

# care of your camera

## **KODAK SERVICE LEAFLET No. 5**

This leaflet will help you to ensure that your camera is always in the best possible condition for picture-taking. By checking your camera occasionally against the relevant points (especially before holidays and other big events), you will have taken the most important steps towards first-class pictures.

**KODAK LIMITED LONDON**

## camera instructions

However much you use your camera, it is always a good idea to refresh your memory occasionally by looking at the instruction book. Remember, it is geared to your particular camera, whereas this is a general leaflet covering all types. Reminders like "you cannot operate the shutter release until. . . .", "bring the viewfinder close to your eye . . .", "clean and bright battery contacts . . ." will help you to keep your camera in good trim to give even better results—they may even clear up a simple problem which was thought to be something more complicated.

## general care

A camera, though robust, is sensitive to crushing, bumping, knocking, jolting, bouncing, squeezing and squashing. Like any other precision instrument, it must be handled carefully—not only while you are using it but also when it is carried or put down somewhere. Fitting an ever-ready case or using a carrying case is always a good investment, because a case will help to prevent damage from accidental knocks.

We hardly need say that special protection would be needed if your camera was to survive a roasting in the sun or a dunking in water. These are, of course, obvious situations to be avoided, but your camera must be guarded from less expected sources of trouble and it is worth remembering the following.

If a camera is left exposed to excessive heat (particularly inside a motor car or on a radiator shelf, or lying in the sun for some time) the result can be stiff or erratic operation because the lubricants either run into other parts or become dried up. At the other extreme, don't leave your camera in a very cold place because when it is returned

to normal conditions, condensation may form temporarily on the outside parts and body, and on the delicate internal parts. Eventually, this may result in corrosion. Similarly, never keep a camera in damp or humid conditions or allow it to be covered with rain or sea spray. Salt water is extremely corrosive and is very difficult to remove completely; it attacks metal parts and the coating on lenses. Spray can be removed from external parts by wiping with a clean cloth, slightly moistened with fresh water.

Always have a safety link between yourself and your camera by using a neck or wrist-strap. Then, if the camera slips from your hands, damage is less likely to result. As an example, an accidental dip in the sea may be avoided. Such an accident will probably ruin a camera due to corrosion caused by the salt water. If the camera is retrieved, there may be a chance of saving it by rinsing it thoroughly in *fresh* water and then by taking it to a dealer who is able to send the camera very quickly to a service centre. Even then, the camera may be beyond economical repair, but it is worth trying.

A camera has moving parts which operate from the inside mechanism through to the outside of the camera. For this reason, the camera cannot be completely sealed, so from time to time you should clean all the accessible parts. Dust, dirt and small chips of film should be blown out and then a small, soft brush used to remove any obstinate particles. If this is not done, some pieces may find their way into the mechanism (this could cause parts to jam) or settle on the film and probably adhere to it during processing to produce dirt marks or spots on slides, prints or movies. However, if you think particles have found their way into the mechanism, don't be tempted

to take the camera apart yourself—leave this job to the experts.

You cannot see well through a dirty window. In the same way, you cannot expect your camera to produce the best pictures if the lens is dirty. To clean the lens, blow away dust, then wipe gently with a soft, clean, lintless cloth. If necessary the cloth can be moistened with a *little* 'Kodak' Lens Cleaner. Never use cleaning solutions which are abrasive or solvents of plastics as these will harm the lens or plastic camera parts. While you are cleaning the lens, don't forget the viewfinder and the exposure meter window.

When you open your camera to load film (or batteries) stay out of the wind so that sand or dust cannot be blown into the mechanism.

## exposure meters

"Automatic" cameras have built-in exposure meters to measure the brightness reflected by the scene. An exposure meter is a precision instrument and is as delicate as a watch; an unlucky knock or fall can put the mechanism out of alignment. When you are travelling in a car, for example, don't leave a camera loose where it can bounce about, or on a parcel shelf where it can get hot, but keep it in its case and lodged where it will stay put and have a cushioned ride.

Normal lighting conditions have no harmful effects on exposure meters. However, the batteries which power certain types of meter will be run down faster than usual if the meter is left exposed to bright light. So whenever you are not using your camera, keep it in its case to preserve the battery as well as to protect the camera.

## batteries

If your camera has batteries to power the flash, motor-drive, or exposure meter, make sure of trouble-free operation by keeping the battery ends and the camera contacts clean and bright by rubbing them occasionally with a rough cloth. Any slight deposits (which are often invisible) are then removed. Out-of-reach contacts can be cleaned by gently rubbing them with the eraser on the end of a pencil. *Even with new batteries, the ends should be rubbed thoroughly with a clean, rough cloth before the batteries are installed.*

Occasionally, batteries may leak. If you have to store your camera (if only for a few days) remove the batteries first so that there is no risk of the mechanism becoming corroded by leakage from the batteries. But keep batteries nearby (in a plastic bag) so that you remember to replace them just before using the camera again.

If you find that the electrical parts of your camera are not working as they should, just check that the batteries are installed the right way round (see your camera instruction book) and that all the contacts are clean. Even if several batteries are used to do one job, one dud among these can stop the camera working. If it does stop working, remove the batteries, clean their ends and the camera contacts, then try them again in the camera. If the camera will not work after this, renew the batteries.

For good performance, batteries should be renewed at least once a year.

## shutters

A particularly delicate part of the camera is the shutter mechanism. This is hidden and any dirt that gets in, or any fault that may develop, is never seen (but the warning may come from the effects of dirt being heard or

felt). All parts of a camera are affected by grit, sand, excessive heat, cold or damp, but the shutter is particularly vulnerable. Grit or sand in the shutter mechanism is likely to jam the moving parts. The shutter will also cease to function if the parts become distorted as a result of the camera being dropped or knocked.

Excessive heat, as we have said, dries up lubricant, and excessive cold thickens it. Either way the shutter cannot operate properly if it is subjected to one or the other for too long.

When possible, it is good practice (just before you put in a fresh film, for example) to "exercise" the shutter by releasing it a few times at each speed setting. With movie cameras, let the motor run freely for a while (at different running speeds if your camera has these). If the shutter becomes stiff or erratic in operation, it may be a sign that there is something seriously wrong. Do not force parts which normally move easily; it is usually quicker and cheaper for an expert to discover the cause as soon as possible.

## loading 35mm cameras

If you have a 'Retina' S1 or S2 Camera you are lucky—they have an easy-load system. But other cameras in which 35mm film is advanced by two sprocket wheels, require more time when loading. While the camera is open, see that the perforations in the film are engaged by both top and bottom sprocket wheels. Close the camera and, before winding on, gently turn the rewind knob *in the direction for rewinding* to take up any slackness in the film. When winding on, check that the rewind knob turns; this indicates that film is being transported. By following this simple procedure, you are unlikely to be troubled by torn film.

If, when you come to the other end of the film, any resistance is felt in winding, don't use force just to "squeeze" another picture, for if the mechanism gives way first it will certainly be more expensive for you than the loss of an "extra" frame. (You will probably lose more than one frame because it is usually necessary to remove the damaged part of the film before the remainder can be processed). Also, torn film makes rewinding difficult and you may be inconvenienced if the film is ripped off the cassette spool, making it impossible to rewind without opening the camera and cassette to re-tether the film.

## repairs

Some or all of the details given in this leaflet will apply to your camera and will help to make picture taking trouble-free. However, should something unforeseen happen and the relevant suggestions do not help you to put it right, then the camera will need expert attention.

NEVER attempt a repair job yourself; you will probably not know the correct method of dismantling or re-assembly and because of this, further damage may result. Then, instead of a localized fault needing attention, your camera will require a complete check to make sure all parts will work correctly. Most photo-dealers will be able to arrange for your camera to receive expert attention.

## insurance

Who can tell whether a camera will be accidentally damaged, lost, or stolen? It is certainly worth while to insure your camera against these possibilities, especially when it is a valuable one. However,

the value of your camera may be insufficient to justify a special policy; in this case it may be possible to include your camera in the items covered by an "all-risks" insurance.

## **picture taking aids**

Having checked your camera, don't stop there! Check with your Kodak dealer for details of Kodak publications which will give you so many ideas for making good pictures. For example, the series of hobby books—"Motor Sport in Colour", "Sailing in Colour", "Your Garden in Colour" and "Your Holiday in Colour" link photography with other popular pursuits to bring more pleasure from your favourite activities, all the year round.

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