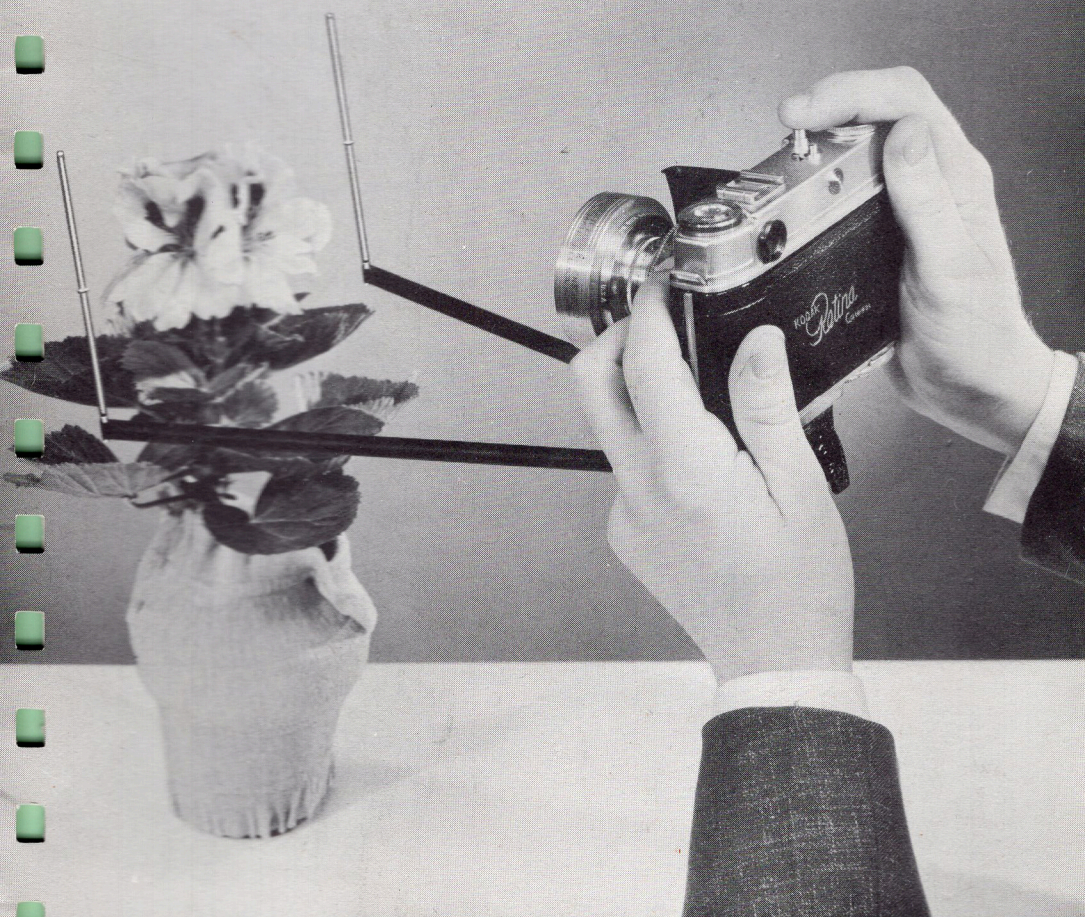


how to use the

Kodak Retina Close-Up Kit

MODEL B

FOR KODAK RETINA IIIc, IIc, AND Ib CAMERAS



KODAK RETINA CLOSE-UP KIT, MODEL B

(for Kodak Retina IIIc, IIc, and Ib Cameras)

Excellent close-up photographs in black and white or color can be made with ease and certainty when any of the above Retina models equipped with a 50mm lens is used with the proper auxiliary lens and set of field guides.

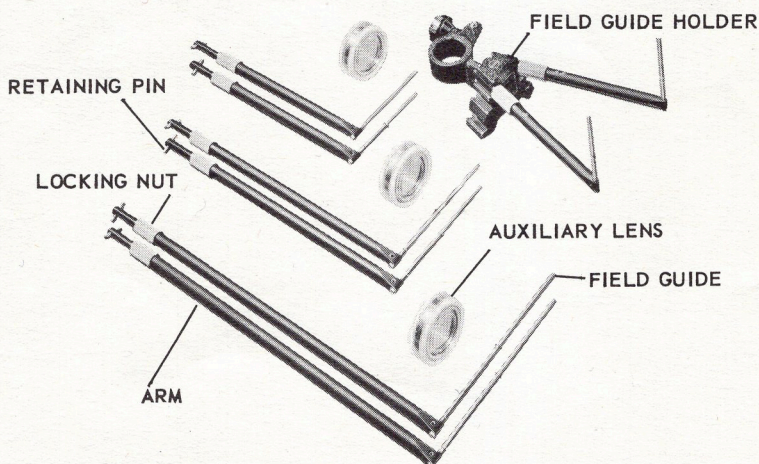
The close-up kit includes 3 AUXILIARY LENSES, 4 pairs of FIELD GUIDES, and a FIELD GUIDE HOLDER (figure 1).

NOTE: This equipment must be used with the Kodak Retina Camera Platform, Model B (not supplied with the close-up kit).

The Kodak Retina Close-Up Kit, Model B, provides 4 field sizes, the maximum being 4 x 5-3/4 inches and the minimum 1-3/8 x 2 inches. The two intermediate sizes are 2-7/8 x 4-1/8 inches and 2-1/16 x 3 inches.

Since the film-to-subject distance is measured mechanically by the field guide arms, it is possible to follow a moving subject, yet easily keep it in focus.

Figure 1. Components of the Kodak Retina Close-Up Kit, Model B.



ASSEMBLING THE CLOSE-UP KIT

Attaching the field guides to the field guide holder—Each FIELD GUIDE (figure 1) is supported by an ARM which has at its opposite end a short RETAINING PIN and a LOCKING NUT. A number on each arm near the locking nut (figure 2) designates the ratio of reduction for that pair of field guides used with its corresponding lens. One guide arm in each pair also has a small circle (o) just above the number. The arm bearing this (o) must be attached to the side of the FIELD GUIDE HOLDER which has been designated by a similar (o) on the REFERENCE PLATE.

The field guide holder has 3 sets of grooves which receive the ends of the field guide arms. The number of the field guide that goes into each pair of grooves is marked on the reference plate of the field guide holder.

Thus, the field guide marked 4.5 must be mounted in the bottom groove of the holder marked 1:4.5 on the reference plate. It should be noted that the same pair of grooves is used for both the 1.5 and 2 field guides. To secure the field guide arm to the holder, tighten the locking nut against the holder.

Selecting the proper lens and attaching it to the camera—There are three achromatic R-type lenses in this kit which are marked R1:4.5, R1:3, and R1:2. They are the accompanying lenses for the field guides 4.5, 3, and

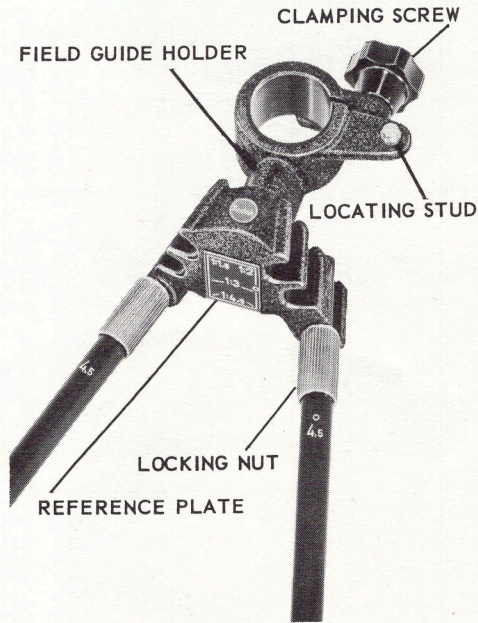


Figure 2. Attaching the field guides to the field guide holder.

◀ Punched to fit the **Kodak Photographic Notebook**. See your Kodak dealer.

2 respectively. When the field guide marked 1.5 is used, *two* lenses (R1:4.5 and R1:2) must be used in combination. Either lens may be attached to the camera first.

To attach an auxiliary lens to the camera, screw it into the camera lens mount as far as it will go.

NOTE: Do not attempt to close the camera cover when an auxiliary lens is attached to the lens of the camera.

A filter can be used with the auxiliary lenses but must always be added last so that it does not come between the camera and auxiliary lenses.

Always use a lens hood to achieve best results.

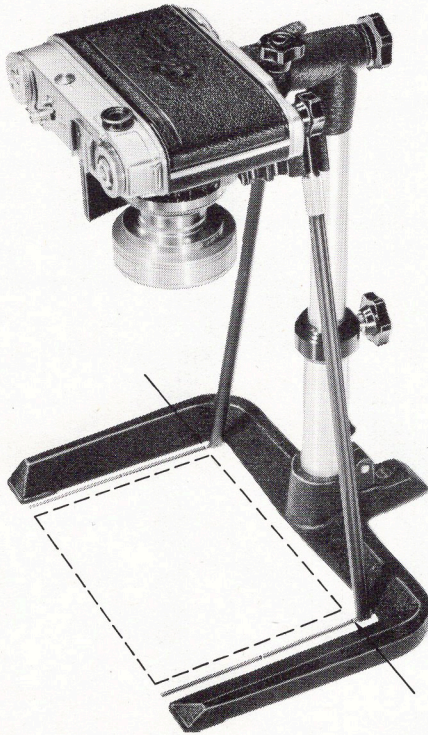


Figure 3. Supporting the close-up apparatus on the Kodak Table Top Camera Stand, Model B.

The Kodak Adapter Ring Series VI No. 29, which takes the Kodak Series VI filters and Lens Hood Series VI or VIA, is recommended. This adapter screws into the mount of the auxiliary lens.

Attaching the field guide holder to the camera—Fasten the Kodak Camera Platform, Model B (not supplied with the close-up kit) to the camera. To do this, insert the stud of the camera platform into the hole in the base of the camera. At the same time, insert the retaining screw of the platform into the camera tripod socket and tighten.

Loosen the CLAMPING SCREW of the field guide holder (figure 2). Slide the holder's expanding clamp all the way over the hub on the camera platform, and fit the LOCATING STUD on the

holder into the opening in the camera platform. If this has been done correctly, it will be impossible to rotate the holder on the hub of the camera platform. Tighten the clamping screw.

Most work using the close-up kit is done with the camera held in the hands. However, where steadiness is a factor the apparatus can be mounted on the Kodak Table Top Camera Stand,

Model B (figure 3) sold at Kodak dealers. This stand comes equipped with the right-angle head shown in the figure which holds the camera at a right angle for copying flat subjects. Do not use the field guides and their supporting arms as a camera stand.



Figure 4. Grasshopper-A subject showing the use of depth of field.

TO TAKE CLOSE-UP PICTURES

1. Attach to the camera the pair of field guides and matching lens most suitable for your subject. Use the numbers in the table to aid you in selecting the proper field size and depth of field. For example: Depth of field would be less important when photographing flat postage stamps than in taking the photograph of the grasshopper (figure 4).

2. Adjust the position of the field guides. The field guides can be pushed through the tips of the arms which support them making it possible to use them in two different ways. In one method, the field guides and their arms form a characteristic "L" shape; in the other a "T". When the field guides are adjusted to form an "L" shape with the arms (figure 3) the actual field and its relation to the field guides are shown by the dotted lines in figure 3. The height of the field is measured from the tips of the guides to the black lines near the arms (see arrows, figure 3). The width of the field is approximately the distance between the parallel field guides, a small margin having been added so that the guides themselves do not appear in the picture.

Although the guides are probably used more frequently in the "L" position, they can be pushed through the tips of the arms until the

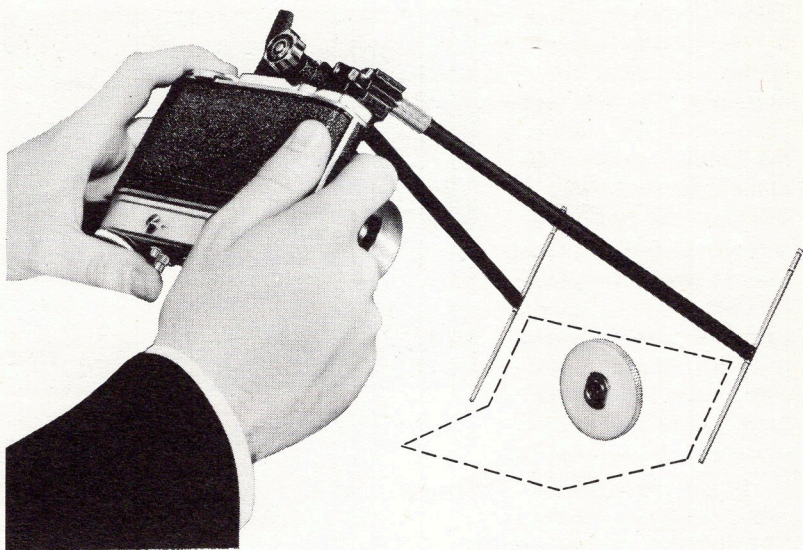


Figure 5. Taking a close-up photograph – Field guides in "T" position.

wire band on each of the guides causes them to stop. Each field guide will now form a "T" with its supporting arm (figure 5). The guides are used in the "T" position when it is not possible to frame the subject entirely and still keep it within the depth of field. Such a situation might occur if the subject were resting on a flat surface. To use the guides in the "T" position, the whole assembly must be inverted as shown in the illustration. The distance from the lower tip of the field guide to the field guide arm is now approximately one-half the height of the field. The width of field between the guides is unchanged. The dotted lines in figure 5 outline the field of view which you should consider in framing your subject.

3. Set the camera distance scale at *infinity*.

4. If the Retina IIIc Camera is being used, make an exposure reading with the built-in exposure meter. Make the exposure reading using the incident light mask over the cell of the exposure meter and pointing the camera from the subject to the picture-taking position. The use of the auxiliary lenses does *not* require an increase in exposure time.

5. Set the camera at a suitable shutter speed and lens opening using the figures for depth of field in the table as a guide.

6. Compose the picture by framing it within the area encompassed by the field guides. Remember the field guides lie in the center of the depth of field given in the table.

7. Release the camera shutter.

TO SUM UP, ALWAYS—

*assemble the equipment according to instructions. Be sure the field guides are in their proper grooves.

*use matching field guides and lenses.

*screw the auxiliary lens on the lens mount all the way.

*attach filters after the auxiliary lens.

*consult the table for exact determination of the depth of field.

Auxiliary Lens	Image Reduction	Field Size* in Inches Retina IIIc and IIc	Distance Scale Setting	†Depth of Field in Inches (Circle of Confusion 1/500*)				Film to Subject Distance in Inches
				f/8	f/11	f/16	f/22	
R1:4.5	.222	4 x 5 7/8	INF	5/8	7/8	1 1/4	1 11/16	11 1/4
R1:3	.333	2 3/4 x 4 1/8	INF	5/16	7/16	5/8	7/8	9
R1:2	.5	2 x 2 15/16	INF	3/16	1/4	5/16	3/8	7 1/4
R1:4.5 + R1:2	.666	1 1/4 x 2	INF	1/16	1/8	1/8	3/16	5 15/16

*Based on Ready Mount Aperture.

†The focal point lies approximately in the middle of the values given.

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