



FILM BACK ETRS-70

INSTRUCTIONS

The Film Back ETRS 70 has been developed for use with the Zenza Bronica ETR and ETRS single lens reflex cameras and makes it possible to load 70 mm films for taking up to 90 exposures in one continuous shooting session. There is complete film back interchangeability with other film backs designed for these cameras, as well as with other Film Back ETRS 70's, which means that it will be possible to detach or attach the film back any time, in daylight and/or in mid-roll, and thus use different types of film interchangeably.

Greater versatility will be possible by using the optional Motor Drive E or Speed-Grip E, in this case, as they will provide faster film winding operations for keeping up with fast-moving actions.

May we suggest that you read this instruction manual carefully, before you even touch the Film Back ETRS 70, since your pleasure in using the product will be greater if you are thoroughly familiar with it.

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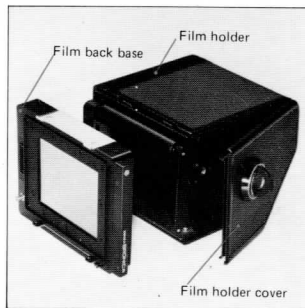
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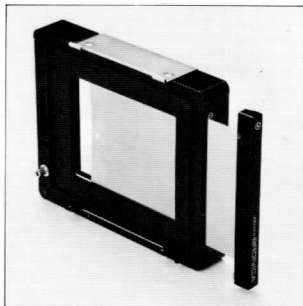
Parts of the Film Back ETRS 70



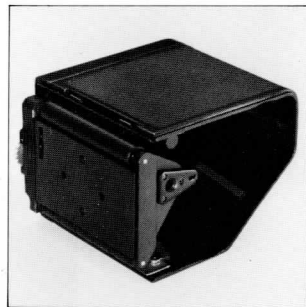




A. The film back ETRS 70 consists of film back base, film holder and film holder cover.



B. The film back base is the device connecting the film holder and the camera body and also has a slit for insertion of the dark slide.

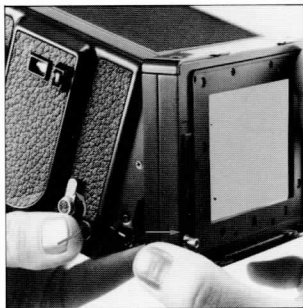


C. The film holder is the actual film chamber in which the film is loaded and incorporates the film winding mechanism, as well as having space for two film cassettes.

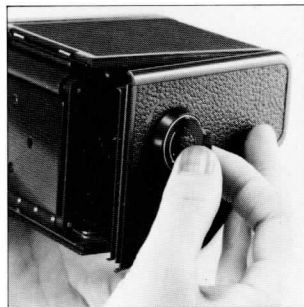
3 Film Loading



D. The film holder cover is detached to load film and is attached to shut out light, with the film holder cover lock securely engaging the cover to the film holder.



A. First, separate the film holder from the film back base, by revolving the film holder safety lock upwards 90° and then depress the film holder release button.



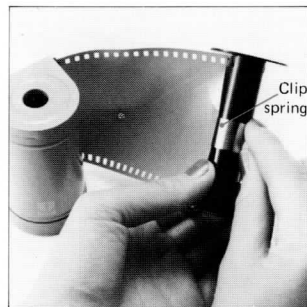
B. Next, take off the film holder cover. Unfold the film holder cover lock and revolve it in the arrow-indicated direction until the cover comes off.



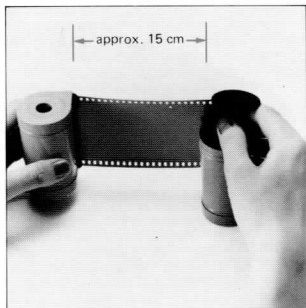
C. Two shafts will be seen in the film holder, when the cover is taken off. The top shaft is for cassette-loaded unexposed film while the bottom shaft is for the empty cassette into which the exposed film is wound.



D. One empty cassette is supplied with the film back. Take off its end cover and then take out the spool. Detach the spring clip from the shaft of the spool.

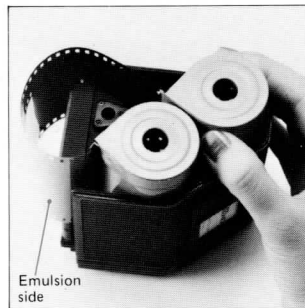


E. Pull the leading end of the fresh film out about 10 cm from the cassette and wrap it completely around the empty spool once. Then, fix securely with the spring clip.

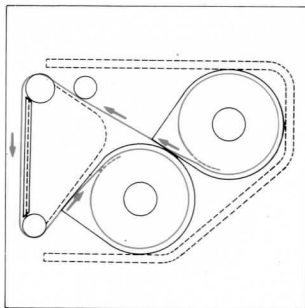


F. Next, insert the spool (with the film fixed to it) into the empty cassette, with the film passed through the light-tight slit. Then, pull out additional film so that there is about 15 cm between the cassettes, to make handling easier.

* Be careful not to mistake the cassettes, since they look alike.



G. Place the cassettes on their respective shafts, i.e., fresh film on upper shaft and take-up spool on the lower shaft, with the film running in the manner illustrated.



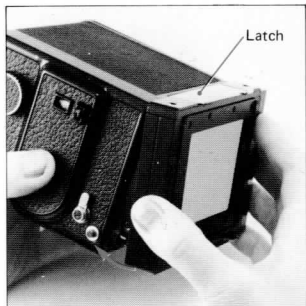
H. The film should be run through the film holder, in the manner illustrated, with the emulsion side facing the camera body. If the cassettes will not go in fully on their shafts, rotate them slightly to the left or right, until a pin on the shaft engages one of the four grooves on the inside of the spool shaft.



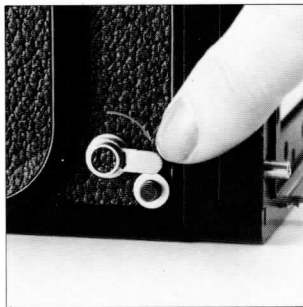
I. Replace the film holder cover on the film holder and fix securely with the film holder cover lock, which should be rotated against the arrow-indicated direction.



J. Next, revolve the film winder in the clockwise direction which will take up any slack in the loaded film and, at the same time, will also engage the perforations with the sprocket teeth.



K. Insert the latches at the upper end of the film holder into attachment openings on the film back base. Then, press the lower end of the film holder against the film back base, which will connect the two.



L. Then, revolve the film holder safety lock clockwise 90° , until it faces toward the camera body, which will lock the two together securely.

4 Setting the Exposure Counter



Upon loading the film, complete all preparations by setting the exposure counter.

Reattach the film back to the camera body. Next, make 4 blank exposures which will take care of those frames which may have been exposed during film loading. Then, set the exposure counter to 00.

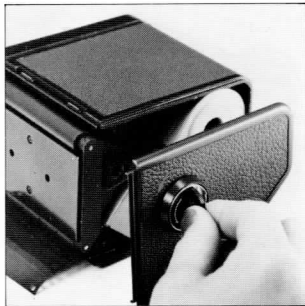
When making blank exposures, keep the lens covered with its cap.

5 Film Unloading

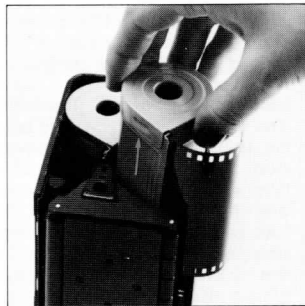
A. It is possible to get up to 90 exposures from the 70 mm film. When all frames are exposed, wind up the balance, one frame at a time, by making blank exposures. When the tension increases at the end, wind up one more frame.



B. To unload the exposed film, rotate the film holder safety lock to the upright position and then press the film holder release button, which will permit detachment of the film holder.

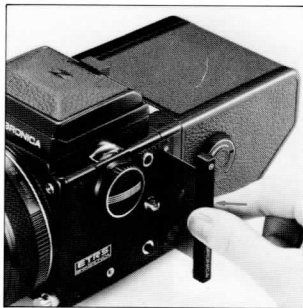


C. Then, unfold the film holder cover lock and revolve it in the direction indicated by the arrow, until it stops and the cover comes off.



D. Then, grab the take-up cassette and pull it out carefully. See that the trailing end of the film is not caught on your fingers or film holder, when doing so, as the film could be pulled out and ruined.

The film back is a film chamber that can be attached or detached freely, thus permitting free exchange of film types even during shooting sessions. The camera body and film back are fully coupled, upon connection. Therefore, always turn the film winding crank completely one time, upon attaching the film back. If winding is not possible, all preparations for taking the picture have been completed. But, if winding is possible, rotating the film winding crank until it stops will automatically take care of the incompleting action, whether uncoupled shutter or film not advanced. Thus, it's always possible to choose the film type most suited for the shot, even midway in the roll.



A. To remove the film back from the camera body, insert the dark slide into the dark slide slit, as illustrated, with the mark on the dark slide at the top end. Push it all the way in.



B. Depress the film back release button and the lower end of the film back can be removed, as illustrated. Simply shift the film back up slightly and pull it away.

* The dark slide can be withdrawn, even while the film back is detached from the camera body and, therefore, extra care is required, in this respect.



C. To attach the film back to the camera body, simply insert the latches at the upper end of the film back into the attachment openings at the upper end of the camera body. Then, press the lower end of the film back against the body until it locks securely.

* The dark slide must be withdrawn from its slit, upon attachment of the film back to the body, as otherwise the shutter cannot be released. Furthermore, there is danger of the film back accidentally becoming detached from the body, should the dark slide be left in its slit while the camera is being carried. Therefore, make it a rule to withdraw the dark slide promptly upon attaching the film back to the body.

7 Exposure Counter



The additive type exposure counter starts from 00 and ends at 99, showing two digit numbers, or 01, 02, 03 and so forth. It is easily reset to 00, any time, by depressing the reset button.

* Be extra careful since it can be reset accidentally, even in mid-roll.

8 Film Type Indicator Frame



Upon loading the film, tear off the end flap from the empty film package and insert it in the film type indicator frame. This will help you keep track of the film loaded in the film back and should prove useful when two or more film backs are used, with different types of films.

The Film Back ETRS 70 accepts cassette-loaded perforated 70 mm film in 15 ft. (4.75 m) length which will give the user up to 90 exposures in the 4.5 x 6 cm format. The perforated film is available in Type I and Type II, with different perforation pitches, but only Type II can be used with the accessory.

As can be seen, from the table, there is a very wide choice of Kodak films, in both color and black-and-white, which are supplied in the 15 ft. cassette. On the other hand, greater economy will be possible by loading your own cassettes from the 100 ft. (30.5 m) length bulk film, if you are able to do this in your darkroom.

Incidentally, there is also an Ilford FP-4 black-and-white film which is available in 100 ft. bulk lengths. Ilford's Microphen or Kodak's D-76 developer can be used for developing this ASA 125 film.

Table for 70 mm Film (Type II)

Name of Film	Balanced for	ASA Film Speed	Developing	Size	
				100 ft. bulk	15 ft. cassette
Kodak Ektachrome MS (5256) Kodak Ektachrome 65	Daylight	64	Process E-4	EMS-475	EMS-488
Professional (5017) Kodak Ektachrome 200	Daylight	64	Process E-6	EPR-475	EPR-488
Professional (5036) Kodak Vericolor II	Daylight	200	Process E-6	EPD-475	—
Professional (5025) Kodak Vericolor II	Daylight	100	C-41	—	VPS-488
Professional (2107)	Daylight	100	C-41	VPS-475	—
Kodak Tri-X Pan	Daylight	400	HC-100; Dektol	TX-475	TX-488
Kodak Plus-X Pan Kodak Plus-X Pan	Daylight	125	HC-110; Dektol	PX-475	PX-488
Professional	Daylight	125	HC-110; Dektol	PXE-2147	—
Ilford FP-4		125	D-76	FP-4	—



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