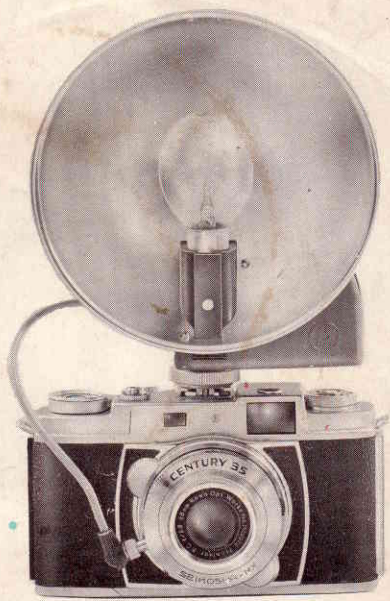


A
Graflex
Prize-
Winning
Camera



CENTURY®

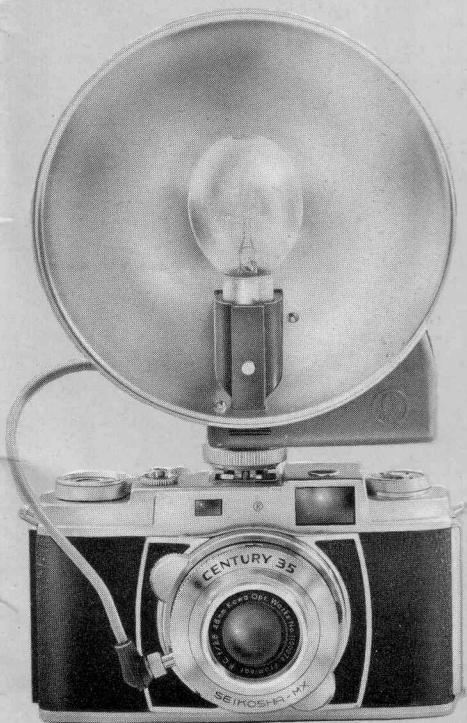
35

with f/2.8 lens

There are hundreds of 35mm cameras now on the market, and all of them are capable of taking full color transparencies and black and white pictures. Some of these cameras cost hundreds of dollars and are equipped with deluxe features that only the very advanced photographer finds practical to use. Other 35mm cameras are so inexpensive that even a beginner quickly outgrows their capacity.

YOUR CENTURY 35, backed by the famous Graflex name, has more quality features than any other camera in its price range. Many of these features, such as the all-metal precision die-cast body may not seem too important, but as you use your Century 35 you will soon learn how these features help you take more and better photographs.

One rule, above all others, that we hope you will use is: "Take plenty of pictures!" Use your Century 35 constantly. The more pictures you take, the better your pictures will be. Composition, subject, light, action, aperture, shutter speed, focus and depth of field all affect the pictures you take. When you use your Century 35 often you will soon recognize the limitations and opportunities each of these factors provides.



CONTENTS

	Page
Features of the Century 35	4-5
Principles of "Still Picture" Cameras ..	6-7
Setting the Diaphragm	8
Setting the Shutter Speed	9
Focusing the Century 35	10-11
Depth of Field	11
Loading the Century 35	12
Daylight Pictures	14
Daylight Exposures (diaphragm, shutter speed)	15
Flash Pictures with the Graflash B-C	16-17
Flash Guide Numbers	17
Guide Number Chart for Graflash B-C	18
Unloading the Century 35	19
Photo Tips	20
Still Life Close-ups and Proximeter	21
Accessories	22
Filters	23

Shutter release

Cable release socket

Exposure counter dial

Rapid wind lever

Serial number

Accessory clip

Rewind knob

ASA film index reminder

Depth of field scale

Focusing scale setting

Diaphragm setting
(f/number)

Diaphragm scale window

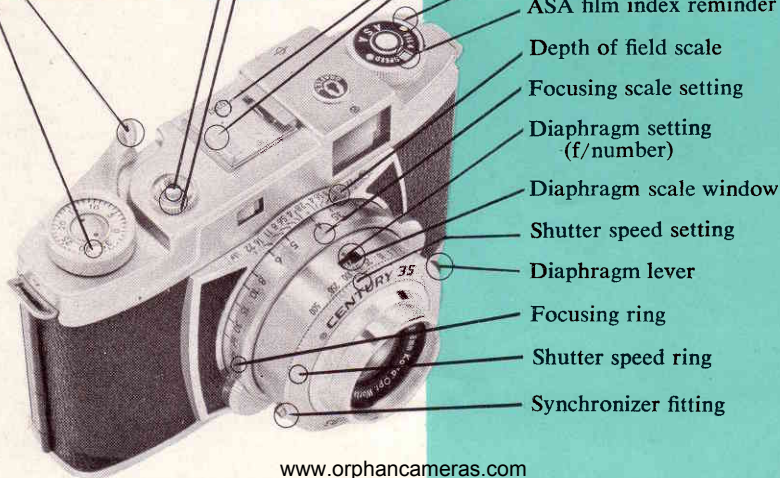
Shutter speed setting

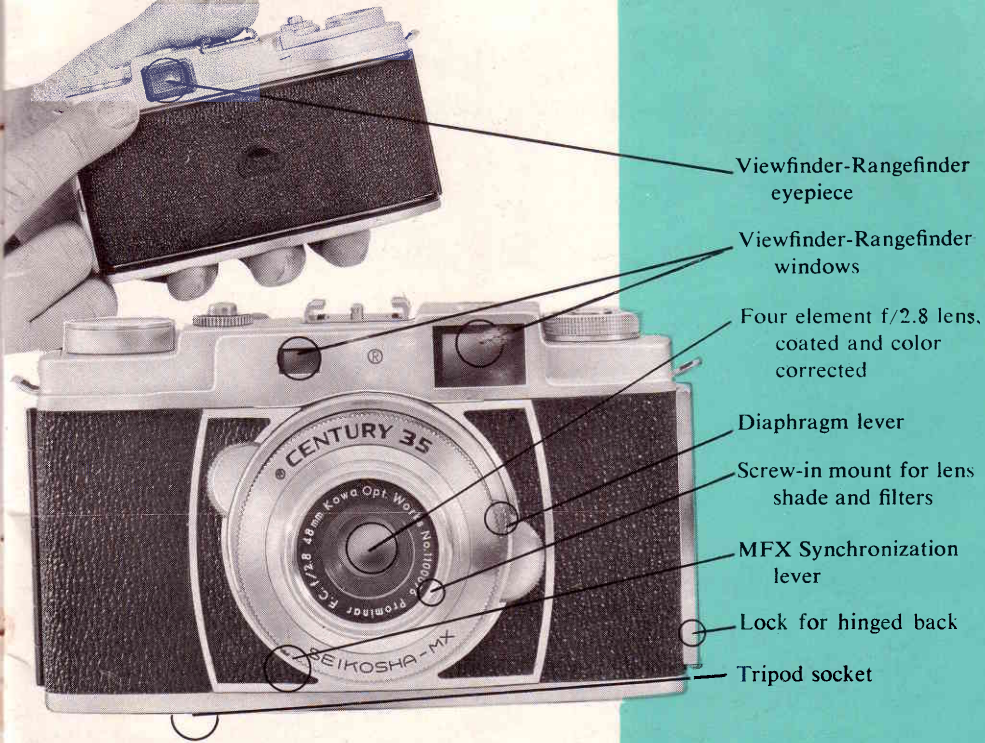
Diaphragm lever

Focusing ring

Shutter speed ring

Synchronizer fitting





Viewfinder-Rangefinder
eyepiece

Viewfinder-Rangefinder
windows

Four element f/2.8 lens,
coated and color
corrected

Diaphragm lever

Screw-in mount for lens
shade and filters

MFX Synchronization
lever

Lock for hinged back

Tripod socket

ALL GOOD "STILL PICTURE" CAMERAS



F/2.8

F/8

F/22

DIAPHRAGM: The quality of any photograph depends upon the amount of light that reaches the film during an exposure. There are two ways of regulating this light: (1) Diaphragm setting, (2) Shutter speed. In your Century 35 the **diaphragm** can be adjusted for a large opening (f/2.8) through eight positions to a small opening (f/22). The larger the opening the more light will reach the film during the exposure. On a bright sunny day you will use a small opening to limit the amount of light reaching the film, and on a dull, cloudy day you will use a larger opening in order to get more of the available light onto the film.

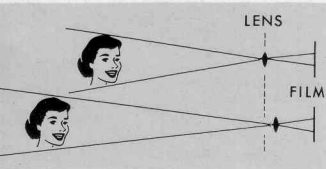
OPEN TIME

1/25 SEC.

1/50 SEC.

1/200 SEC.

SHUTTER SPEED: The second way you control the light reaching the film is by adjusting the shutter speed. When you take a one-second exposure the shutter will remain open for a full second and admit a lot of light. At 1/25 second only 1/25 as much light will enter the camera. At 1/50 second you will get half as much light as you did at 1/25, and at 1/200 second you will get a fourth as much light as you did at 1/50. You can use a faster shutter speed on bright sunny days than you can on dull, cloudy days. In addition, you will want to use a fast shutter speed for action pictures in order to get sharp, unblurred photographs.



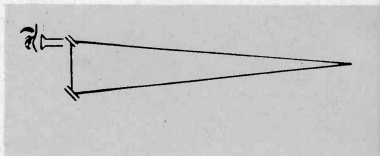
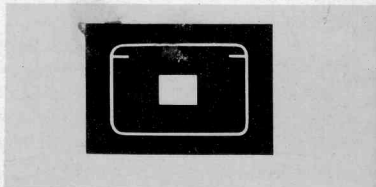
FOCUS: The adjustable focus on the Century 35 helps you get the sharpest possible pictures. To obtain truly sharp pictures, the distance from the subject you are photographing to the lens, and the short distance from the lens to the film must fit into a mathematical formula that depends upon the way the lens has been ground. Your Century 35 has an adjustable focusing mechanism that actually changes the small distance between lens and film. You will actually see it move in

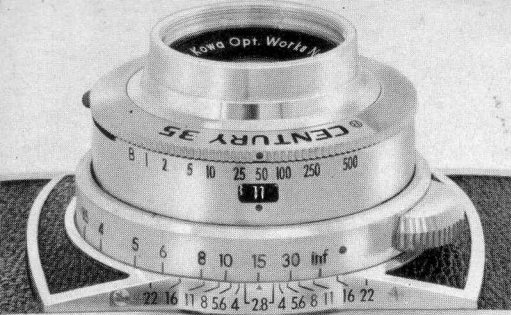
OPERATE ON THESE PRINCIPLES

and out as you turn the focusing ring. The focusing scale, marked in feet from 3 to infinity, shows you where the lens should be set corresponding to the distance the subject is away from the camera.

BRIGHT FRAME FINDER: Your Century 35 combination rangefinder-viewfinder has a Bright Frame Finder that shows the exact subject material that will be recorded on the film. The area outside the frame finder provides a wider viewing area for selecting your subject. The two short lines near the top of the bright frame indicate the top of the picture and provide for parallax correction when focusing at close distances.

RANGEFINDER: Built into your Century 35 is an optical device that works on a principle of triangulation such as a surveyor uses. This rangefinder, in effect, measures the distance between your camera and the subject you are photographing. By coupling the rangefinder and lens focusing you are relieved of all the mathematical problems; you simply adjust the rangefinder and the lens is automatically focused for the sharpest possible photograph.





SETTING THE DIAPHRAGM

Example:

Daylight Ektachrome
ASA Index = 32;
Guide Number at 1/50
second = 80;
Distance to
subject = 10 feet;
 $80 \div 10 = 8 \dots$
for this specific
example you would
use a diaphragm
setting of f/8.

- 1. ED DOT:** Use daylight Ektachrome or daylight Anscochrome film. Set the red f/11 opposite the red dot on the diaphragm scale. When used with the red dot shutter setting you will get good photographs of people and scenes on clear sunny days.
- 2. DAYLIGHT:** Packed with every roll of film you buy is a sheet of instructions that recommend the proper shutter speeds and diaphragm settings (aperture settings) you should use for dull, clear, bright and sunny days. For convenience a sample chart for daylight Ektachrome and Anscochrome is reproduced on page 15. You set the diaphragm by lining up the f/number you want to use with the red dot on the diaphragm scale window.
- 3. FLASH:** On the instruction sheet packed with every roll of film you buy is an ASA Index Rating for Tungsten flash lamps. Locate this ASA Index on the guide number chart (page 18). Opposite this number is a series of "guide numbers" that vary with the shutter speed you wish to use. To determine the correct diaphragm setting for any flash picture, divide the guide number by the number of feet between the flash lamp and the subject you are photographing. The answer will be the approximate diaphragm setting you should use.

SETTING THE SHUTTER SPEED



- 1. RED DOT:** Use daylight Ektachrome or daylight Anscochrome film. Set the red dot on the shutter speed ring opposite the red "50" on the shutter speed scale. When used with the red setting on the diaphragm scale you will get good photographs of people and scenes on clear sunny days.
- 2. DAYLIGHT:** Packed with every roll of film you buy is a sheet of instructions that recommend the proper shutter speeds and diaphragm settings you should use for dull, clear, bright and sunny days. A sample chart for daylight Ektachrome and Anscochrome is reproduced on page 15. You set the shutter by lining up the red dot on the shutter speed ring with the red "50" on the shutter speed scale.
- 3. FLASH:** On the opposite page is described the way to select the proper diaphragm setting for any type of film at any shutter speed you choose to use. A sample guide number chart is printed on page 18. Similar guide number charts are printed on the instruction sheets packed with film and on most flash lamp cartons. You may also purchase an inexpensive flash calculator at any camera store, that will help you take good pictures.

FOCUSING THE CENTURY 35 WITH THE BUILT-IN RANGEFINDER

Your Century 35 has a combined Rangefinder and Viewfinder that is very easy to use. (1) Look through the Rangefinder-Viewfinder eyepiece and you will see the large rectangular field with the slightly smaller Bright Frame Finder which indicates the actual field covered by your camera lens. Inside the Bright Frame Finder is a small, bright rectangle. (2) When you aim the camera at a vertical object (telephone pole, edge of building, etc.) you will notice that the vertical lines are broken by the bright rectangle, meaning the object is out of focus. (3) By turning the focusing ring you can align the broken verticals; the object will then be in focus. (4) When your camera is focused on the subject, concentrate your intention on the full picture seen inside the Bright Frame Finder. Since there is some margin of safety built into the finder, everything you see within the Bright Frame Finder will appear in the picture. When focused on objects at 3 feet the two short lines near the top of the Bright Frame Finder indicate the top of the picture.



OUT OF FOCUS



IN FOCUS

OUT OF FOCUS PICTURE

Occasionally you may forget to focus your camera before taking a picture, or because of an optical illusion you may focus improperly. When this happens you can recognize the problem because the subject, or center of interest, will be entirely fuzzy in appearance (see illus.).



CAMERA FOCUSED BUT IMAGE IS BLURRED BY MOVEMENT

When the picture is only blurred in places (see illus.), the cause is motion of the subject while the picture was being taken. This can usually be remedied by using a faster shutter speed. If, on the other hand, the subject and objects in the background have a "ghost image," the fault lies in camera movement; hold your breath and hold the camera steady for sharp pictures. Use a tripod for shutter speeds of 1/25 second or slower.

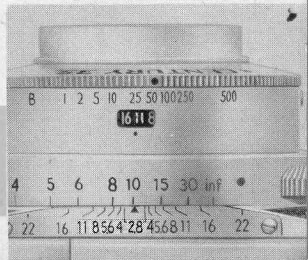


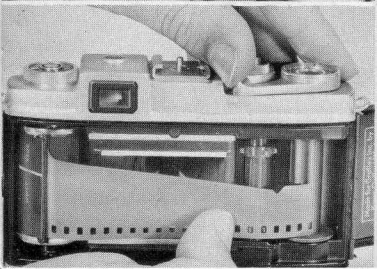
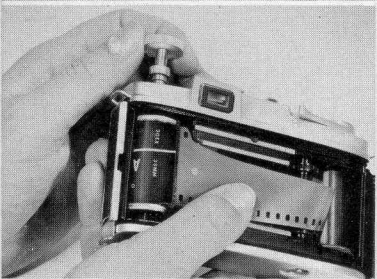
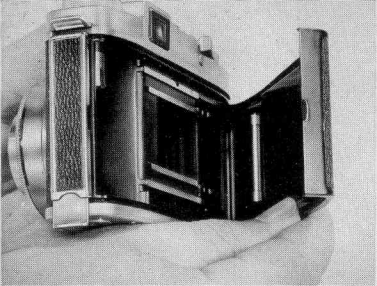
DEPTH OF FIELD

Because of the physical properties of any camera lens the entire depth, from foreground to the horizon, of a picture will never be as sharp as the subject upon which you are focused. The depth of field scale tells you how many feet in front of and in back of the subject will be in sharp focus. This depth of field varies with the diaphragm setting.

Example:

Focused at 10 feet; diaphragm setting of f/11; everything from 6 feet to 30 feet will be sharp.





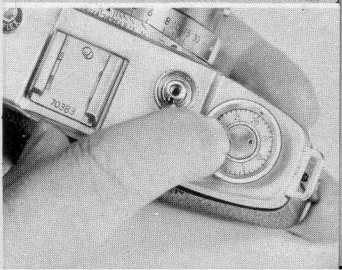
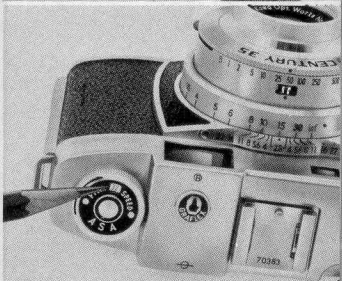
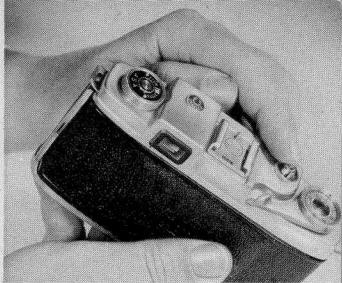
LOADING

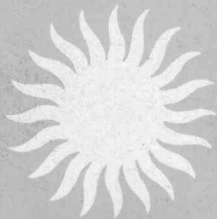
Your new Century 35 will accept standard 20 or 36 exposure 35mm film cartridges (black and white or color). Loading is quick and easy. Never load or unload in bright, direct light. Simply follow the steps on these pages.

- 1.** Slide the lock lever downward as far as it will go. Open the camera back (see illus.).
- 2.** Hold the camera in your right hand and pull the rewind knob upward as far as it will go. Drop cartridge into chamber and press rewind knob back into place, turning slightly to engage cartridge (see illus.).
- 3.** Insert end of film under clip in take-up reel which can be advanced with the right thumb. Make sure sprocket teeth engage sprocket holes in film and film winds straight. Advance film by moving rapid wind lever in direction of arrow as far as it will go. It is not necessary to use excessive pressure (see illus.). Close camera back and lock into place by sliding locking lever upward as far as it will go.

YOUR CENTURY 35

4. Trip the shutter by depressing the shutter release (see illus.) on top of camera as far as it will go. This simultaneously trips the shutter and releases the film wind interlock mechanism. Wind and trip two times to advance film sufficiently to be ready for first exposure.
5. Set film speed (A.S.A. index) on dial on rewind knob by rotating black inner dial in either direction until proper number is seen through window (see illus.).
6. Set counter dial (see illus.) by turning counterclockwise to appropriate number (20 for 20-exposure rolls — 36 for 36-exposure rolls). After each exposure, advance the film winding lever to its fullest (without force); the exposure counter dial will automatically advance one space and will tell you how many exposures you have left.





DAYLIGHT PICTURES

- 1. RED DOT SETTING:** Your Century 35 has red markings for 1/50 second, f/11 and 15-foot focus. Using this combination with daylight Ektachrome or Anscochrome film, you will get good pictures in bright sunlight.
- 2. CHOICE OF FILM:** The Century 35 camera will accept any type of black and white or color film available in #135 size. This film comes in a metal cartridge which you insert into the camera (see pages 12-13). You may choose either the 20 or 36 exposure films. We recommend that beginners select one type of film such as Daylight Ektachrome or Anscochrome with 20 exposures and continue using this same type and size until they are completely familiar with the camera and results.
- 3. FRONT AND SIDE LIGHTING:** Never let the sunlight shine into the lens of your camera while taking a picture. Always stand with the sun shining on your back or from the side. When photographing people, look for large, dark shadows around the eyes, nose, mouth and chin, and try to avoid them by turning the subject's face toward or away from the sun.

WHAT EXPOSURE FOR DAYLIGHT?

Most subjects fall into one of three standard types or groups to which definite exposures can be assigned. This table is for Ektachrome and Anscochrome Daylight Type under common lighting conditions. For other films consult the instruction sheet packed with the film.



DARK SUBJECTS

Masses of dark areas or people standing near shrubbery which does not reflect light can be classed as "Dark Subjects"



AVERAGE SUBJECTS

Basic Exposure

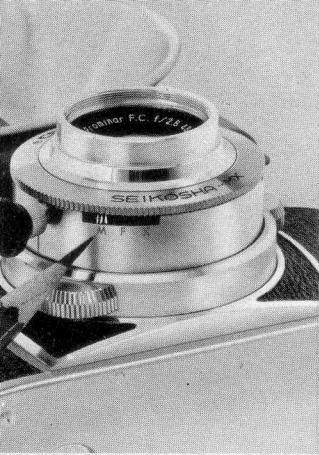
Brightly colored gardens, houses, pets, nearby people, etc., not in the shade. Most pictures fall into this group.



LIGHT SUBJECTS

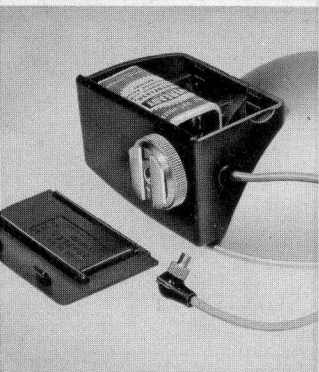
Beach, marine, and snow scenes, where everything is light-colored and the surroundings reflect light onto the subject to give a brilliant, flat lighting.

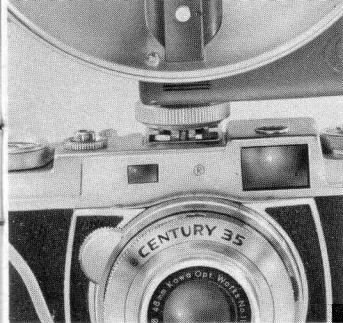
Daylight Ektachrome and Anscochrome Exposure Table		Diaphragm Setting	Shutter Speed	Diaphragm Setting	Shutter Speed	Diaphragm Setting	Shutter Speed
Light Conditions	Subject in clear, direct sunlight	f/8 - f/11	1/50	RED DOT f/11	RED DOT 1/50	f/11 - f/16	1/50
	Hazy Sun Soft shadows cast	f/5.6-f/8	1/50	f/8	1/50	f/8 - f/11	1/50
	Cloudy but bright no shadows	f/4 - f/5.6	1/50	f/5.6	1/50	f/5.6-f/8	1/50



FLASH PICTURES WITH THE GRAFLASH B-C

- 1. Choice of flash lamps:** Your Century 35 is automatically synchronized at all shutter speeds for "M" (medium peaking) and "F" (fast peaking) flash lamps used in the Graflash B-C. You may also use an electronic flash unit, such as the Graflex-made Strobomite, by setting the synchronization lever at "X" (instantaneous). We recommend that beginners use #5 or #25 (clear or blue) **medium peaking** flash lamps until they become familiar with the camera and its results.
- 2. Inserting batteries:** Simply pry off the back cover of the Graflash B-C battery case and insert a 22½ volt photo-flash battery as indicated. The cover snaps back into position. See its instruction leaflet for further details.





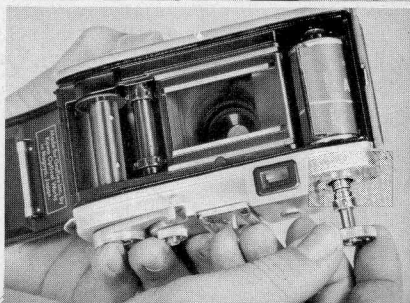
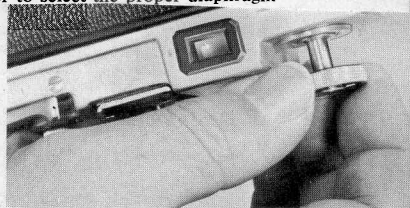
3. Mounting on Century 35: Slide the Graflash B-C mounting foot into the accessory clip on top of the camera and tighten the knurled thumb screw.

4. Attaching shutter cord: The Graflash B-C has a shutter connector cord that attaches to the synchronizer fitting just above the MFX synchronization lever. Press the cord plug firmly onto the fitting.

5. Guide numbers: In order to select the proper diaphragm

point. The exposed film must now be rewound back into the light-tight cartridge before removing it from the camera.

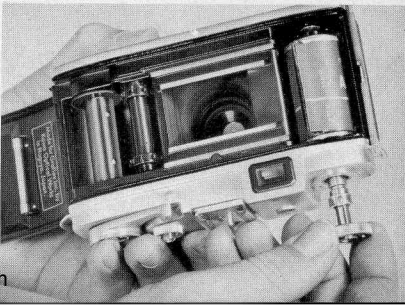
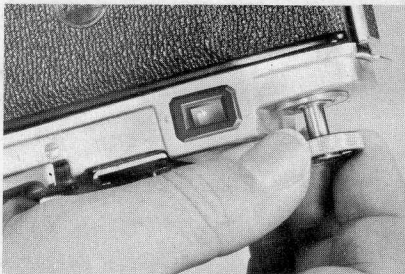
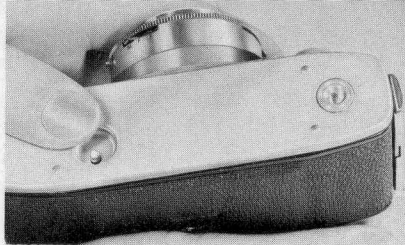
- 1.** Remove the camera from its ever-ready carrying case, depress the rewind release button on the bottom of the camera (see illus.).
- 2.** Lift the rewind knob to first position (approximately $\frac{1}{2}$ inch) (see illus.).
- 3.** Hold the camera in your left hand with thumb depressing the rewind release button. With your right hand, turn the rewind knob clockwise until you have all the exposed film safely rewound into the cartridge.
- 4.** Release the lock on the side of the camera, and open the back.
- 5.** Pull the rewind knob all the way out, as far as it will go, and lift out the cartridge (see illus.). Reload your camera so that it will always be ready for use.



HOW TO REMOVE THE FILM FROM YOUR CAMERA

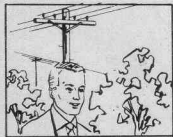
When the exposure dial on your Century 35 reads 0, you will have taken all the pictures on the roll. Usually it will be impossible to wind the film past this point. The exposed film must now be rewound back into the light-tight cartridge before removing it from the camera.

- 1.** Remove the camera from its ever-ready carrying case, depress the rewind release button on the bottom of the camera (see illus.).
- 2.** Lift the rewind knob to first position (approximately $\frac{1}{2}$ inch) (see illus.).
- 3.** Hold the camera in your left hand with thumb depressing the rewind release button. With your right hand, turn the rewind knob clockwise until you have all the exposed film safely rewound into the cartridge.
- 4.** Release the lock on the side of the camera, and open the back.
- 5.** Pull the rewind knob all the way out, as far as it will go, and lift out the cartridge (see illus.). Reload your camera so that it will always be ready for use.



PICTURE-TAKING TIPS —

The best pictures are those which tell a single simple story



Check the background to make sure that there is no distracting material such as a branch or a telephone pole which appears to grow out of the head or shoulders of your subject. Horizontal lines such as the clapboards or shingles on a house can be distracting. When photographing pets or children the camera should be held at or below their level.

Get your subject to relax. Try to have him doing something besides looking at you.

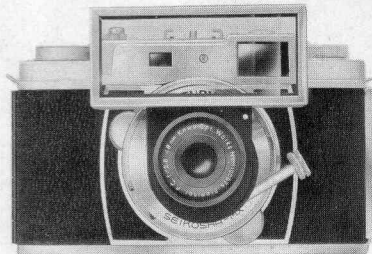
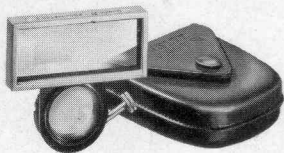


OUTDOOR PORTRAITS — Side lighting and back lighting of the subject will be found helpful in the making of more interesting pictures. Open shade will be most helpful in the making of finer portraits, but be sure that your subject's face will receive light reflected from surrounding areas on both sides so that there will be no dark areas. Since exposure will have to be increased considerably even in the open shade and particularly when subjects are side lighted or back lighted, be sure to check film manufacturer's instruction sheet very carefully. Use a good lens shade when shooting toward the sun or other bright areas. Get close enough to your subject. Fill the entire viewfinder window.



SHARP PICTURES ARE OF UTMOST IMPORTANCE — Check the rangefinder rectangle to be sure that the camera is properly focused. Hold the camera motionless when making the exposure. Be sure that the shutter release is pressed down smoothly when making the exposure. Jabbing at it will cause camera movement. Hold your breath for the instant the exposure is made and you will be rewarded with clearer, sharper pictures.

ACTION — Action will require the use of a fairly fast shutter speed. 1/100 second will stop normal motion around the home; but fast action will require the 1/500 setting. Action can best be stopped if the subject is moving toward or away from the camera, but will be harder to stop if moving at right angles to the camera.



PROXIMETERS

Close-ups — Close-up pictures are fun and enable you to make interesting and pleasing shots of flowers, very small animals and similar objects. The Graflex Proximeters, which clamp right onto the camera lens, include a special prism which permits focusing through the rangefinder and framing the subject in the viewfinder without parallax problems. No change in exposure determination is needed. Full instructions covering their use are included with the attachments.

Proximeter	Closest Distance	Farthest Distance
Proximeter I Cat. No. 8130	21"	41"
Proximeter II Cat. No. 8131	15"	22"
Proximeter I plus Proximeter II	12 ³ / ₄ "	15 ³ / ₄ "

NOTE: Distances are measured from subject to film plane. (⊖)

Very slight vignetting (darkening of the corners) may be noted with the Proximeter II. With both the Proximeter I and II, used over the camera lens, vignetting will be more marked.

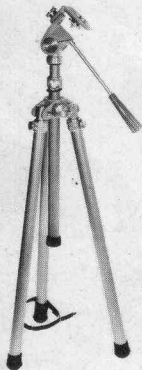
STROBOMITE

(Cat. No. 2201): An excellent accessory for the amateur photographer is the Graflex-made Strobomite, a portable electronic flash unit. Strobomite operates on 4 "D" size photoflash batteries or common 110 volt household AC current. Lightweight and convenient, Strobomite cuts cost to less than 1c a flash and provides advantages unmatched by other artificial light sources. Ask your camera dealer for a demonstration. Has a guide number of 55 for Daylight Ektachrome and Anscochrome.



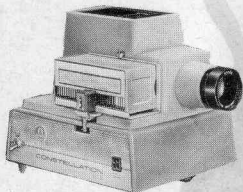
GRAFLEX SPEED TRIPOD

(Cat. No. 8094): A tripod helps you get better pictures more often by freeing your hands and attention, letting you concentrate on a subject's changing expression. For "B" time exposures and when shooting at speeds slower than 1/25 second, a tripod and cable release are a **must**, in order to eliminate camera motion.



CONSTELLATION SLIDE PROJECTOR:

If you take good color slides with a good camera you should also show your slides with a projector. The Graflex-made Constellation is an excellent 500 watt projector with 4" f/3.3 lens for bright, clear projection. Remote operation model available. Ask your camera dealer for a demonstration.



FILTERS

Filters are always helpful in the making of better pictures. The instruction sheet which came with the film will give you information concerning the use of some filters, recommended for that film. In general the Skylight filter will take care of most requirements for the Daylight color films. Black and white films allow the use of a wide variety of filters. Your Graflex dealer can supply you with suitable filters and information concerning them.



The Graflex lens shade and filter kit, Cat. No. 8180, includes a lens shade, a screw-in adapter, the Skylight, the 85-C and the medium yellow (K-2) filters. Spaces in the leather carrying case provide for storage of at least three other Series 5 filters.

Skylight — To reduce bluish haze with all daylight color films.

85-C — When using Kodachrome F, Ektachrome F, and Anscochrome Flash Type films out of doors in daylight.

Medium Yellow (K-2) — For use with black and white film, darkens sky slightly and produces more pleasing reproduction of clouds.

Other commonly used filters available from your Graflex dealer.

Light Green (X-1) — For black and white films — for true rendition of foliage, trees, etc.

Red (A) — For black and white films — for striking cloud pictures with ordinary film and dynamic night shots with infrared film.



POLARI-VUE

(Cat. No. 8132) This accessory reduces unwanted glare, reflections and wavy distortions . . . intensifies colors without changing their values. The photographer views the effect through the viewing screen. Attaches to camera by Adapter Ring and Lenshood (cat. no. 8230).