360

HOW TO USE YOUR POLAROID LAND CAMERA MODEL 360

IMPORTANT !

To make flash pictures you must charge the battery in the electronic flash unit. See page 2 for details.

For best results:

When the flash unit is not in use, keep it on the charger and charge the battery continuously. This will keep the battery fully charged and ready for use.

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Getting Acquainted

Operation

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KNOW YOUR FLASH UNIT AND CHARGER

Focusing the camera with the rangefinder automatically opens or closes the blinds (A) in front of the flash tube so as to give correctly exposed flash pictures at any distance from 3½ to about 10 ft.

You must focus the camera accurately on the most important part of your subject to get a correct exposure.

The flash unit is attached to the camera by the connector (B). The button (C) serves to unlock the flash unit from the camera, for removal. The unit has an On-Off switch (D) and its own Lighten/Darken control (E).

The flash duration is about 1/1000 sec., short enough to give unblurred pictures of quite fast action, such as sports activities, children playing, etc.

The light is balanced to give excellent results with both Polacolor and black and white films.

The power for the flash is provided by rechargeable nickel-cadmium batteries, which are built into the flash unit and need never be changed.

When the batteries are fully charged, the unit will give you about 40 flashes. After each flash, it takes 20 to 25 sec. for the unit to build up the energy for the next flash.

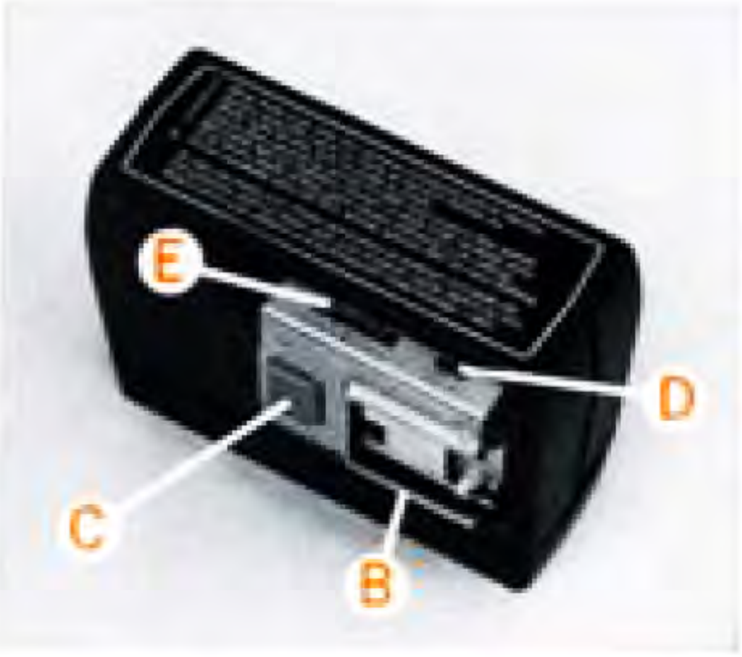
Each Polaroid electronic flash unit is matched at the factory with the camera with which it is supplied, to assure the greatest possible exposure accuracy. Flash units and cameras should not be interchanged.

Each flash unit is supplied with the Polaroid Fast Charger, #363.

HOW TO USE THE CHARGER

The charger is designed so that it first gives the flash unit batteries a substantial charge at a fast rate and then automatically switches to a trickle charge to provide the batteries with additional energy so they will give the maximum number of flashes.

1. Connect the charger (F) to a 110-120V AC outlet (for other voltages you **must** use a suitable voltage converter).



2. Switch the flash unit ON.

3. Slide the flash unit onto the charger all the way. The charger light (G) should go on, a signal that the charger is providing a fast charge.

If the light does not go on, check that the flash unit is pushed onto the charger all the way. The charger light also may not go on if the battery has been charged recently and the flash unit has not been used enough since then to reduce the charge.

4. Charge until the charger light goes out, a signal that the battery is sufficiently charged to give enough flashes for several packs of film (a 15 minute charge is enough for one pack). The charger now automatically begins to trickle charge.

(The charger light should go out in about an hour or less; if it stays on as long as two hours, switch the flash unit OFF for a few seconds and then ON again. If the light still does not go out, unplug the charger and have it and the flash unit checked for a malfunction.)

5. Switch the flash unit OFF and slide it off the charger (unless you want a maximum charge — see below).

6. **To get the maximum number of flashes:** Leave the flash unit on the charger to trickle **charge for at least 12 hours** after the charger light goes out. When the flash unit is not in use, store it on the plugged-in charger (with the flash unit switched ON) so the battery will be kept fully charged.

"Sleepy" batteries: Some batteries, if they are neither used nor charged for 6 months or more, may become "sleepy". If this happens, they will not accept a charge in the usual manner. Although the charger light may go out (usually the signal that the battery has been charged) the flash unit may flash only a few times. To "wake up" the battery, leave the flash unit on the charger to trickle **charge for at least 12 hours.** "Sleepy" batteries may occur even in brand new flash units.

KNOW YOUR CAMERA

Flash unit and connector

Folding view/rangefinder

Shutter release

Fast focus scale

White tab slot

Yellow tab slot door

3-element lens, 114mm., f/8.8

Camera Lighten/Darken control (non-flash pictures)

Shutter cocking lever

Rangefinder pushbutton

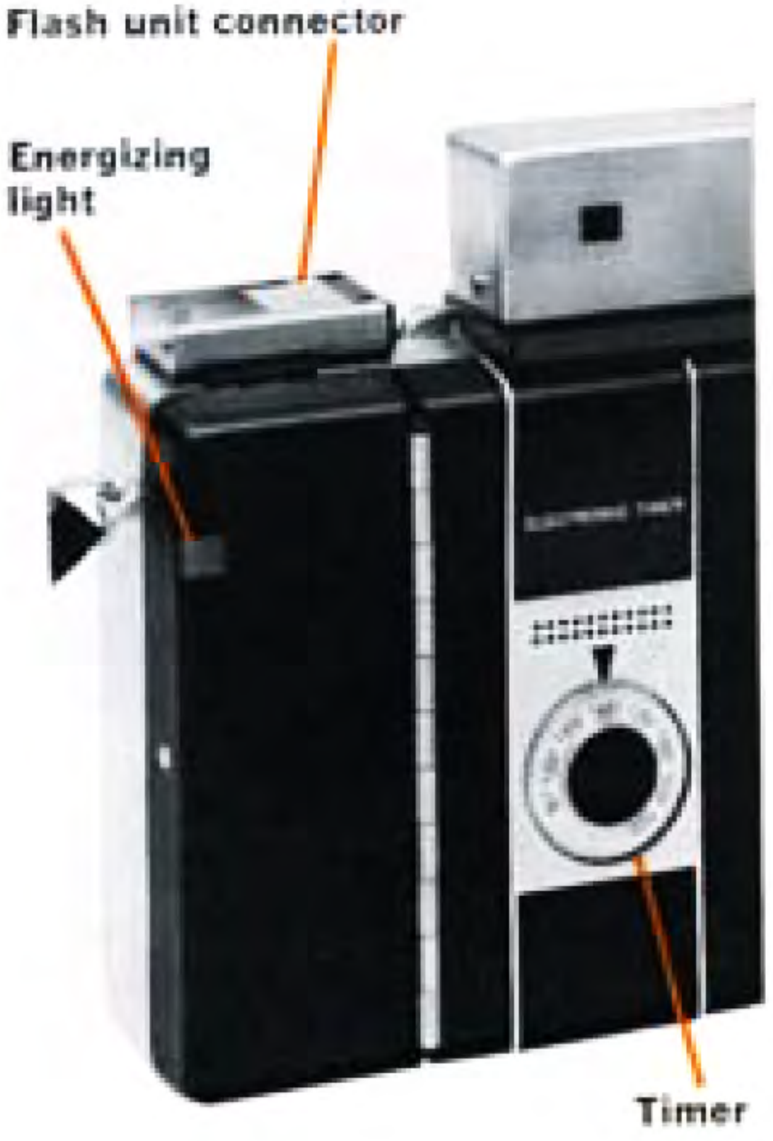
Battery compartment (change batteries yearly, see page 35)

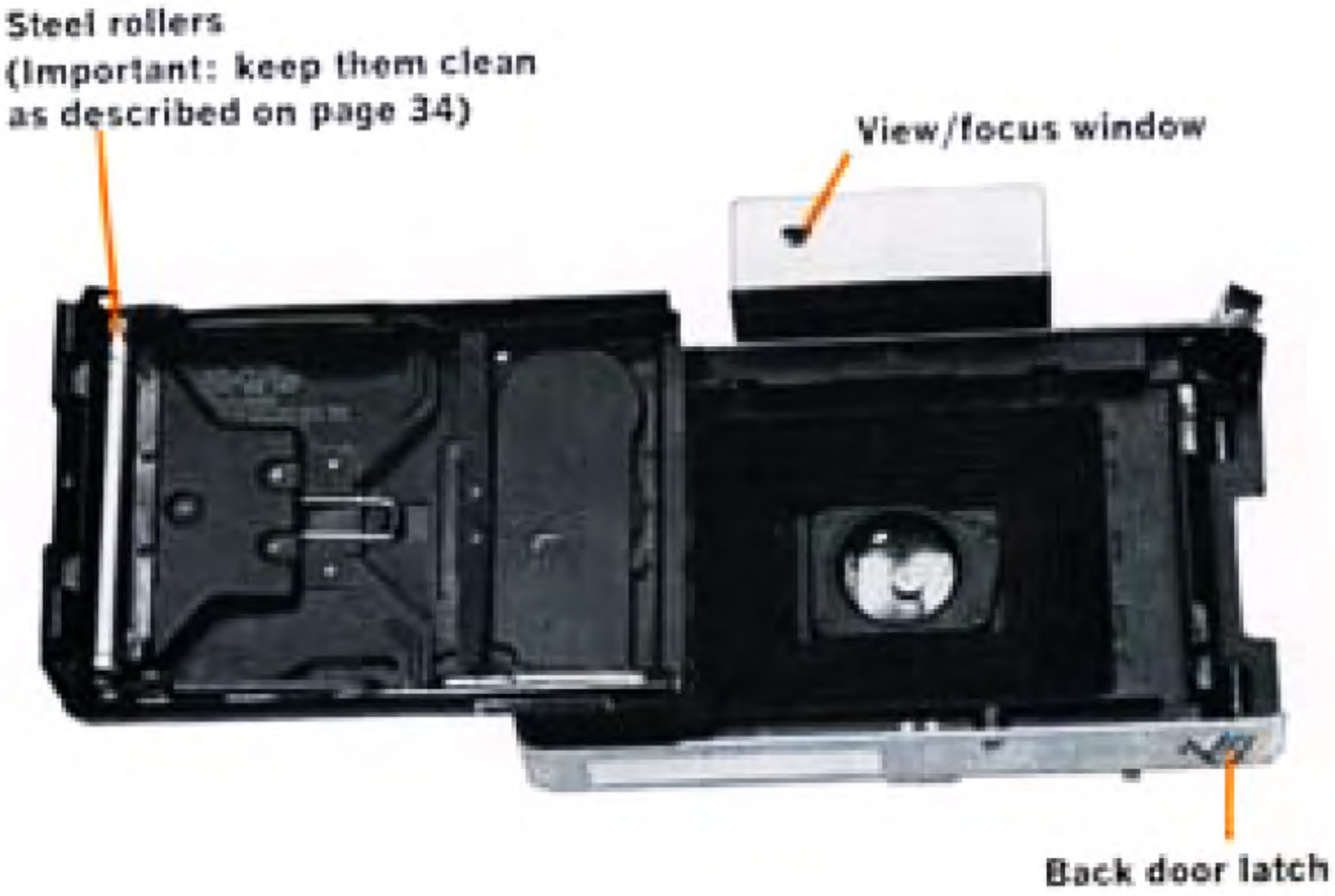
Lighting selector

Electric eye

Film speed dial

Lighting selector knob


Flash unit connector
Energizing light
Timer


Steel rollers
(Important: keep them clean as described on page 34)
View/focus window
Back door latch

WHAT THIS CAMERA CAN DO

The Model 360 is designed to make instant pictures in the widest possible variety of conditions. Here are some of the kinds of situations you can handle.

FLASH: As you focus for individuals or groups from 3½ ft. to about 10 ft. away, the electronic flash automatically gives you crisp, well exposed pictures. It "stops" most kinds of action and prevents blurring due to camera shake or subject movement. **The system is designed to give best results in medium sized rooms with light colored walls.**

BRIGHT DAYLIGHT OUTDOORS: The electric eye automatically measures the brightness of the light reflected from the scene and sets the correct exposure. In bright sunlight, shutter speeds may be as fast as 1/600 sec., so you can "stop" most kinds of action. And, for some special situations, you can even combine flash with daylight.

DIM LIGHT, WITHOUT FLASH: Some subjects are too big for flash pictures — for example, the interior of a church, or a lighted monument at night. The electric eye automatically makes great time exposures. Or, you can make snapshots in deep shade, etc.

HOW TO OPEN AND CLOSE THE CAMERA

1. Magnet holds cover down. Lift back edge.

2. To remove it, push spring (A) and lift hinge (B). To replace, slide hinge down over spring.

3. Lift finder up and back; magnet will grip it.

4. Raise button No. 1; this unlocks camera front.

5. Pull camera front out as far as it will go. Be sure locking bar (A) snaps into place. If not, you may get blurred or all-black pictures.

6. To close camera, press down on locking bar and push camera front in until it locks. Fold finder down gently.

HOW TO ATTACH AND REMOVE THE FLASH UNIT

1. Hold the flash unit so that the rails on the bottom (A) line up with the bottom of the camera connector (B).

2. Slide the flash unit onto the connector all the way, until it latches. Then pull back on it to be sure that it is securely connected.

To remove: Press the red button (C) and slide the flash unit off the connector.

HOW TO HOLD THE CAMERA

HORIZONTAL: Grip the two ends. Place your forefingers on the No. 1 buttons; you can easily shift the right forefinger to the No. 2 button. To steady the camera, press your elbows into your ribs; rest the camera against your nose.

VERTICAL: Grip the camera as you would for a horizontal picture, turn it so your right hand is below and the flash unit is above. Brace the camera against your forehead and face.

HOW TO AIM AND FOCUS THE CAMERA

This camera has a combined viewfinder and rangefinder made specially for it by the famous German firm Zeiss Ikon.

The rangefinder makes it easy to get sharp, well framed pictures. In addition, it is coupled to the flash unit and automatically adjusts the exposure for flash pictures (as explained on page 12). You must know how to use the rangefinder correctly and quickly.

Hold the camera horizontal as shown. Place your forefingers on both No. 1 buttons and move them all the way to your left. Look through the finder window (A) and aim the bright spot in the center at a subject about 4 ft. away. The bright spot is the rangefinder.

You should see two images of your target in the bright spot. This means the camera is not focused for that distance; if you made a picture now it would be out of focus and fuzzy.

Push the No. 1 buttons back and forth until the two images in the bright spot become one — sharp and clear. Now the camera is focused. The bright viewfinder frame automatically adjusts to show what will be in the picture. Center your subject. Shoot.

For vertical pictures, you can focus with the camera horizontal; turn it to vertical position to aim and shoot.

The closest focusing distance with the rangefinder is about 3½ ft. If you want to come closer than 3½ ft., you must use either the portrait or close-up kit described on page 43.

Look through here. Aim bright spot at subject.


Push No. 1 buttons back and forth; watch the bright spot.

OUT OF FOCUS: If you see two images of your subject in the bright spot, the camera is not focused for that distance.

IN FOCUS: Move the No. 1 buttons until the two images in the bright spot blend into one that is sharp and clear.

Keep your eye centered in the finder window or you will be unable to see the bright spot.

WHY YOU MUST FOCUS ACCURATELY WHEN USING FLASH

Focusing the camera automatically adjusts the opening of the blinds in the flash unit. This assures that, between a distance of 3½ ft. and about 10 ft., a subject which is sharply focused will also receive the right amount of light from the flash unit to give a correctly exposed picture.

Picture 1: As the focusing button (A) is adjusted for closer distances, the guide pins (B) in the camera and the flash unit move in the direction shown. This causes the blinds to be gradually closed more and more, thus reducing the light emitted to the amount needed for such a close distance.

Picture 2: By adjusting the focusing button (A) for greater distances, the guide pins (B) will move in the direction shown, causing the blinds to be gradually opened more and more. This increases the light emitted to the exact amount required for that greater distance.

To get a correctly exposed as well as a sharp picture with the Polaroid electronic flash unit, always focus accurately.

HOW INCORRECT FOCUSING AFFECTS EXPOSURE

The subject in both examples was 3½ ft. from the camera.

1. Correct focus: In the rangefinder you saw a single image of the most important part of your subject. The image is shown oversize for clarity.

The flash unit blinds opened the correct amount, lighting the subject for a well exposed picture.

2. Incorrect focus: The camera was focused for a distance greater than 3½ ft. The rangefinder showed two images (exaggerated here for clarity).

The blinds were now opened so wide as to give a correct exposure for a distance greater than 3½ ft. As a result the subject at 3½ ft. received too much light, and thus the picture was too light. If you were using color film, the picture may also have been out of focus.

WHAT YOU SHOULD KNOW ABOUT YOUR FILM

This camera uses Polaroid Land pack films. A film pack contains all the materials to make eight pictures. For each picture there is a piece of negative film, a sheet of print paper, and a thin foil container (the pod) filled with the jelly-like chemicals needed to develop the picture.

After snapping the picture, you start development by pulling a piece of paper out of the camera. This drags the exposed negative, a sheet of print paper, and a pod of chemicals between two steel rollers. The pressure of the rollers squashes the pod, spreading the chemicals between the negative and print paper to form a picture "sandwich".

The picture develops outside the camera. After the recommended development time you separate the sandwich and there is your finished picture.

At present there are two Polaroid pack films available: 3000 speed black and white, Type 107, and 75 speed color, Type 108. There may be additional types of film in the future.

You must know the film speed number, 3000 or 75, to set the camera controls correctly.

An important label: On some color film packs you may see a label (A) advising you to turn the Lighten/Darken control to a special setting for all pictures made with that pack. Please do so with the L/D controls on both the camera and flash unit or your pictures may be too dark.

CAUTION: Please be sure to read the important notice on page 54.

HOW TO LOAD A FILM PACK

Open the top of the box. Pull out the film package. Handle it gently, carefully. Hold the package near the edges. **Don't press hard on the middle of the package.** Starting at the corner, tear open the entire side of the foil bag along the dotted line and remove the film pack. Discard the moisture absorbing card supplied with color film. Handle the pack by the edges only. With color film there's a set of mounts; with black and white film there's a coater. Please read the instruction sheet. Save the box to carry prints in safely. It can also be very useful when coating black and white prints.

Always open the package and load film in the shade, not in direct sunlight, to avoid fogging the film.

A special request!

As soon as you open the film pack you will begin to accumulate waste paper. There will be more when you develop the pictures. We hope that it won't become litter in the streets or be scattered around the landscape.

What to do with the waste paper? Usually, it will fit into an empty foil bag or film box. Or, if you're planning to take lots of outdoor pictures, bring along a paper bag or other container for waste. Everyone will appreciate this little extra effort on your part.

LOADING (Cont.)

1. Push the back door latch; the door will pop up.

2. Open it all the way. Are the rollers (A) clean? If not, clean them as described on page 34.

3. Hold the film pack by the edges as shown, and push the closed end of the pack under the door hinge against spring tension.

4. Push the pack down into the camera. You'll feel it snap into place.

5. & 6. Check to be sure that the white tabs are not caught between the film pack and the camera body. Close the back door. Press both sides firmly to be sure that both sides latch. The black tab of the safety cover must stick out of the small slot. If not, reopen the back lead the tab out.

7. Grip the black tab. This is the end of the safety cover.

8. Pull the safety cover all the way out of the camera without stopping. Don't rip it.

9. With the safety cover out, a white tab (A) should stick out of the small slot (No. 4). Don't pull the tab. You're now ready for picture No. 1.

IF NO WHITE TAB APPEARS

1. If there's no white tab in the No. 4 slot, do the following in the shade or indoors, not in bright sunlight.

2. Open the back of the camera part way and, without disturbing or moving the film pack, push the white tab out into the open.

3. Close the back of the camera, making sure that both sides are locked securely and the white tab is outside in the No. 4 slot.

THE CONTROLS . . . AND WHAT THEY DO

A. The Film Speed Dial: It sets the camera for the kind of film you are using. For 75 speed color film, turn it to 75; for 3000 speed black and white film turn it to 3000. The dial has a strong spring and must be turned quite far to set it. The other numbers on the dial (besides 75 and 3000) are for films that may be sold in the future.

B. & C. The Lighting Selector: It sets the camera for the kind of light with which the picture will be taken. Move the knob (B) sideways to put the yellow square in the Lighting Selector (C) next to the label describing the lighting conditions. When using 3000 speed film look at the 3000 SPEED ONLY side; when using 75 speed color (or any film other than 3000 speed film) look at the 75, 150, 300 SPEED side.

D. The Electric Eye: This controls the exposure for pictures made without flash. When you press No. 2 button, the shutter opens. Instantly, the electric eye measures the brightness of the light reflected from the subject and times the closing of the shutter to give correct exposure. **The electric eye does not control the flash unit.**

E. **The camera Lighten/Darken control, for pictures made without flash:** Turning this L/D control adjusts the electric eye so you can make your picture a little lighter or darker than it would be if the L/D control were left at the Normal position (shown here). **This control does not affect pictures made with flash.**

F. **The flash Lighten/Darken control:** Turning this L/D control adjusts the amount of light coming from the flash unit so you can make a flash picture a little lighter or darker than it would be if the L/D control were left at the Normal position (shown here). **This control has no effect on pictures made without flash.**

HOW TO SET THE CAMERA FOR MOST FLASH AND DAYLIGHT PICTURES

FOR 75 SPEED COLOR

Film Speed Dial (A): Set it to 75.

Lighting Selector: Move the knob to set the yellow square as shown for almost all color pictures.

BRIGHT SUN ONLY is a special purpose setting; use it as described on p. 38.

Lighten/Darken controls: Set them to the Normal position (shown) unless a label on the back of the film pack (A) shows a special setting. You can open the back of a loaded camera to see if there is such a label. If you do this carefully in the shade or indoors and don't move the pack, the film will not be damaged.

FOR 3000 SPEED BLACK AND WHITE

Film Speed Dial (A): Set it to 3000.

Lighting Selector: Move the knob to set the yellow square as shown for all flash pictures and almost all outdoor daylight pictures.

INDOORS WITHOUT FLASH is a special purpose setting for dim light; see p. 36.

▲ For flash. ▼ For daylight.

Lighten/Darken controls: Leave them at the Normal position (shown) unless you want to make a picture lighter or darker. For some dim light pictures you may have to move the camera L/D control toward LIGHTEN. See p. 36.

IN BRIGHT DAYLIGHT ONLY

You can use the fast focus scale: With 3000 speed film and the camera set as shown at left, it's not necessary to focus with the rangefinder to get sharp pictures — just pre-set the fast focus scale to one of the three marks and aim. Here it's shown set for groups 5-10 ft. away. The right hand mark is for everything past 10 ft.; the left mark is for close subjects (3-5 ft.). This method is handy for action shots and scenes.

Don't use the fast focus scale for flash pictures, or in dim light, or with color film at any time.

HOW TO MAKE FLASH PICTURES

STAND 3½ ft. to about 10 ft. from your subject (5 ft. is a good distance). Your pictures will look better if there's a light colored background a few feet behind your subject.

CHECK that the Film Speed Dial, the Lighting Selector, and the L/D control are set for the kind of film you are using (see page 20).

SWITCH ON: Move the switch (A) to ON. The energizing light (B) will come on and you will hear a soft whining sound from the power supply. When the light begins to blink, the flash unit is ready and you can shoot.

1. **AIM AND FOCUS:** Frame your subject in the viewfinder. Push the No. 1 buttons until the bright spot shows a single clear image of the most important part of your subject. Then frame your subject again.

2. **SHOOT:** Press button No. 2 until you hear a loud click and the flash fires.

SWITCH OFF to save power until you start to get ready for the next picture and switch ON again.

3. **RESET:** Immediately after snapping a picture, press No. 3 button down firmly until it locks and stays down. This resets the shutter so you'll be ready for the next picture.

YOU ARE NOW READY TO DEVELOP THE PICTURE. SEE PAGE 26.

FLASH PICTURE HINTS

Line up groups: Try to have everyone about the same distance from the camera so they'll be lighted evenly.

Have plenty of color: White, black, and gray don't improve color pictures.

Spare the eyes: Let your subjects look elsewhere than at the camera.

If the flash doesn't fire: Immediately let No. 2 button come up. Perhaps you forgot to switch ON the flash unit. If the room is dimly lit, the film may still be good — don't pull the tabs. Instead, move the switch to ON until the flash is ready, and shoot.

For action pictures: See page 46.

Special flash techniques: Sometimes you can use both flash and daylight for the same picture (see page 44).

Don't shoot flash pictures in explosive atmospheres.

HOW TO MAKE DAYLIGHT PICTURES

STAND so the light on the subject is coming from behind you or from the side, but not from in front of the camera.

CHECK that the Film Speed Dial, the Lighting Selector, and the L/D control are set for the kind of film you are using (page 20), and that the No. 3 button is locked down (opposite page).

If the flash unit is on the camera, be sure that the switch is turned OFF.

1. AIM AND FOCUS: Frame your subject in the viewfinder. Push the No. 1 buttons until the bright spot shows a single clear image of the most important part of your subject. Then frame your subject again in the viewfinder.

2. SHOOT: Press button No. 2 smoothly and slowly, without moving the camera, until you hear a loud click. When shooting in the shade or in dim light, hold No. 2 down and don't move until you hear a second click as the shutter closes. Then let No. 2 button come up.

3. RESET: Immediately after snapping a picture, press No. 3 button down firmly until it locks and stays down. This resets the shutter so you'll be ready for the next picture.

YOU ARE NOW READY TO DEVELOP THE PICTURE. SEE PAGE 26.

DAYLIGHT PICTURE HINTS

The best light for pictures of people: On a very bright, hazy day the light is even and the shadows are soft.

Move in close: The bigger your subject is in the print, the more color and detail you'll be able to see.

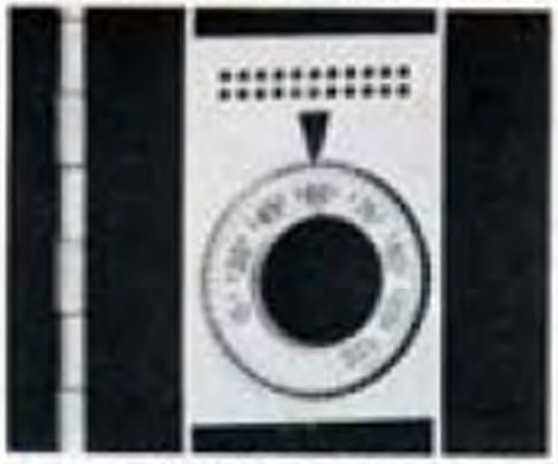
Have plenty of color: Look for subjects and backgrounds with big areas of strong, bright colors.

Watch the background: The light on it should be just about as bright as the light on the subject.

Keep an eye on the temperature: Cold or very hot weather can affect the quality of your pictures. Be sure to read page 29, which explains how temperature affects your pictures.

Lighting to avoid: Bright light behind the subject will "fool" the electric eye. Your subject will be too dark.

HOW TO DEVELOP THE PICTURE



1. **Set the timer:** Turn the number dial so the desired time is next to the point of the arrow.

The timer will start automatically when you pull the yellow tab (opposite page).

2. **Hold the camera as shown:** Use your left hand. Your grip should be firm but flexible. Hold the camera a few inches in front of you with your elbows close to your body. Grasp the white tab with thumb and forefinger.

3. **Pull the white tab all the way out of the camera:** Pull it straight out, without stopping. This causes a yellow tab (A) to pop out of a narrow door in the end of the camera. Don't block this door in any way.

If no yellow tab pops out, stop: Don't pull another white tab; you will waste film. Instead follow the steps shown on page 33.

Never pull a white tab if you can see a yellow tab: If you accidentally do so, stop! Follow the steps shown on page 33.

4. **Grip the center of the yellow tab.**

5. **Pull the yellow tab all the way out of the camera:** Pull straight, smoothly, at medium speed, without slowing down or stopping. This starts the timer (see below).

THE PICTURE IS NOW DEVELOPING OUTSIDE THE CAMERA.

How the timer works: Pulling the yellow tab out automatically starts the timer and turns on a light behind the arrow. **Starting the timer does not cause the number dial to turn while the timer is operating.** At the end of the time the light goes out and the timer makes a "beep" sound.

If you shoot another picture and pull the yellow tab while the timer is operating, the timer will stop timing the first picture and start to time the second picture.

6. **Wait:** Develop the picture for the full time given in the film instruction sheet. Let the film hang from the yellow tab without moving, or lay it down flat.

Don't touch or bend the part where the picture is developing (A).

Next page, please.

DEVELOPING (Cont.)

7. **Separate the print:** After the full development time, quickly lift the print away from the rest of the paper, starting from the end near the yellow tab, as shown. **Don't** start at the other end; you will get developer chemicals on your fingers. Don't touch the face of the print. Black and white prints must be coated and color prints should be mounted (see page 32).

8. **Fold up the negative:** To avoid touching chemicals left after the print is removed, fold up the negative with the moist side in. Please put it in a wastebasket.

CAUTION: Please be sure to read the important notice on page 54.

DEVELOPING HINTS

Time development carefully: Color pictures that are developed for too long a time will tend to have a bluish tint; if they are developed for less than the full recommended time, they will have a reddish brown tint and the colors will be of poor quality.

Black and white pictures will not be harmed by a few seconds extra development time. If they are developed for less than the recommended time they will have a muddy gray look.

Check the timer: It is designed to be sufficiently accurate for its purpose but should be checked occasionally. If it's fast or slow, allow for this when developing pictures.

Is the print too light or too dark? If so, page 39 tells you what to do.

CHECK THE TEMPERATURE! IT'S IMPORTANT

Cold and heat have a great effect on the way your picture develops and on the print quality. Even moderate cold can ruin your pictures unless you take precautions.

The important factor is the temperature of the camera and film at the time you're developing the picture.

A loaded camera carried outdoors in cold weather for half an hour gets thoroughly chilled. If you then enter a warm house and a few minutes later shoot a flash color picture the results are likely to be bad. It takes a long time for a cold camera and film to warm up.

However, if camera and film are indoors and warm, you can step outside to snap the children in the snow, step back in again in a minute and develop the picture normally.

In cool weather development times may have to be adjusted according to the temperature. The instruction sheet with each film pack contains detailed information about development times and temperatures. Be sure to read these recommendations; they may change from time to time.

In very hot weather there is a greater tendency for chemicals to be squeezed out of the edges of the picture assembly as you pull the yellow tab to begin development. If these chemicals collect on the steel rollers they can cause defects in your prints. So, when it's hot, be extra careful to keep the rollers clean (page 34).

HOW TEMPERATURE AFFECTS COLOR FILM

The normal development times for color film are set for temperatures of 75°F (24°C) and warmer. When it's cooler the action of the developer chemicals slows down and you must develop for a longer time. See the film instruction sheet for more details.

When the temperature gets to 65°F (18°C) and below, the chemical action is so sluggish that color pictures won't develop well without help. That help is the Cold-Clip (page 30). Color pictures developed in cold weather without the Cold-Clip will be dark, with muddy colors.

As a general rule, use the Cold-Clip whenever it's too cool to be comfortable in a short-sleeved shirt.

You'll get your best colors in pictures made in pleasantly warm weather. But when it is terribly hot your prints may show weak colors and have a pinkish tint overall.

HOW TEMPERATURE AFFECTS BLACK AND WHITE FILM

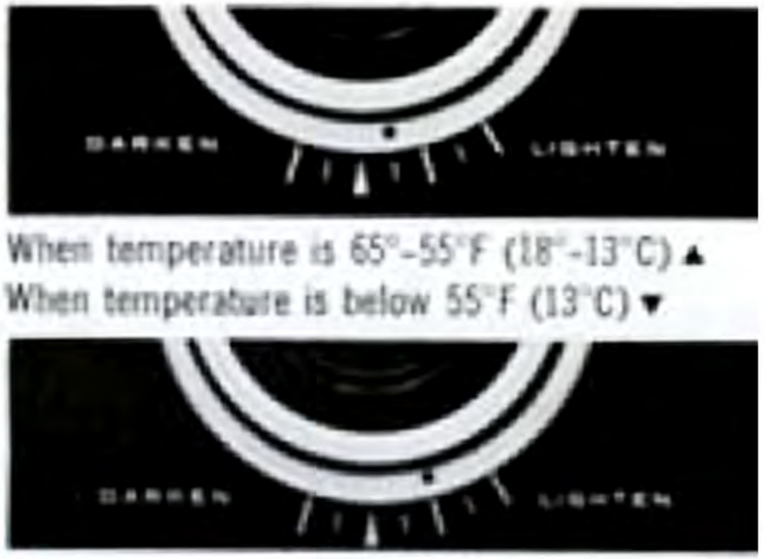
The normal development times are set for temperatures of 70°F (21°C) and above. **As a rule, if it's too cool to be comfortable in a short-sleeved shirt, develop pictures for a longer-than-normal time.** Time and temperature recommendations may change; see your film instructions for details. **Don't use the Cold-Clip with black and white film.**

HOW TO USE THE COLD-CLIP WITH COLOR FILM

The Cold-Clip makes it possible to get good color pictures when the temperature of the camera and film is 65°F (18°C) or below at the time the picture is developed.

If you are unsure of the temperature, use the Cold-Clip anyway. It may improve the color of your pictures and it can do no harm even if the temperature is above 65°F. Store the Cold-Clip in the camera cover when it is not in use, so it will always be handy when needed.

1. **Warm up the Cold-Clip:** Take it out of the camera cover and warm it with body heat in an inside pocket or between your arm and body for about five minutes **before** starting to take pictures.



When temperature is 65°–55°F (18°–13°C) ▲
When temperature is below 55°F (13°C) ▼

2. **Set the L/D control and shoot:** When it's cool enough to use the Cold-Clip, you should set the camera L/D control as shown before taking the picture. **For a flash picture, set the flash L/D control the same way.**

If the Normal position of the L/D control for that film pack already is one mark toward LIGHTEN, turn the L/D control one or two more marks toward LIGHTEN, according to the temperature.

These recommendations may change, from time to time. For the latest information, check the film instructions.

3. **Start development:** Pull the yellow tab all the way out of the camera and immediately place the picture "sandwich" inside the Cold-Clip with the tab hanging out. Do this within 10 seconds after pulling the yellow tab.

4. **Keep the Cold-Clip and film warm:** Put the Cold-Clip between your body and arm while the picture develops.

5. **Time development:** Let the picture develop for 60 seconds inside the Cold-Clip, then remove the "sandwich" and separate the picture in the usual way.

Occasionally, developer may leak from the edges of the developing picture and stick to the Cold-Clip. Avoid contact with this material and before using the Cold-Clip again clean it with a damp cloth. **Please be sure to read the CAUTION notice on page 54.**

Don't use Cold-Clip for black and white pictures

CARE OF THE PRINT

CARE OF BLACK AND WHITE PRINTS

Pictures made with Type 107 film must be coated, within two hours if possible, to protect them from fading, scratches, etc. A coater is supplied in each film package. To coat a print, lay it face up on a clean, smooth surface and hold down one edge.

Remove the coater from the tube. Hold it by the plastic handle and run the liquid-soaked side down the length of the picture, away from you. Use 6 to 8 overlapping strokes and moderate pressure. Cover the **entire** print, including the borders. Don't scratch the print with the edge of the coater. To get more liquid from a partly used coater, press it down on the near end of the print, then spread the squeezed-out liquid across the picture.

The coating dries quickly and forms a tough protective layer over the image. Don't bend or crease coated pictures, and don't write on the back with a ball-point pen or a sharp pencil; the coating may crack and cause discoloration in the print. When you write on the backs of prints, use a soft pencil and write lightly, and only in the areas around the edges. Keep freshly coated prints apart, or they will stick together.

Don't use corner mounts, paste, glue, or rubber cement to mount pictures. Many adhesives contain impurities that discolor pictures. Never put your pictures in albums with black paper leaves; use Polaroid Picture Albums.

CARE OF COLOR PRINTS

A newly separated color print will look nearly dry, but don't touch it for a few minutes until the surface dries hard and glossy. To protect it against curling, cracking, etc., mount it on one of the print mounts supplied with the film. **Do not coat color prints.**

The dyes used to form colors in the prints are long lasting. However, like all dyes, they will fade if exposed to bright light for long periods of time. For maximum protection and easy access, store prints in Polaroid Picture Albums.

IF NO YELLOW TAB APPEARS WHEN YOU PULL THE WHITE TAB

1. Don't pull another white tab. Instead, gently open the camera back just enough to get one fingertip under it to hold down the film pack. Do this indoors or in the shade.

2. While holding the pack down lightly (picture at left) slowly open the back all the way and take hold of the topmost yellow tab, as shown.

3. Gently pull the entire picture assembly all the way out of the pack and discard it. Don't try to save it. While the back door is open check that the rollers are clean (page 34).

4. Close the back of the camera, making sure that the next white tab sticks out of the small slot next to No. 4. Check that both sides of the back latch securely.

YOU MUST TAKE CARE OF YOUR CAMERA

KEEP THE ROLLERS CLEAN: Signs that they need cleaning are (1) a yellow tab does not pop out when a white tab is pulled; (2) developer chemicals are smeared on the back of a picture; (3) there are repeated spots on the face of the print. Inspect the rollers frequently; if possible, do it before loading each new film pack. Lift up the red latch (A). Swing out the rollers; turn and inspect them, especially at the ends. Wipe the rollers clean with a damp cloth, dry them. Never scrape them with anything metallic, nor with your fingernail. Open the tab slot doors clean out any dirt around the tab slot (B). Blow out lint or dust in the back of the camera. Push the roller assembly back into place.

CLEAN THE LENS GENTLY: Never use silicone coated eyeglass tissue on it. Blow dust off or brush it off lightly. Breathe gently on the lens to moisten it, wipe lightly with clean, dry, absorbent cotton. Also clean the lens over the electric eye.

REPLACE BATTERIES EVERY YEAR: They are under the left hand grip (A). Push a pencil point into the hole (B); the grip will pop up. Remove it and lift out the battery holder, being careful not to strain the wires. Unsnap the free end of the holder (C) which is hinged. One battery powers the electric eye, one is for the timer. Install two

new ones of the same or equivalent type (see your Polaroid Land camera dealer). Snap the end of the holder onto the new batteries and replace the holder (D). Place the end of the grip (E) under the edge of the camera body (F) and press the grip into place. The rechargeable batteries in the electronic flash unit are never changed.

HOW TO USE 3000 SPEED FILM IN DIM LIGHT WITHOUT FLASH

If there's enough light to read comfortably, you can use 3000 speed film to make good black and white pictures indoors (or outdoors in dim light) without flash. Set the camera as shown on the opposite page.

The camera must be rock steady or your pictures will be blurred. Try to place your subjects so the light on them is even.

In very dim light the electric eye will make a time exposure, which may be as long as several seconds. Hold No. 2 button down and don't move until you hear the second click as the shutter closes.

This kind of lighting is not recommended for color pictures unless you are trying for special effects; for such pictures, set the camera as shown on page 20.

Lighting to avoid: Bright light in the scene will "fool" the electric eye and make your subject too dark.

How to hold steady: Rest your elbows on a firm support, use a tripod, or place the camera on a table, etc.

360

3000 SPEED ONLY

OUTDOORS OR FLASH

INDOORS WITHOUT FLASH

How to set the camera: Set the Film Speed Dial to 3000 and the Lighting Selector and L/D control as shown.

With tungsten bulbs, set it here. ▲

For window light and fluorescents. ▼

37

WHEN TO USE THE BRIGHT SUN ONLY SETTING

This is a special purpose setting. The lens opening is smaller and the shutter speeds are slower than at the BRIGHT SUN OR DULL DAY, ALSO FLASH setting.

The main reason for using it is to add "depth" to your picture by getting more near and far objects into sharp focus at the same time.

Always set to BRIGHT SUN ONLY for all color pictures made with the Portrait Kit or the Close-up Kit (even with flash). You may also want to try it for snapshots of subjects in brightest sun, as on a beach, but ordinarily the all-purpose setting shown on page 18 is satisfactory for such pictures.

Set the Lighting Selector as shown.

Set the Film Speed Dial to 75 and the L/D control to Normal position, unless a label on the back of the film pack shows a special L/D setting.

For color pictures of subjects like this, always use the BRIGHT SUN ONLY setting. If you don't, the picture may be unsharp.

HOW TO MAKE PRINTS LIGHTER OR DARKER

This is well exposed. . . leave the L/D control here.

If it's too light . . . set the L/D control here.

If it's too dark . . . set the L/D control here.

Most non-flash pictures made with the light coming from behind you or from the side will be well exposed with the camera Lighten/Darken control at Normal position (left, above), but sometimes you may want a lighter or darker print. To lighten or darken the next print of the same subject, in the same lighting conditions, adjust the camera L/D control as shown. To make a small change, turn to the first small mark. **To lighten or darken flash pictures, use the flash L/D control in the same way. If there is a label on the film pack showing a special setting of the L/D control,** set both the camera and the flash L/D controls as shown there and make that the Normal position for all pictures made with that pack. Any adjustment of the L/D control should be in addition to that special setting.

COPIES AND ENLARGEMENTS

It's easy to get copies and enlargements, both in color and black and white; 35mm slides can also be made from your favorite Polacolor pictures. Just use the form packed with your film or camera to order them from Polaroid Copy Service.

The reproductions are sharp, clear, and remarkably faithful to your original Polaroid picture. Copies are available in either the popular 3¼ x 4¼ in. size or the 2½ x 3¼ in. wallet size. Beautiful mounted enlargements can be made in 5 x 7 in. or 8 x 10 in. sizes. They make handsome gifts for birthdays or anniversaries. You can also order holiday greeting cards featuring your favorite Polaroid Land picture. Service is prompt and as convenient as your mailbox.

SOME HELPFUL ACCESSORIES

Cable release #191, with plastic adapter, fits over No. 2 button. Great for time exposures.

Case #327 holds camera, flash unit, charger, spare film packs, and other accessories.

UV Filter #585 reduces excessive blue in shadows in outdoor color pictures.

Self-timer #192 fits over No. 2 button, lets you get into your own pictures.

Albums #519 and #521 hold 72 prints each. Bigger Deluxe #521 (left) has expandable metal binder.

These simple accessories can add much to your picture-taking pleasure. On the following pages you'll see other helpful accessories with examples of how they can extend your picture taking range and give better results.

A FILTER CAN PEP UP BLACK AND WHITE SCENIC PICTURES

Without the filter.

Press the filter on over the lens mount (collapsing the lens hood) and the electric eye.

With the filter.

Black and white scenic pictures are often disappointing because bright blue skies and fleecy white clouds come out as a dull white area in the print. The Polaroid Cloud Filter #516 darkens clear blue skies, makes white clouds stand out. The darkened skies also make contrasting backgrounds for light colored subjects on the ground. The #516 filter has no effect on gray skies, in the fog or rain, or at night. Don't use it with color film at any time. With the filter in place, set the L/D control to Normal position. If your print comes out too light or too dark, adjust the L/D control as shown on page 39.

CLOSE-UPS AND PORTRAITS ARE EASY WITH THESE DEVICES

Close-up lens and view/focus adapter.

The lens goes over the camera lens; the adapter fits over the viewfinder.

Close-up Kit covers areas from about 5½ x 7 in. to about 10 x 13 in. for pictures like this.

Portrait Kit covers areas from about 11 x 14½ in. to about 28 x 37 in. for pictures like this.

The normal closest picture-taking distance with your camera is about 3½ ft. With the Polaroid Portrait Kit #471/581A you can come as close as 19 in. to take head and shoulder portraits of adults, pictures of children, etc. With the Polaroid Close-up Kit #473/583A you can come as close as 9 in. for daylight or flash pictures of small objects. For **all** portraits or close-ups made with 3000 speed black and white film, use the OUTDOORS OR FLASH setting. For **all** color close-ups or portraits use the BRIGHT SUN ONLY setting.

HOW TO COMBINE FLASH WITH DAYLIGHT

You can take pictures in which flash and daylight are combined. There are two conditions in which this technique can improve your pictures:

1. Subject in shade, background in bright light: Using daylight only would give you a well exposed background and a very dark subject in the foreground. By adding flash in the foreground, the overall lighting can be so balanced as to give a picture which is well exposed in all parts.

2. One side of subject brightly lit, other side in deep shadow: This happens when strong sunlight strikes one side of the subject's face, the other side being in deep shadow. By adding flash, the shadows can be lightened to produce a much more pleasing picture.

Technique: Switch the flash ON. Focus accurately on the subject in the foreground. Be sure the Lighten/Darken control on both the flash unit and the camera are set to normal (unless a different setting is indicated on the particular film pack you are using). When the flash is ready for firing, and just before you take the picture, switch the flash unit OFF. Then, take your picture.

IMPORTANT: Only with the flash unit switched OFF can the electric eye and the camera L/D control function properly.

How to adjust exposure: You can adjust the flash and daylight exposures separately by use of the flash and camera L/D controls respectively. For example, if the flash has almost eliminated the shadow in your side-lit portrait, you can get some of it back by setting the flash L/D control toward DARKEN.

Subject in shade, background in bright light: In this daylight exposure the background is correctly exposed, but the foreground subject in the shade is much too dark.

Flash added: The flash has lighted the foreground subject by the correct amount, while correct exposure for the background in bright daylight is determined by the camera's electric eye.

One side of subject brightly lit, other side in deep shadow: The brightly lit side of the subject is correctly exposed by the electric eye, but the shadow area is dark and lacks detail.

Flash added: By adding flash, the shadows can be lightened. By use of the flash unit L/D control, the depth of the shadow can be controlled to some extent.

SPECIAL TECHNIQUE FOR FAST ACTION

With the electronic flash you can make sharp and bright pictures of fast action events indoors, no matter how poor the available lighting conditions are.

To get a well exposed as well as a sharp picture, you must focus accurately. It is generally not easy to focus on a subject in action, so that a special focusing technique has to be used.

Here are the three basic types of action you will find, together with a focusing method for each.

1. Stationary action: The subject is performing a fast moving act, such as juggling, baton twirling or rope skipping, but is not actually moving from one spot. Simply focus on the subject in the normal way.

Check that the subject does not move from the spot. If he does move a foot or so toward you or away from you, you can correct for that very quickly by moving yourself in the same direction, to keep the distance between you constant.

2. Action toward the camera: The subject is moving toward the camera, either directly or at a sharp angle. You must focus on a predetermined mark, generally on the ground, and shoot at the precise moment the subject passes over this mark. For example, you could use the edge of a carpet or an open doorway as your reference mark.

3. Action past the camera: The subject moves past the camera from left to right or from right to left. Focus on a mark over which the subject will pass at the point where you want to take the picture.

When the subject moves past the camera, the distance change between you and him is much more gradual than when he is moving directly toward you. Thus, if you have focused on a spot 8 ft. away, you could shoot the subject 3 or 4 ft. before he reaches that mark, or 3 or 4 ft. after he passes over the mark, and still get a good picture.

Important to remember: The maximum distance for flash pictures is about 10 ft.

PICTURE TROUBLES, THEIR CAUSE AND CURE

WHITE, FAINT IMAGE OR NONE

The film was greatly overexposed or light-struck. If it happens with 3000 speed black and white film, you probably had the Film Speed Dial set to 75. Reset it to 3000. Both color and black and white films will be light-struck if you pull out the safety cover before putting the film pack in the camera or if you remove a film pack from the camera after pulling the safety cover.

BLACK, FAINT IMAGE OR NONE

If no details are visible, no light reached the film. Perhaps you didn't reset No. 3 button. Or you put into the camera the moisture absorbing card packed with color film. Or the camera front wasn't pulled all the way out and locked. Or the battery is dead. Or the shutter is damaged. If a color print shows faint details, the Film Speed Dial probably was set to 3000. Reset it to 75.

TOO DARK: FLASH PICTURES

Underexposed, with two probable causes:

1. You didn't focus accurately with the rangefinder (see pages 12, 13).

2. The flash L/D control was set incorrectly. Set it to Normal position unless there is a special setting shown on the film pack, in which case set it as shown there. If that's where it was to begin with, turn it toward LIGHTEN.

PICTURE TROUBLES (Cont.)

TOO LIGHT: FLASH PICTURES

Overexposed, with two probable causes:
1. You didn't focus accurately with the rangefinder (see pages 12, 13).
2. The flash L/D control was set incorrectly. Set it to Normal position unless there is a special setting shown on the film pack, in which case set it as shown there. If that's where it was to begin with, turn it toward DARKEN.

TOO DARK: NON-FLASH PICTURES

Underexposed, probably because the camera L/D control was set incorrectly. For most pictures, set it to Normal position unless there is a special setting shown on the film pack, in which case set it as shown there. If that's where it was to begin with, turn the L/D control toward LIGHTEN.

TOO LIGHT: NON-FLASH PICTURES

Overexposed, probably because the camera L/D control was set incorrectly. For most pictures, set it to Normal position unless there is a special setting shown on the film pack, in which case set it as shown there. If that's where it was to begin with, turn the L/D control toward DARKEN.

REPEATED SPOTS

Usually they are white, but they may be reddish-orange on color pictures. Marks like these show that the steel rollers are dirty. Inspect and clean them frequently (page 34).

MANY WHITE SPECKS

They are a sign that you pulled the yellow tab too swiftly; slow down a bit. Sometimes, white specks may appear only at one side of the picture. The cause is the same.

MUDDY LOOKING PRINT

It wasn't developed long enough. Develop both black and white and color prints for the full time recommended in the film instruction sheet. This is most important in cool or cold weather. See page 30 for details of how to use the Cold-Clip with color prints. If you don't develop long enough, color prints will be brownish pink over-all; black and whites will be muddy gray.

PICTURE TROUBLES (Cont.)

UNDEVELOPED EDGES OR CORNERS

Usually caused by pulling the yellow tab out at an angle. When this happens the developer is not spread evenly over the picture and edges and corners may not develop. Pull the yellow tab out straight and at medium speed, all the way (pages 26, 27).

ORANGE-RED MARKS ALONG EDGE

Reddish-orange marks like these (A) along the edge and/or in the corners of the print generally indicate that the yellow tab was pulled out of the camera at an angle. Pull the yellow tab out straight and at medium speed, all the way (pages 26, 27).

UNDEVELOPED AREAS IN PRINT

It may be a single blank white area or a combination of blank areas and streaks (orange in color pictures) as shown. You pulled two white tabs before pulling a yellow tab, causing uneven spread of the developer, jammed film, or developer smeared on the rollers. Always inspect and clean the rollers before taking more pictures.

If no yellow tab appears when you pull a white tab, **never** pull another white tab. Follow the directions on page 33.

OBLONG IN PRINT

The oblong is pink or red in a color picture. You didn't pull the white tab all the way out of the camera. As a result, when you pulled the yellow tab, the white tab was dragged back into the camera and spoiled the picture.

Always pull the white tab right out of the camera (page 26).

U-SHAPED WHITE AREA

Several possible causes: One or more white tabs were folded under when you loaded the film pack (avoid this as shown on page 16, photo 5). Or, you pulled the yellow tab too slowly. Or, there may be dirt on the ends of the rollers; keep them clean (page 34). Or, in some way you squeezed the tab slot end of the camera back while pulling the yellow tab (see page 26 for the correct way to hold the camera).

CORNERS, EDGES VERY DARK

This happens mainly with 3000 speed black and white film and only with subjects in the bright sun. Caused by having the Lighting Selector set to INDOORS WITHOUT FLASH when it should be set to OUTDOORS OR FLASH.

It may also occur, to a lesser degree, with color in very bright sun. If so, shift the yellow square in the Lighting Selector to BRIGHT SUN ONLY.

PROTECT FILM AND CAMERA FROM HEAT

Extreme heat and high humidity can damage your films, especially after the film pack has been placed in the camera. Don't leave a loaded camera or packages of film lying in direct sun. Remember that the glove or luggage compartment of a car can get as hot as an oven. If you store film or a loaded camera in a closet, keep it near the bottom where the air is cooler. Don't remove a film pack from its sealed foil inner wrapping until you are ready to use it.

FOR MORE INFORMATION

If you have any problems with the camera or film that are not explained here, write to CUSTOMER SERVICE, POLAROID CORPORATION, CAMBRIDGE, MASS. 02139 or, if you are overseas, to the nearest Polaroid office (see next page for addresses). Send sample pictures with full information and, most important, state what model camera you have. Please be sure to include a clearly printed or typewritten return address.

WARRANTY

If, through any human or machine error at time of manufacture, any part or workmanship in this camera or its flash unit and charger prove defective, we will repair it at no charge providing the camera, flash unit, and charger are shipped by prepaid transportation to the nearest Polaroid repair station listed on the next page, or to the nearest authorized repair station. This warranty covers the camera, flash unit, and charger for one year from date of original purchase.

The warranty does not cover (and charges will be made for) customer replaceable batteries or repairs required to correct damage from leakage of such batteries, accident, dropping, mishandling, wear and tear, or rough or heavy use. Authorized repair stations have the properly trained staff, and the approved tools, testing equipment and parts to repair these cameras, flash units, and chargers. No reimbursement can be made for repair charges made by non-authorized repair stations. Tampering with the camera, flash unit, or charger, or having them repaired by a non-authorized repair shop, voids the warranty and charges will be made for any subsequent work that may be required.

No liability is assumed for film which may be spoiled by a camera failure. Any operating difficulty should be reported at once to prevent needless film waste.

If it becomes necessary to return your camera for repair, your dealer can do so for you, or you may ship it direct to the station located nearest to you. Pack the camera carefully in its original protective box for safe travel, and mail it by prepaid INSURED parcel post. Enclose a note describing the reason for the return and/or pictures illustrating the problem.

If the problem concerns flash pictures, be sure to return the flash unit and the charger with the camera and in the same package.

CAUTION: The Polaroid Land process uses a caustic jelly which is safely packed inside sealed containers within the metal-plastic pack. If accidentally you should get some of this jelly on your skin, wipe it off immediately. To avoid an alkali burn, wash the area with plenty of water as soon as possible. **It is particularly important to keep the jelly away from eyes and mouth.** Keep discarded materials out of reach of children and animals, and out of contact with clothing and furniture, as discarded materials still contain some jelly.

POLAROID REPAIR STATIONS AND OFFICES

CALIFORNIA
Polaroid Corp.
875 Stanton Road
Burlingame 94010

Polaroid Corp.
2040 E. Maple Avenue
El Segundo 90245

GEORGIA
Polaroid Corp.
3720 Browns Mill Road, S.E.
Atlanta 30315

ILLINOIS
Polaroid Corp.
2020 Swift Drive
Oak Brook 60521

IOWA
Polaroid Corp.
2801 Bell Avenue
Des Moines 50321

MASSACHUSETTS
Polaroid Corp.
89 Second Avenue
Waltham 02154

NEW JERSEY
Polaroid Corp.
P. O. Box 607
W-95 Century Road
Paramus 07652

OHIO
Polaroid Corp.
4640 Manufacturing Avenue
Cleveland 44135

TEXAS
Polaroid Corp.
9329 Governors Row
Dallas 75247

PUERTO RICO
Francisco N. Castagnet, Inc.*
621-623 Fernandez Juncos Avenue
San Juan 00907
Attn. Walter Fleischer

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Polaroid Australia Pty. Ltd.
2 Small Street
Ultimo, N.S.W. 2007

Mailing address:
P. O. Box 335
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350 Carlingview Drive
Rexdale, Ontario

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Polaroid (U.K.) Ltd.
Office, Rosanne House
Welwyn Garden City
Hertfordshire

Repairs, Huggins Lane
Welham Green, near Hatfield
Hertfordshire

FRANCE
Polaroid (France) S.A.
57, rue de Villiers
92-Neuilly sur Seine

GERMANY
Polaroid GMBH
Königslacher Strasse 15-21
6 Frankfurt/Main-Niederrad 1

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Polaroid (Italia) S.p.A.
Via dei Cignoli 9
20151 Milan

JAPAN
Nippon Polaroid Kabushiki Kaisha
Mori Bldg. No. 6
32, Nishikubo Tsuneo-cho
Shiba, Minato-ku
Tokyo

MEXICO
Michelmex S.A.*
Apartado Postal 16-952
Mexico 6 D.F.

THE NETHERLANDS
Polaroid (Nederland) N. V.
Office, Maasluisstraat 258
P. O. Box 9167
Amsterdam-W. III

Repairs, 24 Markt
Enschede

SOUTH AFRICA
Frank & Hirsch (Pty.) Ltd.*
P. O. Box 1803
Bree and Nugget Streets
Johannesburg

SWITZERLAND
Polaroid A. G.
Hardturmstrasse 175
Zurich 8037

*Authorized Repair Station

In addition to Polaroid's own repair stations listed here, there are a number of authorized repair stations in the U.S.A. and Canada. To locate the one closest to you, write to the nearest Polaroid repair station or to Customer Service, Polaroid Corporation, Cambridge, Mass. 02139.

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