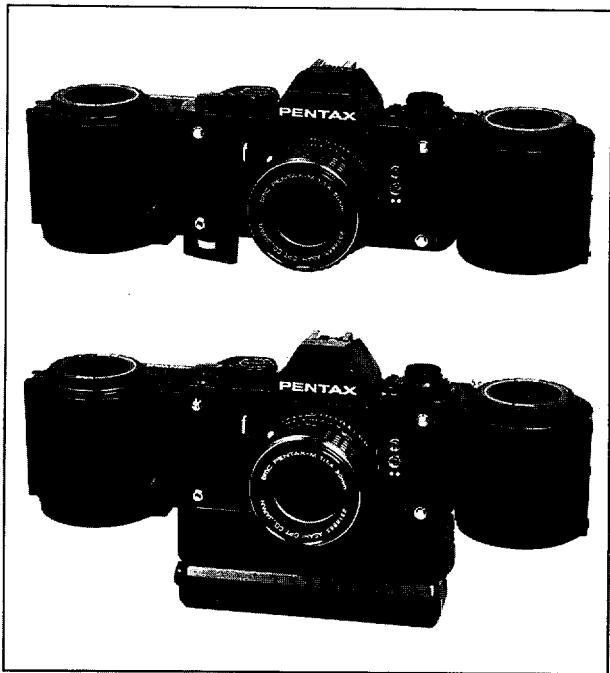


PENTAX

BULK FILM MAGAZINE

IL X

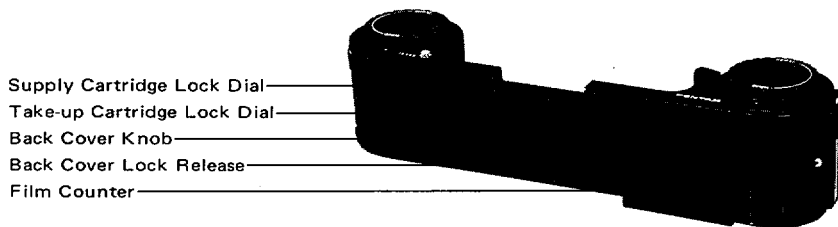
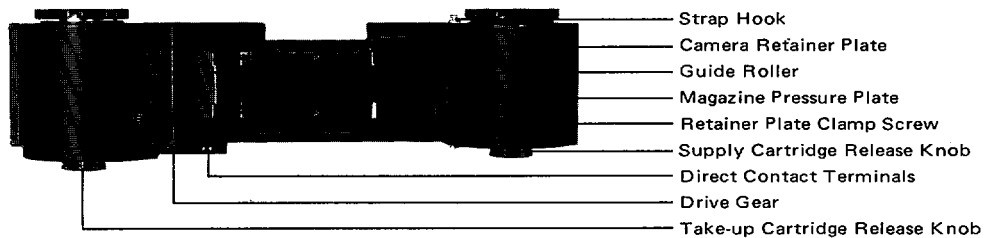


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DESCRIPTION OF PARTS

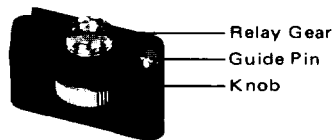
Bulk Film Magazine LX



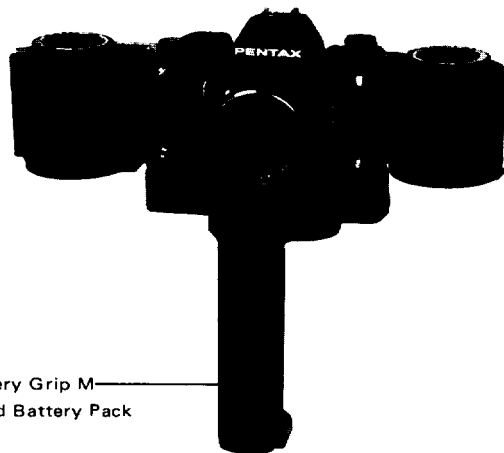
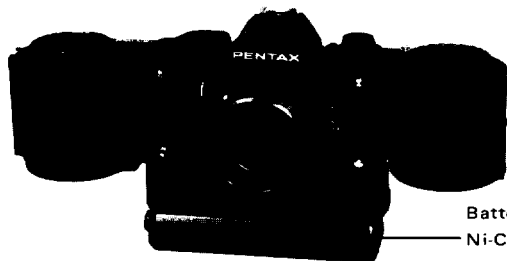
LX + Bulk Film Magazine LX



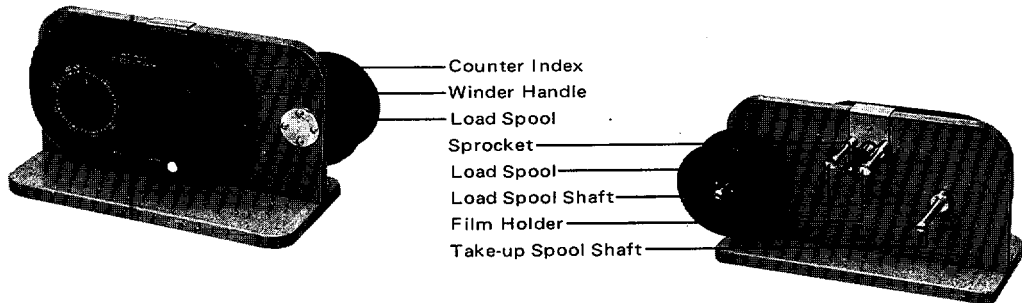
Coupler LX



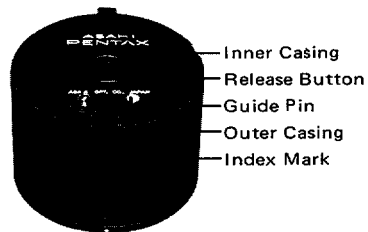
LX + Bulk Magazine + Motor Drive LX



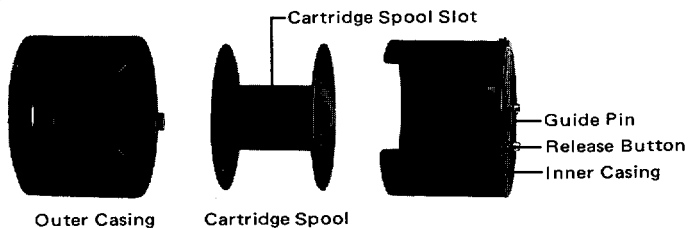
Cartridge Loader (sold separately)



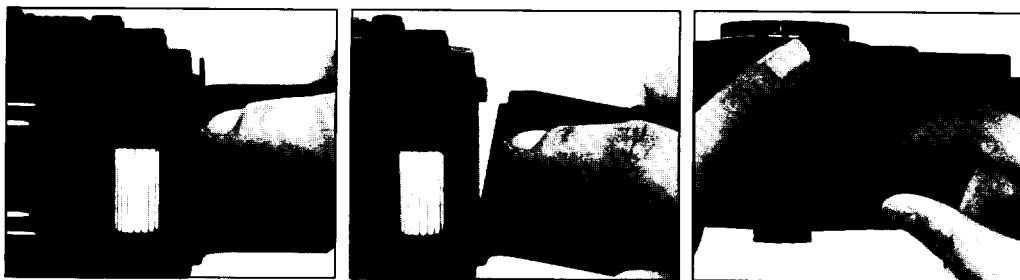
Film Cartridge



Sections of Film Cartridge



ATTACHING THE BULK FILM MAGAZINE



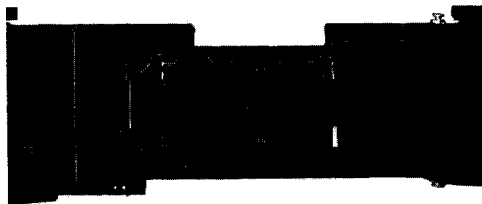
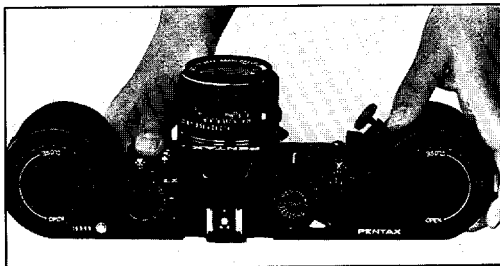
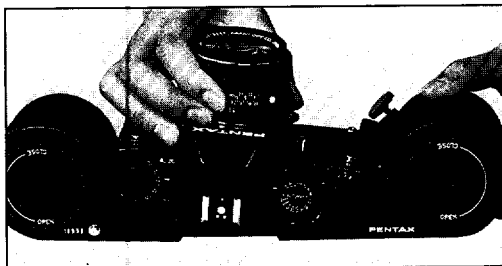
Remove the camera strap.

Removing the back cover:

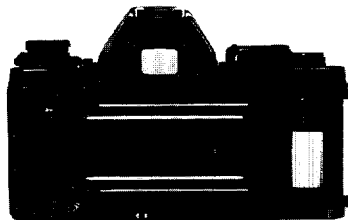
Open the back cover. Depress the back-cover release pin and tilt the back cover outward to remove. Once removed, the cover should be kept in a place where it will not be bent or damaged. To replace the back cover, first insert the bottom side of the shaft into the camera; then press the removal pin, align the top of the shaft and release the pin. The shaft will spring into place.

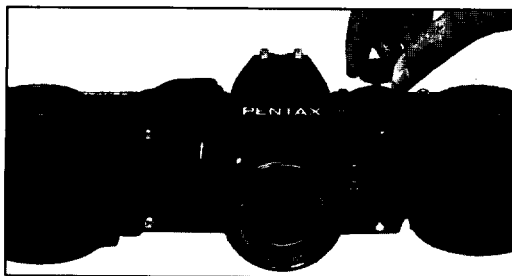
Loosen the retainer plate clamp screw by turning counter-clockwise.

Align the rail and the groove as shown in the drawing and attach the camera take-up lever side.



When the film-rewind side of the camera is pushed the camera will lock in place with a click.

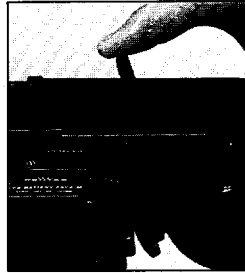
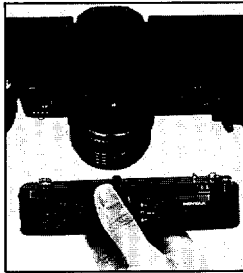




When the retainer plate clamp screw is turned clockwise, the camera retainer plate will hold the camera in place. Check to see that the camera is held securely by pulling the film rewind side of the camera toward you.

To detach the film magazine from the camera, loosen the retainer plate clamp screw by turning counter-clockwise. Then lift up on the film rewind lever and remove the film magazine from the film rewind side.

When using the camera with bulk magazine: use Coupler LX and connect the camera and the bulk magazine take-up mechanism. Remove the film transport coupler cap on the bottom side using a coin. Keep the cap in a safe place so that it will not be misplaced.



Attach the Coupler as shown in the drawing. Align the guide pin with the guide hole of the camera, and the coupler with the bulk magazine gear, and then turn the knob clockwise to tighten. Wind the film transport lever of the camera and check to see that the gear turns.
To wind, turn the film transport lever twice.

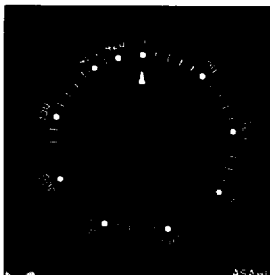
When using camera + bulk magazine + motor drive:
No coupler is used.

Remove the film transport coupler cap on the bottom side of the camera and attach the motor drive. After attaching the motor drive, wind the film transport lever of the camera and check to see that the gear turns.

The motor drive will not operate if there is not film in the magazine.

Refer to the instruction manual for the Motor Drive LX.

HOW TO LOAD THE FILM (1)



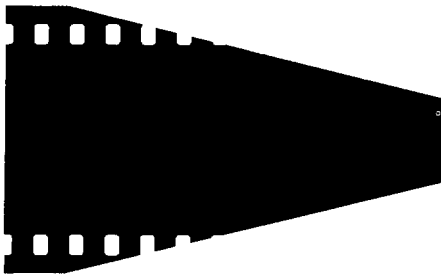
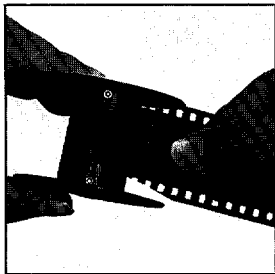
35mm bulk film is cut into lengths of 30.5m (100 ft).

When loading the film into the cartridge use a cartridge loader (sold separately). As darkroom operation is required, sufficient advance practice is necessary.

Load the film into the film cartridge:

Have the bulk film, film cartridge, cartridge loader, and a pair of scissors ready in the darkroom. First, pull the cartridge loader winder handle toward you and match the triangular index pointer to the desired number of exposures, plus 10 frames for the leader.

The exposure dial is of the subtracting type running from 420 to 0. Numbers 420, 250, and 0 are written in fluorescent yellow, while numbers 400, 350, 300, 250, 200, 150, 100, and 50, as well as the triangular index pointer, are in fluorescent green; if light is shone on the numbers before entering

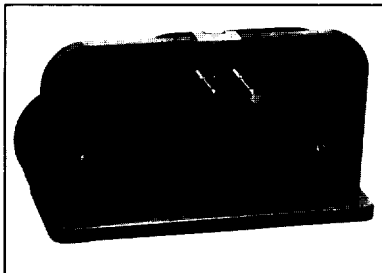


the darkroom, they can be read in the dark. (Each dial reading equals 5 exposures.)

When the round release button of the film cartridge is pressed down and turned halfway, and the openings of the outer and inner casings are aligned, the inner casing and the spool can be removed.

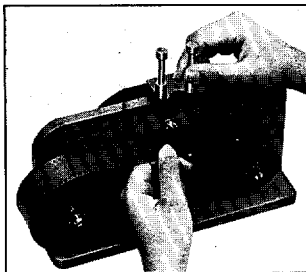
To reassemble, place the cartridge spool over the inner casing and align with the opening of the outer casing. Then turn halfway clockwise until there is a click.

When winding onto the film spool, trim the end of the film as shown in the drawing. Then with the emulsion side facing the inside, insert into the slot of the cartridge spool. As this must be done in the darkroom, you should practice first in a light place.

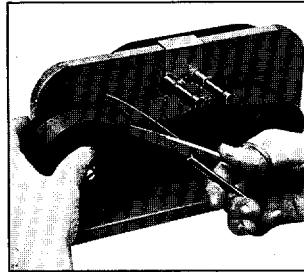
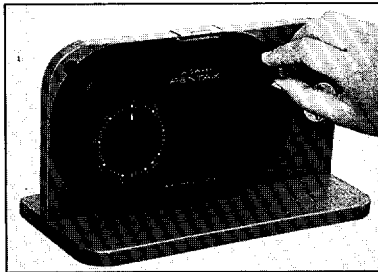


Place the film cartridge spool on the cartridge loader. Next, remove the cartridge loader reel and remove one of the flanges by turning counter-clockwise. Then raise the film holder section of the loader.

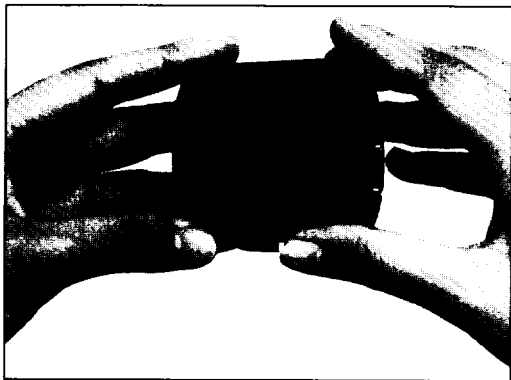
From this point on, all operations will be carried out in complete dark in the darkroom. Remove the bulk film from the can while pushing the plastic core to one side. Insert the film into the shaft of the load spool and re-attach the shaft. Face the film so that it will feed out as shown in the drawing and then place the shaft onto the cartridge loader and peel off the tape holding the film.



Trim the end of the bulk film roll with a pair of scissors as shown on page 9, and after passing the end over the sprocket, insert into the slot of the cartridge spool. Check with your fingers to see that the perforations of the film are meshed properly with the sprocket gears, then lower the film holder.



When the winder handle of the cartridge loader is turned clockwise, the film will wind onto the spool, and when the preset number of frames reaches 0, it will stop automatically. Cut the film at the place shown in the drawing.



After removing the cartridge spool and inserting the film end into the inner casing, as shown in the drawing, insert the inner casing into the outer casing and turn halfway in a clockwise direction. Then close the cartridge.

Remove the film remaining on the reel and, after wrapping it in the original black paper, place it in the can and seal with tape.

Before turning on the lights, check to make sure that the cartridge is closed and that the remaining film has been put in the can.



March 18



March 24

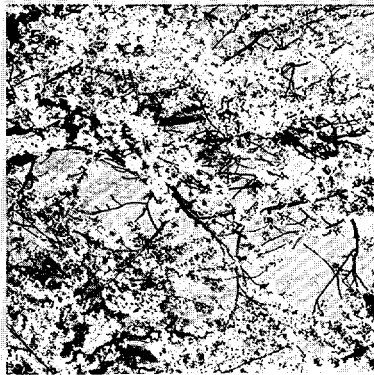


March 26

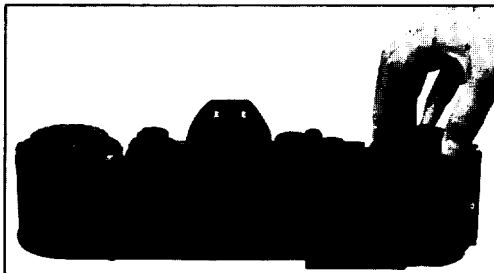
March 29

April 5

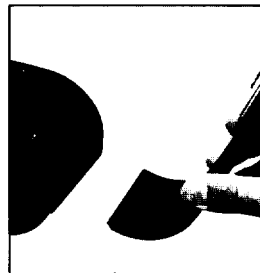
April 7



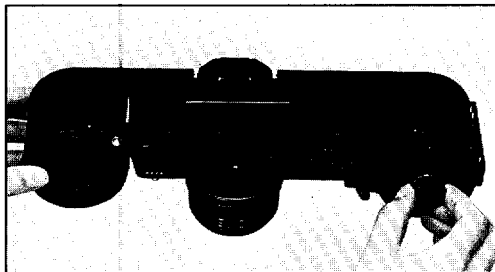
HOW TO LOAD THE FILM (2)



Inserting the film cartridge into the Bulk Magazine:
Turn the supply cartridge lock dial on the take-up side and supply side of the Bulk Magazine and align **OPEN** with the white index dot.

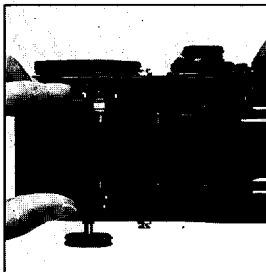


The back cover can be removed by lifting the lock release of the back cover and turning the knob in the direction of the arrow. The back cover is of the removable type; be careful not to drop it.

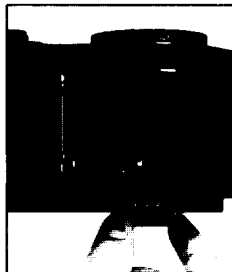


Pull out on both of the cartridge release knobs on the base of the Bulk Magazines. Insert the loaded film cartridge into the supply chamber of the Bulk Magazine.

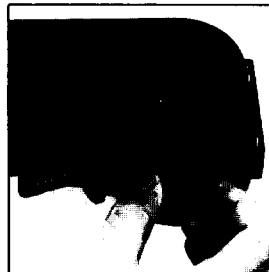
Insert while aligning the film cartridge with the white dot of the Bulk Magazine and then push in the cartridge release knob.



In the same manner insert the unloaded film cartridge into the take-up side and push in the cartridge knob. Turn the release knob of the take-up cartridge and align CLOSE with the index dot, then close the film cartridge.



Rotate the cartridge release knob on the take-up side until the spool slot is facing directly upward. Pull out about 25cm of film from the supply cartridge and insert the leader into the slot of the spool on the take-up side.



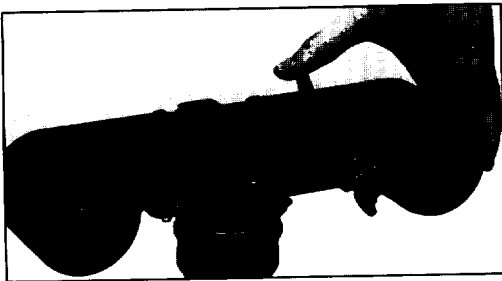
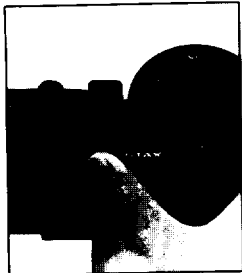
Give the take-up cartridge release knob two turns to take up slack in the film. Turn the cartridge lock dial on the take-up side to OPEN. This will close the opening.



When the supply side of the back cover is securely in the Bulk Magazine slot and the take-up side is inserted in the cartridge release, there will be a click and the cover will close.



Align the take-up side and supply cartridge lock dials with **CLOSE**. Record the type and number of exposures loaded in the Bulk Magazine for later reference.



Blank Exposures:

Make five blank exposures with the camera's wind lever and then wind the sixth exposure. The lever must be operated twice to advance the film one frame, otherwise the film will not be in position. Check to make sure that the cartridge knob on the supply side turns clockwise when making the blank exposures. (If the supply side does not turn properly, reload the film.)

Aligning the film counter:

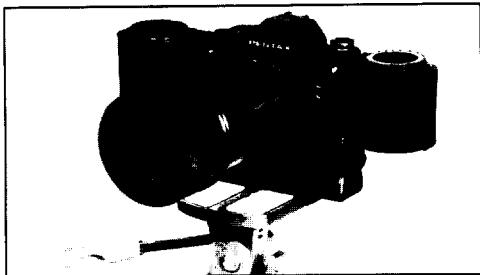
Pull out the take-up side cartridge knob, turn the roller ring inside clockwise and set to the number of frames to be used on the film counter. This number should not include the frames added for the leader (Page 8).



Push in the cartridge knob, turn clockwise and take up any slack in the film. Stop when the knob begins to feel heavy.

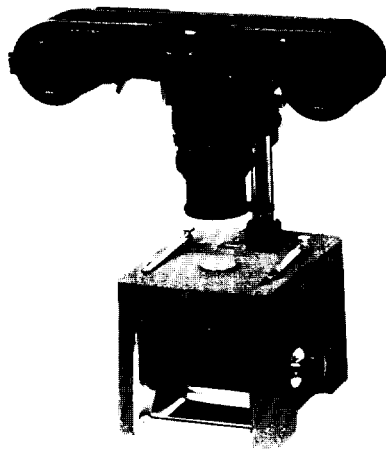


SHOOTING

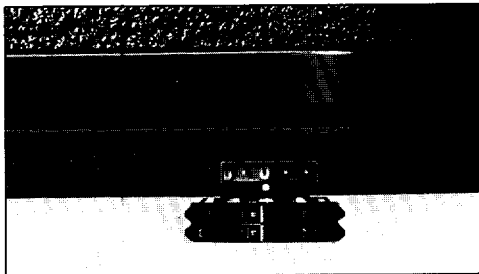


Shooting

Shoot as you would ordinarily. For handheld shooting, be careful that the camera is steady. As an ordinary film counter cannot be used, the special film counter for the Bulk Magazine, or the remaining numeral type, should be used.



AT THE END OF THE FILM ROLL



Film end:

The counter will read "0" when the number of exposures set on the film counter is reached. At this time, five blank exposures should be taken. There is no need for rewinding. Set the cartridge lock dials for both take-up and supply to OPEN, remove the back cover and pull out the take-up side cartridge knob.

If the length of the film is shorter than the set number of exposures, the film counter will stop moving. It will also stop when the blank exposure film has been completely wound into the cartridge on the take-up side.

Do not open the back cover or disassemble the camera without taking blank exposures.

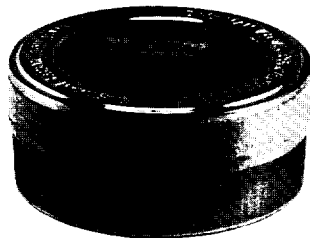
CONCERNING THE FILM

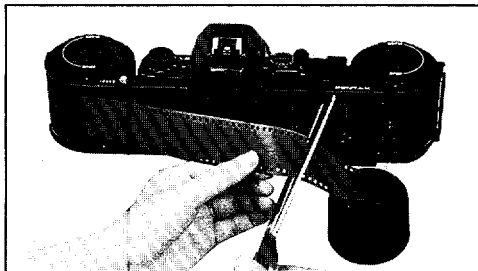
Purchase of bulk film and developing:

There are times when bulk films are out of stock at the store. Thus, they should be purchased sufficiently in advance. Consult the camera shop, film maker, or dealer when developing the film.

Length to be inserted into the film cartridge:

When inserting the film into the film cartridge, insert only the length necessary. Extra lengths left in the film cartridge for a long period will deteriorate. Put the remaining film into the can and store it away from high temperatures or humidity.





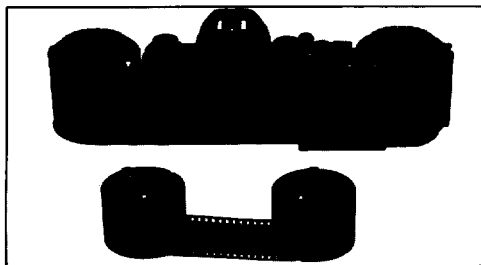
When developing part of the film:

While looking at the film counter, record the number of exposures taken and the remaining number of exposures. The number of exposures shot will be the number displayed subtracted from the number preset. Take five blank exposures. If this is not done, the frames shot will be overexposed.

Open the back cover of the Bulk Magazine. Pull out on the cartridge knob and remove the film cartridge.



Cut the film at the part near the opening of the film cartridge on the take-up side. For the film remaining, write the name of the film and the number on a sheet of paper and attach to the film cartridge for future reference.

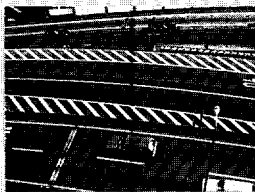


When changing to a different film in the middle of a roll: Have two spare film cartridges ready. Use the method for partial developing explained in the previous paragraph to exchange the partially-used film with a separate film.

The protruding part of the film that has been removed should be wound around the outside of the other film cartridge, wrapped in black paper and put in the can. To use this film again, place in the Bulk Magazine and take five blank exposures.

When sending the film cartridge as is for developing, be sure to have a spare film cartridge ready. Otherwise, send only the film out for developing.

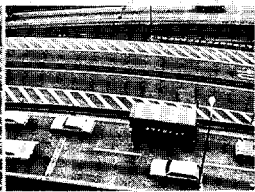
1



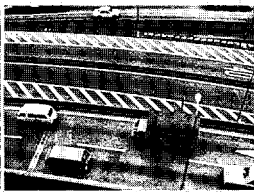
2



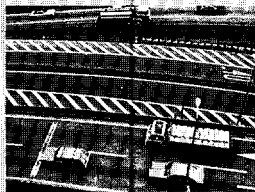
3



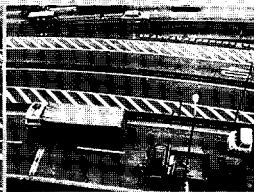
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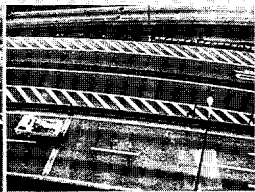
5



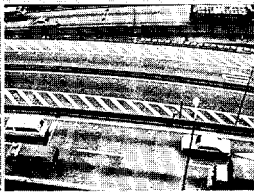
6



7



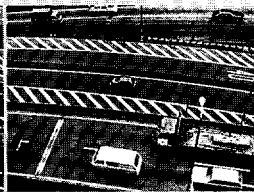
8



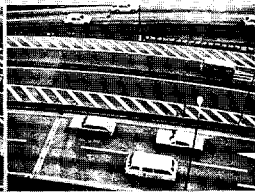
9



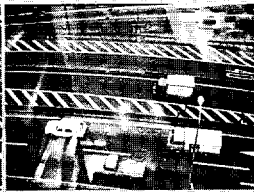
10



11



12



1

Feb. 16



2

Feb. 19



3

Feb. 22



4

Feb. 24



5

Feb. 25, 10 A.M.



6

Feb. 25, 2 P.M.



7

Feb. 26, 10 A.M.



8

Feb. 26, 3 P.M.



9

Feb. 27, 10 A.M.



10

Feb. 27, 2 P.M.



11

March 1



12

March 5, 11 A.M.



13

March 5, 3 P.M.



14

March 6



15

March 8



16

March 11



SPECIFICATIONS

Film used:	For exclusive film cartridge use, 35mm bulk film (30.5m, etc.) cut to any desired length less than 10 meters.
Number of exposures that can be shot:	Up to 250
Exposure counter:	Subtracting type (automatically stops at film end)
Overall size and weight:	268(W) x 81(H) x 66(D)mm, 1010g (2 film cartridges attached) LX + FA-1 + Bulk Magazine + Coupler 268(W) x 107(H) x 75(D)mm, 1540g LX + FA-1 + Bulk Magazine + Motor Drive LX 268(W) x 122(H) x 66(D)mm, 1760g
Standard accessories:	Film cartridge, 2 each, coupler
Accessories sold separately:	Cartridge Loader (Reel attached)



Asahi Optical Co., Ltd. C.P.O. 895, Tokyo 100-91, JAPAN

Asahi Optical Europe N.V. Weveldlaan 3-5, 1930 Zaventem Zuid-7, BELGIUM

Pentax Handelsgesellschaft mbH. 2000 Hamburg 54 (Lokstedt), Grandweg 64, WEST GERMANY

Pentax Corporation 35 Inverness Drive East, Englewood, Colorado 80112, U.S.A.

Pentax of Canada Ltd. 1760 West 3rd Avenue, Vancouver, B.C. V6J 1K5, CANADA

Pentax U.K. Ltd. Pentax House, South Hill Avenue, South Harrow, Middlesex HA2 0LT, U.K.

Asahi Optical Brasileira Ind. e Com. Ltda. Rua Estados Unidos, 1053, São Paulo-SP, BRASIL