

# The Nikkormat FTN Camera



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### Code numbers:

Nikkormat FTN Body, chrome  
Nikkormat FTN Body, black

No. 100-27-001  
No. 100-27-041

Nikkormat FTN Body, chrome, with split-image screen  
Nikkormat FTN Body, black, with split-image screen

No. 100-27-002  
No. 100-27-042

## A. General Introduction

As a "sister" of the Nikon F and F2 cameras, Nikkormat FTn has been widely used by professionals and advanced amateurs the world over. Incorporating various outstanding features, it accepts all the interchangeable Nikkor lenses and most of the accessories offered by the Nikon System. It differs from the more sophisticated Nikon models only in that it does not accept the motor drive backs and that the viewfinder and focusing screen are not interchangeable. The camera body is made up of 685 component parts. The major features of the Nikkormat FTn include:

- Sturdy metal focal plane shutter
- Top X synch at 1/125 sec
- Built-in center-weighted through-the-lens exposure meter
- Film advance lever, operated in a single sweep. Also serves as a meter on-off switch
- Depth-of-field preview control
- Independent mirror lock-up

## B. Specifications

**Type:**  
35mm single-lens reflex.

**Shutter:**  
Metal focal plane (travels vertically). Shutter speeds from 1 to 1/1000 sec. plus B. Built-in self-timer (about 8 sec.).

**Synchronization:**  
X and M synch terminals. X synch at 1/125 sec. or slower. FP- and MF-class bulbs also usable.

**Viewing/focusing:**  
Eye-level prism finder with built-in exposure meter. Shutter speed visible in finder viewfield. Focusing screen with matte/Fresnel field and central microprism grid. Depth-of-field preview button provided.

**Exposure metering:**  
Through-the-lens center-weighted measurement at full opening.  
CdS exposure meter powered by a 1.3V mercury battery. Meter needle visible in the finder viewfield and atop the body.  
Range of metering: EV3 — EV17 at ASA 100 (e.g. f/1.4, 1/4 sec. — f/11, 1/1000 sec.).  
ASA sensitivity setting: 12 — 1600.  
Maximum aperture setting: f/1.2 — f/5.6.

Designed with sharp and clear-cut lines, the external appearance of the Nikkormat camera body gives an overall feeling of mechanical precision and dependability associated with professional use.

The body is made of die-cast aluminum alloy and finished in chrome plating. The Nikkormat body is also available in black finish.

Meter diaphragm coupling: f/1.2 — f/32.  
Couples with both diaphragm and shutter speed dial.

**Other features:**  
Single-stroke film advance lever (135°, throw angle 20°) also serves for on-off switch of the meter.  
Independent mirror lock-up.  
Automatic "0" resetting frame counter.  
Crank-type film rewinding.  
Accepts most accessories for Nikon F and Nikon F2 cameras.

**Lenses:**  
Standard: 50mm f/2, 50mm f/1.4 and 55mm f/1.2 Nikkor Auto lenses.  
Nikon F bayonet mount.  
More than 40 Nikkor interchangeable lenses available.

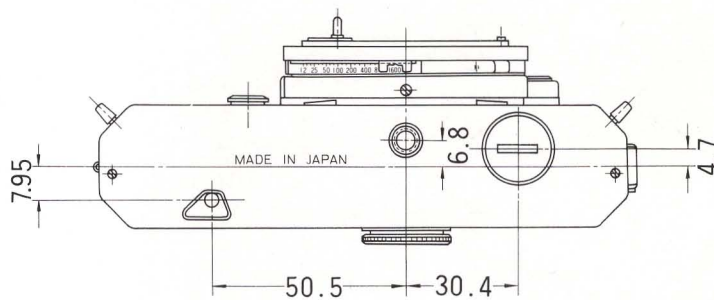
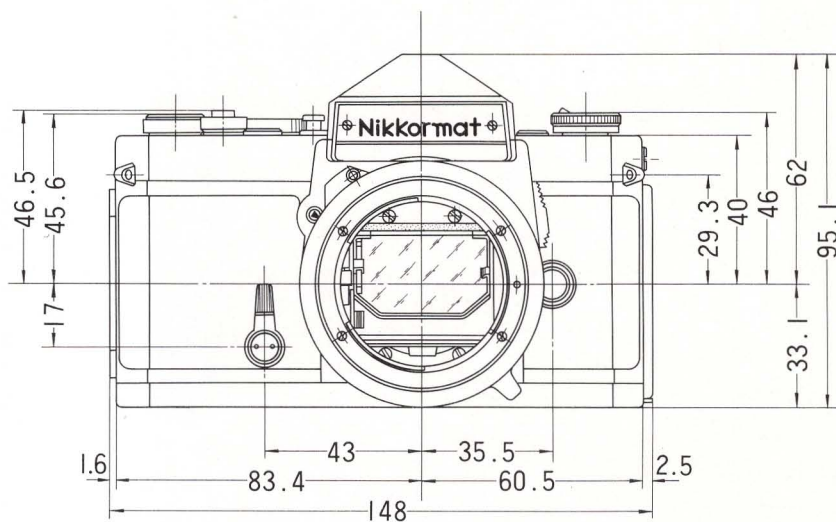
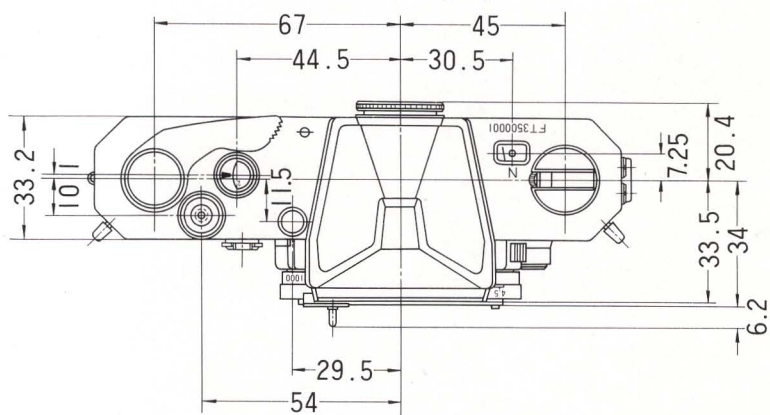
**Dimensions (body):**  
148 x 95 x 54mm (5-13/16 x 3-3/4 x 2-1/8 in)

**Weight (body):**  
765g (1.68 lb)

**Remarks:**  
Available in satin chrome or black finish.

Technical drawing of the ASA 1753 B machine, showing a side profile. The drawing includes the following details:

- Dimensions:**
  - Overall width: 300
  - Overall height: 1000
  - Internal width: 175
  - Internal height: 530
- Labels:**
  - ASA 1753 B
  - ASA 1753 B
- Features:**
  - A large, angled top cover.
  - A control panel on the right side with a dial and buttons.
  - A series of rollers or guides at the bottom.



MB-3



## C. Nomenclature

**Film rewind crank**

**Meter window**

A meter needle appears to show correct exposure.

**Film advance lever**

In a single stroke, advances the film, cocks the shutter and operates the frame counter. Also serves as 'on-off' switch of the meter.

**Meter switch index**

**Frame counter**

Shows the number of frames exposed.

**Shutter release button**

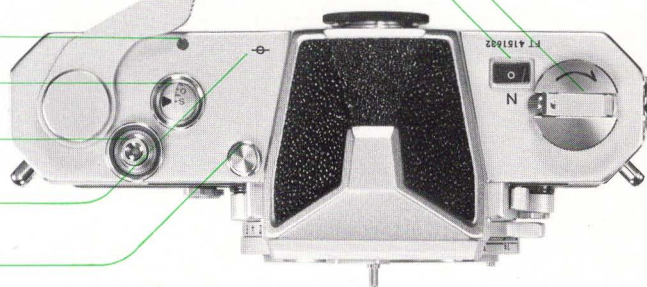
Screw-threaded for cable release.

**Film plane indicator**

Indicates exact position of the film plane.

**Depth-of-field preview button**

Depress to preview the depth of field of the image at the preselected aperture setting.



**Neck strap eyelet**

**Shutter speed index**

**Self-timer**

Trips the shutter in about 8 seconds' delay.

**Mirror lock**

Locks the mirror in the "up" position by being slid downward.

**Lens-lock release button**

Press to unlock the lens for removing.

**Shutter speed lever**

**Synch terminals**

"M" terminal for flashbulbs and "X" terminal for electronic flash.

**Meter coupling pin**

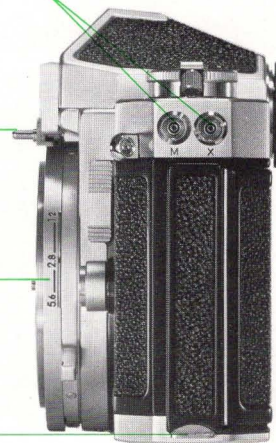
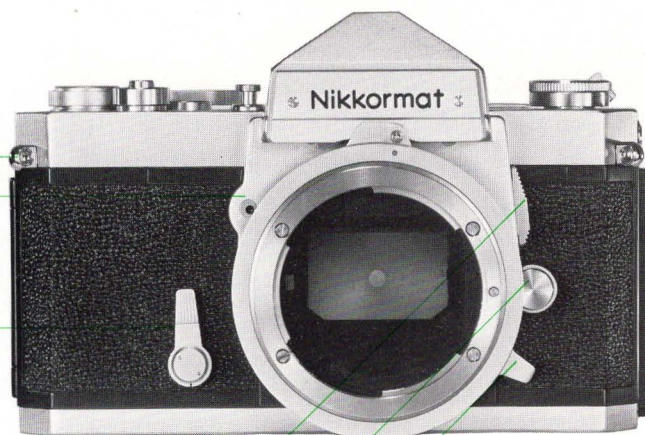
Fits the coupling prong on the lens aperture ring.

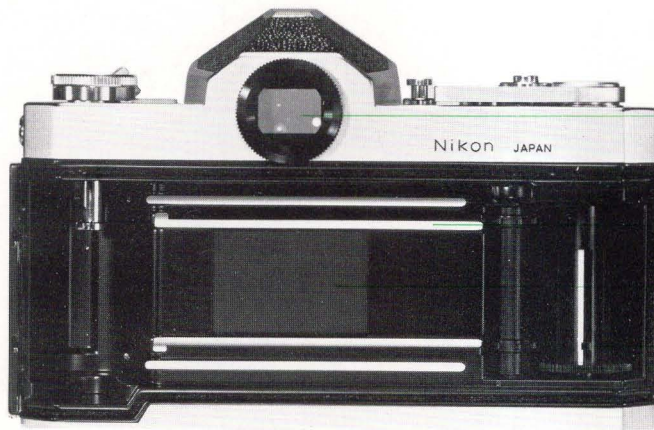
**Maximum aperture scale**

For checking if the meter is set for maximum aperture of the lens in use.

**Camera back latch**

Pull down to open the camera back.



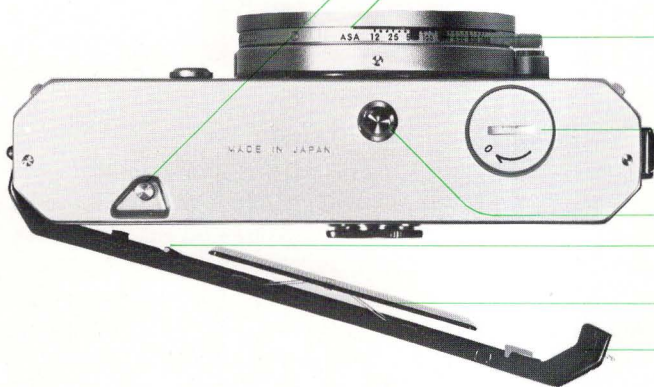


● **Finder eyepiece**  
Accepts various screw-in accessories.

● **Film guide rails**

● **Metal shutter curtains**

● **Take-up spool**  
● **Sprockets**



● **Film rewind button**  
Depress to rewind the film.

● **ASA film speed scale**  
For setting the film speed from ASA12 to 1600 for exposure metering.

● **ASA film speed index**  
For adjustment of the meter to the speed of the film in use.

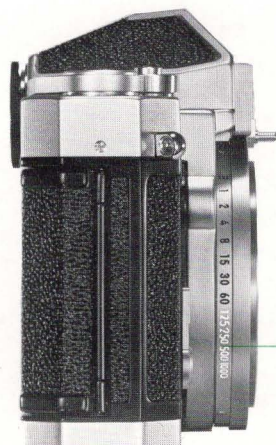
● **Battery chamber**  
Houses a 1.3V mercury battery that powers the meter.

● **Tripod socket**

● **Film roller**

● **Film pressure plate**

● **Camera back**  
Hinged to swing open.



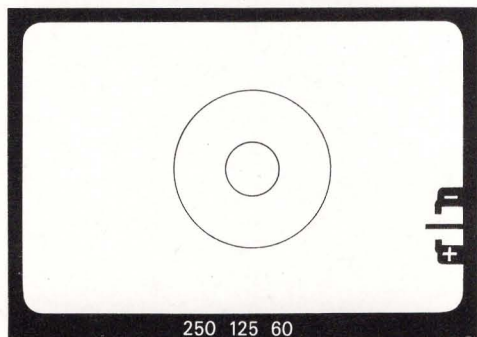
● **Shutter speed ring**  
Speeds range from 1 to 1/1000 sec. plus B.



## D. Features

### 1. Viewfinder and Focusing Screen

The Nikkormat camera features a fixed eye-level finder with a built-in exposure meter. Its brightness ensures easy and accurate viewing and focusing. The eyepiece frame of the finder accepts an accessory shoe, a right angle viewing attachment, an eyepiece magnifier, eyepiece correction lenses, etc.



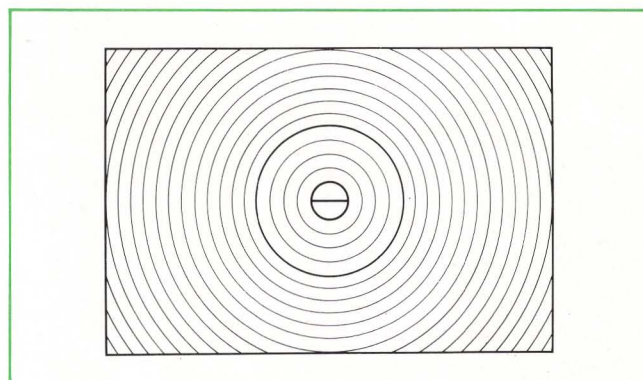
The Nikkormat FT<sub>N</sub> finder provides center-weighted through-the-lens exposure metering that is coupled to the shutter speed and lens diaphragm. The meter reads light over the entire picture area in the viewfinder, but favors the central 12mm-diameter reference circle. Making use of the automatic diaphragm of the Nikkor Auto lenses, the exposure meter measures light at the maximum aperture of the lens in use. The needle appears on the right side of the picture field, between the plus and minus marks which indicate over- and under-exposures respectively. The preset shutter speed is given in white, below the viewed subject, between two values (in yellow) that represent the "neighboring" shutter speeds. The needle also appears atop the camera body. The metering range extends from EV3 to EV17 at ASA100, the aperture coupling range from f/1.2 to f/32.

The ASA film speed scale is provided on the shutter speed ring to set the film speed into the exposure meter. The scale is numbered from ASA 12 to 1600, with two dots between the numbers indicating intermediate values such as 32, 64, 80, etc. The setting is done by sliding the slotted ASA index pointer to line it up with the ASA number of the film in use.



Through-the-lens exposure metering at full aperture requires setting the maximum aperture of a lens in use into the meter. After mounting the lens, just turn the aperture ring all the way to the minimum f-stop setting, then to the opposite direction as far as it will go. The maximum aperture thus set can be confirmed with the scale provided on a ring next to the shutter speed ring. The scale ranges from f/1.2 to f/5.6, with the f-numbers 1.2, 2.8 and 5.6 marked on the ring. The exposure meter is powered by a 1.3V mercury battery embedded in the battery chamber on the camera baseplate. The meter is turned "on" or "off" by means of the film advance lever.

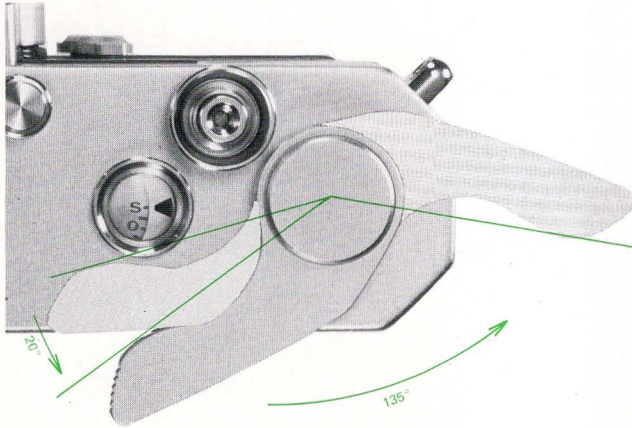
The diaphragm of a Nikkor Auto lens is kept fully open except when the shutter is released. This gives the brightest possible and the most shallow image on the focusing screen for easy and accurate viewing/focusing. The Nikkormat FT<sub>N</sub> camera is equipped with a focusing screen which consists of a matte/Fresnel with a central 4mm-diameter microprism spot\*. The microprism produces very sharp and crisp image only when it is in focus.



\* Also available on order is the Nikkormat camera equipped with a focusing screen that consists of a matte/Fresnel field with a split-image rangefinder spot.

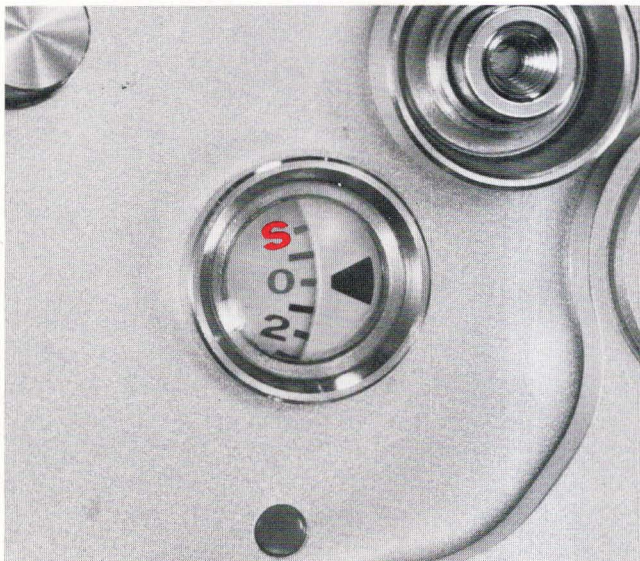


## 2. Film Advance Lever



The film advance lever has a winding angle of 135° with ample clearance of 20° for the thumb, to enable quick advance to the next frame. In one sweep, it simultaneously winds the film, cocks the shutter and operates the frame counter, and springs back to its original position after each stroke. A built-in locking device prevents the shutter from being released before it is fully cocked and the film is advanced one full frame. The film advance lever also serves as an on/off switch for the exposure meter built in the finder. The meter is switched off when the lever is pressed against the camera body and turned on when the lever is moved out from its original position to reveal a red dot at the roof of the camera body.

## 3. Frame Counter

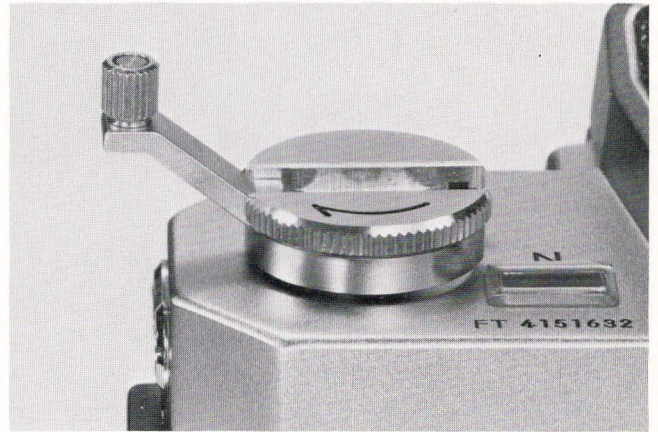


A circular window on the top left side of the camera body, the frame counter indicates the number of frames exposed.

Every other frame is numbered, from 0 to 36, and the magnifying glass on the circular window ensures easy reading. The numerals 20 and 36, marked in red, correspond to the number of frames in standard film cartridges.

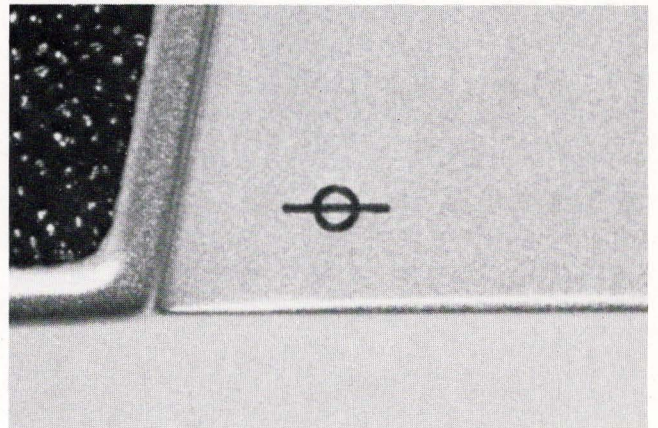
The counter stops at 36, and resets itself to "S"—two frames before "0"—when the camera back is opened for reloading.

## 4. Film Rewind Crank



The film rewind crank is for smooth and rapid rewinding of film. It can be folded into the rewind knob when not in use.

## 5. Film Plane Indicator



The position of the film plane in the camera body is indicated by the (⊖) mark on the top of the camera body. This is a useful feature in close-ups or macrophotography, for which the photographer is required to know the exact film-to-subject distance.



## 6. Shutter Speed Ring



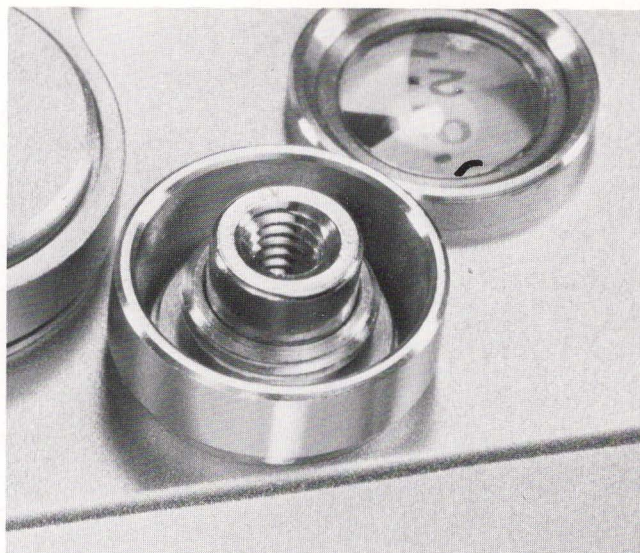
Shutter speeds: 1, 1/2, 1/4, 1/8, 1/15, 1/30, 1/60, 1/125, 1/250, 1/500 and 1/1000 second plus B.

The shutter speeds of the Nikkormat camera are controlled by a ring on the base of the camera lens mount.

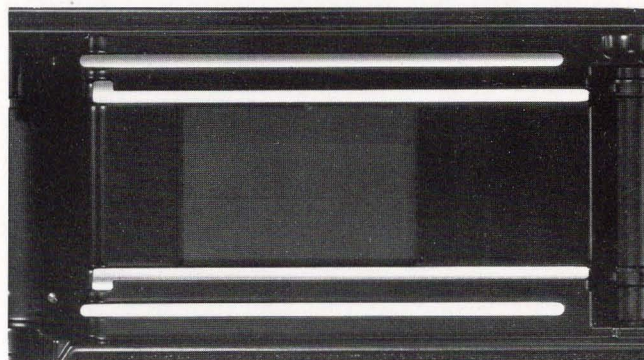
The shutter speed ring, complete with click-stops, has a lever for easy handling. The ring is engraved with shutter speeds from 1 to 1/1000 second and B. The speeds from 1/250 to 1/1000 second are marked in red to indicate that they do not permit synchronization with an electronic flash unit. The shutter speed is set by turning the ring until the desired speed aligns with the black indicator dot on the front of the camera body. Intermediate shutter speed settings are possible at speeds between 1/250 and 1/1000 second. The shutter speed can be set before or after winding the film. The preset value appears in the viewfinder, so that the photographer can adjust the shutter speed ring without taking his eye off the finder.

## 7. Shutter Release Button

The shutter release button, located at the top front of the camera, is threaded to accept the shutter cable release.



## 8. Shutter

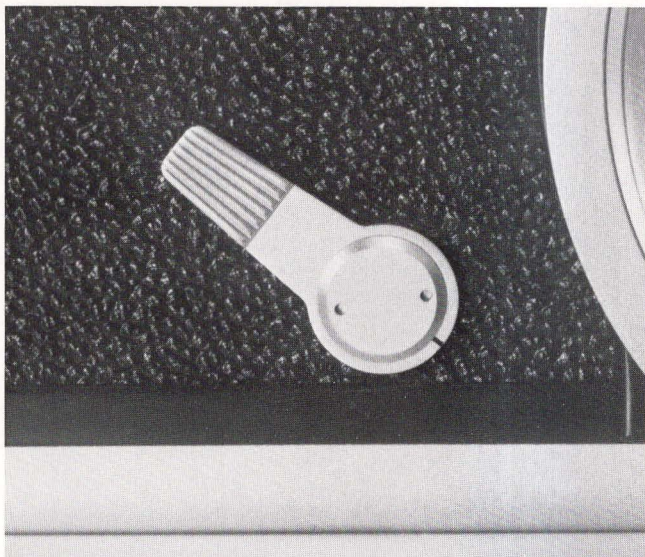


The metal focal plane shutter is of six-bladed design (three blades each for the front and rear curtains). The curtains travel vertically across the film gate in about 6.5 milliseconds. At speeds slower than 1/125 second, the rear curtain starts moving after the front curtain is fully opened. Hence, the electronic flash synchronizes at shutter speeds of 1/125 second or slower.

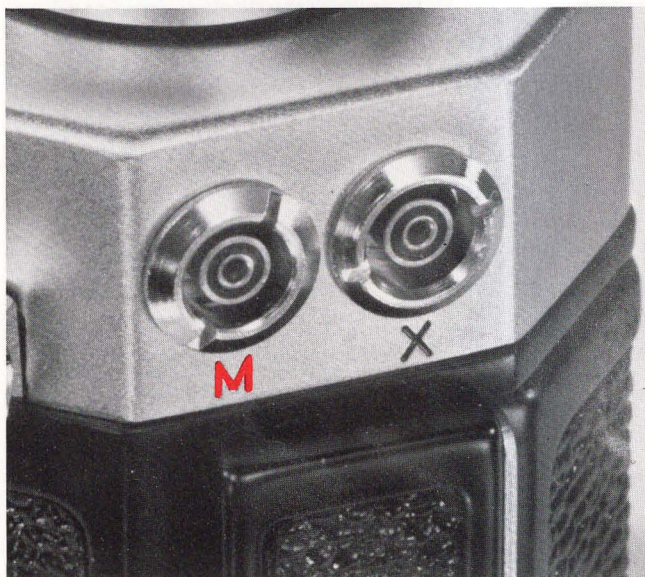
## 9. Self-Timer

The self-timer is positioned in front, at the lower left side of the body, and can be set by turning the lever some 50° counterclockwise until it stops. It permits a delayed exposure of about 8 seconds, at any shutter speed from 1 to 1/1000 second. The self-timer can be set before or after winding the film, since it is independent of the shutter mechanism.





## 10. Flash Synchronization



The Nikkormat has two flash terminals, marked M (in red) and X (in black), on the right side of the camera body. The M-terminal is used with M, FP and MF class flasbulbs.

The M- and FP-class bulbs synchronize with the camera at all shutter speeds from B to 1/1000 second, and the MF-class bulbs at speeds up to 1/60 second. The X-terminal is designed for electronic flash units with standard PC synch cord. The electronic flash synchronizes with the camera at 1/125 second, or slower.

An accessory shoe must be used when attaching the Nikon BC-7 flash unit, clip-on type flash units or other accessories onto the Nikkormat camera. The base of the accessory shoe is fixed between the viewfinder housing and the finder eyepiece.

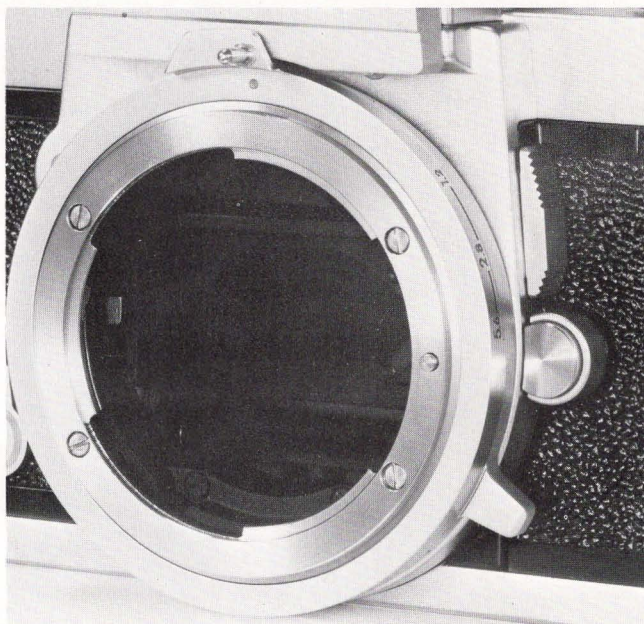
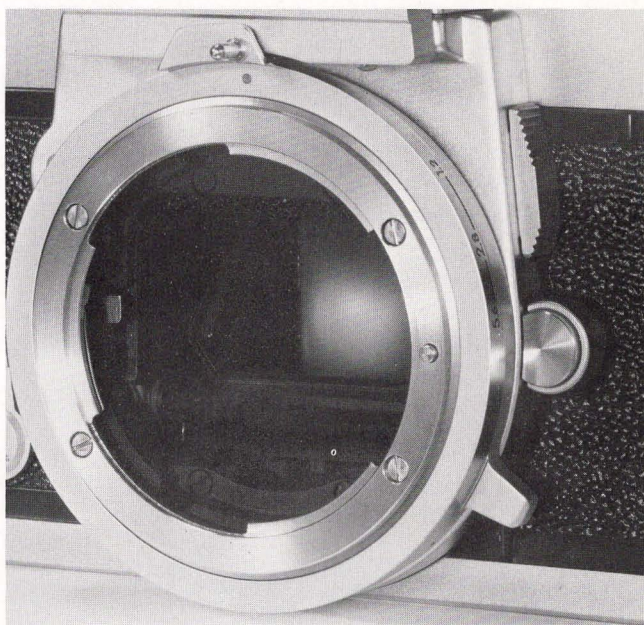
## 11. Reflex Mirror

The instant return reflex mirror of the Nikkormat FT<sub>N</sub> can be lifted and locked up, out of the optical path, by means of the mirror locking knob located on the upper right side of the camera scutcheon.

The mirror lifts as the locking knob is slid downward, and it remains locked up until the knob is pushed upward, when it returns to its original viewing position.

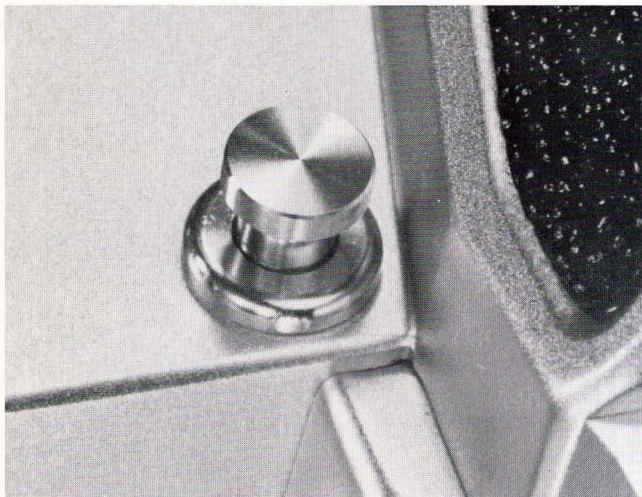
The mirror can be locked up independently before or after the shutter release or film winding.

The mirror lock-up is necessary when using some fisheye lenses, or for other applications requiring an absolute vibration-free condition.





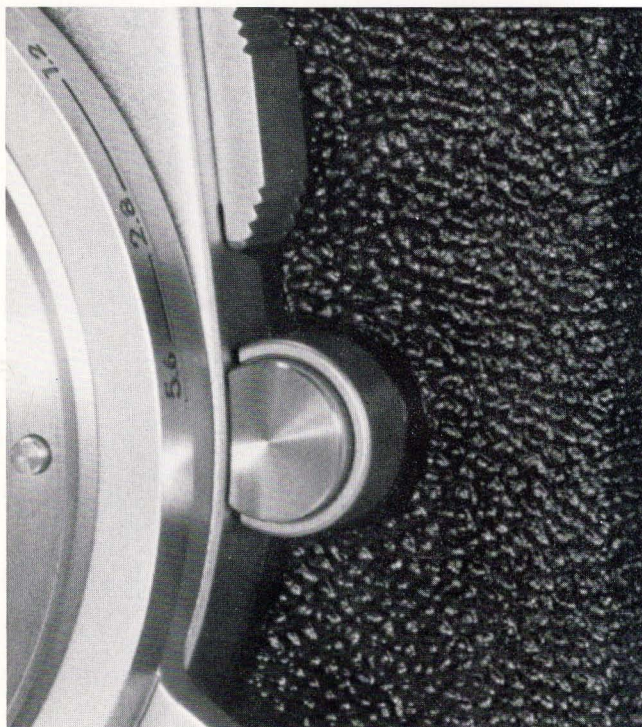
## 12. Depth-of-Field Preview Button



The depth-of-field preview button is conveniently located near the shutter release button on top of the camera body. When the button is pressed, the lens diaphragm stops down to the preselected aperture, permitting the photographer to check the depth of field and to make any adjustments in the exposure setting, if necessary.

The depth-of-field preview button is also used for stop-down exposure measurement when using a lens without a meter coupling prong.

## 13. Lens-Lock Release Button



The lens lock-release button is located on the right side, to the front of the camera body. It facilitates the interchange of the bayonet-type Nikkor lenses which can be easily removed from the body by pressing the lens-lock release button and turning the lens clockwise as far as it will go.

## 14. Lens Mount Flange

The broad, specially treated lens mount flange (44mm in diameter) ensures secure seating, correct alignment for all the Nikkor interchangeable lenses.

## 15. Camera Back

The hinged-type camera back of the Nikkormat camera pops open as the release catch is pulled down, making possible speedy and easy loading or unloading of film. When the camera back is opened, the film frame counter resets itself automatically to "S", two frames before "0".

## 16. Tripod Socket

The tripod socket has a standard 1/4" thread and is located in the center of the baseplate of the camera body.