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POLAROID LAND PACK FILM BACK

FOR **ETR**

Instructions

The Polaroid Land Pack Film Back for the Zenza Bronica ETR has been developed in cooperation with the Polaroid Corporation and increases the range of interchangeability in film backs, in addition to the film Backs ETR for 120 and 220 roll films. Thus, the user has greater flexibility in photography with the Bronica ETR, as well as a means for previewing the light and exposure in an actual shot before using other roll films. The Bronica ETR Polaroid Pack Film Back is designed for exclusive use with the Zenza Bronica ETR camera only.



READ BEFORE USING THE POLAROID PACK FILM BACK

Please read through this manual carefully before actually taking any pictures with the Polaroid Pack Film Back.

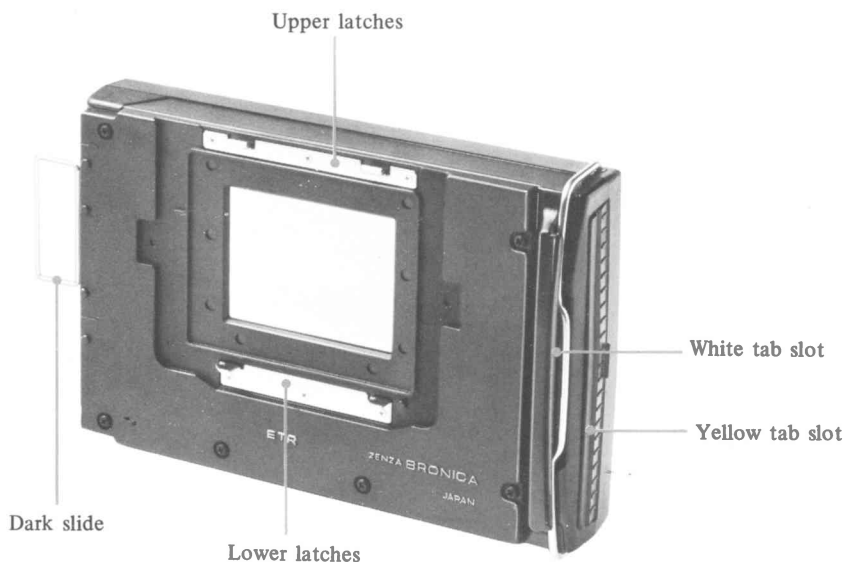
Practice the operations as instructed and/or illustrated in this manual, without actually using the pack film. Thoroughly familiarize yourself with the operations so that you can go through them without referring to the instructions. Load the film pack only after you are sure that you have got the simple operating procedures down pat.

It is recommended that you start with the black-and white film first. Always read the instruction sheet packed with the film, as these instructions may often change, in keeping up with improvements which are made in the film.

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Nomenclature



1. PREPARATIONS FOR PICTURE-TAKING

a. Films for the Polaroid Pack Film Back

The following five types of Polaroid Land Pack film can be used with the Bronica ETR Polaroid Pack Film Back. The Polaroid film packs produce eight prints of 83mm by 105mm size or 83mm by 85mm size, depending on the film type. However, in the case of the Bronica ETR, the actual picture image area is only 42.5mm by 55.1mm, as shown on page 10, because of the 4.5 x 6cm format of the camera.

Film Type	B&W or Color	Print Size	Film Speed
105	B&W/Negative	83mm x 108 mm (3-1/4" x 4-1/4")	ASA 75
107	Black-and-white	83mm x 108 mm (3-1/4" x 4-1/4")	ASA 3600
108	Color	83mm x 108 mm (3-1/4" x 4-1/4")	ASA 75
87	Black-and-white	83mm x 86 mm (3-1/4" x 3-3/8")	ASA 3600
88	Color	83mm x 86 mm (3-1/4" x 3-3/8")	ASA 75

When using Types 87 and 88 film packs, please read instructions for "Loading the Pack Film", on page 4, very carefully.

b. Eight hints for getting better pictures

It is suggested that you have a clear idea of what you want to take before you even load film in the Polaroid Pack Film Back. The following eight hints should be helpful towards getting better pictures with your Polaroid Pack Film Back:-

1. Set exposure carefully.
2. Move in closer to the subject which will give you a bigger image in the print.
3. Choose colorful subjects, when using the color film.
4. Consider your background carefully, especially for flash shots.
5. Pull the tabs correctly.
6. Time development carefully.
7. Always check the temperature.
8. Always keep the rollers clean.

Each of the above hints is important towards getting better pictures and will make the difference between a good or poor picture.

c. 'Attaching the Polaroid Pack Film Back

First, remove the film Back ETR for 120 or 220 roll film from the camera body.

Next, place the Polaroid back against the rear end of the camera body and insert the latches at the upper end of the accessory into corresponding openings at the upper end of the body. Finally, press the lower end of the accessory against the body until it locks securely.



To remove the Polaroid back, simply depress the film back release button on the camera body and the lower end of the accessory can be detached, as illustrated. Simply shift the accessory up slightly and pull it away.



CAUTION

- (1) Differing from the Film Back ETR, the Polaroid back can be attached or detached without insertion of the dark slide. Therefore, always insert the dark slide before detaching the accessory from the body, when there is pack film still loaded in it.
- (2) The shutter can be released even when the dark slide is inserted in the Polaroid back and, therefore, be extra careful.

d. Loading the Pack Film

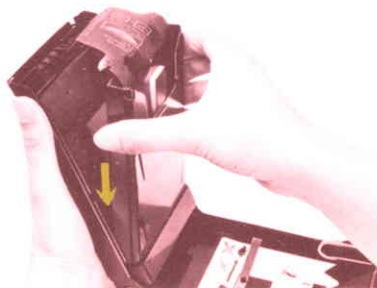
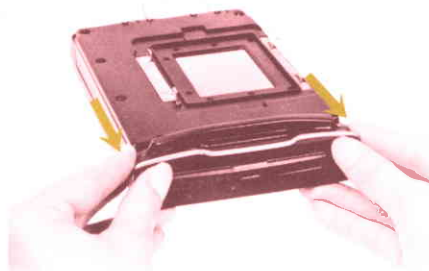
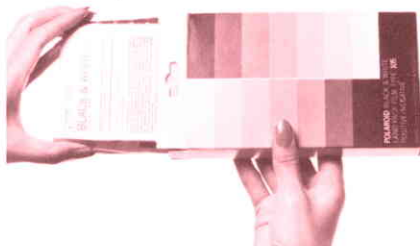
Open the pack film box carefully. In addition to the film package, there should be a tube of coater, in the case of black-and-white film, or a set of print mounts, in the case of color film, which should be put back into the box once more for safe keeping. When removing the film package from the box, hold it carefully by the edges or corners only. Do not press on the center of the film package, as you may ruin one or two prints.

To remove the pack film out of the film package, hold the undotted side of the package firmly and tear open the other side of the package completely, along the dotted line. Hold the pack film carefully, too, or by the edges or corners. The bag of silica gel packed together with the color film should be taken out and thrown away. Read the instruction sheet carefully in order develop your prints correctly. Save the box for carrying prints safely.

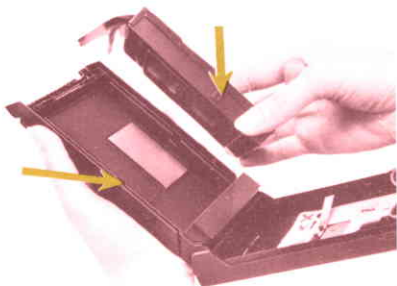
Always load the pack film in the shade and not in direct sunlight, to avoid fogging the film. The pack film should be loaded, if possible, with the Polaroid back removed from the camera body.

Opening the Polaroid Back: Hold both ends of the wire latch and pull in the arrow-indicated direction. The front plate should pop up slightly.

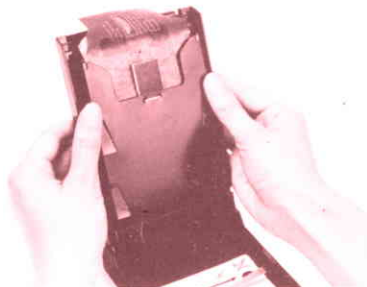
Inserting the Pack Film: Open the front plate all the way. Next, hold the pack film by the edges, with the printed surface of the safety cover (film face) towards the camera, insert the pack film into the guide frames and push down in the arrow-indicated direction.



Inserting Types 87 and 88 Pack Film: The Types 87 and 88 pack films cannot be inserted fully into the guide frames, like the Type 105, 107 and 108 films which are longer. Therefore, coincide the protrusion (B) on the side of the pack film with a guide notch (A) cut into the side of the Polaroid back. Then carefully close the front plate which will nest the pack film correctly in position.



Press the pack film against the Polaroid back which will nest it correctly in position.



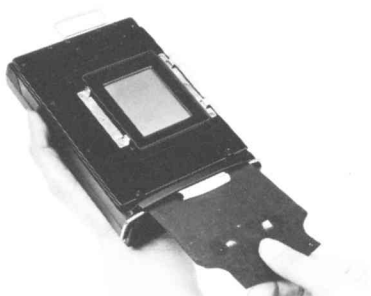
Check the White Tabs: Check whether the white tabs, under the black tab, are free and not folded under the pack film.



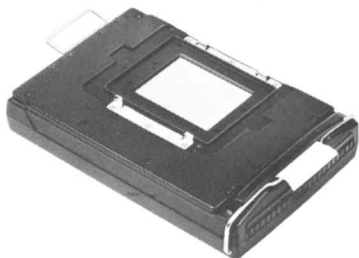
Closing the Polaroid Back: Press the front plate strongly against the rear cover and fix them securely with the wire latch, as illustrated. The black tab of the safety cover should be sticking out of the small slot (white tab slot), when the front plate is locked. If not, reopen the Polaroid back and lead the black tab out into the slot.



Removing the Safety Cover: Grip the black tab firmly with the thumb and forefinger. Pull the black tab (safety cover) all the way out of the Polaroid back. Pull out straight, in order not to rip the safety cover. The safety cover can be discarded.



A white tab should stick out of the small slot (white tab slot), when the safety cover is pulled out. Do not pull the white tab as yet, however, as it is only an indication that the pack film has been loaded correctly and that everything is ready for taking the first picture.

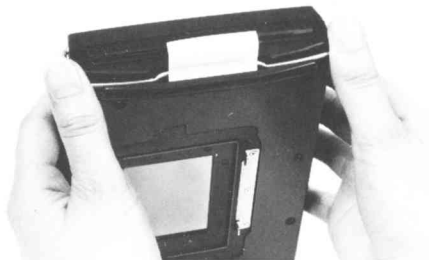


e. If No White Tab Sticks Out

If there is not white tab sticking out, after removing the safety cover, this must be corrected before proceeding any further. The correction should be made in the shade or indoors and not in direct sunlight. Open the Polaroid back slightly and, without disturbing or removing the pack film push the end of the white tab out into the open.



Close the front plate securely, by pressing on both slides strongly, with the white tab sticking out of the small slot, and fix the wire latch securely.



As noted in "Loading the Pack Film", the Types 87 and 88 pack films are nested in the correct position when the front plate of the Polaroid Pack Film Back is closed strongly. When opening the Polaroid Back, therefore, always place the film face on the bottom and swing the front plate upwards to open. See that the pack film does not move up when opening the front plate. Procedures to be taken "If the Yellow Tab Fails to Appear Upon Pulling White Tab" are also the same.



2. PICTURE-TAKING PROCEDURES AND DEVELOPING THE PRINT

a. Setting the Correct Exposure

Always use an exposure meter determining the accurate exposure setting or use the AE Finder on the Camera.

Types 105, 108 and 88 pack films have film sensitivities of ASA 75 which should be set to the exposure meter. If not available, use the closest-matching one or ASA 64. In the case of Types 107 and 87 pack films, the film sensitivity is ASA 3,000 and, therefore, set the exposure meter to 3,000 or, to 3,200, which is close. However, in bright sunlight, the film sensitivity may exceed the range of the exposure meter in which case a ND4x filter must be used.

Use the Standard Exposure table as a general guide for average subjects in bright sunlight or bright open shade, when setting exposures without an exposure meter.

Standard Exposure

Types 107 and 87

Subject in bright sun
(EV 20) 1/1,000 sec. F32

Subject in bright
open shade (EV17)
1/250 sec. F22

Type 105, 108 and 88

Subject in bright sun
(EV 14) 1/125 sec. F11

Subject in bright
open shade (EV 12)
1/60 sec. F8

Note: Use the Bronica ND4x filter, in the case of Types 107 and 87 films, when the subject is in bright sun for an effective setting of 1/500 sec. and F22. (See Neutral Density Filter.)

NEUTRAL DENSITY FILTER

The ND or neutral density filter is used to reduce the volume or intensity of the light through the lens to the film. It should, therefore, be used to reduce the light when there will be overexposure, even using the fastest shutter speed and smallest lens opening combination, such as when taking pictures outdoors in the bright sunlight.

The Bronica ND4x filter reduces the light 1/4th the actual intensity, which means that the exposure setting must be readjusted by this factor. However, it will be more convenient to readjust the ASA film speed setting to 1/4th the actual film sensitivity, in this case, because the exposure meter or the AE Finder's automatic exposure system can then be used without making further adjustments.

Picture-Taking Procedures

Load the required Polaroid Land pack film in the Polaroid back, following previous instruction. Then, attach the Polaroid back to the camera body and proceed with the following preparations for taking the picture:-

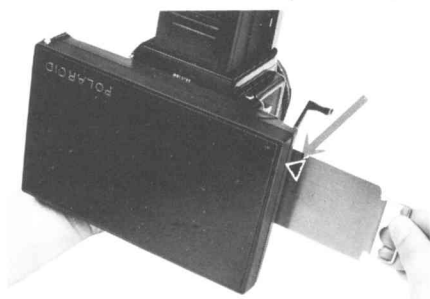
1. Rotate the film winding crank until it stops. Use short, rapid ratcheted strokes, in this case.
2. Rotate the multiple exposure lever in the clockwise or arrow-indicated direction. (see page 23 of the instructions for the Bronica ETR.)
3. Determine the correct exposure setting for the subject.
4. Draw out the dark slide from the Polaroid Pack Film Back.

All preparations for taking the picture are completed with the above.

* Always hold the camera body and never hold the Polaroid back when carrying the camera with the latter attached or during photography.

Triangle (△) Mark on the Dark Slide

A triangle (△) mark will be seen on the dark slide of the Bronica ETR Polaroid Pack Film Back when it is pulled out part of the way. When the dark slide is pulled out far enough for the mark to be seen, photography will be possible, which means that it will not be necessary to pull the dark slide out all the way when in a rush.



b. Developing The Print

Grip the White Tab: Upon taking the picture, hold the camera back (with Polaroid back) with one hand so that the white tab can be pulled with the other hand. The Polaroid back should be oriented perpendicular to the horizontal, at this time, and the white tab should be gripped firmly with the thumb and forefinger.



Pull out the White Tab: Pull the white tab straight out, until it is completely out of the Polaroid back, and then discard it.



Let the Yellow Tab Appear: Pulling out the white tab, as above, opens a narrow door on the right-hand end of the Polaroid back, and causes a yellow tab to appear. Therefore, this side door must not be prevented from opening, when pulling the white tab.

If no yellow tab appears when the white tab has been pulled out completely, stop further action and correct the mistake, as explained on page 11.

Never pull a white tab when a yellow tab can still be seen. If you do so accidentally, stop further action and correct, as explained on page 11, too.

Grip the Yellow Tab: Pulling the white tab, as above, does not start development, which always takes place outside the Polaroid back. The white tab is simply pulled out to place the yellow tab in position for the next step, which is pulling out the yellow tab itself. Therefore, grip the center of the yellow tab firmly.

Pull out the Yellow Tab: Pull the yellow tab straight, moderately fast, in one smooth uninterrupted action. Development starts when the yellow tab has been pulled completely out and, therefore, start timing development from that point. If the developed print is full of white specks, slow down a little as you are pulling too fast.

Let the Print Develop: Development of the print takes place outside of the Polaroid back, when the yellow tab has been pulled out completely. Therefore, let the picture develop for the full time recommended in the instruction sheet. While waiting for the print to develop, hold it by the yellow tab or place it on a flat surface. Don't touch or bend the print, or peel off the white paper. Don't let the film flap in the wind outdoors.



Separate the Print: After the recommended development time, quickly strip the white paper (print) off the brown paper, starting from the corner with the exposure number. Although the color print will appear to be nearly dry, do not touch it for a few minutes. When completely dried, mount it on a color print mount.



Coat Black-and-White Prints: Do not touch the face of the black-and-white print, too. The prints must be coated to prevent fading and to add a glossy finish. See the instruction sheet for further information on coating.

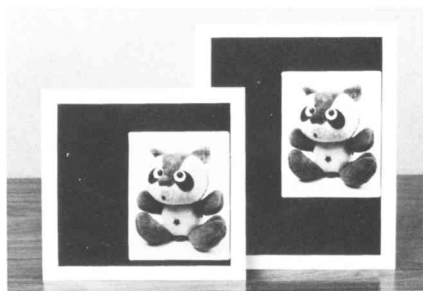
The negative, from which the print has been stripped off, should be folded with the moist surface on the inside, to prevent contact with the chemicals still on the surface. The negative should then be put in a paper bag, box and/or discarded into proper waste containers. Do not throw the negatives away indiscriminately.

Do not coat color prints or the Type 87 print.



Let the Coating Dry: After coating the black-and-white print, do not touch the print face until the coating has completely dried up.

Polaroid prints taken with the Bronica camera cover a 6x4.5cm area within the large print area, as shown on the right.



IF YELLOW TAB FAILS TO APPEAR UPON PULLING WHITE TAB

Do not pull another white tab. Instead, open the front plate slightly so that a finger can be inserted to hold down the pack film and keep it in place. This operation should, of course, be done indoors or in the shade and never in the bright sunlight.

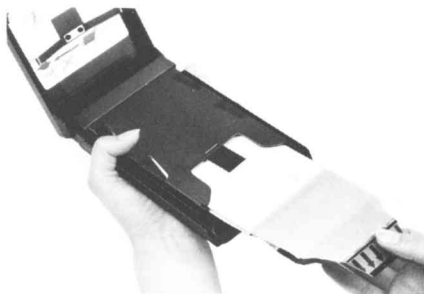
While holding the pack film down with one finger, open the Polaroid back all the way and take a firm grip on the topmost yellow tab, with the free hand.

Draw the yellow tab completely out of the pack film and discard it. While the Polaroid back is open, check the rollers and see if they are clean.

If a white tab has been drawn out accidentally, while the yellow tab was sticking out, then draw out the yellow tab and discard it, at this time.

Close the Polaroid back after confirming that the next white tab is sticking out of the small slot.

When closing the Polaroid back, check that both sides of the frontplate are securely locked with the wire latch.



d. Temperature is 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 are developing the picture.

A load 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, you cannot produce a good print. It takes a long time to warm up the cold camera and film.

However, if camera and film are kept warm indoors, you can snap children in the snow outside, pop back 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, chemicals may come 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 is hot, be extra careful to keep the rollers clean.

How Temperature Affects Type 108 and 88 Color Films: The normal developing times for color film are set for temperatures of 75°F (24°C) and warmer. When it is a bit cooler, the action of the developer chemicals slow down and you must develop for a longer time. See the film instruction sheet for more details. When the temperature gets below 65°F (18°C), the chemical action is so sluggish that the picture will not develop properly without help. The help is the Cold-Clip. (See page 13. This is sold separately at camera shops.) Prints developed in cold weather without the Cold-Clip will be dark, with muddy colors.

Whenever it is cool enough so that you must wear warm clothes, use the Cold-Clip for all color pictures. If you feel temperature pleasant when you are lightly dressed, make development in normal way.

When you are sweltering and can think only of a cool drink and a swim, it may be too hot for best results with color film; your prints may show weak colors. For details see the film instruction sheet.

Effect of Temperature on Type 107 and 87 Black-and-White Films: Best results are obtained with the film's normal range of development times in temperatures of 59°F (15°C) and above. When the temperature of film and camera are both below 59°F (15°C), develop for longer-than-normal time. Read the instruction sheet for full particulars. Never use the Cold-Clip with the Type 107 pack film.

3. USING THE COLD CLIP

The Cold-Clip is used only for development of color prints, when the temperature is below 65°F (18°C).

If you are not sure of the temperature, use the Cold-Clip, as no harm will be done even if the temperature is somewhat higher than 65°F (18°C).

To use the Cold-Clip, put it in a warm inside pocket about five minutes before taking the picture and preheat it with the body temperature. If the temperature should be near 32°F (0°C), put the Cold-Clip between the arm and body which will heat it to the maximum temperature.

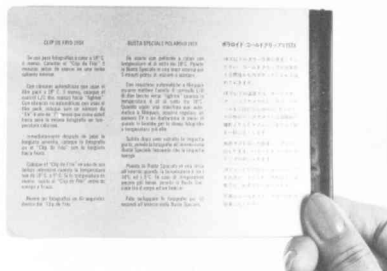
Double the exposure for your color pictures, if it is cold enough for you to consider using the Cold-Clip.

Immediately after pulling out the yellow tab and starting development of the print, place the developing film in the Cold-Clip, with the yellow tab section extending out. The film must be inserted between the Cold-Clip within ten seconds.

The Cold-Clip should then be put in an inside pocket, if the temperature is above 41°F (5°C), or between the body and arm, if it is below that temperature.

The film should be developed for 60 seconds in the Cold-Clip (in the above condition) and then removed, with the print stripped off the negative paper in the usual manner.

The Cold-Clip should be placed in an inside pocket once more, in preparation for the next picture.



4. CLEANING THE ROLLERS

Dirty rollers will cause troubles, such as spotty development and/or blockage of the yellow tab which will then be unable to protrude. Dirty rollers are caused by developer chemicals sticking to the rollers and to the inside of the rear cover and, therefore, the rollers should be checked, whenever new pack film is loaded, and cleaned, if necessary.

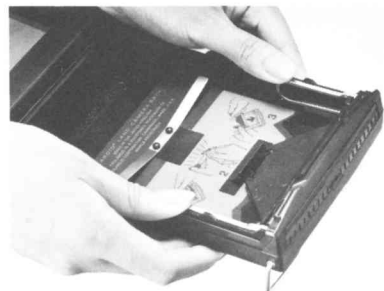
Rollers can be cleaned even when the Polaroid back is loaded.

Lift up the red-colored latch, which will permit the roller assembly to be detached. Detach the assembly and check the rollers carefully.

First, wipe the rollers with a damp cloth, then, follow with a dry cloth. Wipe until clean and never scrape the rollers with metallic articles or with your fingernail.

At the same time, open the slot door for the yellow tab, and clean the slot opening, as well as the region around it.

Use an air-blower and clean out the inside of the rear cover, before returning the roller assembly to its place.



5. POSSIBLE PICTURE FAULTS

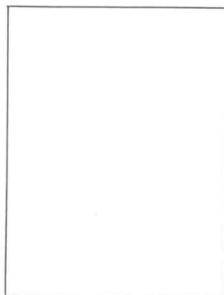
Nearly Black Image Or Solid Black: If you cannot see an image at all, the film was not exposed. You may have neglected to pull out the dark slide on the Polaroid back or the black safety cover from the film pack. Or perhaps the shutter did not open. If the print is very dark, increase the exposure.

Very Light Image Or None At All: The film was either greatly overexposed, or it was accidentally fogged. Make sure the dark slide on the Polaroid back is inserted when removing or attaching the back.

Both black-and-white film and color film will be fogged if you pull out the safety cover before putting the film pack in the Polaroid back, or if you remove a film pack from the back after having pulled the safety cover.

Undeveloped Edges Or Corners: These are usually caused by pulling the yellow tab out at an angle. In this example, the tab was pulled down instead of straight. When this happens the developer is not spread evenly over the picture, and thus edges and corners may not develop. Always pull the yellow tab out straight and swiftly, all the way.

Broad Streak: If you have one or more of these running across the short width of the picture, you stopped or slowed down while pulling the yellow tab to start development. Always pull the film out in one smooth and uninterrupted motion.



Many Small White Specks: These are a sign that you pulled the yellow tab too swiftly. Try to pull it a little less rapidly.

Orange-Red Marks Along Edge: Reddish-orange marks like these along the edge and/or in the corners of the print (with color film only) generally indicate that the yellow tab was pulled out of the Polaroid back at an angle. Always pull the yellow tab out straight and smoothly all the way.

Moddy Looking Print: The picture was not developed long enough. Develop both black-and-white and color films for the full time recommended in the film instruction sheet. See page 13 on how to use the Cold-Clip with color film. Underdeveloped color prints will tend to be a brownish pink.

Oblong Area In Print: The oblong area, which will be pink or red in a color picture, indicates that you did not pull the white tab all the way out of the Polaroid back. As a result, when you pulled the yellow tab, the white tab was pulled back into the Polaroid back, thus spoiling your picture. Always pull the white tab all the way out of the Polaroid back.



Speed Grip-E

Prism View-Finder-E



Polaroid Land Pack Film Back