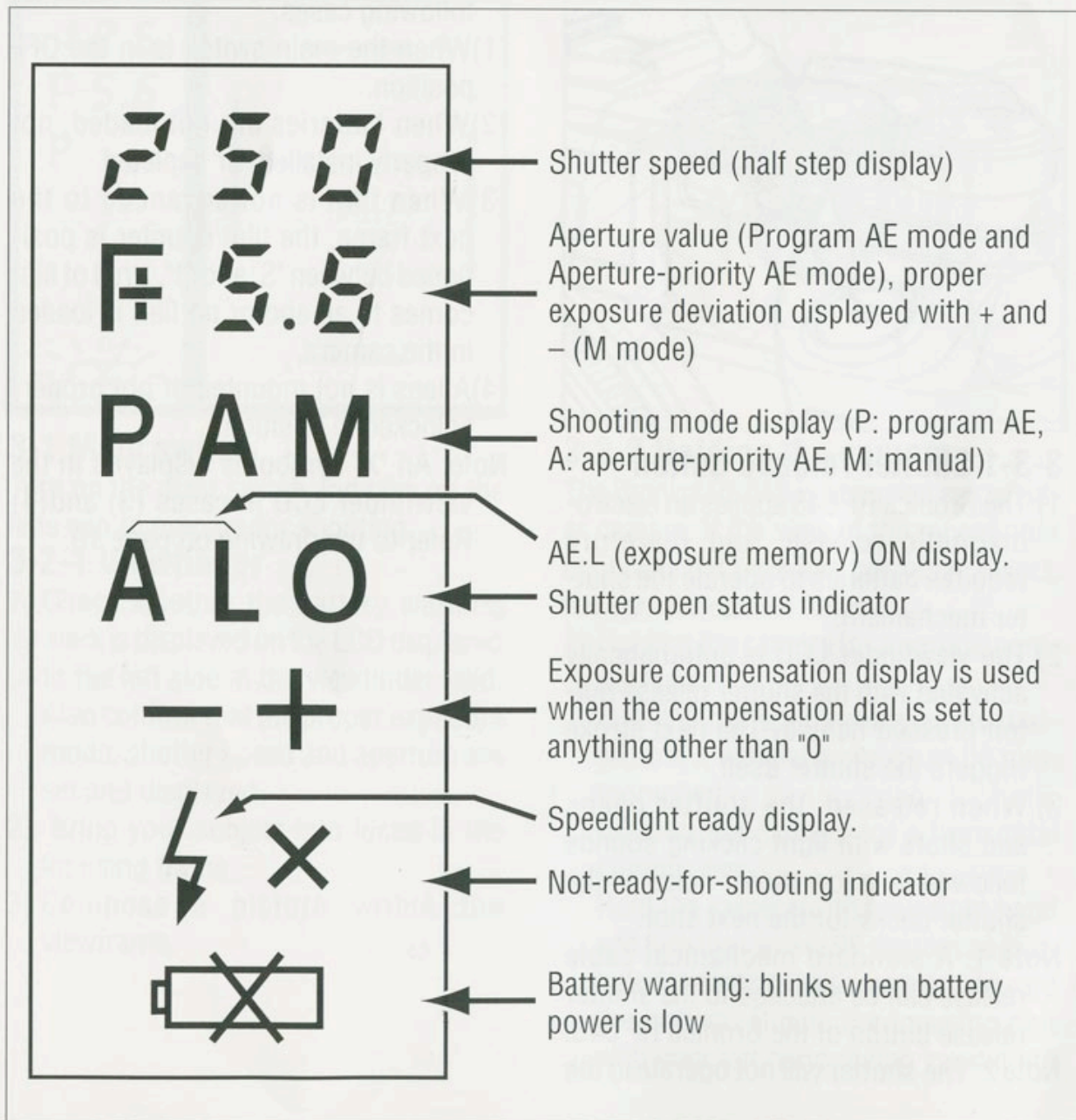
following cases.

- (1) When the main switch is in the OFF position.
- (2) When batteries are not loaded, not properly installed, or depleted.
- (3) When film is not advanced to the next frame, the film counter is positioned between "S" and "1", a roll of film comes to an end or no film is loaded in the camera.
- (4) A lens is not mounted or not properly locked in position.

Note: An "X" symbol is displayed in the viewfinder LCD in cases (3) and (4). Refer to the drawing on page 19.

3. Shooting

3-3 Viewfinder display



3-3-2 Viewfinder display

The viewfinder contains the following displays:

- 1) An LCD panel to the left of the view-finding field,
- 2) Viewframe bright frame display, and in its center, a focusing frame with dual superimposed images.

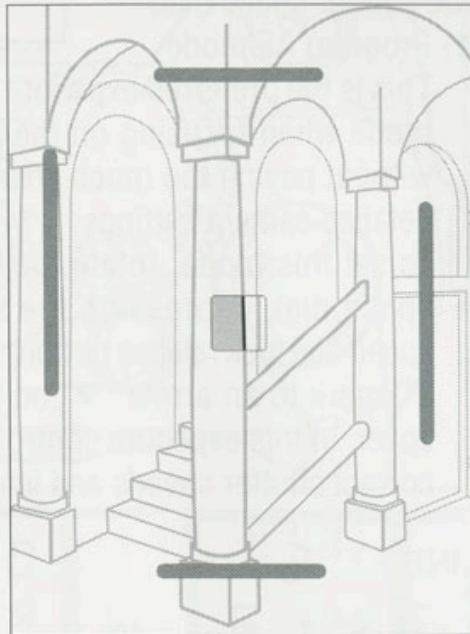
Note: The bright frame displays shift automatically corresponding to 65mm or 100mm lens when attached.

3. Shooting

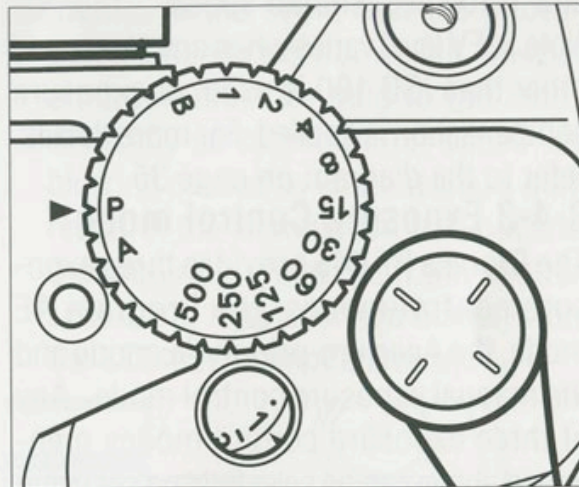
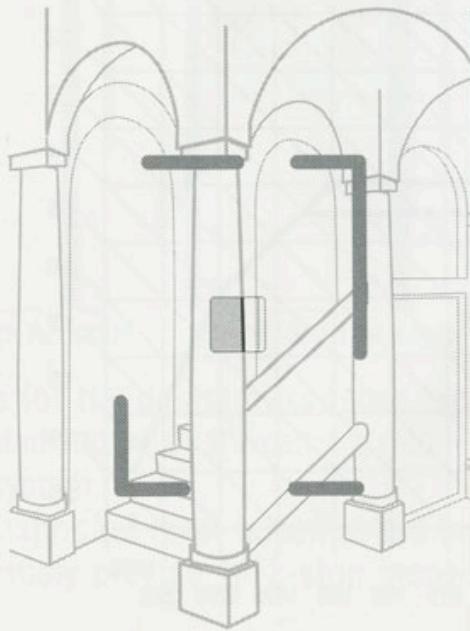
3-3 Viewfinder display

3-4 Exposures 3-4 Shutter dial and lens aperture operations

View frame at 65mm Lens



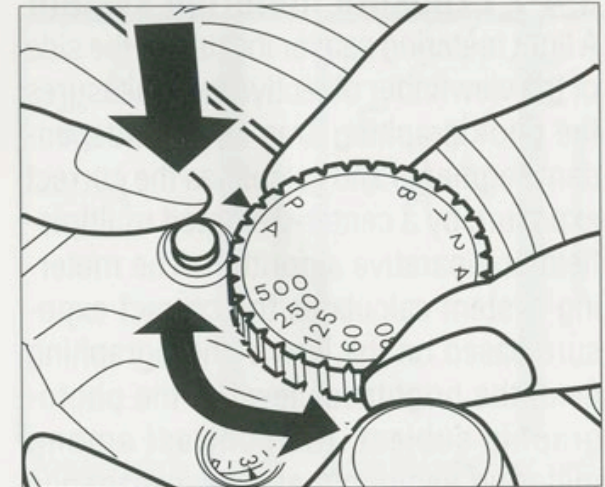
View frame at 100mm Lens



3-4-1 Shutter dial and lens aperture operations

Photographing modes and the shutter speeds can be selected on the shutter speed dial located on the top of the Bronica RF 645 main camera body. "P" represents Program AE mode, "A" designates Aperture-priority AE mode, while "B" indicates bulb mode, in which the shutter remains open as long as the shutter release button is pressed. The shutter dial is locked in these three positions to prevent unintentional changing of the setting.

Press down on the shutter speed dial lock, release button while rotating the shutter dial between these three shooting mode



settings.

The numerals 1 to 500 on the shutter speed dial represent shutter speeds or exposure times expressed in reciprocals. In other words, "500" actually means 1/500 second and "60" is 1/60 second.

The lens aperture can be set by rotating the lens aperture ring. The 65mm lens provides an aperture range of f/4 to f/32. Between any two f-numbers, there is an intermediate stop. Align an f-number or an intermediate stop with the distance/aperture index line to set the aperture as required.

3. Shooting

3-4 Exposures

3-4 Exposure Control Mode 3-4 Program AE mode

3-4-2 Exposure metering system

A light metering sensor located to the side of the viewfinder objective lens measures the photographing area in five independent segments and calculates the correct exposure by a center-weighted multiple-field comparative algorithm. The metering system calculates the correct exposure based on the lens's photographing field, the brightness level of the photographic subject, the contrast among metering segments and miscellaneous factors to achieve the best photographic image reproduction. Refer to Figres on page 36 for the metering pattern.

Note 1: The impact on exposure settings of any filters attached to the lens must be taken into consideration to determine the correct exposure when compensating for the exposure determined by the external metering system of the Bronica RF 645. Note 2: The metering range of the Bronica RF 645 is from EV 3 to EV 18 with the 65mm standard lens at ISO 100. EV 3 (at ISO 100) is an exposure level designated by a combination of f/4 aperture and 2 second shutter speed. EV 18 (at ISO 100) is an exposure level designated by a combination of f/22 aperture

and 1/500 sec. shutter speed.

Note 3: EV level varies when any film speed other than ISO 100 is used, or exposure compensation is applied. For more details, refer to the diagram on page 35.

3-4-3 Exposure Control mode

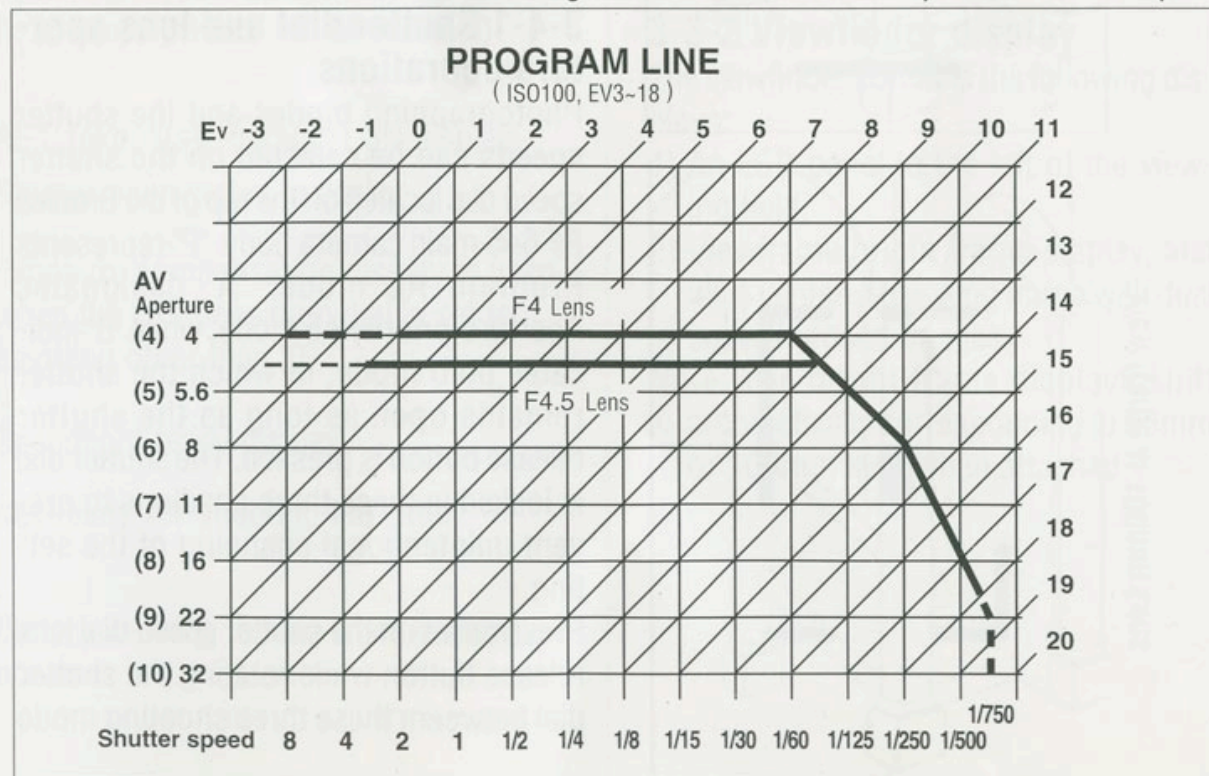
The Bronica RF 645 provides three exposure control modes: the Program AE mode, the Aperture-priority AE mode and the manual exposure control mode. Any of three exposure control modes mentioned above can be selected and set using

the shutter speed dial.

1) Program AE mode

This is the preferred exposure control mode when focusing on the subject without paying too much attention to detailed camera settings.

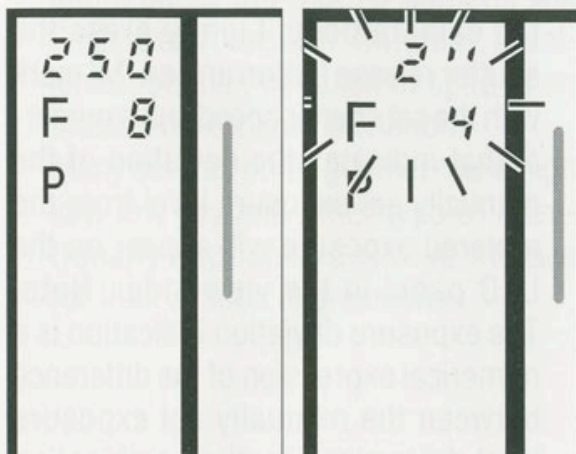
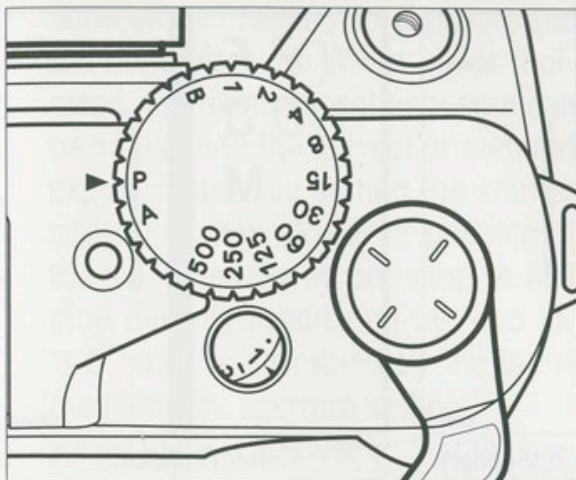
To set this mode, rotate the shutter speed dial, depressing the shutter speed dial lock release button, to align "P" mark to an arrow "▼" on the top cover. In this exposure control mode, correct shutter speeds and lens aper-



3. Shooting

3-4 Exposures

3-4 Exposure Control Mode 3-4 Aperture priority AE mode



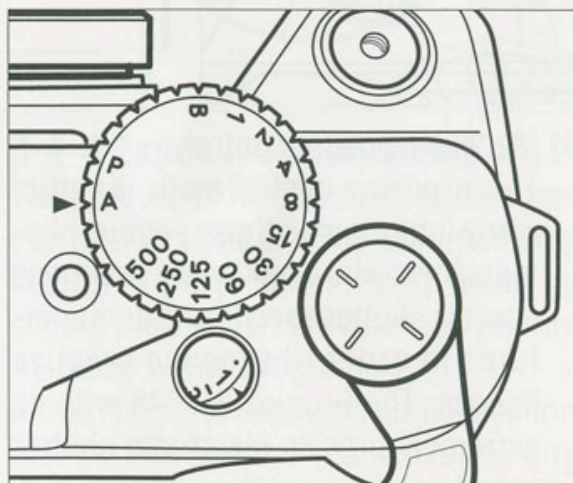
Program AE mode

Outside the Shutter Speed Range

tures for the desired exposure are selected and set by the camera's control system.

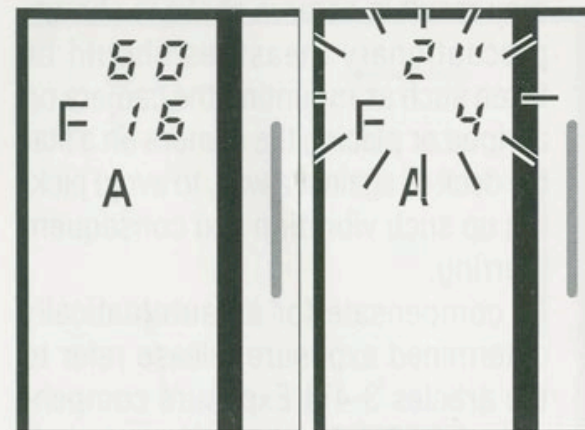
The exposure level is controlled in extremely precise 1/12-stop incre-

ments. In the event that the photographic subject is not well lit, special attention must be paid to the automatically selected shutter speed, or blurring caused by camera shake may result. If the illumination falls outside the metering range, both the shutter speed and lens aperture displays on the LCD flash simultaneously.



2) Aperture priority AE mode

This is an automatic exposure control mode applicable to the most variable photographic situations. To set on the mode, rotate the shutter speed dial while pressing the shutter dial lock release button, and align "A" mark to the arrow "▼" on the top cover. An f-



Aperture priority AE mode

Outside the Shutter Speed Range

number is then manually set on the lens aperture ring. For a shallow depth of field to obtain an out-of-focus background for portrait photography, select a small f-number (a large lens opening). Alternatively, to photograph the background in sharp focus for landscape photography, for example, select a large f-number (a small lens opening).

The Bronica RF 645 controls the exposure level in extremely precise 1/12-stop increments. Carefully observe the automatically selected shutter speed displayed on the LCD in the viewfinder when the subject area is comparatively dark. If a slow shutter speed that

