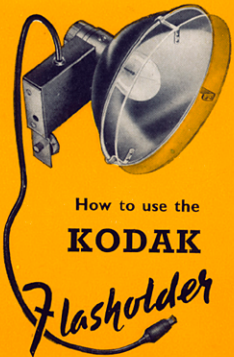


How to fix to your Camera

How to fix the Lamps and Batteries



How to use the
KODAK

Flashholder

KODAK LIMITED LONDON

The KODAK FLASHHOLDER



This folder gives instructions for the use of three models of the 'Kodak' Flashholder, an accessory available for most post-war 'Kodak' cameras. These models are:

'KODAK' FLASHHOLDER B

for Six-20 'Brownie' E and 'Brownie' Reflex

'KODAK' FLASHHOLDER FB

for Six-20 Folding 'Brownie' with f/6.3 lens

'KODAK' FLASHHOLDER KA

for all models of the Six-20 'Kodak' A

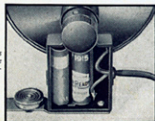
The miniature flashbulbs used with the 'Kodak' Flashholder give a single intense flash of light. The bulb is flashed automatically, as the camera shutter moves across to expose the film, by a battery housed in the back of the Flashholder.

THE FLASHBULB

Use SM, No. 5, or similar-type flashbulbs. To fit the flashbulb, first unclip the plastic diffusing screen, which must be in position when taking flash photographs as a precaution against the unlikely occurrence of a bulb shattering when flashed. Then insert flashbulb into the bayonet socket and replace diffusing screen. To remove flashbulb, unclip the diffusing screen and turn the knurled plastic knob at the rear: make sure that the flashbulb falls on something soft.

THE BATTERY

Use a "fountain pen" torch battery. Split it into its two cells and fit it as shown in the diagram so that the cells point in opposite directions. The battery must be fresh and in good condition otherwise the flash will not synchronise properly with the shutter. Any electrician can test the battery for you as follows: connect a 2.5 volt 0.3-amp flashlamp bulb across the battery (with both cells in series) and shunt it with a 2-ohm resistance; if the battery is suitable for use in the Flashholder the bulb will glow brightly.



The battery fits snugly into the battery compartment.

How to fix the Lamps and Batteries

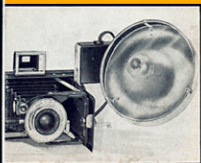
'BROWNIE' REFLEX

'Kodak' Flashholder Type B



SIX-20 FOLDING 'BROWNIE' f/6.3

'Kodak' Flashholder Type FB



Slide the forked end of the Flashholder bracket over the stud at the side of the camera body, locating the hole in the bracket over the stud at the camera top. Connect the flex to the 2-pin socket on the front of the camera, below the bottom lens.

Attach the Flashholder to the camera by screwing the clamping screw on the Flashholder bracket into the tripod socket in the bed of the camera. Connect the flex, which leads from the battery compartment, to the bayonet plug on the shutter.

Slide the forked end of the Flashholder bracket over the stud at the side of the camera body, locating the hole in the bracket over the stud at the camera top. Connect the flex to the 2-pin socket at the side of the camera, below the shutter button.

Attach the Flashholder bracket to the side of the camera body by screwing the clamping screw into the tripod socket on the side of the camera. Connect the flex, which leads from the battery compartment, to the bayonet plug on the shutter.

SIX-20 'BROWNIE' E

'Kodak' Flashholder Type B



SIX-20 'KODAK' A (all models)

'Kodak' Flashholder Type KA



MAKE SURE THAT THE FLEX DOES NOT OBSTRUCT THE CAMERA LENS

How to fix to your Camera

HOW TO TAKE FLASH PICTURES

SIX-20 'BROWNIE' E and 'BROWNIE' REFLEX

Set the shutter for "Instantaneous Snapshots" when using S.M. flashbulbs and for "Brief-time" when using No. 5 flashbulbs. (NOTE: "Brief-time" cannot be used outdoors or in brightly-lit rooms.) Stand so that the flash-to-subject distance is between the limits given in the following table:

'VERICHROME' FILM		'SUPER-XX' FILM		'PANATOMIC'-X FILM	
SM BULB	No. 5 BULB	SM BULB	No. 5 BULB	SM BULB	No. 5 BULB
5 to 7 ft.	7 to 10 ft.	7 to 10 ft.	10 to 15 ft.	4 to 5 ft.	5 to 7 ft.

Do not forget to fit a close-up lens for close-ups. Operate the shutter release exactly as for normal snapshots.

SIX-20 FOLDING 'BROWNIE' f/6.3 and SIX-20 'KODAK' A

Set the camera shutter at 1/50th sec. when using S.M. flashbulbs and at 1/25th sec. when using No. 5 flashbulbs. The exposure is controlled by adjusting the lens aperture as shown in the table below:

DISTANCE BETWEEN THE FLASH AND THE SUBJECT	APERTURE SETTING (f/number)					
	'VERICHROME' FILM		'SUPER-XX' FILM		'PANATOMIC'-X FILM	
	SM BULB	No. 5 BULB	SM BULB	No. 5 BULB	SM BULB	No. 5 BULB
30 feet	—	f/4.5	f/4.5	f/5.6	—	—
20 feet	f/4.5	f/5.6	f/5.6	f/8	—	f/4.5
15 feet	f/5.6	f/8	f/8	f/11	f/4	f/5.6
10 feet	f/8	f/11	f/11	f/16	f/5.6	f/8
7 feet	f/11	f/16	f/16	f/22	f/8	f/11
5 feet	f/16	f/22	f/22	f/32	f/11	f/16

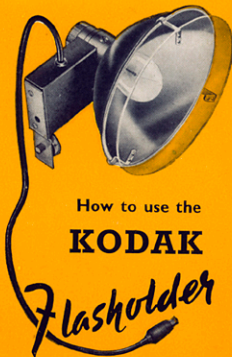
For dark-coloured subjects in dark-coloured surroundings, or outdoors at night, use one aperture larger than that given in the table (lower f/number), for example f/5.6 instead of f/8.



● Flashlight photographs indoors, and outdoors after dark, are just as easy to take as normal daylight snapshots; all you have to do is to make sure that the flash-to-subject distance is correct—as explained on the previous page—then take the picture. For best results, take flashlight photographs in light coloured surrounds whenever possible, as this increases the effectiveness of the flash. Make sure that there are no large shiny objects in the picture area, such as mirrors or highly polished ornaments, as these may reflect light from the flash back into the camera lens and thus spoil the picture. When taking portraits, pose your sitter about 4 or 5 ft. in front of a plain background. When using an S.M. flashbulb, the flash from the 'Kodak' Flashholder is quick enough to stop normal action: you can therefore photograph children at play, and take informal "candid" snapshots of the family at home, and of your friends at parties or other social gatherings. When using a No. 5 flashbulb, subjects should not move faster than is usual for normal snapshots.



● Attractive lighting effects can be obtained out of doors by choosing your viewpoint so that the sun illuminates your subject from the top or from the back, and then by illuminating the shadows with your 'Kodak' Flashholder as shown in the illustration above. It is necessary to obtain a satisfactory balance between the general illumination from the sun and the local illumination from the flash. You should stand between 7 and 12 ft. from the subject when using 'Verichrome' film and an S.M. flashbulb with either the Six-20 'Brownie' E or the 'Brownie' Reflex (No. 5 bulbs are not satisfactory). When using an S.M. bulb with a Six-20 Folding 'Brownie' with f/6.3 lens, or a Six-20 'Kodak' A, set the shutter at 1/50 sec. and set the lens aperture to suit the general lighting conditions (f/11 for an average subject and 'Verichrome' film). Stand so that the flash-to-subject distance is roughly as given in the exposure table on the left (for an aperture of f/11 and 'Verichrome' film it is 7 ft.). Make sure that the sun does not shine directly into the camera lens.



DO NOT TAKE FLASHLIGHT PICTURES IN AN EXPLOSIVE ATMOSPHERE OR NEAR HIGHLY INFLAMMABLE MATERIAL

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