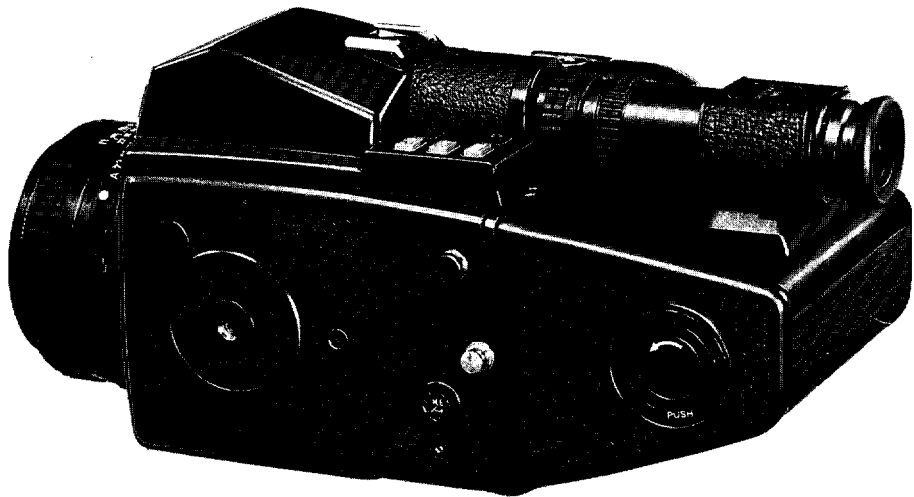


PENTAX[®]
645

70mm FILM HOLDER 645
EYEPIECE 645 FOR FILM HOLDER



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SPECIFICATIONS

70mm Film Holder 645

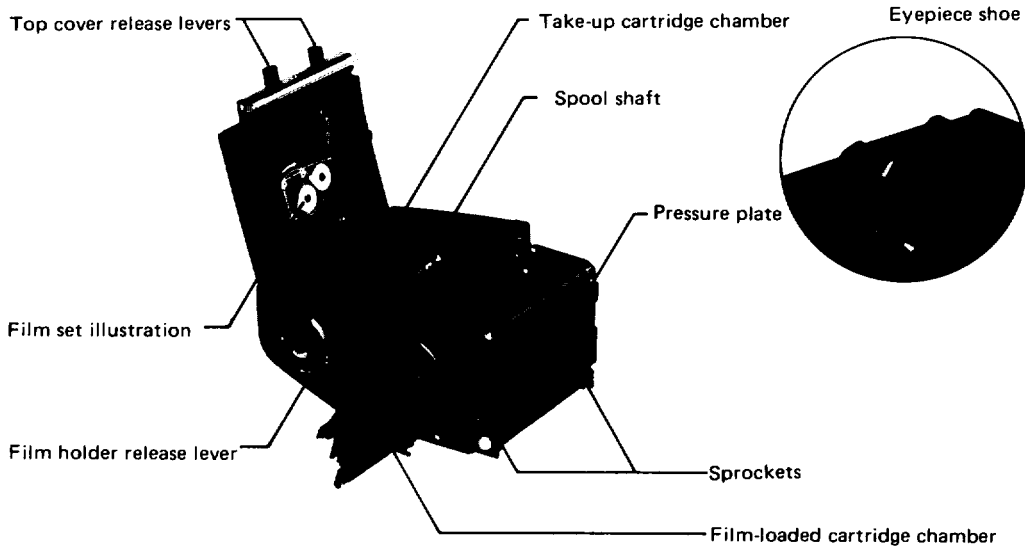
Camera	Pentax 645
Film	Type II 70mm film (15 ft. in cartridge) (Type II = ANSI PH 1.20 film) (ANSI = American National Standards Institute)
Number of Exposures	Approx. 90 (the last seven to eight frames not usable).
Film Loading	Automatic loading device that automatically advances film to the first frame.
Dimensions	96(W) x 72.5(H) x 114(D)mm; 3.8 x 2.9 x 4.5 in. Approx. 185mm; 7.3 in. (depth when 645 body and film holder are combined)
Weight	394 g; 13.9 oz. (without cartridge)
Accessories	Soft case 645, film holder cover 645, empty cartridge

Eyepiece 645

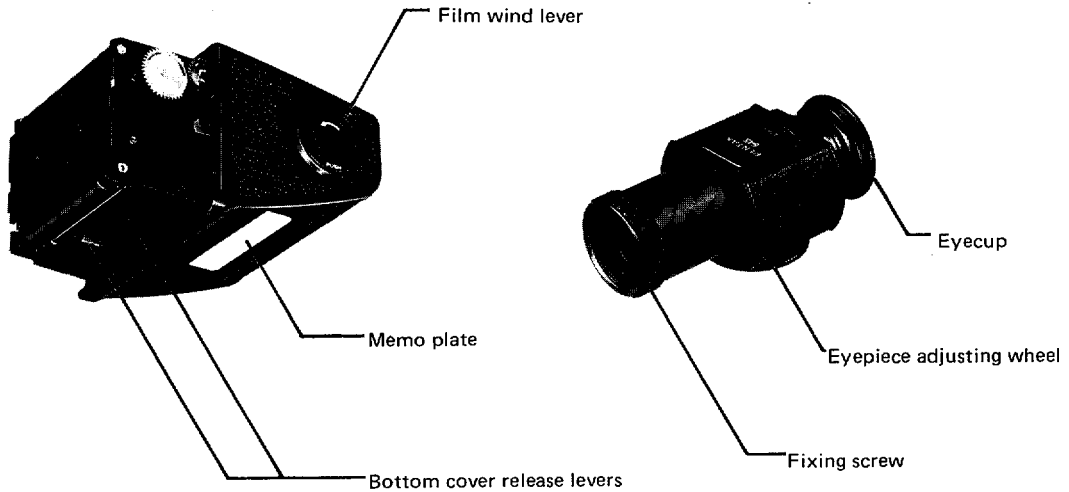
Camera	Pentax 645
Diopter Adjustment	Made on the camera body
Field of View	92% vertically and 93% horizontally when combined with the camera body.
Magnification	0.75X (with standard lens set at infinity) when combined with the camera body.
Dimensions	37(W) x 31(H) x 72(L)mm; 1.5 x 1.2 x 2.8 in.
Weight	110 g; 3.9 oz.

NOMENCLATURE

70mm Film Holder 645

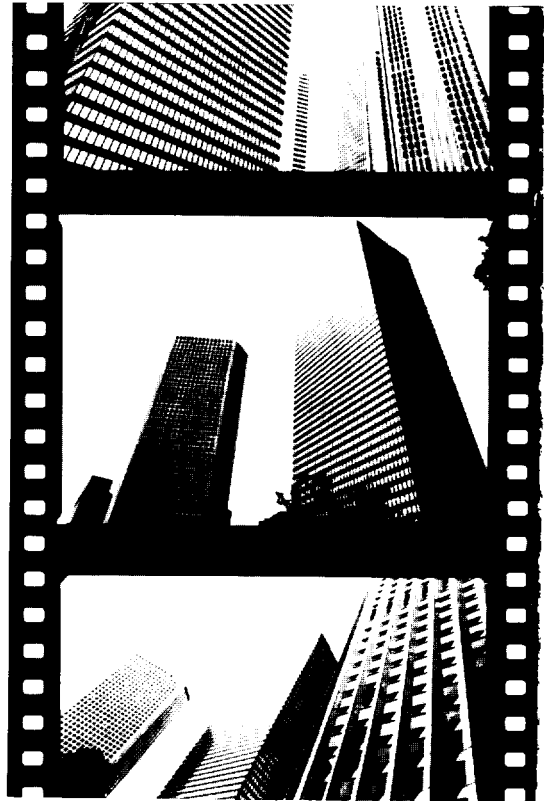


Eyepiece 645



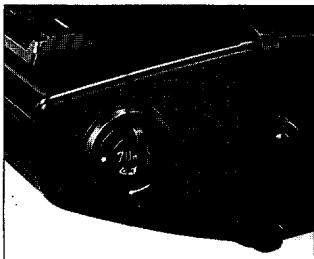
OPERATIONAL PRECAUTIONS

- Use the type-11 70mm film (15 feet long) loaded in the cartridge. In the case of 100-foot 70mm film, you must cut off 15 feet of the film from the roll and load it in the cartridge. For the types of films, refer to page 16.
- Do not change the film holders while shooting. If the film holder is removed, the film outside the cartridge will be spoiled, and the camera's exposure counter will automatically be reset to the start position (no indication).
- The 70mm film loaded in the cartridge has 90 frames to be exposed, but the last seven to eight frames cannot properly be exposed, since they are damaged by the spring retaining the cartridge. So the maximum number of exposures you can make is about 85 with a roll of 70mm film loaded in the cartridge.

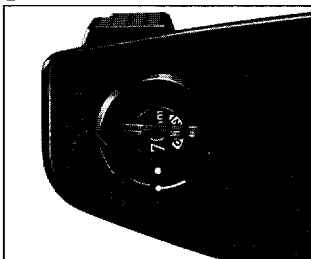


FILM HOLDER COVER 645; SOFT CASE 645 FOR FILM HOLDER

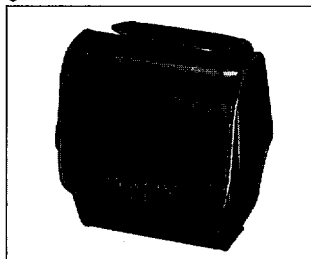
1



2



3

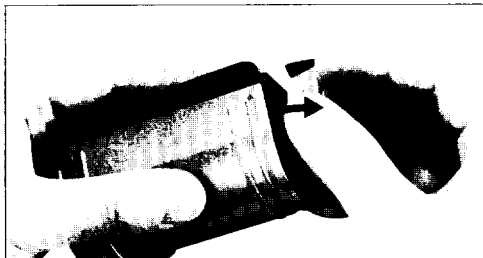


1. The Film Holder Cover is supplied with the 70mm Film Holder. Unfold the Film Holder release lever, and turn it counter-clockwise until it stops with a click, two red dots aligned. Turn it further to unlock and remove the Film Holder Cover.

2. To replace the Cover, check to see the red dots are aligned, attach the Holder to the Cover, and turn the release lever clockwise until the Holder is locked in place.
3. The Soft Case can contain the Holder combined with the Cover. It also has a pocket outside into which the Eyepiece for the 70mm Film Holder can be put.

LOADING FILM INTO CARTRIDGE

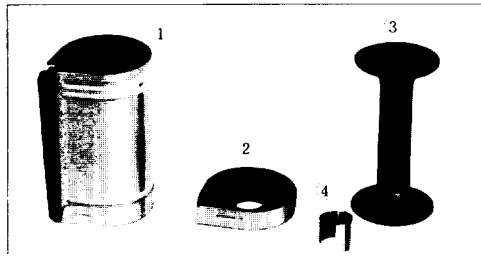
1



1. As illustrated, remove the cap from the empty cartridge while holding it firmly.

Be sure to avoid direct sunlight when loading film.

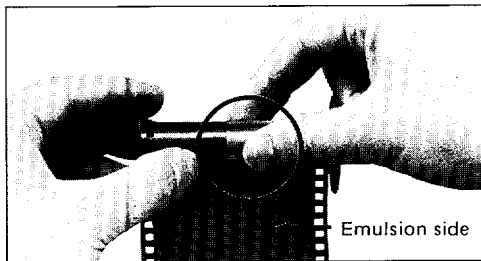
2



2. The cartridge consists of four components as illustrated above. Remove the film retainer spring from the ③ spool shaft.

- ① Cartridge
- ② Cap
- ③ Spool
- ④ Film retainer spring

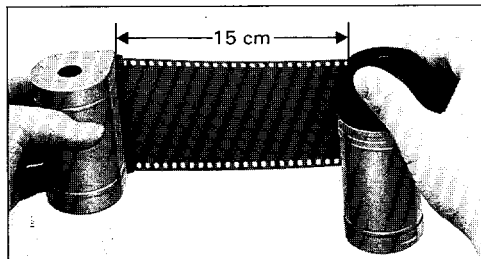
3



3. Pull the film leader about 10 centimeters and wind it tightly on the spool about 1.5 turns. Then fix the central portion of the film with the film retainer spring.

- Wind the film on the spool with its emulsion side facing inward.
- When fixing the film to the spool, do not use a tape or the like. Be sure to use the film retainer spring.

4



4. Place the take-up spool, where the film is fixed, in the cartridge. Incidentally, the film should be inserted into the slit of the cartridge.

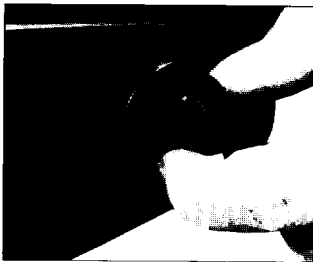
- To facilitate putting the cartridges into the film holder, adjust the length of the film between the two cartridges so that it becomes about 15 centimeters.

LOADING FILM INTO FILM HOLDER

1



2



3



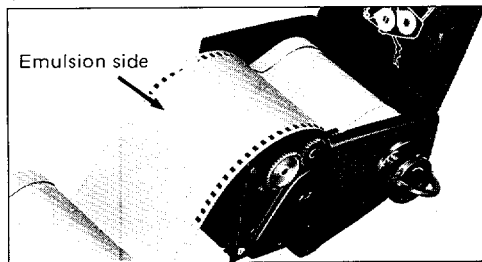
1. Open the top cover by raising the top cover release levers while pushing them with your fingers as indicated by the arrows.

2. As illustrated, push the PUSH-indicated portion to unfold the film wind lever.

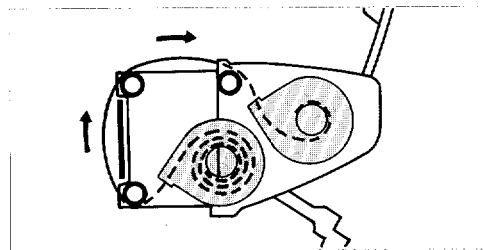
3. Pull the film wind lever to take the spool shaft out.

- Always keep the inside of the Film Holder clean. Dust, dirt or the chips of film may cause it to malfunction or go defective.

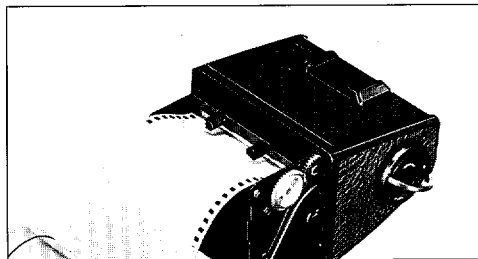
4



When loading the film into the Film Holder, follow the steps described in the film set illustration inside the top cover.



5

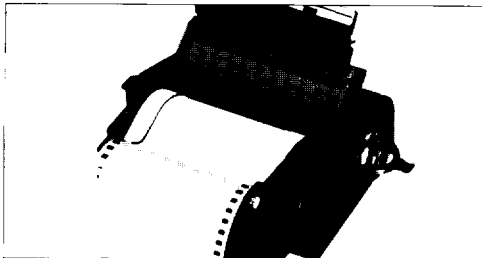


4. Place the film-take-up cartridge in the take-up-cartridge chamber with the emulsion side facing outward, and push the spool shaft back to the original position.

- The two cartridges look very much alike, so be careful not to take one for the other.

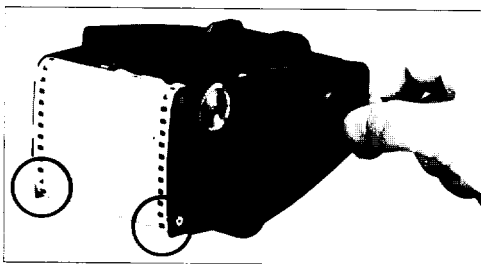
5. Close the top cover by pushing it in, making sure that it has been locked in place with a click.

6



6. Turn the Film Holder upside down, and open the bottom cover by raising the bottom cover release levers while pushing both of them inside. Place the film-loaded cartridge in the Film Holder, and close the bottom cover by pushing it back until you hear a click.

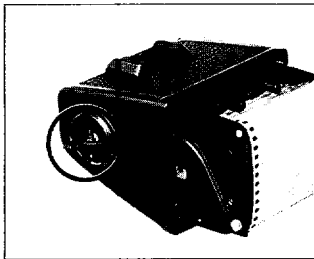
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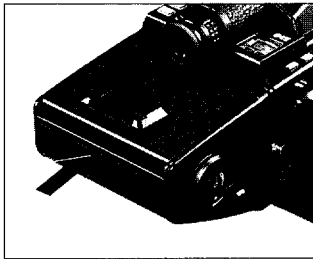
7. Turn the film wind lever in the direction of the arrow, and make sure the film perforations engage the sprocket teeth properly while taking up the slack of film. Turn the film wind lever about a half turn to make sure the film is being taken up properly. Finally, fold the film wind lever.

ATTACHING FILM HOLDER TO CAMERA

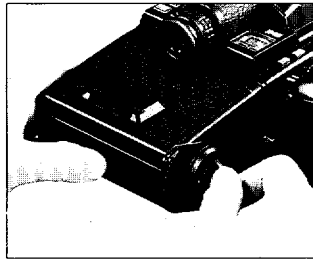
1



2



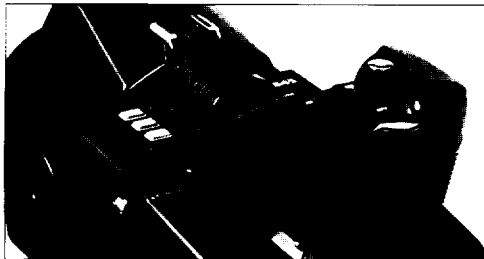
3



1. Unfold the film holder release lever and turn it counter-clockwise until the red dot aligns with the index.
2. While holding the camera body firmly, face it downwards, and insert the Film Holder into its back.
 - Try pulling the Holder softly to see if both of its sides are locked in place.
 - Be sure to insert the Holder into the camera body correctly; if inserted upside down, it may cause trouble.
3. As illustrated, turn the film holder release lever clockwise by 90° to lock the Holder in place. Unfold the film holder release lever.

USING EYEPiece 645

1



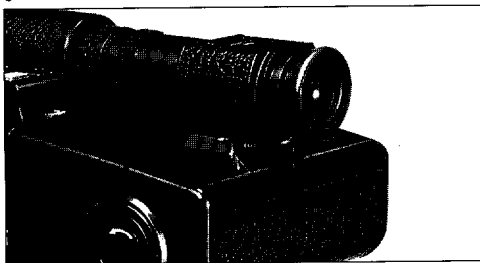
1. First remove the eyecup from the eyepiece on the 645 camera body. Be careful not to lose the removed eyecup.

2



2. After slightly turning the eyepiece adjusting wheel to loosen it, insert it into the eyepiece shoe on the Film Holder, as illustrated. Then attach the eyepiece fixing screw to the eyecup fixing screw on the camera body, by turning the ring of the eyepiece fixing screw to the right to lock it.

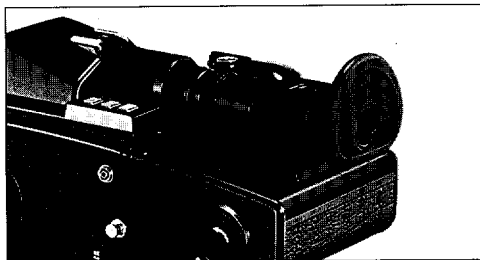
3



3. Turn the eyepiece adjusting wheel until it is positioned in the middle between the top and the bottom of the eyepiece shoe's groove. Then adjust the diopter. If the wheel is not where it should be, but stays attached to the top or the bottom of the groove, you will find it difficult to turn the diopter adjusting ring smoothly.

- You can attach or detach the Film Holder with the eyepiece on it, but you should do it very carefully, making sure the eyepiece adjusting wheel is properly positioned in the eyepiece shoe.

4

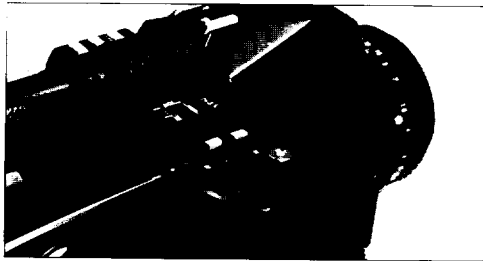


4. You can use not only the Large Eyecup 645 but also the Magnifier 645 and the Refconverter 645, on the eyepiece for 70mm film holder.

- Note that when the Refconverter 645 is attached to the eyepiece for the film holder, the diopter adjusting ring does not turn smoothly.

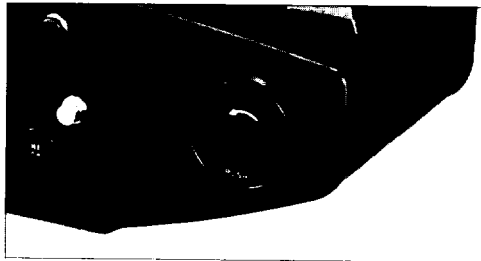
SHOOTING

1



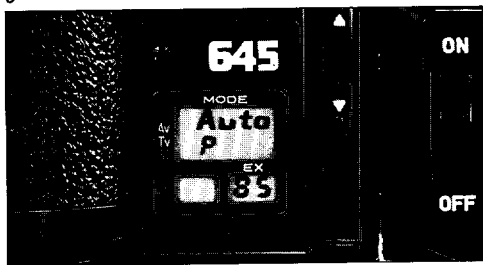
1. Turn the camera's main switch to ON and press the shutter button, and the motor will automatically wind the film leader and stop at the first frame. Now you are ready to shoot.
 - The consecutive (C) mode allows about-one-frame-per-second photography.
 - For the reasons mentioned on page 4, you should be able to take about 85 pictures with a roll of 70mm film loaded in the cartridge.

2



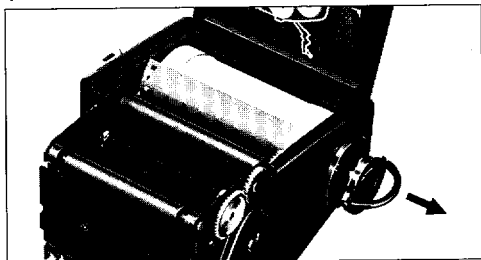
2. The film wind lever turns as the film advances. As the film is wound, the film wind lever also turns. Make sure that the film wind lever stays folded when not in use.

3



3. When your film has reached its 85th frame or so, keep making blank exposures until it reaches the last frame and the motor automatically stops.

4



4. Take the Film Holder out and open the top cover, and you will find that the film is on the take-up cartridge. Pull out the spool shaft by pulling the film wind lever, and take the cartridge out.

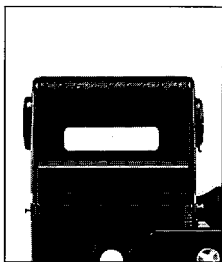
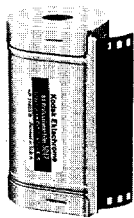
- Use the cartridge in the bottom cover as an empty cartridge.

MAIN TYPES OF 70mm FILMS

Kodak Films	Film Speeds (ISO)	Types	Sizes (Marks)	
			15 ft. (cartridge)	100 ft. (canned)
Ektachrome 64 Professional	64	Daylight (Reversal Color)	EPR-488	EPR-475
Ektachrome 200 Professional	200	Daylight (Reversal Color)	—	EPD-475
Vericolor III Professional	160	Daylight (Nega Color)	VPS-488	VPS-475
Plus-X pan	125	Monochrome	PX-488	PX-475
Tri-X pan	400	Monochrome	TX-488	TX-475

- There are two kinds of 70mm films: Type I and Type II. The Pentax 70mm Film Holder uses the Type II. (Type I has different pitches of perforations.)

MEMO PLATE



The memo plate on the Film Holder is for writing the type of film on it. First remove the protective tape and write data with a pencil. The data can be erased by rubbing, so they should be protected with the cellophane tape or the like.



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