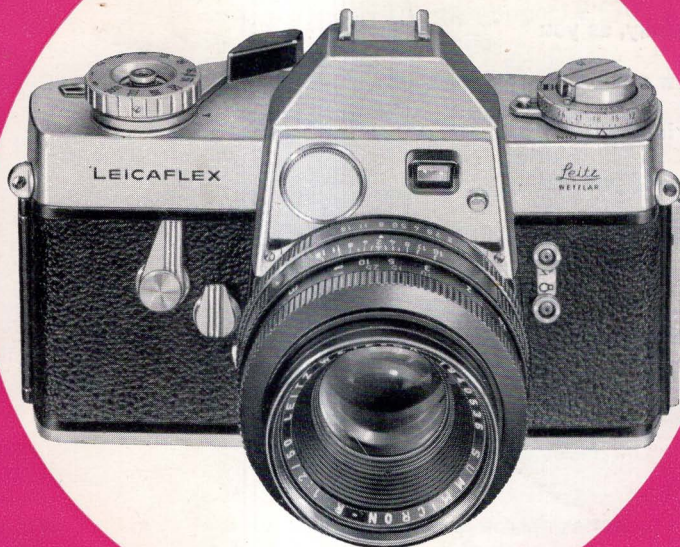


**INSTRUCTIONS**

*Leitz*  
WETZLAR



**LEICAFLEX**

111 - 56 b / Engl.

**You are now a LEICAFLEX® owner . . .**

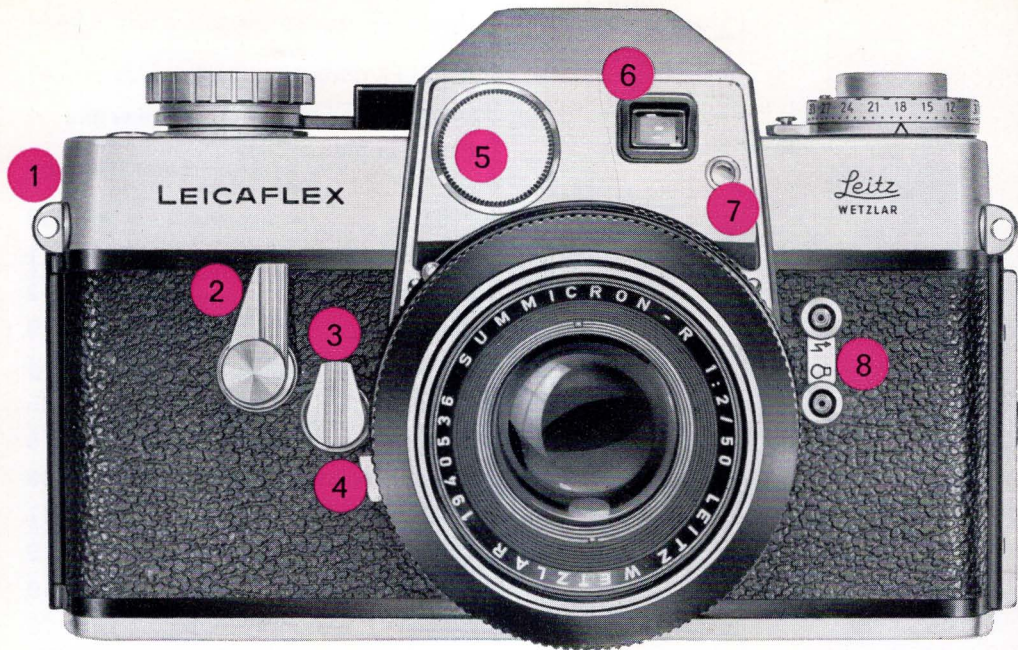
. . . and will want to read these  
instructions carefully, as you  
examine your new camera.

The LEICAFLEX is remarkably  
easy to operate, and you will  
master this precision instrument  
very quickly by trying each  
camera control as it is described  
in these pages.

® = Registered trademark

**ERNST LEITZ GMBH WETZLAR**

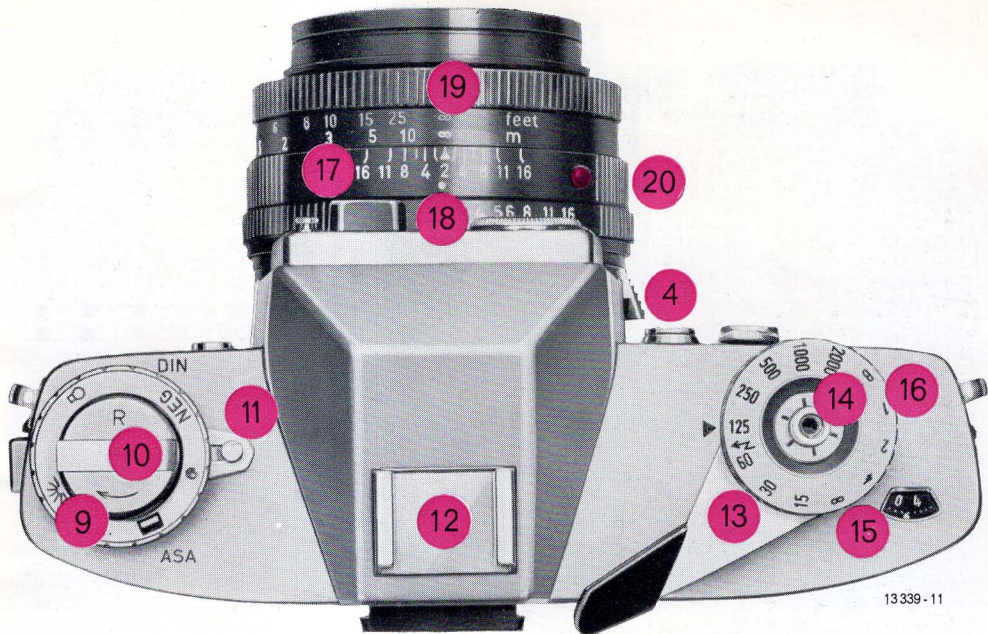
LEICAFLEX parts identification . . . .	4-7
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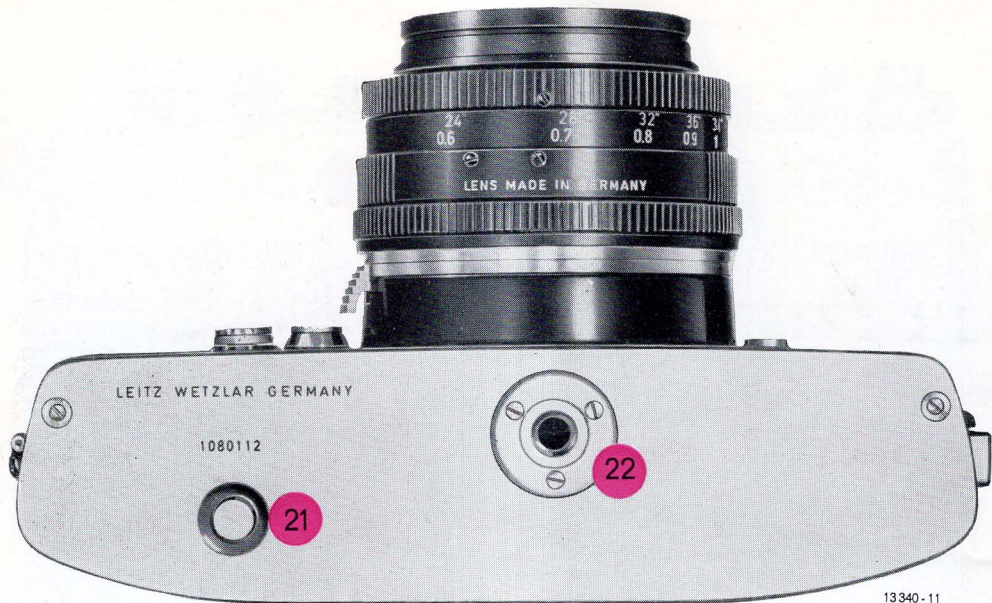
- 1 Strap lugs
- 2 Self-timer
- 3 Mirror control lever
- 4 Lensmount bayonet lock

- 5 Meter battery housing
- 6 Meter window
- 7 Battery-test button
- 8 Twin flash contacts



13 339 - 11

- 
- |  |  |
|--|--|
| 4 Lensmount bayonet lock   | 14 Release-button (threaded for cable-release) |
| 9 Film-type indicator  | 15 Frame counter                               |
| 10 Rapid film-rewind crank                                       | 16 Shutter speed dial                          |
| 11 ASA/DIN scale lock  | 17 Depth-of-field scale                        |
| 12 Accessory shoe  | 18 Auto-aperture preselector ring              |
| 13 Rapid transport lever and on/off switch<br>for exposure meter | 19 Lens focusing ring                          |
|  | 20 Raised red dot for lens changing            |



13340-11

- 
- 21 Film rewind button  
22 Tripod bushing, 1/4"



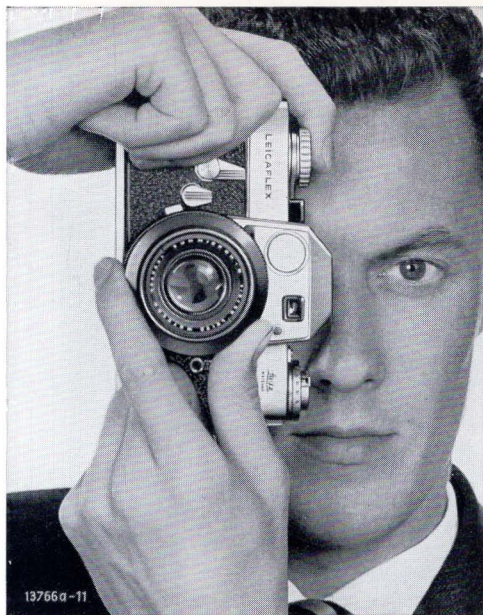
13341 - 11

- 
- 23 Bar-lock for hinged camera back
  - 24 ASA/DIN meter scales
  - 25 Viewfinder eyepiece, with fitting  
for eyepiece correction lenses



### Holding the LEICAFLEX

For steady three-point support, the right hand grasps that side of the camera, with forefinger on the release button and thumb against the transport lever. The left hand cradles the lens from below, and the forehead presses against the camera back.



To make vertical pictures, keep both hands in the same positions described for horizontal shooting, and simply swing the camera into the vertical position. This keeps you in full command of the LEICAFLEX controls, and your fingers perform the same functions in both positions.



The ultra-bright LEICAFLEX viewfinder



25454 -11

## Focusing



25455 - 11

**Shimmering center-spot = Unsharp**

The circular focusing-spot in the center of the LEICAFLEX viewing screen is filled with precision micro-prisms which deflect out-of-focus light rays, but do not affect sharply focused images.



25 457 - 11

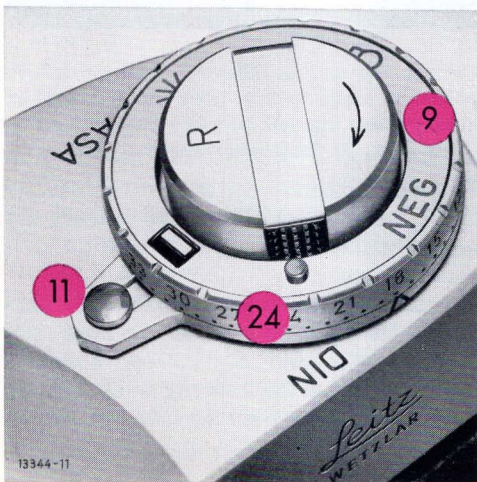
**Clear center-spot = Sharp Focus!**

When a subject centered within the focusing-spot appears sharp, you will notice that the shimmering texture of the spot disappears. Note also that the double images of subject contours fuse into a single sharp outline when the lens is accurately focused.

## Setting the film-speed index

ASA and DIN film-speed indexes are engraved on the scale-ring (24). Holding down the push-button lock (11) permits the scale-ring to be turned to the required ASA/DIN index. The arrow for ASA speeds is at the back of the camera; the DIN arrow at the front.

**Accurate exposure depends upon setting the correct film-speed index!**

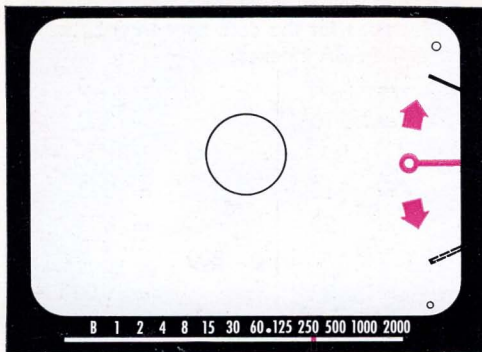


Indexes are engraved from ASA 8 to 6,500 and from DIN 10 to 39. This table shows the ASA values for the dots appearing between engraved ASA indexes:

·	=	8	·	=	250
·	=	10	·	=	320
12			400		
·	=	16	·	=	500
·	=	20	·	=	650
25			800		
·	=	32	·	=	1,000
·	=	40	·	=	1,250
50			1,600		
·	=	64	·	=	2,000
·	=	80	·	=	2,500
100			3,200		
·	=	125	·	=	4,000
·	=	160	·	=	5,000
200			·	=	6,500

The film-type indicator (9) has symbols for black-&-white film (**black-&-white bars**), daylight color reversal film (**sun**), tungsten-type color reversal film (**lamp**) and negative color film (**"NEG"**). The push-button lock (11) serves as the marker for these symbols.

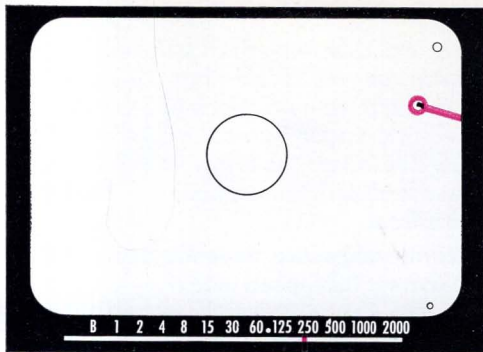
## The built-in exposure meter



25330-11

Movement of the follow-pointer upward toward the larger circle indicates the setting of a larger lens opening, and downward toward the smaller circle a smaller lens aperture.

The LEICAFLEX exposure meter is cross-coupled so that correct exposure can be set by turning either the lens auto-aperture preselector ring (18), or the shutter speed dial (16). It is usually better to start by selecting an appropriate shutter speed, setting the exposure by means of the lens aperture. The speed scale below the viewing field permits rapid correction without removing the eye from the viewfinder.



25331-11

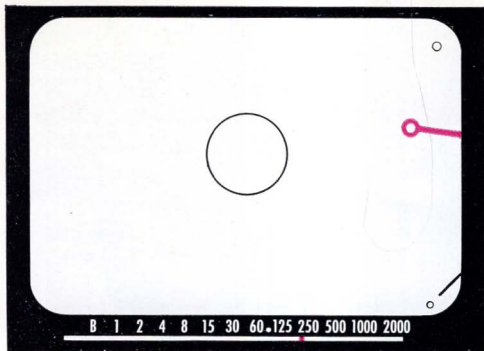
Correct exposure is obtained when the follow-pointer is made to cover the meter needle by turning either the auto-aperture preselector ring of the lens, or the shutter speed selector dial.

Use the focusing-spot to aim the LEICAFLEX meter at an important part of the scene containing a mixture of bright and dark objects.

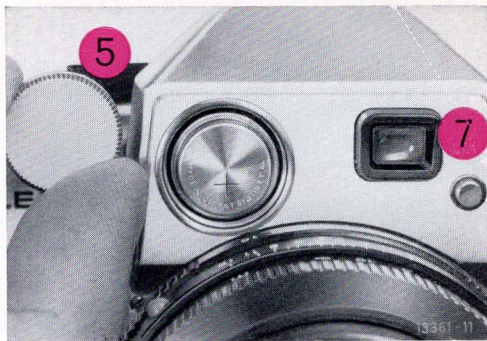
**The LEICAFLEX exposure meter is calibrated for measurements in the horizontal position. For maximum meter accuracy hold the camera horizontally when aligning the follow-pointer over the meter needle.**

The meter's measuring field is approximately equal to the viewing angle of the 90mm lens.

## Testing and changing the LEICAFLEX meter battery



25341-11



The built-in LEICAFLEX CdS exposure meter draws its energy from a **Mallory PX 625 battery (with white ring)**. This battery will normally last for one to two years.

### To test the battery,

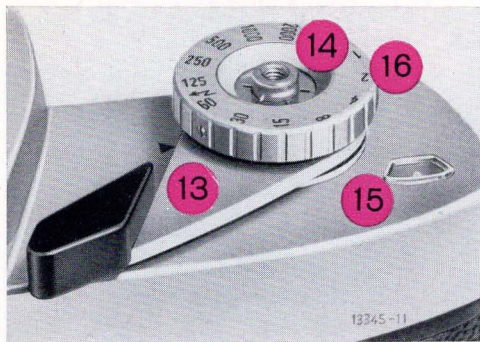
hold the camera horizontally, look through the viewfinder, and press the battery-test button (7) at the front of the camera. If the battery is in good condition, the meter needle will immediately move to the small circle in the lower right-hand corner of the viewing screen.

### To change the battery,

unscrew the cover-cap (5), gripping it by its milled outer edge, and drop the new battery into position so that the side marked PX 625 + faces upward.

**The rapid transport lever (13) serves also as the on/off switch for the exposure meter. To save battery energy, the meter is switched off when the lever is folded in against the camera body.**

## Control center for the right hand . . .

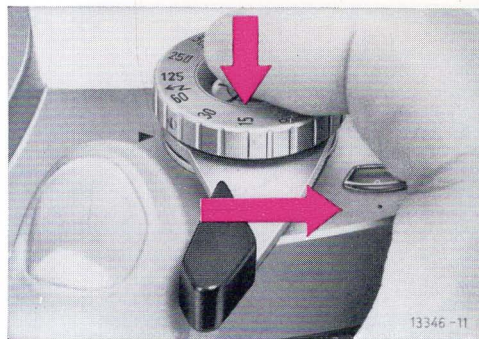


### The rapid-transport lever (13)

advances the film and re-sets the camera controls with a single stroke. Leave this lever in its convenient "ready position" when using the LEICAFLEX.

### The shutter speed selector dial (16)

provides speeds from 1 to  $1/2000$  sec, plus Bulb, and is coupled with the exposure meter follow-pointer. Accurate intermediate speeds can be set at all positions, **except between  $1/4$  and  $1/8$  sec.** The symbol  $\text{⚡}$  =  $1/100$  sec, and is used for synchronizing electronic-flash units.



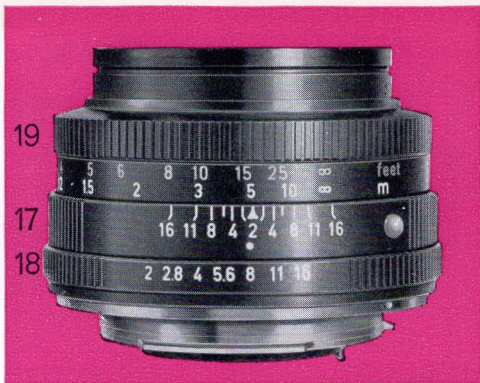
### The release button (14)

is threaded for a standard cable-release such as the LEITZ locking release No. 14067, which is used for making time exposures. Pressing the release starts the following chain of events:

1. mirror swing up,
2. aperture closes down to the preselected value,
3. shutter opens and closes,
4. aperture springs back to full opening,
5. mirror drops back into the viewing position.

## ... and for the left hand

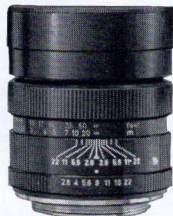
All auto-aperture LEICAFLEX lenses have the same control-ring arrangement: The center ring (17), which carries the depth-of-field scale, does not rotate, and is used for lens changing. Nearest to the camera front is the auto-aperture preselector ring (18) that couples with the exposure meter follow-pointer. The forward ring (19) is for focusing, and carries the foot-and-meter distance scales.



13347-11

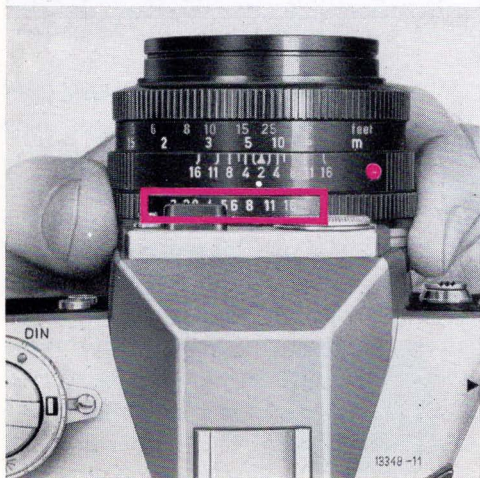


25338-11

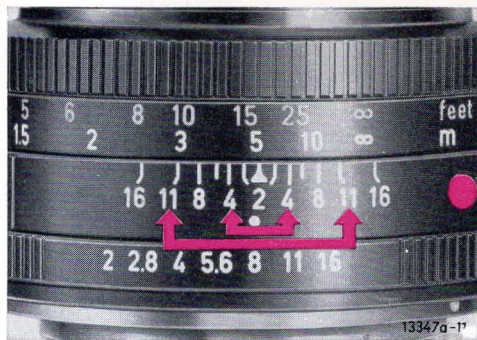


## The automatic lens aperture

remains fully open for maximum viewing and focusing efficiency, except for the brief interval of exposure. The aperture preselector ring (18) has click-stop settings for each aperture and half-aperture. This ring couples to the exposure meter follow-pointer.



## The depth-of-field scale



Distances in front of, and behind, the plane of sharpest focus that will be reproduced with acceptable sharpness are indicated for each lens aperture. The arrows above indicate the depth-of-field for  $f/4$  and  $f/11$ .



## LEICAFLEX lens changing

LEICAFLEX lenses can be inserted and removed regardless of their distance or auto-aperture settings. Grasp the lens by the stationary ring (17), and follow these simple directions:

### To remove the lens,

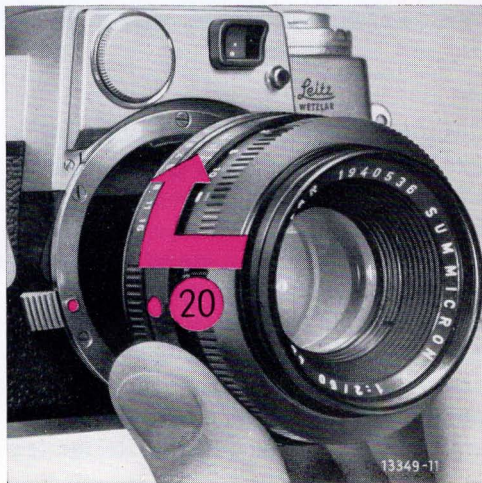
press the release-lock (4), turn the lens to the **left**, and lift out as shown by the arrow below.



### To insert a lens,

align the raised red dot on the lens barrel with the red dot on the lensmount, press the lens straight into the opening, and turn to the **right** (as shown below) until the bayonet clicks audibly in the locked position.

**Avoid lens-changing in direct light!** Turn the open lensmount toward your body to avoid strong illumination.



## Series filters



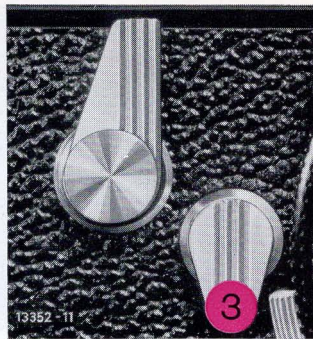
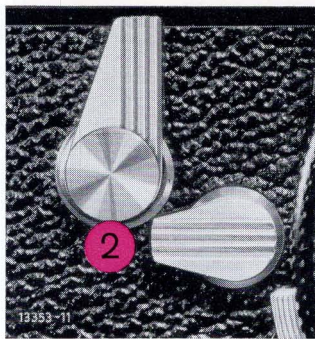
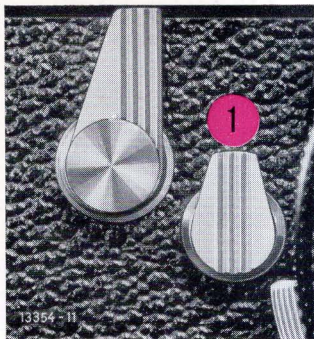
Every LEICAFLEX lens is supplied with a filter-retaining ring (b) engraved with its Series size. The 35- and 50mm LEICAFLEX lenses use Series VI filters; the 90- and 135mm, Series VII. To mount a filter, remove the retaining-ring, drop the filter in, and replace. (If the retaining-ring is screwed in very tightly, do not attempt to unscrew with force. Instead, grasp the ring at any point on its circumference with thumb and forefinger, turning slightly to the left to loosen.)

## Lenshoods



Lenshoods (a) should always be used for best optical quality. The 35- and 50mm LEICAFLEX lenses use the same reversible lenshood (No. 14164), which may be reversed over the lens for easier transport, or when the camera is carried in its ever-ready case. Press the two chromed spring releases before mounting or removing this lenshood. The 90- and 135mm LEICAFLEX lenses have built-on telescoping lenshoods which are simply drawn forward for use.

## The LEICAFLEX mirror-control lever (3)



**Position 1 (UPRIGHT)** = Instant-return mirror, springing up as the release is pressed, and returning immediately after each exposure.

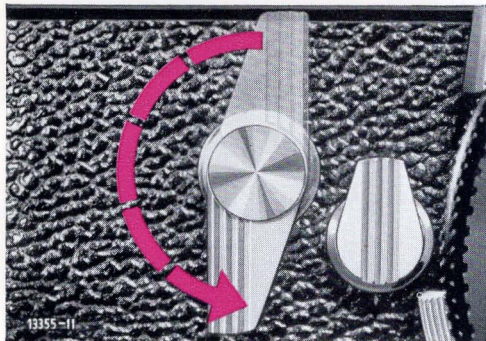
**Position 2 (TO SIDE)** = Mirror springs up as soon as shutter is released, and remains locked up until control lever is returned to Position 1.

**Position 3 (DOWNWARD)** = Mirror is locked up **before** shutter is released, and remains locked up until control lever is returned to Position 1. If the transport-

lever (13) is tensed, mirror rises as soon as Position 3 is set; if not, mirror will rise when transport-lever is stroked to retension the camera.

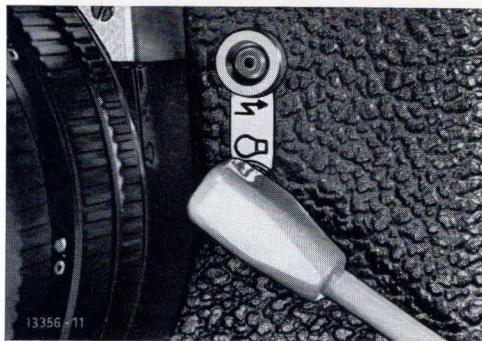
**IMPORTANT!** After a series of exposures have been made with the control lever in Positions 2 or 3, this lever should be returned to Position 1 **before** retensioning the camera. If the camera is retensioned before resetting to Position 1, it will be necessary to make a blank exposure before the mirror will return.

## The self-timer






An exposure delay of about 8 seconds is introduced when the lever is swung all the way down, as shown above. The delayed shutter action is started by pressing the camera release-button (14). Note that the exposure occurs just before the self-timer lever returns to its upward position.

## Flash synchronization

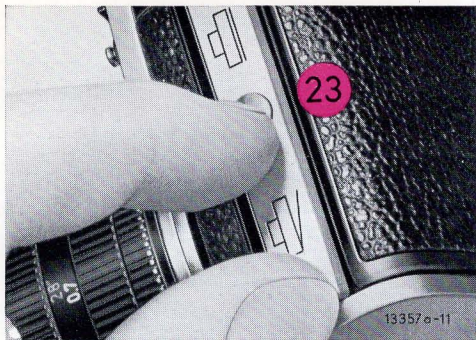


The upper contact marked ⚡ is for synchronizing electronic-flash units at speeds of up to  $1/100$  sec (= ⚡ on the speed dial). The lower contact marked 💡 is for synchronizing flashbulbs. The table on the next page gives full synchronization data for the most widely used flashbulbs.

# LEICAFLEX Flash Table

Electronic-Flash		B →  (= 1/100)	
Flash bulbs	<b>M 2</b>	1 → 1/30	Contact (upper)
	<b>XM 1</b> <b>PF 1</b> <b>PF 5</b>	1 → 1/125	 Contact (lower)
	<b>GE 5</b> <b>25</b> <b>M 3</b>	1 → 1/250	
	<b>AG 1</b> Flash cubes	1 → 1/60	

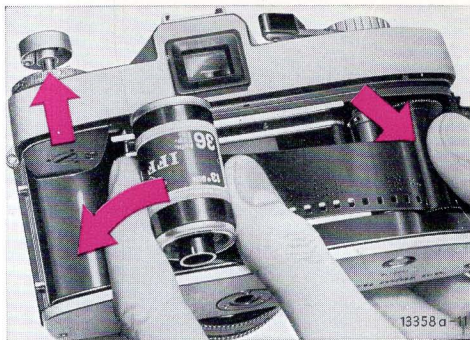
## Film loading



The LEICAFLEX accepts all standard 35mm film cartridges; it does not accept LEICA cassettes.

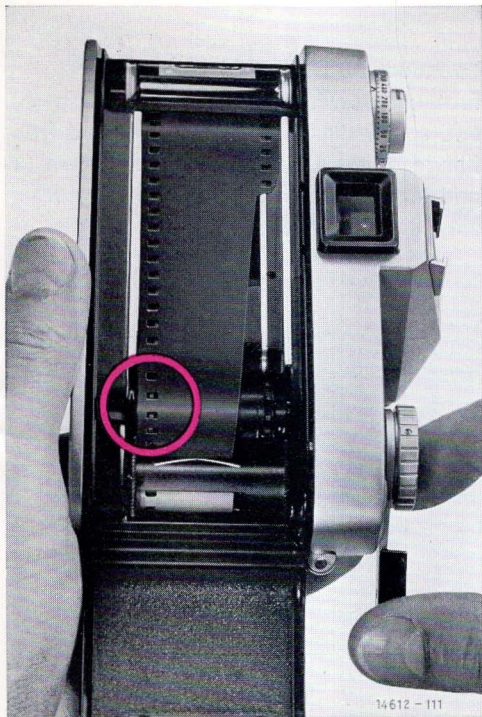
To open camera back, press flat button in center of locking-bar (23), simultaneously pressing bar upward. Follow this easy loading procedure:

**1** Wind shutter fully, then release. **2** Unfold rewind crank and pull up. **3** If necessary, turn take-up spool to locate one of loading slits conveniently. **4** Push film leader, shiny side up, deep into loading slit, but do not permit to protrude. Film edge should lie flat against take-up spool flange. **5** Holding take-up spool with right thumb, move film,



cartridge to left and drop into chamber, drawing in minimum length needed. **6** Push rewind shaft down without turning. **7** Stroke transport lever slowly to wind one turn of film onto take-up spool. Be sure that sprockets engage perforations and film feeds straight across film channel. **8** Close back and press locking-bar down. **9** Take up film slack by turning rewind crank until tension is felt. **10** Make 2 blank exposures, observing that **rewind turns in opposition to arrow**. (If rewind fails to rotate when shutter is wound, repeat loading procedure: otherwise film will not advance.) The automatic frame counter now stands at 0, and the LEICAFLEX is ready to shoot.

## Rewinding the exposed film



**Correct loading:**  
Sprockets engage perforations, and film feeds straight across film channel.



Press the rewind button (21) on the bottom of the camera, unfold the rewind crank (10), and turn in the direction of the arrow until no further resistance is felt. **Do not pull up on the rewind crank while rewinding!** The rewind button (21) will stay down in the proper rewinding position until the transport lever (13) is stroked. For maximum security and convenience, hold the LEICAFLEX as shown above when rewinding. As the film is rewound the frame-counter (15), will turn backward toward "0". After rewinding, pull the rewind crank up to remove the finished film cartridge.

## ELPRO lenses

are precision two-element coated achromats especially designed to extend the focusing possibilities of the 50-, 90-, and 135mm LEICAFLEX lenses into the close-focusing ranges with optimum image quality.

ELPRO lenses VIa (Catalog No. 16531) and VIb (No. 16532) were computed **exclusively** for use with the 50mm <sup>®</sup>SUMMICRON-R f/2 lens, and provide critical corner-to-corner close-up quality, even at medium lens apertures.

ELPRO lens VIIa (No. 16533) was computed to match the correction of the 90- and 135mm ELMARIT-R f/2.8 lenses. The ELPRO VIIb (No. 16534) is intended only for use with the 135mm <sup>®</sup>ELMARIT-R f/2.8 lens.

The ELPRO data table on the next page gives full operating information. The normal operation of the LEICAFLEX is in no way changed by the use of the ELPRO lenses, and no exposure-increase factors are required.

### To mount an ELPRO (d) lens

first unscrew the filter retaining-ring (b), and screw directly into the threaded front flange of the LEICAFLEX lens. Filters (c) and lenshoods (a) are used in the normal way, as described on page 18.

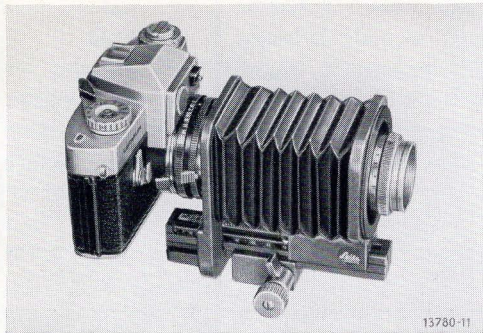




LEICAFLEX lens	E L P R O	Dis- tance scale setting	Approx. distance		Field covered (inches)	Repro- duction ratio	Depth -of- Field (inches)		
			Subject -to- film in inches	Subject -to- ELPRO			f/8	f/11	f/16
50mm SUMMICRON-R f/2	VI a	∞	19 <sup>11</sup> / <sub>16</sub> "	16 <sup>1</sup> / <sub>16</sub> "	7 <sup>1</sup> / <sub>4</sub> " x 10 <sup>7</sup> / <sub>16</sub> "	1: 7.7	1 <sup>3</sup> / <sub>8</sub> "	1 <sup>7</sup> / <sub>8</sub> "	2 <sup>3</sup> / <sub>4</sub> "
	VI a	20"	12 <sup>1</sup> / <sub>8</sub> "	8 <sup>1</sup> / <sub>4</sub> "	3 <sup>5</sup> / <sub>8</sub> " x 5 <sup>7</sup> / <sub>16</sub> "	1: 3.8	2 <sup>5</sup> / <sub>64</sub> "	9 <sup>1</sup> / <sub>16</sub> "	2 <sup>5</sup> / <sub>32</sub> "
	VI b	∞	11 <sup>7</sup> / <sub>8</sub> "	8 <sup>3</sup> / <sub>16</sub> "	3 <sup>11</sup> / <sub>14</sub> " x 5 <sup>9</sup> / <sub>16</sub> "	1: 3.9	1 <sup>3</sup> / <sub>32</sub> "	9 <sup>1</sup> / <sub>16</sub> "	1 <sup>3</sup> / <sub>16</sub> "
	VI b	20"	9 <sup>1</sup> / <sub>2</sub> "	5 <sup>9</sup> / <sub>16</sub> "	2 <sup>7</sup> / <sub>16</sub> " x 3 <sup>11</sup> / <sub>16</sub> "	1: 2.6	3 <sup>1</sup> / <sub>16</sub> "	9 <sup>1</sup> / <sub>32</sub> "	3 <sup>8</sup> / <sub>16</sub> "
90mm ELMARIT-R f/2.8	VII a	∞	29 <sup>1</sup> / <sub>16</sub> "	24 <sup>1</sup> / <sub>16</sub> "	6 <sup>5</sup> / <sub>16</sub> " x 9 <sup>1</sup> / <sub>2</sub> "	1: 6.7	1 <sup>1</sup> / <sub>16</sub> "	1 <sup>1</sup> / <sub>2</sub> "	2 <sup>1</sup> / <sub>8</sub> "
	VII a	28"	17 <sup>7</sup> / <sub>16</sub> "	11 <sup>13</sup> / <sub>16</sub> "	2 <sup>7</sup> / <sub>8</sub> " x 4 <sup>5</sup> / <sub>16</sub> "	1: 3.0	1 <sup>7</sup> / <sub>64</sub> "	3 <sup>8</sup> / <sub>16</sub> "	1 <sup>7</sup> / <sub>32</sub> "
135mm ELMARIT-R f/2.8	VII b	∞	4'11"	4'5 <sup>1</sup> / <sub>4</sub> "	9 <sup>5</sup> / <sub>16</sub> " x 14"	1: 9.9	2 <sup>1</sup> / <sub>4</sub> "	3 <sup>1</sup> / <sub>8</sub> "	4 <sup>1</sup> / <sub>2</sub> "
	VII b	5'	33 <sup>1</sup> / <sub>2</sub> "	27 <sup>3</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>4</sub> " x 6 <sup>3</sup> / <sub>8</sub> "	1: 4.5	1 <sup>7</sup> / <sub>32</sub> "	2 <sup>3</sup> / <sub>32</sub> "	1 <sup>1</sup> / <sub>16</sub> "
	VII a	∞	29 <sup>13</sup> / <sub>16</sub> "	24 <sup>1</sup> / <sub>16</sub> "	4 <sup>1</sup> / <sub>4</sub> " x 6 <sup>3</sup> / <sub>8</sub> "	1: 4.5	1 <sup>7</sup> / <sub>32</sub> "	2 <sup>3</sup> / <sub>32</sub> "	1 <sup>1</sup> / <sub>16</sub> "
	VII a	5'	23 <sup>1</sup> / <sub>8</sub> "	16 <sup>13</sup> / <sub>16</sub> "	2 <sup>5</sup> / <sub>8</sub> " x 3 <sup>15</sup> / <sub>16</sub> "	1: 2.8	1 <sup>7</sup> / <sub>32</sub> "	5 <sup>1</sup> / <sub>16</sub> "	7 <sup>1</sup> / <sub>16</sub> "

Focusing data is given for ∞ and the shortest engraved distance settings of the LEICAFLEX lenses. Since the lenses can slightly exceed these engraved settings, somewhat higher reproduction ratios can be obtained than are shown in this table. All figures are approximate, having been rounded off for convenience.

## Using LEICA lenses with the LEICAFLEX

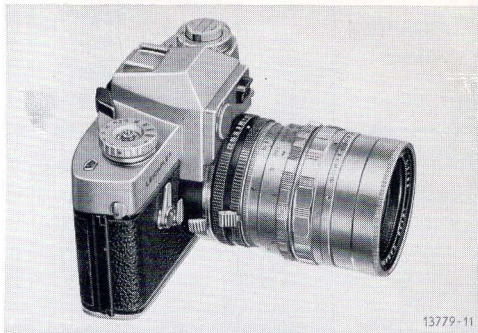


Because its moving mirror requires a longer lensmount-to-film distance, the LEICAFLEX can not be used with **rangefinder-focusing** LEICA lenses.

The special LEICA-to-LEICAFLEX lens adapter No. 14127 permits the use of all VISOFLEX® II/III lenses and accessories with the LEICAFLEX. This includes the FOCUSING BELLOWS II.

### The aperture simulator:

The LEICA-to-LEICAFLEX lens ring is equipped with an aperture simulator that couples to the follow-pointer of the LEICAFLEX exposure meter. This is used to set the correct exposure exactly as with a LEICAFLEX lens. After correct exposure has been determined, the aperture indicated on the simulator scale is then transferred to the LEICA lens.



The following LEICA® lenses and accessories can be used directly with the ring No. 14127 on the LEICAFLEX:

**FOCUSING BELLOWS II**, with any applicable LEICA lens.

90mm ELMAR f/4 (lens-head in mount No. 16467, "OUAGO")

90mm SUMMICRON® f/2 (in short VISOFLEX II/III focusing mount)

135mm ELMARIT f/2.8 (in short VISOFLEX II/III focusing mount)

Universal Focusing Mount No. 16464 ("OTZFO") with:

65mm ELMAR f/3.5

90mm ELMARIT f/2.8 (lens-head)

135mm TELE-ELMAR f/4 (lens-head)

135mm ELMAR f/4 or HEKTOR f/4.5 (lens-heads in ring No. 16472 "OTSRO")

The following LEICA lenses can be used with the LEICAFLEX with the ring No. 14127 plus the ring No. 16486 ("OUBIO"):

125mm HEKTOR® f/2.5

135mm ELMAR® f/4, in short focusing mount

135mm HEKTOR f/4.5, in short focusing mount

200mm TELYT® f/4 (and f/4.5)

280mm TELYT f/4.8

400mm TELYT f/5

## Caring for your LEICAFLEX lenses

The special LEITZ hard anti-reflection coating on the outer surfaces of your LEICAFLEX lenses is abrasion-resistant, but not scratch-proof! Treat lens surfaces with great care, always starting any cleaning process by dusting with a camel's-hair lens brush. If this doesn't suffice, wipe gently with a soft, well-laundered linen cloth, a clean piece of chamois leather, or a high-grade (white) optical lens tissue. Avoid any colored or chemically impregnated tissues which are intended only for eyeglasses. Use lens cleaning fluids sparingly, if at all. When not in use, the front

and rear lens surfaces should be protected by using the front and rear lenscaps supplied for this purpose. Above all, remember:

**It is better to keep your lenses clean, than to keep cleaning your lenses!**

When photographing in sandy, dusty, or other potentially dangerous places, protect the front lens surface by using a clear LEITZ UVa (ultra-violet absorbing) filter. This filter will not affect the exposure time. Lenshoods, which improve optical quality by blocking-off stray light rays, also protect against accidental contacts with the front lens surface, and are a big help in rainy weather. When photographing near salt water, always use the UVa filter to prevent air-borne salt from settling on the lens. Should salt water ever splash on your camera or lens, clean by first wiping with a cloth dampened in ordinary tap-water, then dry thoroughly with a second piece of clean cloth.

Read LEICA-Fotografie,  
the magazine of miniature camera technique

The LEICAFLEX is covered by the  
International LEITZ Guarantee.  
A guarantee card with the serial  
number of your camera is packed  
with the LEICAFLEX.

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