

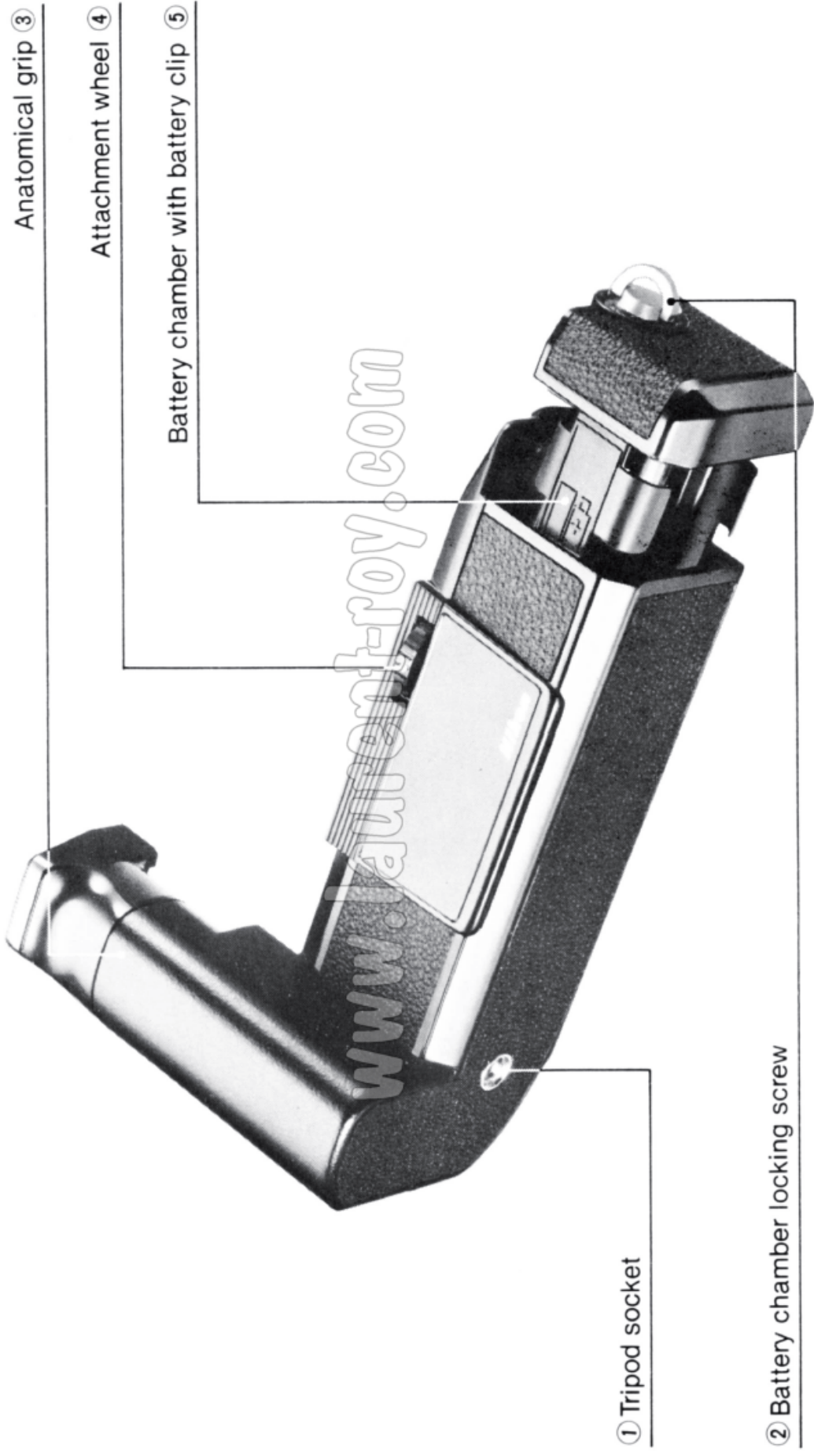
***Nikon* Motor Drive**

FD4

www.laurent-roy.com

Instruction Manual

NOMENCLATURE



⑥ Rewind button pin

⑦ Mounting screw

⑧ Electrical contacts

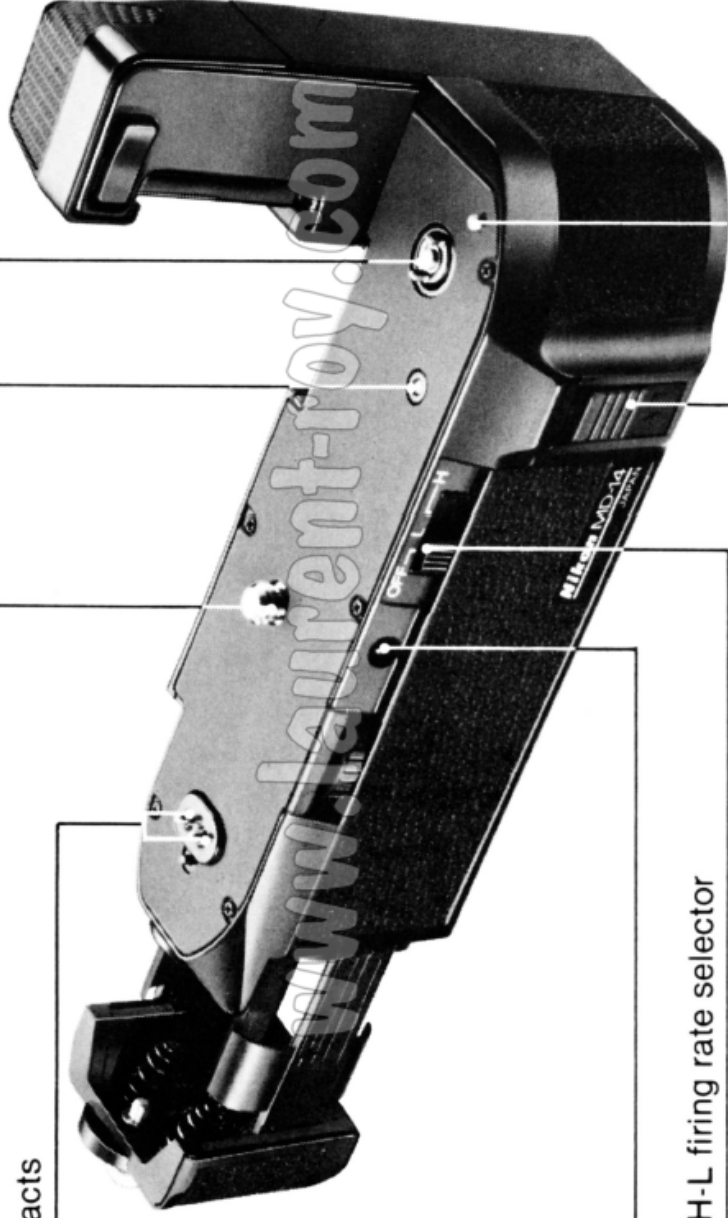
⑨ LED indicator

⑩ Power switch/H-L firing rate selector

⑪ Rewind slide

Motor drive coupling prong ⑫

Camera positioning pin ⑬



CONTENTS

NOMENCLATURE	2—3
FOREWORD	4
BASIC OPERATION	5—10
CONTROLS IN DETAIL	11—12
Power Switch/H-L Firing Rate Selector.....	11—12
TIPS ON MOTOR DRIVE CARE	13
OPTIMUM BATTERY PERFORMANCE	14
SPECIFICATIONS	15

FOREWORD

Congratulations. You now own the Motor Drive MD-14, an accessory designed to advance the film automatically through the Nikon FG or EM camera. You can select firing rates of approximately 3.2 fps or 2 fps at shutter speeds of 1/125 sec. or faster. Single-frame shooting, of course, is also possible at any shutter speed.

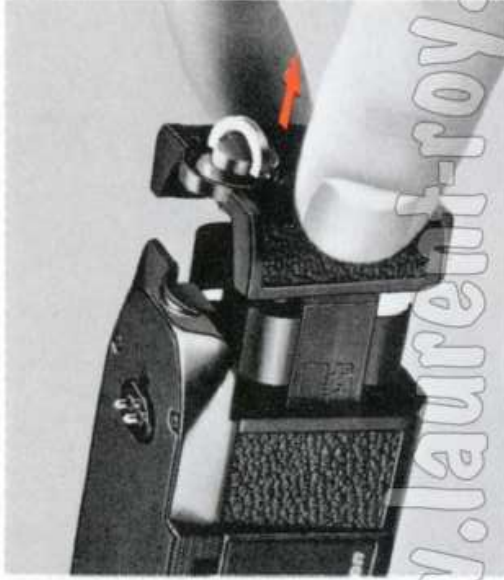
Even though the MD-14 is extremely easy to use, you should familiarize yourself thoroughly with this instruction manual, as well as your camera's instruction manual, before actually using the product.

BASIC OPERATION

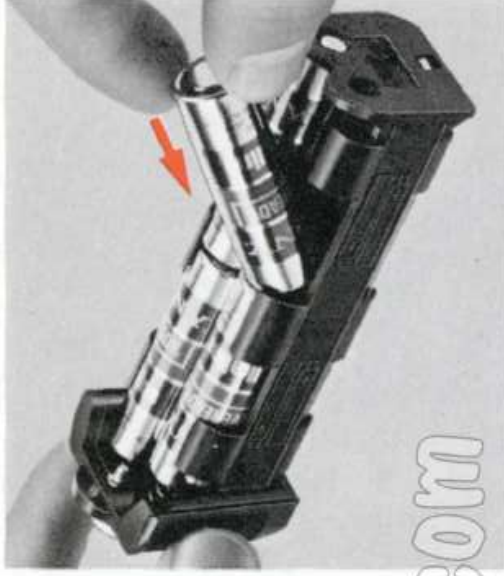


1. Unscrew the battery chamber locking screw (2).

Lift the outside ring of the locking screw and unscrew it.



2. Remove the motor drive's battery clip (5).

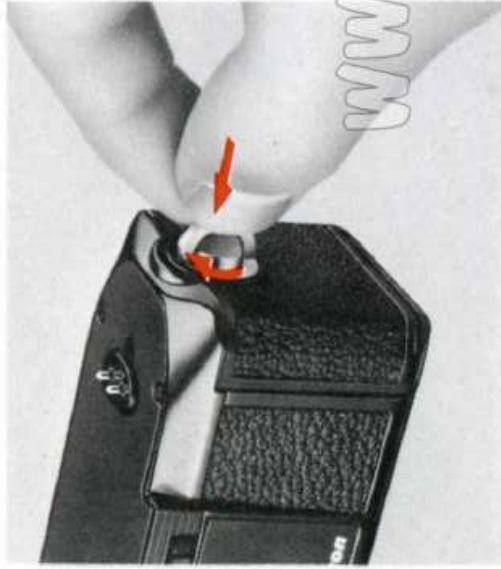


3. Load the batteries.

Install eight 1.5V AA-type penlight batteries into the clip following the "+" and "-" indications.

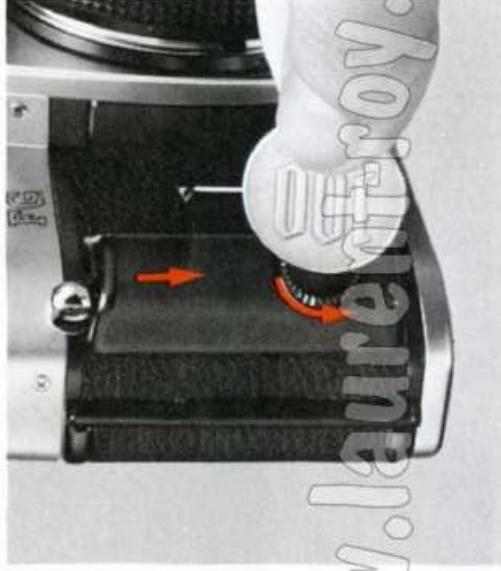
Note: Improper installation of the batteries might cause the MD-14 to malfunction or may result in damage to the unit. (For information about batteries, refer to page 14.)

BASIC OPERATION—continued



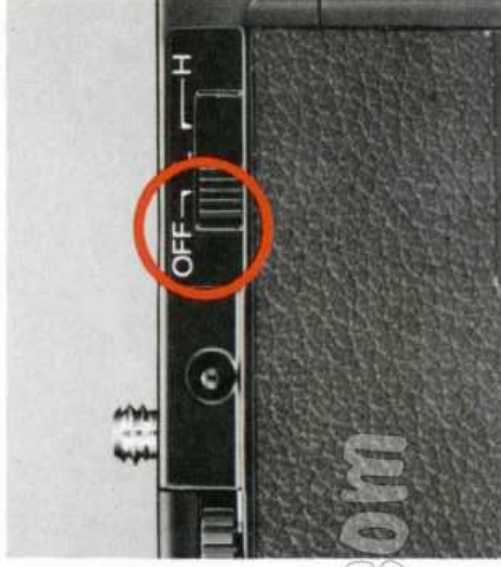
4. Install the battery clip.

Put the clip back into the chamber. While pushing the clip down into place, tighten the locking screw; then return the outside ring of the locking screw to its original position.

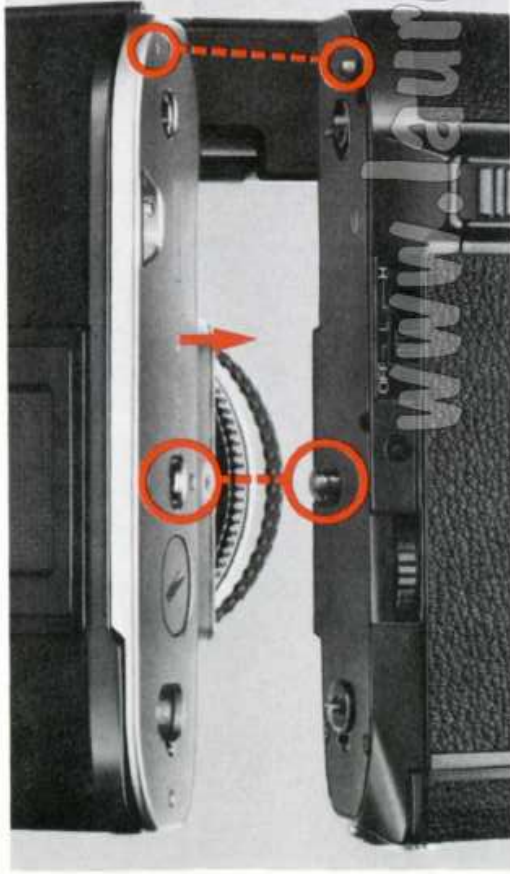


5. Remove the camera's handgrip.

When using the Nikon FG, remove the camera's handgrip, referring to the camera's instruction manual. With the Nikon EM, this is unnecessary.



6. Make sure the motor drive's power switch ⑩ is in the OFF position.



7. Place the camera body on the motor drive.

Place the camera body on top of the motor drive so that the motor drive's mounting screw ⑦ lines up with the camera's tripod socket and the camera positioning pin ⑬ is aligned with the motor drive positioning hole.

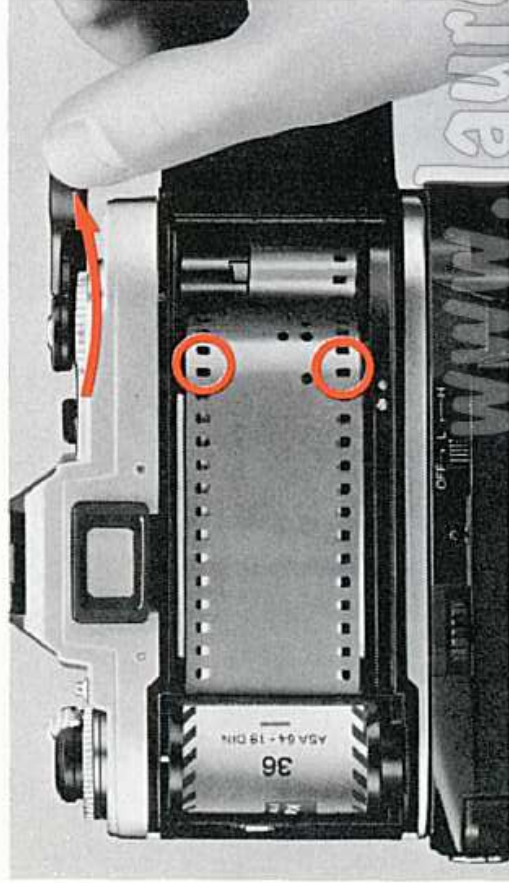


8. Attach the motor drive to the camera body.

Turn the attachment wheel ④ clockwise until the two units are screwed tightly together.

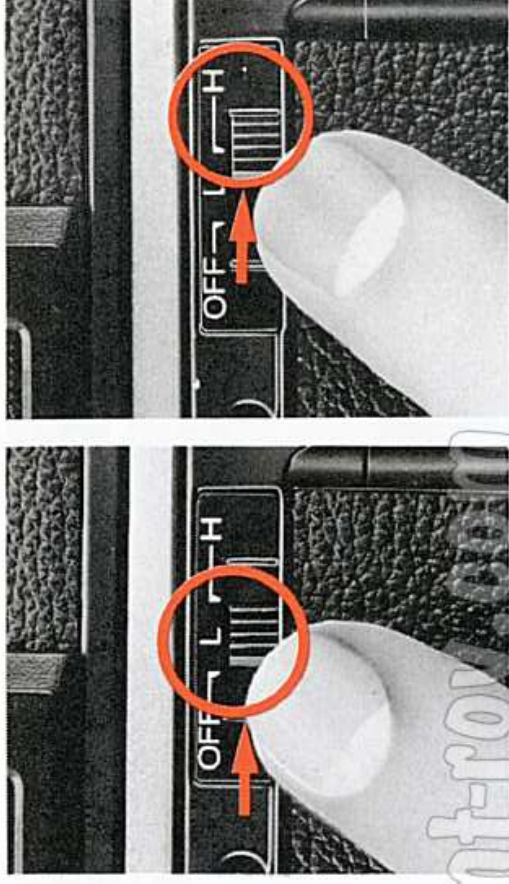
Note: Before attaching the motor drive, make sure the camera's film advance lever is completely cocked.

BASIC OPERATION—continued



9. Load film into the camera and make blank exposures.

Load film into the camera in the normal way, and then make blank exposures with the camera's shutter release button and film advance lever in the normal way as if the MD-14 were not attached.

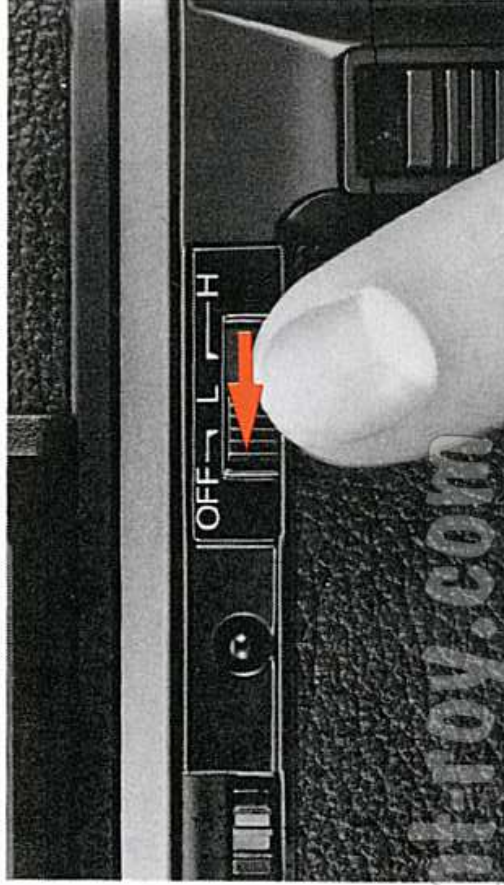
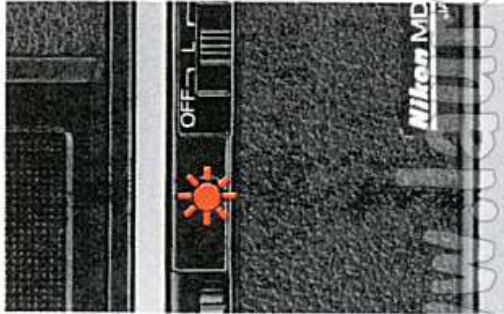
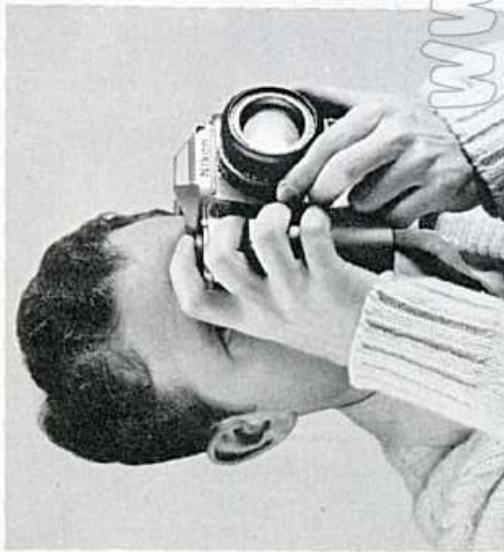


10. Slide the firing rate selector to the H or L position.

This turns the motor drive on. At the H position, the MD-14 operates continuously at approx. 3.2 fps, while at L, it fires at approx. 2 fps.

Note:

- 1) With the MD-14 set at either H or L, you can make blank exposures by holding the button down. However, at the H position, be careful not to make too many blank exposures.
- 2) Sliding the selector to the H or L position without winding the film after shutter is released advances the film by one frame.



11. Take the picture(s).

Push the camera's shutter release button to take the shot(s). The LED indicator ⑨ lights up to indicate the motor drive is operating.

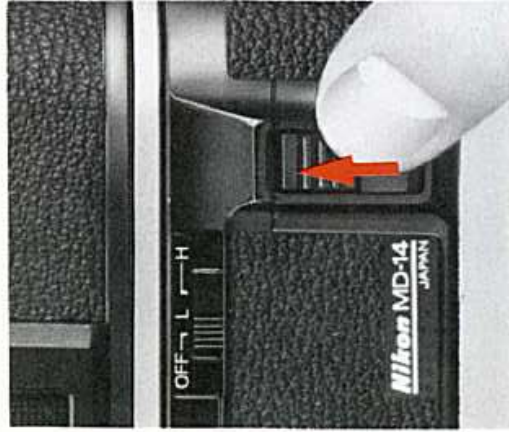
When you want to take a single shot, depress the shutter button and remove your finger from the button before the motor drive advances the film to the next frame. To take pictures continuously, hold the shutter button down as long as you like.

12. Turn off the power switch.

When the film reaches the end of the roll, the MD-14 will automatically stop and the LED indicator will light up continuously. Then turn the motor drive off.

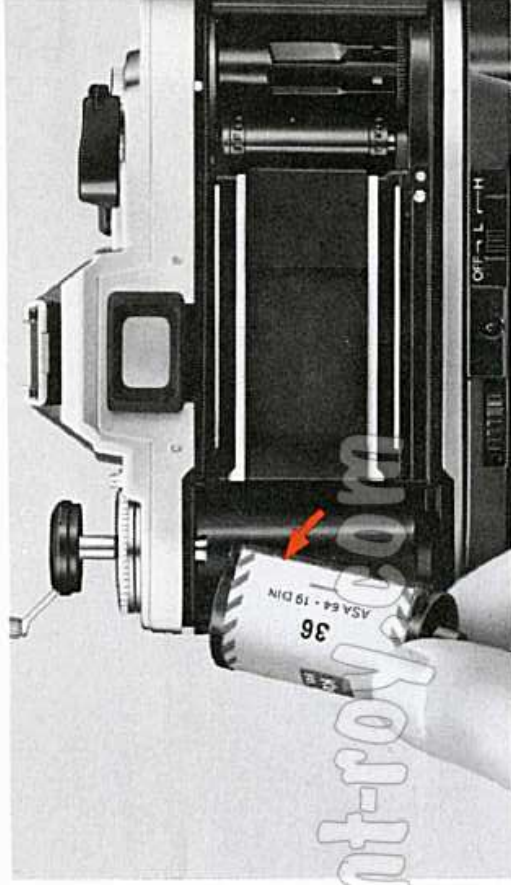
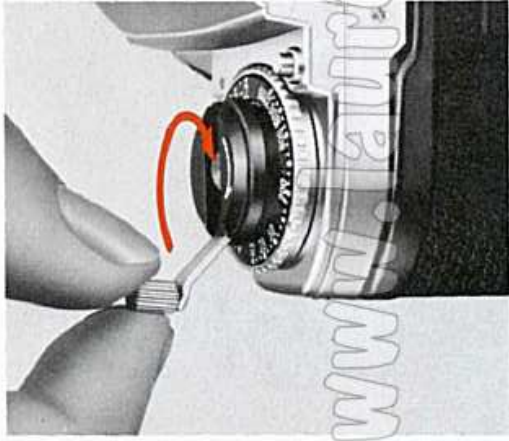
Note: Do not repeatedly depress the camera's shutter release button nor turn the motor drive on and off rapidly as these actions may cause the film to break.

BASIC OPERATION—continued



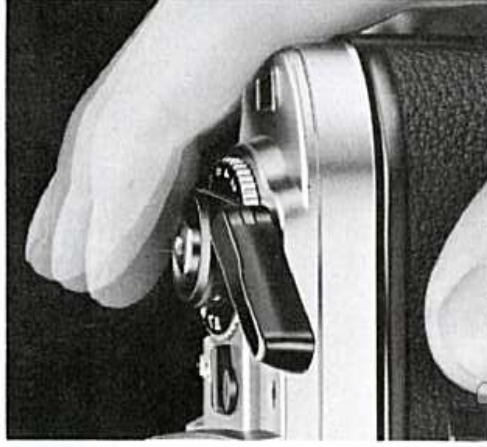
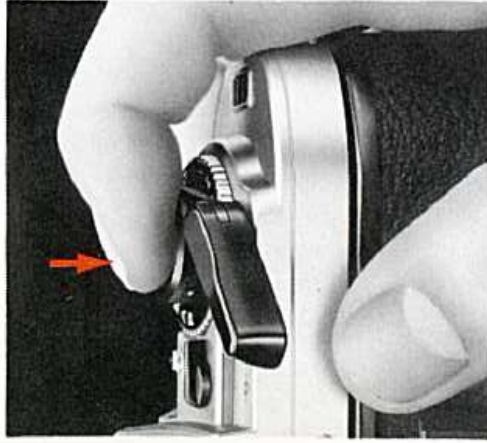
13. Rewind the film. Push the rewind slide ① up and then rewind the film manually by turning the camera's rewind crank.

Note: If the rewind slide is difficult to operate, detach the motor drive from the camera body first; then push in the camera's rewind button manually.



14. Remove the film cartridge. Unload the film in the normal manner, avoiding direct sunlight.

CONTROLS IN DETAIL



Power Switch/H-L Firing Rate Selector ⁽¹⁰⁾

Continuous Shooting

At the H and L positions respectively, you can shoot at 3.2 fps and 2 fps* at shutter speeds of 1/125 sec. or faster by simply pushing the camera's shutter release button. When you remove your finger from the button, the motor drive winds the film for the next shot and then stops. The camera's shutter speed/mode selector can be set at any position except B. *Firing rates depend on the actual shutter speed in use and the condition of the batteries.

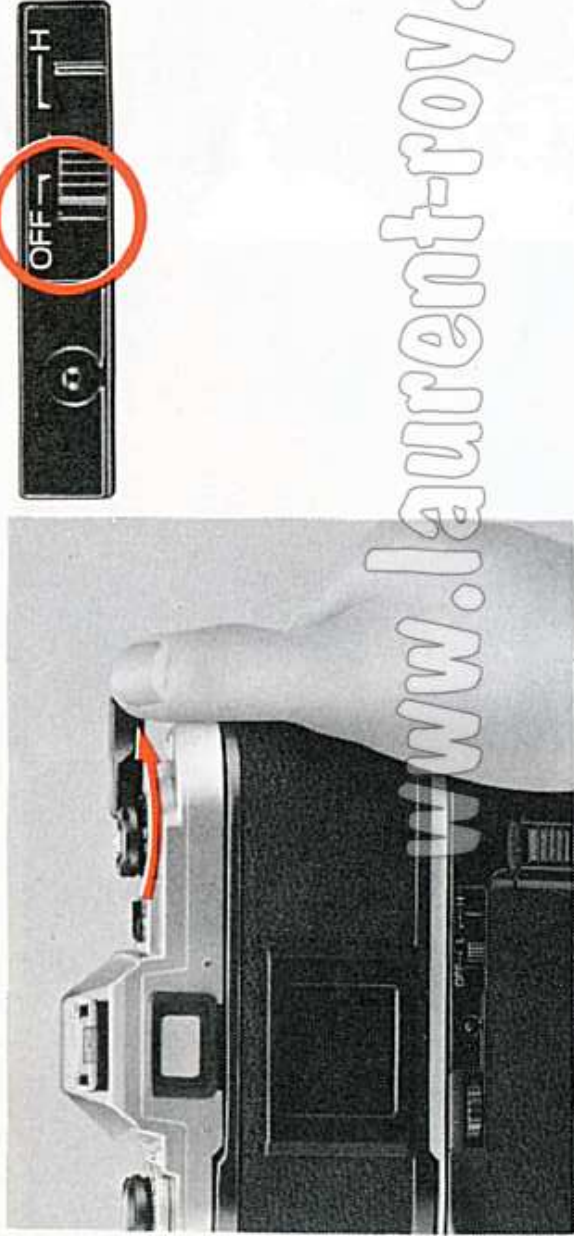
Single-Frame Shooting

You can take single shots by pushing the shutter release button and then removing your finger from

the button before the film is completely wound. Because the MD-14's operation is coupled to the camera's shutter, film is wound after the shutter closes even if you remove your finger from the button while the shutter is open. The camera's shutter speed/mode selector can be set at any position. At B however, the shutter remains open for as long as you depress the shutter release button; the film is then wound to the next frame when you take your finger off the button.

For single-frame shooting, it is recommended that you set the firing rate selector at the L position. Setting at the H position is possible, but, because the film is wound faster, you must be careful to remove your finger immediately.

CONTROLS IN DETAIL—continued



Manual Shooting

You can wind the film manually by operating the camera's film advance lever in the normal manner. Turn the motor drive off before shooting manually.

Note: To begin shooting with the MD-14 again, just slide the H-L firing rate selector to the H or L position after completely advancing the film or just after the shutter is released.

TIPS ON MOTOR DRIVE CARE

1. Always keep the motor drive's connecting parts (electrical contacts ⑧, coupling prong ⑫, etc.) clean, as dust or smudges might prevent the motor drive from operating properly.
2. Do not attempt to turn the motor drive coupling prong with your hand, as this might cause a malfunction.
3. If the film reaches the end of the roll before the MD-14's film-advance operation is completed, the motor drive may not operate properly when the next film cartridge is loaded into the camera. If this happens, use the camera's film advance lever to wind the film initially; after that, the motor drive will operate normally.
4. When not actually taking pictures, the MD-14 should be turned off.

OPTIMUM BATTERY PERFORMANCE

- 1. New batteries.** Between manufacture and first use, all batteries exhibit some drain. Therefore, care should be taken to purchase the newest (and freshest) ones possible. To help you do this, some manufacturers stamp the date of manufacture on the bottom of each battery. Ask your camera dealer for assistance in interpreting the codes.
- 2. Temperature.** Battery life ratings are based on operation at around 25°C (68°F). At other temperatures, battery life is shortened. At 0°C, for instance, battery life is shortened by as much as two-thirds. Spare batteries should therefore be kept available if operation in low temperatures is anticipated.
- 3. Continuous use.** Batteries are drained much more quickly by continuous use than by intermittent use.
- 4. Storage.** When not in use, the batteries should be removed to prevent damage from leakage. To minimize drain during the period of disuse, store the batteries in a cool, dry place.
- 5. Battery brands.** Do not use mixed brands of batteries, nor batteries with different model numbers. Also, avoid mixing new and old batteries since proper performance will not be obtained and battery leakage into your MD-14 may occur.
- 6. Disposal.** Do not dispose of batteries by burning. Also, for safety's sake, do not disassemble batteries when disposing.
- 7. Polarity.** When installing batteries, observe the voltage polarities carefully. Reversal of the positive (+) and negative (-) terminals may result in leakage. If leakage should occur, clean carefully or take your MD-14 to your dealer.

SPECIFICATIONS

Camera fitting
Shutter release

Nikon FG, EM
Via camera's shutter release button

LED indicator

Lights up during motor drive operation and when film reaches the end of the roll

Firing rate

Choice of 3.2 fps or 2 fps via H-L firing rate selector; single-frame operation also possible at H or L setting by quickly depressing shutter release button

Power switch

At OFF position, the motor drive is off; at the H or L position, the motor drive is on

Usable shutter speeds

In continuous shooting, all settings except B; in single-frame shooting, all settings
Eight 1.5V AA-type penlight batteries

Rewind slide

Coupling to the camera's rewind button
Approx. 140mm(W)x91.5mm(H)x64mm(D)

Weight

Approx. 350g (without batteries)

Power source

Eight 1.5V AA-type penlight batteries

Number of 36-exp. rolls

Approx. 50 rolls in continuous shooting with manganese batteries (at normal temperatures)