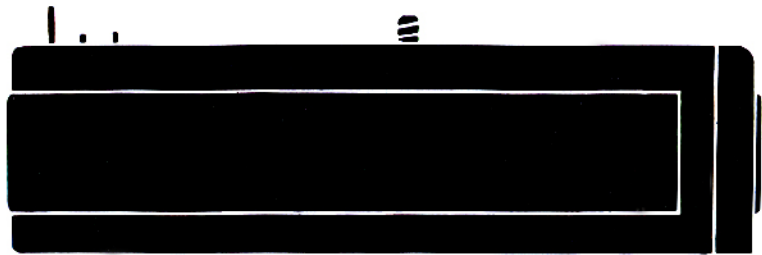


# MINOLTA AUTO WINDER D



OWNER'S MANUAL

Ⓔ

Specially designed for use on the Minolta XD cameras, your Auto Winder D attaches to the camera body in a few seconds. It advances film and resets the XD for the next exposure automatically after each one is taken in single-frame or continuous operation up to two frames per second, stopping automatically at the end of each cartridge. It has a handy monitor lamp and permits multiple exposures and film rewinding while attached. The highly efficient coreless motor winds well over 150 cartridges per charge with Ni-Cd batteries, and also uses ordinary or alkaline penlight cells. Smallest and lightest to date, the Auto Winder D is designed for optimum total balance and lightness of the camera/winder combination.

Before using your winder for the first time, please read this manual all the way through — or at least far enough to cover your own picture-taking needs — while loading batteries, attaching to camera, and handling and acquainting yourself with the unit and its parts and features. This way, you can take good pictures and begin to realize the potential of your Auto Winder D right from the start.

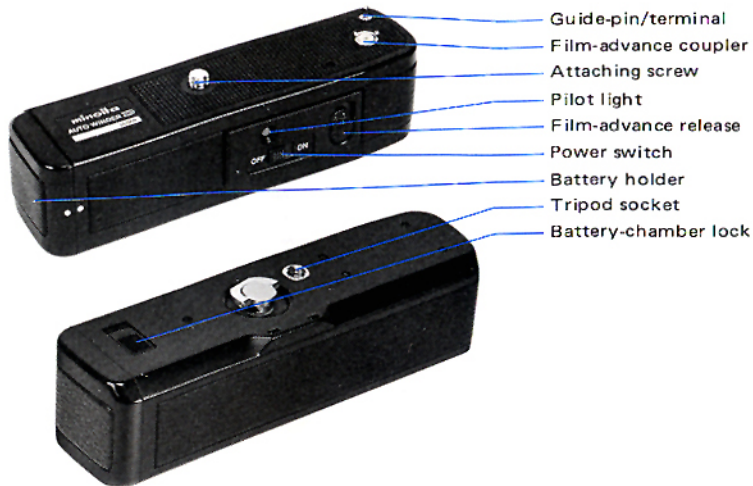


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## NAMES OF PARTS

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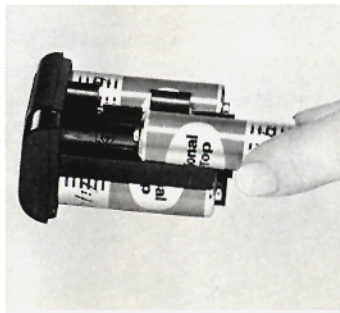
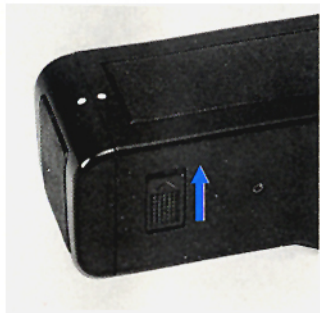


## BATTERIES

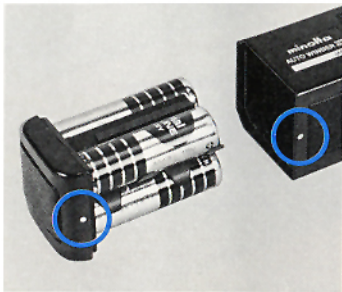
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### Installation

1. With power switch at "OFF," slide the battery-chamber lock in the direction of the arrow and remove the battery holder.
2. Insert four penlight (AA-size) 1.5-volt alkaline, Ni-Cd, or sealed carbon-zinc batteries with plus (+) and minus (−) ends positioned as indicated in the battery holder.



- 4 3. Insert the battery holder into the winder body so that the white marks are on the same side and snap it securely into place. (It is shaped so that it will not seat properly if the white marks are not on the same side.)



#### CAUTION

- When replacing batteries, be sure to change all four batteries at one time. If exhausted batteries are used with fresh ones, or if different types of batteries are used together, there is a possibility of battery leakage or explosion.
- If the winder does not operate after replacing the batteries, cock the shutter once manually using the film-advance lever. This should recycle the winder mechanism, and normal operation can be resumed.
- Do not attempt to charge alkaline or carbon-zinc batteries as this could cause battery leakage or explosion.
- If the winder is not to be used for two weeks or more, batteries should be removed.

## ATTACHING AND REMOVING

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### Cold-weather operation

Batteries generally decrease in capacity as the temperature goes down, and the amount of film the winder can advance per set lessens accordingly. Alkaline and sealed carbon-zinc batteries can be used in temperatures down to  $0^{\circ}\text{C}$  ( $32^{\circ}\text{F}$ ) while nickel-cadmium batteries may be used in temperatures as low as  $-20^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$ ). It is thus recommended that the winder be loaded with fresh batteries for use in cold weather and that you carry fresh spares in a warm inside coat pocket for replacement if necessary during such operation.

### To attach

1. With the power switch at "OFF", insert the auto winder's guide-pin/terminal into the camera's winder-pin socket and align the attaching screw with the tripod socket on the bottom of the camera.
2. Fold out the attaching screw and turn it clockwise until the winder is securely in place.



## 6 To remove

1. With the power switch at "OFF," fold out the attaching screw and turn it counterclockwise out of the camera's tripod socket.
2. Separate the winder and camera, making sure the guide-pin/terminal is drawn straight out of the winder-pin socket.



## CAUTION

Do not attach the winder to the camera with the winder's power switch at "ON" as this may cause damage to the camera.

## NOTE

- Because the bellows supports extend behind the body mount, the XD with auto winder can not be used on the Auto Bellows I without modification. For information about modification of your Auto Bellows I contact an authorized Minolta service facility.
- Be sure to clean the guide-pin/terminal with a clean dry cloth as proper electrical contact with the XD will not be made if allowed to get dirty.



## OPERATION

### Normal winding

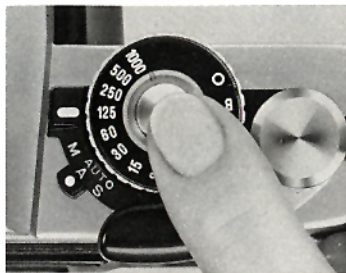
With serviceable batteries loaded and winder attached to the camera:

1. Turn the power switch to "ON."



2. To make a single exposure, depress the operating button to trip the shutter and immediately release the button. (The winder will automatically advance the film when the exposure is complete.) when the operating button is held in its release position, successive exposures will be made and the

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winder will advance the film after each one at a rate of up to two frames per second. In either single-frame or continuous operation, the pilot light will come on during each advance cycle.

3. At the end of each cartridge, the winder will automatically stop, and the pilot light will stay lit.

#### CAUTION

Do not release the battery holder while the winder is operating as this could interrupt the winding cycle. If this happens and replacing the holder does not restore winder operation, cock the shutter once manually using the film-advance lever. The winder mechanism should then be recycled, and normal operation can be resumed.

#### NOTE

- Excess tension on the film may stop the winder drive mechanism in mid-cycle before the film is exhausted; the pilot light will also remain lit. Should this happen, move the winder's power switch to "OFF" and then to "ON." This should reset the winder and pilot light for normal operation. If the winder still does not operate, replace the film cartridge and/or batteries.
- When the camera's shutter-speed selector is set at "B" or "O" the winder will advance after the operating button is released.
- During winder operation, the advance lever should be kept at its rest position.
- Keep the winder's power switch at "OFF" when the winder is not being used.

### With Auto Electroflash 200X

If Auto Electroflash 200X is to be used with the XD cameras and Auto Winder D in successive flash operation, be sure to use only freshly charged Ni-Cd batteries in the flash. If partially charged or other batteries are used, the flash may not synchronize properly with the camera causing overexposures to be made.

As the capacity of Ni-Cd batteries varies with age, state of charge, the 200X, in some cases may not synchronize properly with the camera after 40 successive winder exposures.

When using Ni-Cd batteries other than those sold by Minolta, be sure that they are of the low resistance type. Using high resistance type batteries in the Autoflash 200X could cause camera synchronization problems in winder operation.

### Manual advance

The film can be advanced manually with the winder attached if desired, whether or not battery power is sufficient. To do so, it is necessary to make sure the power switch is at "OFF" before releasing the shutter. Generally speaking, however, to reduce the size and weight of the camera, you will probably want to detach the winder when it is not in use.

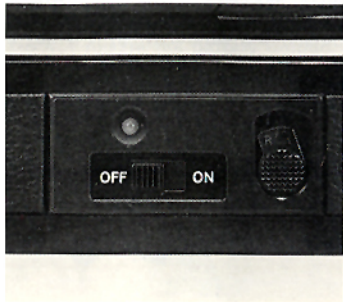


## REWINDING FILM

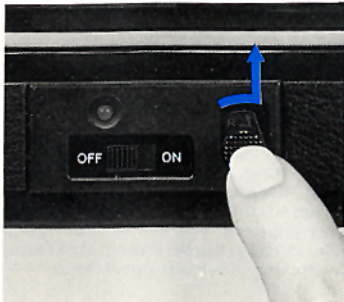
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**When the auto winder is attached:**

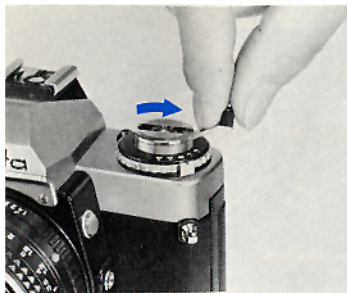
1. Move the power switch to "OFF."



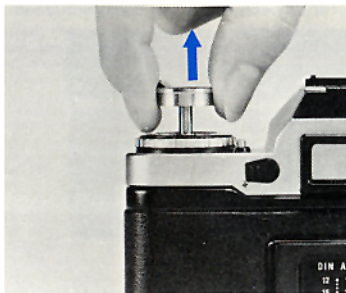
2. Turn the auto winder's film-advance release to the right as far as it will go and slide it into the indentation in the direction of the arrow until a faint click is heard.



3. Fold out the rewind crank and turn it in the direction indicated by the arrow on it until the red Safe Load Signal bar moves out of the window to the left. You will then feel tension on the film increase and disappear, and the crank will turn freely.



4. When you are certain that the film is completely rewound, pull the back-cover release knob to open the back and remove the cartridge.

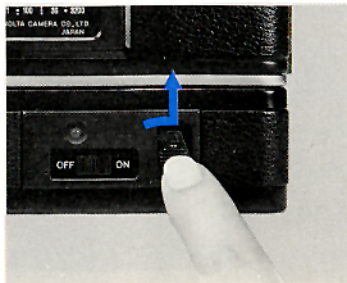


## MULTIPLE EXPOSURES

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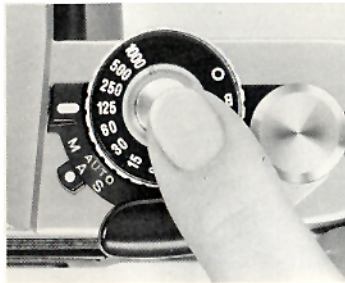
To intentionally make more than one exposure on a single frame of film:

1. Turn the auto winder's film-advance release to the right as far as it will go and slide it into the indentation in the direction of the arrow until a faint click indicates the mechanism has been actuated.



(Do not hold the film-advance release in this position while the film is advanced, let it snap back to its rest position.)

2. Push the shutter release to make your first exposure. (The winder will operate to recock the shutter for the next exposure, but the film will not advance.)



3. Make your second exposure. (The winder will automatically advance the film and recock the shutter in the usual way.)
4. If you wish to make more than two exposures on the same frame, repeat the steps above as many times as desired, making sure not to actuate the film-advance release before pushing the shutter release for the last time.

The film-advance release may also be held in its actuating position for as many successive exposures on one frame as desired.

#### NOTE

If the film-advance release is not disengaged before the last exposure is made, attach the lens cap and release the shutter two times. This will advance the film and cock the shutter for the next exposure.

**Minolta Ni-Cd Charger NC-2 with batteries**

Nickel-cadmium batteries are usable indefinitely through recharging. They also provide shorter recycling time and are virtually unaffected by usual low temperatures. A compact charger and set of four batteries for use with your Auto Winder D is available as an accessory from Minolta. This can charge either two or four batteries in an eight hour period with lighted LED'S indicating proper installation and charging. The charger is available in Edison (American-type) plug model for direct connection to any 115-volt socket or in corded models with Siemens (European-type) and SAA (Australian and New Zealand-type) plugs for 230-volt alternating current of 50Hz or 60Hz (cycles) only.



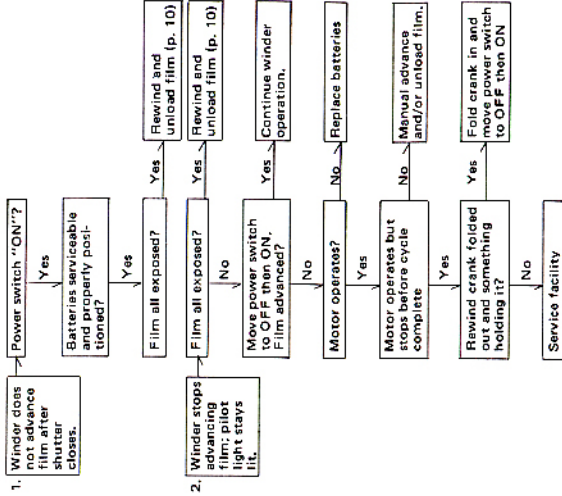


## TROUBLE SHOOTING CHECK-POINTS

The following is provided to help you quickly and easily find and correct simple problems that might be encountered in usual operation and which do not require service. If the steps shown do not restore proper operation, consult an authorized Minolta service installation.

### PROBLEM

### WHAT TO CHECK AND/OR DO



## AUTO WINDER D TECHNICAL DETAILS

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- Type: Automatic film winder for use on Minolta XD camera body
- Function: Operates camera's film-advance/shutter-cocking mechanism as soon as advance lock releases after each exposure
- Winding time: Approx. 0.4 sec.
- Winding speed: Up to 2 fps in successive operation
- Usable shutter speeds: Single-frame/successive operation at all electronic auto/manual speeds 1 through 1/1000 sec. or "X" setting; single-frame only at "0" and "B" mechanical settings
- Usable exposure-control modes: Auto "S" or "A" or manual "M"
- Power source: Four 1.5v AA-size (penlight) cells connected in series (=6v)
- Drive motor: Coreless-type micromotor
- Winding capacity: Successive 36-exp. cartridges per fresh set or full charge of cells at 20° C (68° F)
- |                     |                     |                 |
|---------------------|---------------------|-----------------|
| Sealed carbon-zinc: | Alkaline-manganese: | Nickel-cadmium: |
| Approx. 50*         | Approx. 70*         | Approx. 150*    |
- \* as determined by Minolta's standard testing method
- Other: Tension-type switch to stop advance at end of cartridge; LED monitor light, film-advance release.
- Size and weight: 35 x 37 x 136mm (1-3/8 x 1-7/16 x 5-3/8 in.)  
205g (7-3/16 oz.) without cells

Specifications subject to change without notice

## CARE AND STORAGE

- Your Auto Winder D may be wiped with a silicone-treated cloth to clean it. Do not allow alcohol or chemicals of any kind to touch its surface.
- Do not keep the unit in places subject to high temperature, high humidity, dust or dirt. Store it in a cool, well ventilated place.
- Remove batteries whenever the winder is not to be used for more than two weeks, as old batteries may leak causing damage to electrical connections.

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