

Canon
F-1

FILM CHAMBER 250

INSTRUCTIONS



English Edition

Canon Film Chamber 250 is an exclusive attaching/detaching type long-length roll film magazine designed to expand the continuous photographing functions of Canon F-1 and the Motor Drive Unit.

It has a maximum capacity of 250 exposures and is effective for copying documentary pictures, and shooting sporting events.



Technical Data

Circuit Construction: 1 motor, 1 lead switch.

Loading Capacity: 250 frames. 10 meters (33 feet).

Film Loading: 2 exclusive magazines used, one each for supply and take-up. Film Loader 250 is used for loading film into magazine.

Film Magazine: Film Magazine 250 for 35mm strip film.

Frame Counter: Counts the number of frames.

Drive System: Film advance with Motor Drive Unit and synchronized film take-up with built-in micro-motor. Automatically stops when entire film is

exposed.

Coupling of Motor Drive Unit: With 3-core, direct-couple connector.

Back Cover Interlock: Connected to open/close of film magazines, and Motor Drive Unit.

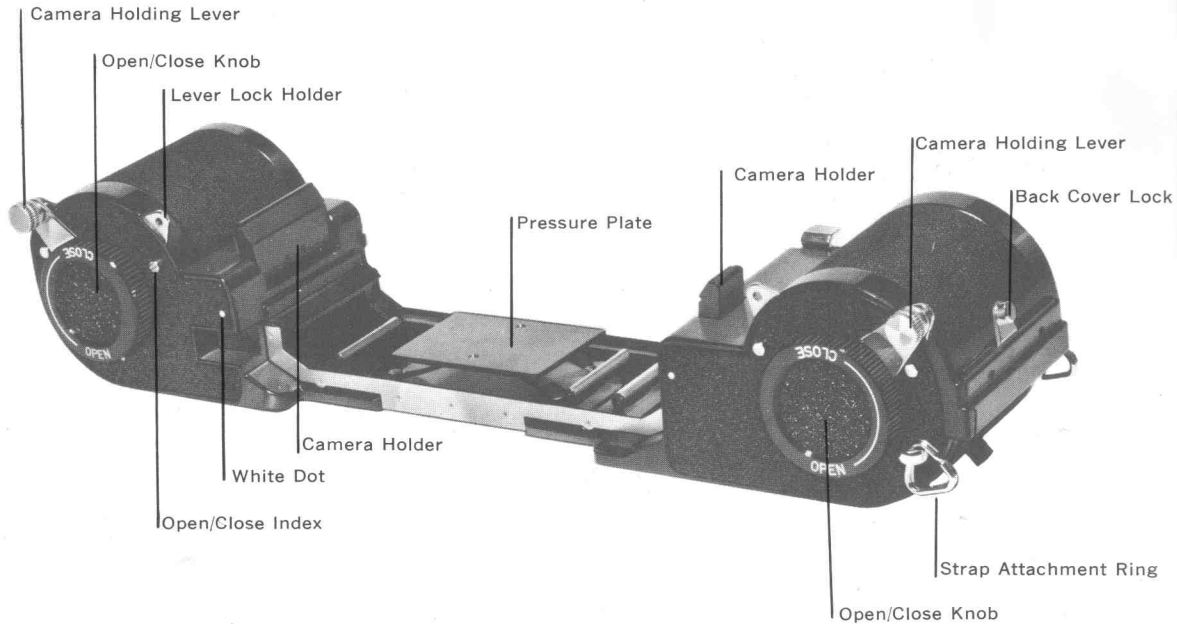
Size: 333x63x100mm (13-1/8" x 2-1/2" x 3-15/16").

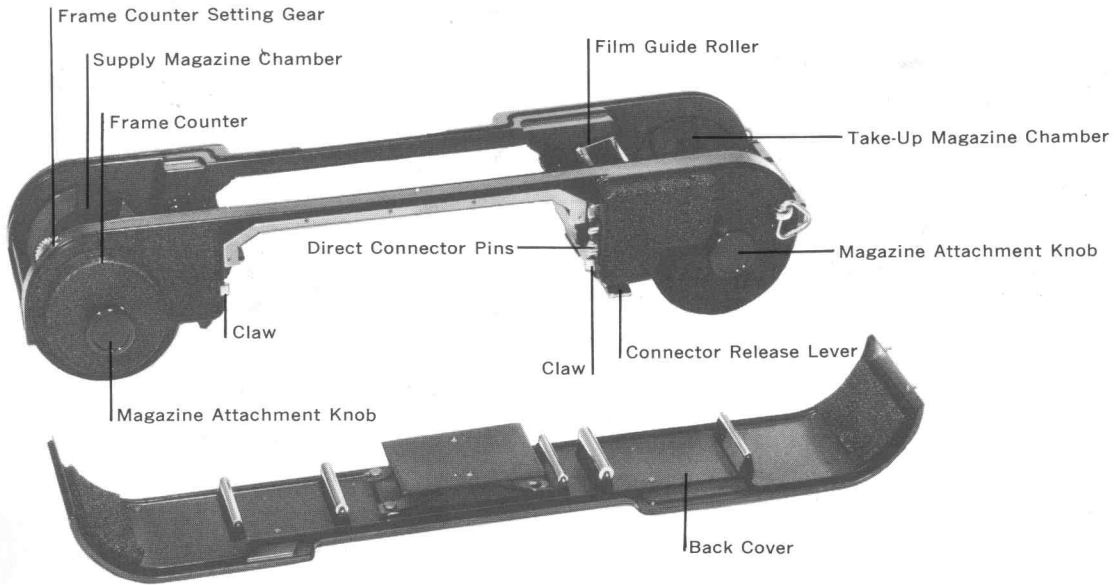
Weight: 1,170 grams (2.58 lbs.).

Power source, shooting speeds, shutter speeds, and remote control are the same as those for the Motor Drive Unit.

Manual Windup Adapter will be available in near future.

Subject to alterations.





Frame Counter Setting Gear

Supply Magazine Chamber

Frame Counter

Film Guide Roller

Take-Up Magazine Chamber

Direct Connector Pins

Magazine Attachment Knob

Claw

Claw

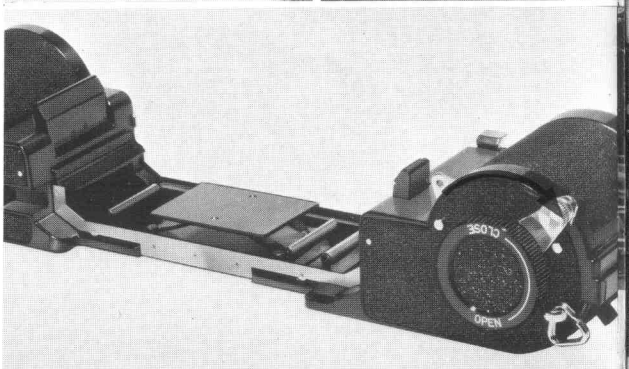
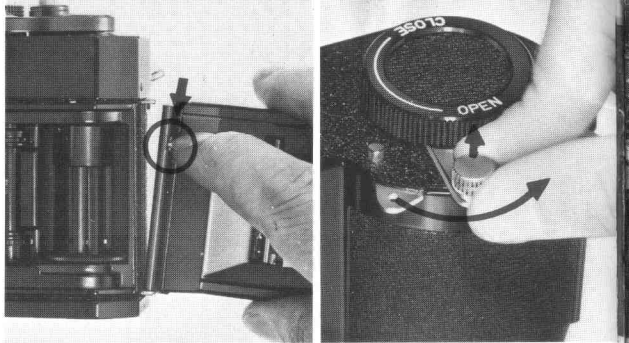
Connector Release Lever

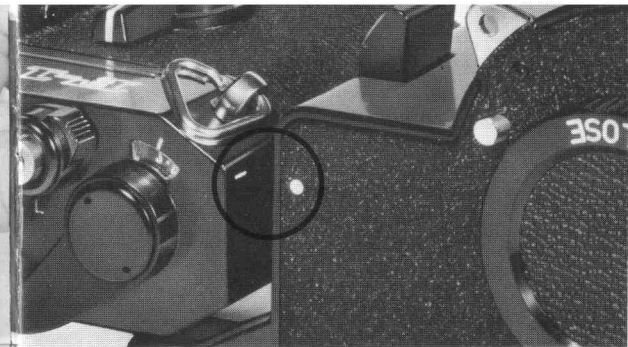
Magazine Attachment Knob

Back Cover

Attaching onto Camera

- 1** Open the back cover of the Canon F-1, and remove it while pushing the pin, on the inside of the hinge section, downwards.
- 2** Release the camera holders by pulling upwards and turning the two camera holding levers on Film Chamber 250 outwards.





3 Align the back cover grooves of the camera with the rails of the Film Chamber. Then push in the camera until the index lines of the camera and the white dots of the Film Chamber match.

4 Set the strap attachment rings so that they do not get in the way, and turn the camera holding levers inwards to the locked positions. The camera will be fixed by closing the camera holders.

■ Manipulate the holding levers only when attaching or detaching the camera. The camera may drop if these levers are accidentally shifted.

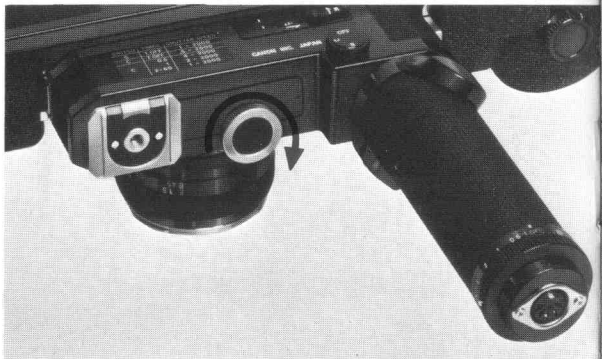


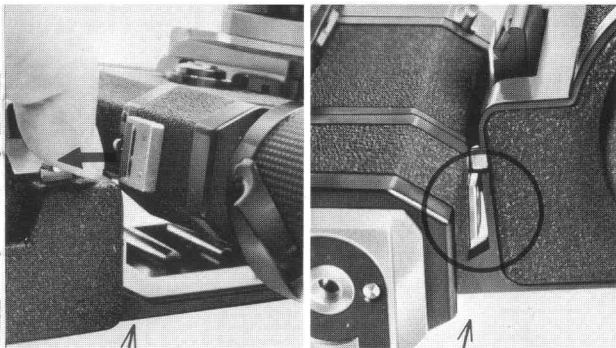
Connecting Motor Drive Unit

For best results, use the Film Chamber jointly with the Motor Drive Unit.

Connector connections are easier if the Motor Drive Unit is attached after the Film Chamber has been attached.

1 Remove the bottom cover of the camera, reload the mercury battery, connect the Motor Drive Unit, and then fix it with the attachment screw. The direct connector is automatically connected to the Film Chamber.





2 When the Film Chamber is attached after the Motor Drive Unit has been attached, first release the connector by shifting the connector release lever on the Film Chamber to the left. Insert the holding plate of the Motor Drive Unit slantwise so that it goes beneath the claw on the other side of the connector, and then gently lay the Motor Drive Unit on the Film Chamber. Other procedures are similar to those when attaching only the Film Chamber.

■ When detaching, remove the Motor Drive Unit first so as to release the connector automatically. Otherwise, the connector release lever should be shifted to detach the Motor Drive Unit.

3 Connect the Motor Drive Unit with the Battery Case.

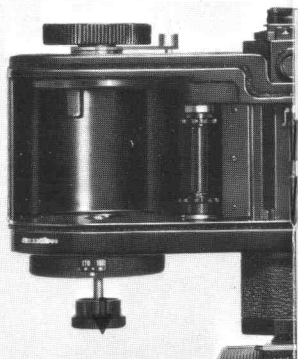
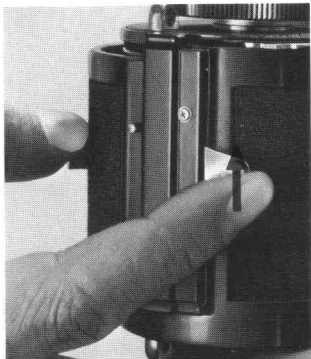
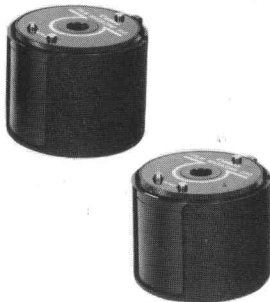
Loading of Magazine

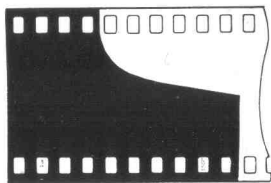
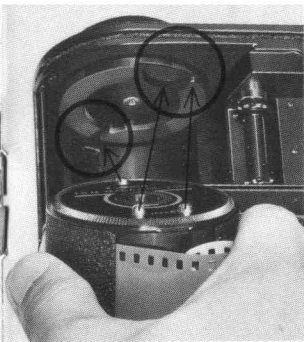
1 Set the two open/close knobs of the back cover at "OPEN" lift up the back cover lock, and remove the back cover.

■ Be sure to turn both of the open/close knobs together.

■ The sliding covers of the magazines are close when the open/close knobs are set at "OPEN".

2 Pull out the magazine attachment knob.





3 Load a magazine, containing unexposed film, in the supply magazine chamber. Fit the two projections and the release button on the top side of the magazine to the notch on the upper part of the magazine chamber. Push in the magazine attachment knob.

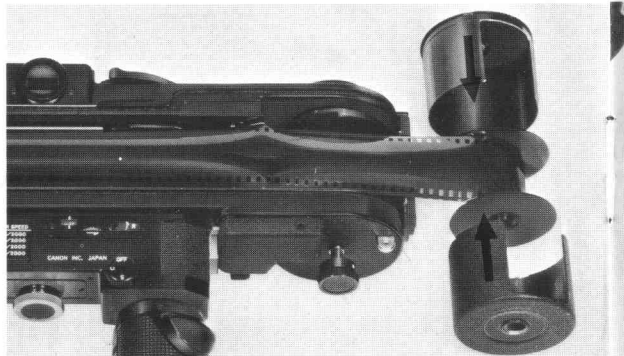
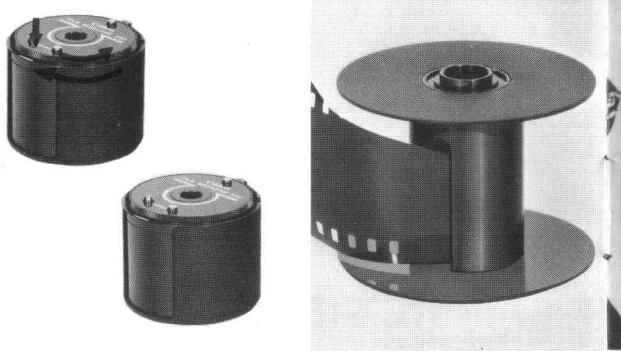
■ Be sure not to turn the open/close knob to "OPEN", since the sliding cover of the magazine opens and the film will be exposed.

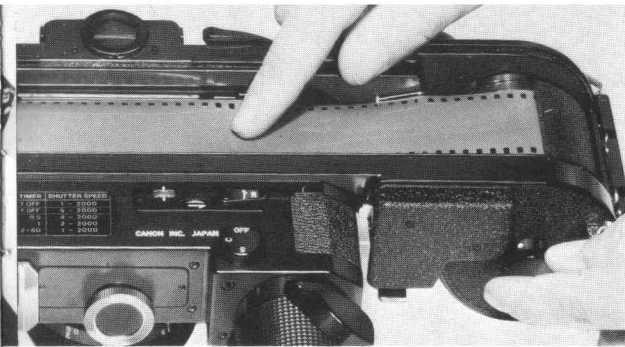
4 Pull out the film from the supply magazine for 30 centimeters (approx. 1 ft.), and cut the tip of the film on one side, so as to insert it into the slit of the spool properly.



5 Take out the spool of the take-up magazine. Turn the inner case, while depressing the release button of the inner case, and align the opening section of the inner and outer cases. The inner case and spool can then be taken out.

6 Insert the film leader into the slit of the spool in the take-up magazine, and wind the film three times with its emulsive side facing inwards. After confirming that the film is accurately wound around the spool, cover it from the top with the inner case of the magazine and from the bottom with the outer case. Then turn the inner case counterclockwise until it click stops.





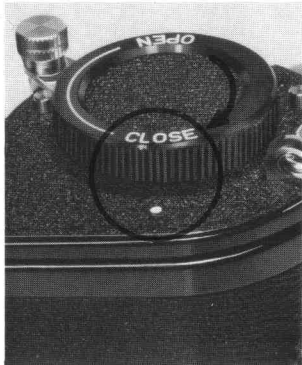
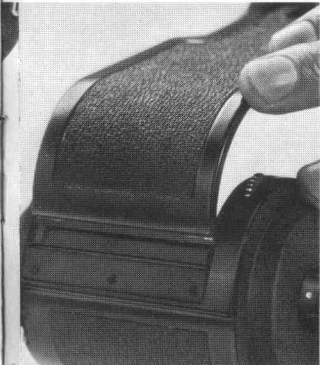
7 Put this take-up magazine into the take-up magazine chamber, in the same manner as the supply magazine was inserted, and push in the magazine attachment knob.

8 Turn the magazine attachment knob on the take-up magazine side to take away the slack in the film and, at the same time, confirm that the film is correctly engaged with the sprocket.

9 When replacing the back cover of the Film Chamber, first insert the edge of the cover on the supply magazine chamber side, into the slit on the outer side of the Chamber. Then push in the entire back cover.

10 When the two open/close knobs of the Chamber are set at "CLOSE", the sliding covers inside the magazine chambers open and are ready for film winding. Simultaneously, the power circuit for film drive is connected.

■ The power circuit is not connected unless the take-up magazine is closed.



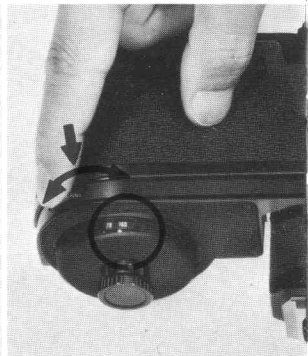
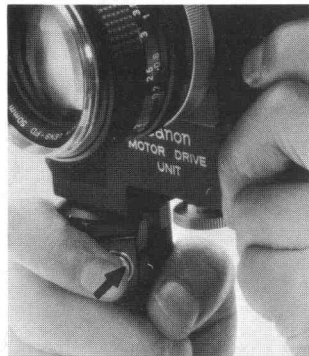
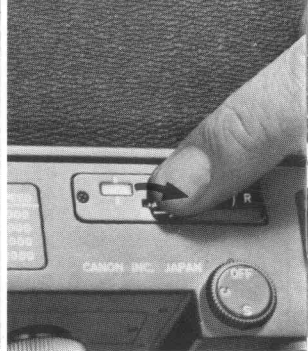
Setting Frame Counter

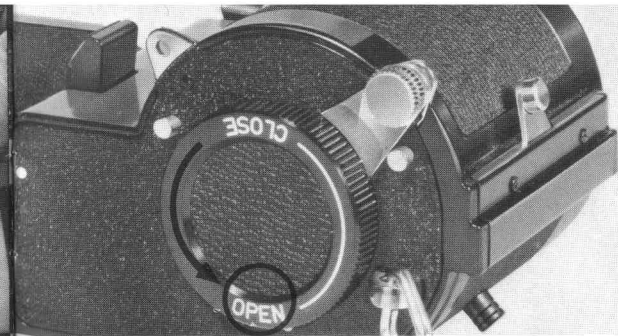
1 Set the frame counter of the Motor Drive Unit at "F.C." by turning the setting gear.

■ The automatic stopper maintains film priority only when using the Film Chamber. When the Motor Drive Unit is attached, the frame counter of the Motor Drive Unit takes over priority. For example, if the frame counter of the Motor Drive Unit is set at "36", with 250-exposure film loaded, the counter will stop at the 36th exposure. The "F.C." setting is to free the automatic stopper mechanism of the Motor Drive Unit.

2 After loading the film, make six blank shots by using the Motor Drive Unit. Be sure to advance the unexposed frames by using the Motor Drive Unit. The film will sag inside the take-up magazine chamber if wound with the winding lever of the camera.

3 Then, after winding the seventh frame, set the frame counter of the Film Chamber to the number of exposures possible by pressing down the setting





gear. The frame counter counts the number of unexposed frames. Be sure to set the frame counter correctly because it will stop only when the end of the film passes over the film guide roller and will not stop when the counter itself reaches "0".

■ The Motor Drive Unit will not function unless the open/close knob on the take-up magazine side is set at "CLOSE".

Unloading Film

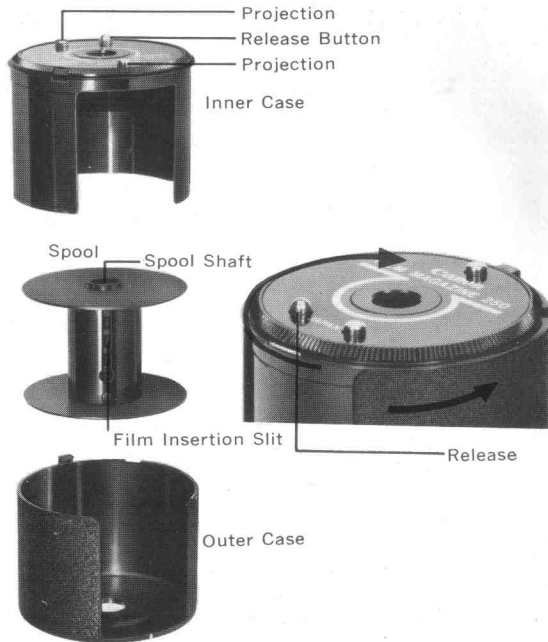
The Motor Drive automatically stops its operation after all exposures have been taken and the end of the film passes over the film guide roller.

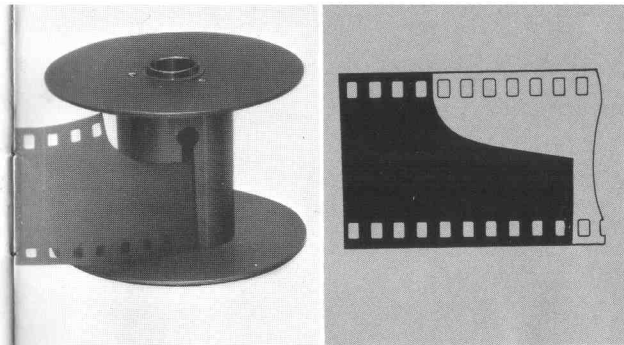
- 1 Turn both of the open/close knobs to "OPEN", and open the back cover.
- 2 Pull out the magazine attachment knobs, and take out the magazine.

Using Film Magazine with Film Loader

With Film Chamber 250, the Film Magazines 250 are used for supply and take-up use, and have the capacity of winding 250 frames of strip film. The magazines can be used in common. The magazine is composed of an inner case, outer case, and a spool.

1 Turn the inner case, while depressing the release button on the top side of the inner case, and align the opening sections of the inner and outer cases. The inner case and spool can then be taken out.





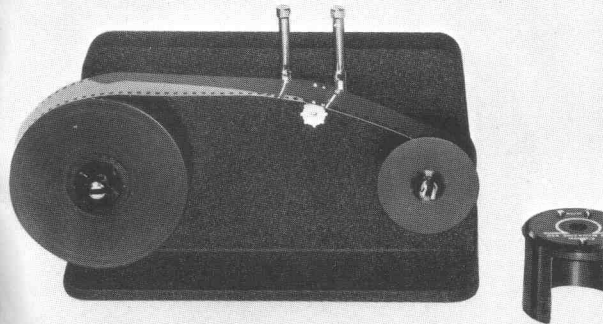
2 Wind a strip film to a spool of the magazine by using Film Loader 250 in a darkroom.

Insert a strip film either directly into the supply-side shaft of the Film Loader or by using the spool attached to the Film Loader.

Raise two film holding rollers.

Insert the magazine spool into the take-up-side shaft and insert the tip of the film into one of the slits of the spool. The tip of the film should not be bent because the automatic stop will not function, if the film tip does not come loose from the supply spool after all exposures have been taken.

Wind the film to the spool two or three times by facing the emulsive surface inwards.



Match the film sprockets with the sprocket shaft, and lay the film holding rollers on the film.

Set the proper frame counter scale at the index and turn the winding handle clockwise until it stops.

It will stop when the frame counter reaches "0". Cut off the film, take out the magazine spool, and put it into the magazine.

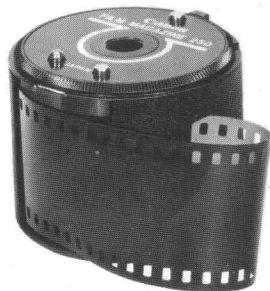
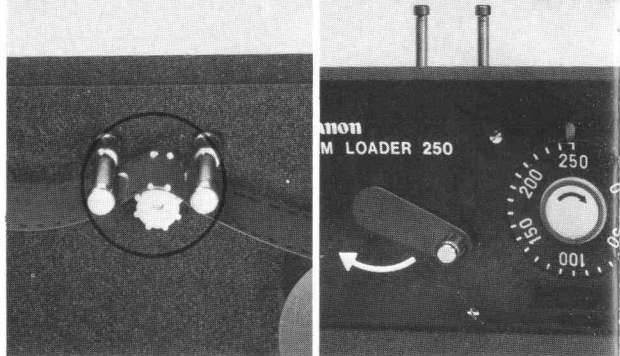
3 When looking from above, the film should be wound on the spool counterclockwise, and its tip should be protruding approximately 10cm (3 in.) from the opening section of the case.

Align the opening section of the cases and drop the inner cases all the way in together with the spool. Turn the inner case clockwise, and the stopper becomes geared with a clicking sound.

Return the remaining film into its container. Set the tip of the magazine film in loading condition and trim its corners off.

■ 250 frames is equivalent to 10 meters (335ft.) of film in length.

■ 100 feet of film contains 750 frames.



Film Loader 250

Film Loader 250 is a film winder for the film magazine of the Film Chamber. It is used for winding film for any desired number of frames of 250 or less from 50 feet or 100 feet long 35mm strip film. The Film Loader is also installed with a stopper which is coupled to the frame counter for winding the necessary number of frames.

Frame counter scale: Figures are engraved for every 50 frames. One graduation is equivalent to 10 frames.

Frame counter: Counts unexposed frames. Stops at "0".



Note

- 1** Be careful not to turn the open/close knobs or attachment levers during photography.
- 2** If the camera is detached before all the frames have been exposed, the film will be exposed and wasted because the sliding covers of the magazines are kept open inside the Film Chamber.
- 3** When the Film Chamber is detached from the camera while the film is loaded in the magazines, be sure the open/close knobs are set at "OPEN" to prevent exposing the film in the magazines.
- 4** When the film has been cut off midway, or the Film Chamber is interchanged midway with another loaded film chamber, unload it after making six blank shots.
- 5** When winding the film manually with the film advance lever of the camera, one frame at a time, in cases where the battery has been used up, be sure to turn the magazine attachment knob on the take-up magazine side with each windup to remove the slack of the film because the spool does not take up the film.

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