ZENZA
BRONICA
SQ

POLAROID® LAND
PACK FILM BACK S

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INSTRUCTIONS
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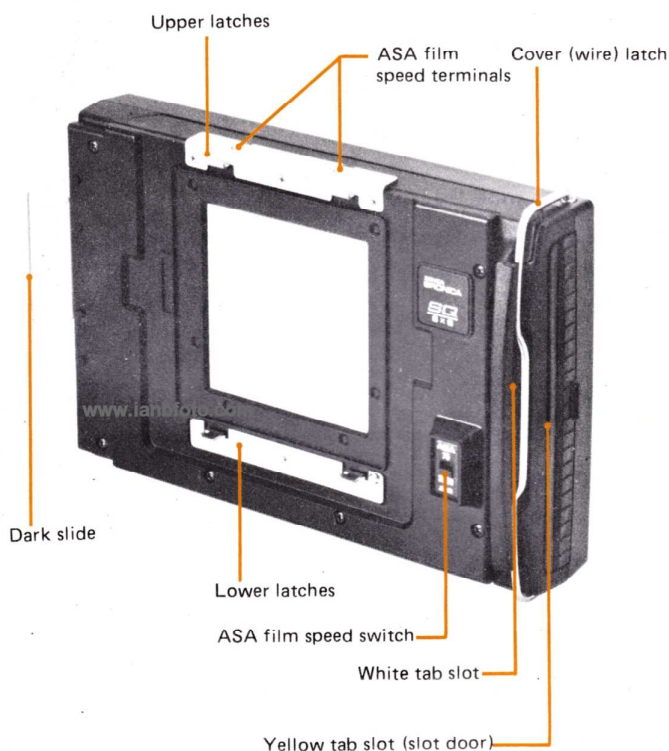
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The Polaroid Film Back S has been specially designed for exclusive use with the Zenza Bronica SQ single lens reflex camera and has been developed in cooperation with the Polaroid Corporation. The film back greatly increases the range of interchangeability in film backs, in combination with Film Backs SQ for 120 and 220 roll films, which means that the user has even greater flexibility in photography with the Bronica SQ, as well as a means for previewing the light and exposure in an actual shot before using other roll films.

READ BEFORE USING THE POLAROID FILM BACK S
Please read through this manual carefully before actually taking any pictures with the Polaroid Film Back S.
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 back 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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1 PREPARATIONS FOR PICTURE-TAKING

a. Film for the Polaroid Film Back S

The following seven types of Polaroid Land Pack films can be used with the Polaroid Film Back S.

The film packs produce eight prints measuring 85mm by 108mm or 82mm by 86mm, in this case, depending on the film type, but the actual picture image area with all film types is only 55.6mm by 55.6mm, because of the 6 x 6cm format of the Bronica SQ.

Film Type	B&W or Color	Print Size	Film Speed	Developing Times (24°C)
665	B&W/negative	85mm x 108mm	ASA 75	30 seconds
667	Black-and-white	85mm x 108mm	ASA 3000	30 seconds
668	Color	85mm x 108mm	ASA 75	60 seconds
107	Black-and-white	85mm x 108mm	ASA 3000	15 seconds
108	Color	85mm x 108mm	ASA 75	60 seconds
87	Black-and-white	82mm x 86mm	ASA 3000	30 seconds
88	Color	82mm x 86mm	ASA 75	60 seconds

When using Types 87 and 88 film packs, please read instructions for "Inserting Type 87 and 88 Pack Film," on page 6, 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 Film Back S. The following eight hints should be helpful towards getting better pictures with your Polaroid Film Back S:—
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.

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c. Attaching the Polaroid Film Back S

First, remove Film Back SQ 120 or 220, as the case may be, from the camera body. (See "Attachment and Removal of Film Backs" of the instructions for the Zenza Bronica SQ.) Next, place the Polaroid Film Back S against the rear end of the camera body and insert the upper latches into corresponding openings of the body. Finally, press the lower end of the Film Back S against the body until it locks securely.

To remove the Polaroid Film Back S, simply depress the film back release button on the camera body. This will permit detachment of the lower end of the accessory from the camera back, as illustrated. Therefore, shift the accessory up slightly and then pull it away.

CAUTION
- The Polaroid Film Back S can be attached or detached, without insertion of the dark slide, in which respect it differs from the Film Back SQ 120/220. Therefore, always be sure to insert the dark slide before detaching the accessory, especially when there is pack film still loaded in it.
- Furthermore, since the shutter can be released even when the dark slide is inserted in the Film Back S, extra care must be taken, in this respect, too.

d. Loading the Pack Film

Open the pack film box carefully. In addition to the film package and instructions, there should also be a tube of coater, in the case of black-and-white films (Types 665 and 107), 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 completely, along the dotted line. Hold the pack film carefully, in this case, too or by the edges or corners.
Read the instruction sheet carefully in order to develop your prints correctly and 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 Film Back S removed from the camera body.
**Opening the Polaroid Film Back S:** Hold both ends of the wire latch and pull in the arrow-indicated direction. The front plate should pop up slightly. Be sure to insert the dark slide into the Polaroid Film Back S before loading the pack film.

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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.
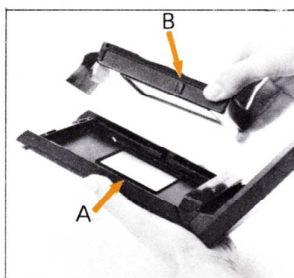
Inserting Type 87 and 88 Pack Films: The Types 87 and 88 pack films cannot be inserted fully into the guide frames, like the Types 665, 667, 668, 107 and 108 films which are longer. Therefore, coincide the protrusion (B) on the side of the pack film with a guide notch (A) cut into the side of the Film Back S. Then, carefully close the front plate which will nest the pack film correctly in position.
Press the pack film against Film Back S, which will nest it correctly in position.
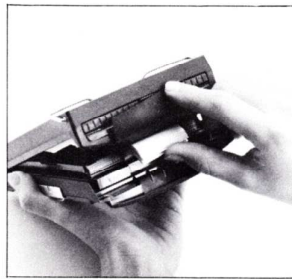
Check the White Tabs: Check whether the white tabs, under the black tab, are free and not folded under the pack film.

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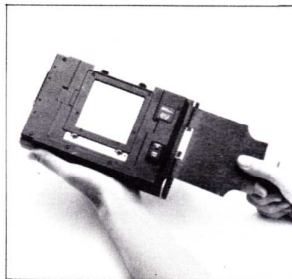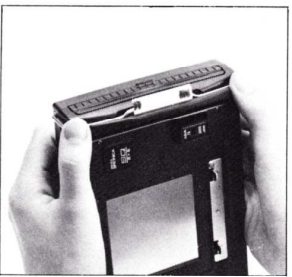
Removing the Safety Cover: Grip the black tab firmly with the thumb and forefinger. Pull the black tab (safety cover) all the way out of the Polaroid Film Back S. Pull out straight, in order not to rip the safety cover. The safety cover can be discarded.

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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 no 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 Film Back S 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 sides strongly, with the white tab sticking out of the small slot, and fix the wire latch securely.
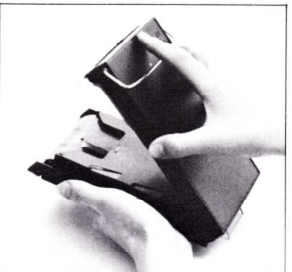
As noted in "Loading the Pack Film," the Types 87 and 88 pack films are nested in the correct position when the front plate of the Polaroid Film Back S is closed strongly. When opening the Polaroid Film Back S, therefore, always place the film face on the bottom and swing the front plate upwards to open. 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.

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f. ASA Film Speed Switch

An ASA film speed switch is available on the Polaroid Film Back S, for setting the film sensitivity of the film loaded, based on the table on page 3.)
Therefore, either set the dial to 75, for the ASA 75 speed of the Types 665, 668, 108 and 88 pack films, or to 3000, for the ASA 3000 speed of the Types 667, 107 and 87 pack films, as there will be automatic coupling to the CdS MF Finder S or CdS MM Finder S, when either of these finders is attached.

2 PICTURE-TAKING PROCEDURES AND DEVELOPING THE PRINT

a. Setting the Correct Exposure

The use of the optional CdS MF Finder S or CdS MM Finder S is recommended for obtaining highly accurate exposure settings, based on exposure measurements of the reflected light through the camera lens, with automatic coupling to the ASA Film Speed Switch of the Polaroid Film Back S. Otherwise, use an exposure meter for taking accurate exposure measurements of the subject matter. Set the film sensitivity dial of the exposure meter to 64, in the case of Types 665, 668, 108 and 88 pack films, and to 3000, in the case of Types 667, 107 and 87 pack films, unless it is possible to set the exact film speeds. Or, if an exposure meter is not available, use the Standard Exposure Table as a general guide for average subjects in bright sunlight or bright open shade.

Standard Exposure Table

Film Types	667, 107 & 87	665, 668, 108 & 88
Subject in bright sun	EV 20* - 1/1000 sec. F32	EV 14 - 1/125 sec. F11
Subject in bright open shade	EV 17 - 1/250 sec. F22	EV 12 - 1/60 F8

(*) 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 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 prove more convenient to readjust the ASA film speed setting to 1/4th the actual film sensitivity, in this case, as, for example, set ASA 750 for the ASA 3000 film speed of the Type 107 pack film when using a ND4x filter. The latter method will, furthermore, require no further adjustments when using an exposure meter or the optional CdS MF or MM Finder S.

Picture-Taking Procedures

After loading the required Polaroid Land pack film in the Polaroid Film Back S, proceed with the following preparations for taking the picture.
1. Rotate the multiple exposure lever in the clockwise direction (see page 25 of the instructions for the Bronica SQ).

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2. Determine the correct exposure setting and then rotate the film winding crank, with short, ratcheted strokes, until it stops.
3. Draw out the dark slide.
All preparations for taking the picture are completed with the above.
CAUTION
● Always hold the camera body and never hold the Film Back S, when carrying the camera with the Polaroid Film Back S attached or during photography.

Triangle (◄) Mark on the Dark Slide
A triangle (◁) mark will be seen on the dark slide of the Polaroid Film Back S 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 with the left hand so that the white tab can be pulled with the right hand, as illustrated. Then, grip the white tab firmly with the right thumb and forefinger.

Pull out the White Tab: Pull the white tab straight out, until it is completely out of the Polaroid Film Back S, 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 Film Back S, 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 16.
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 16, too.
**Grip the Yellow Tab:** Pulling the white tab, as above, does not start development, which always takes place outside the Polaroid Film Back S. 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.

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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.
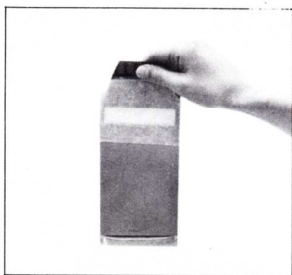
Let the Print Develop: Development of the print takes place outside of the Polaroid Film Back S, when the yellow tab has been pulled out completely. Therefore, let the picture develop for the full time recommended in the instruction sheet. While waiting for the print to develop, hold it by the yellow 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.

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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 Types 87 and 667 prints.
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 SQ cover a square 55.6mm by 55.6mm area within the large print area, as illustrated.
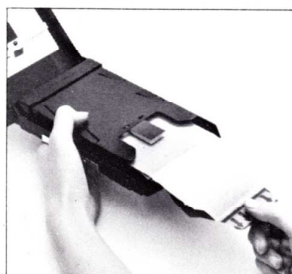
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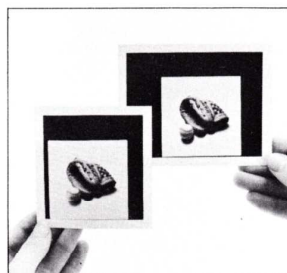
c. If Yellow Tab Fails to Appear upon Pulling White Tab

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 Film Back S all the way and take a firm grip on the topmost yellow tab, with the free hand.
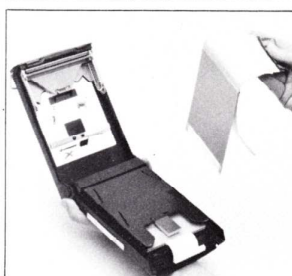
Draw the yellow tab completely out of the pack film and discard it. While the Polaroid Film Back S is open, check the rollers and see if they are clean.
If a white tab has been drawn out accidentally, while the yellow tab was sticking out, then draw out the yellow tab and discard it, at this time.

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Close the Polaroid Film Back S after confirming that the next white tab is sticking out of the small slot.
When closing the Polaroid Film Back S, 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 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, 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 chemical 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.

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How Temperature Affects Types 668, 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.

Effect of Temperature on Type 665, 667, 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 higher. Therefore, develop for a longer-than-normal time when the temperature of film and camera are both below 59°F (15°C).
In any case, read the instruction sheet packed with the film for full particulars.

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3 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.

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.

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

4 POSSIBLE PICTURE FAULTS

Solid Black Picture: The film was not exposed for one of the following reasons —
1. Shutter did not operate properly,
2. Dark slide was not pulled out,
3. The flash unit did not synchronize (if the picture is being taken with flash illumination).

Nearly Black Image: The image cannot be seen because —
1. There was a mistake in the exposure setting and the picture was greatly underexposed, or
2. Color film was taken at the film sensitivity of the black-and-white film. (Check the ASA film speed switch when using the CdS MF Finder S or the CdS MM Finder S.)
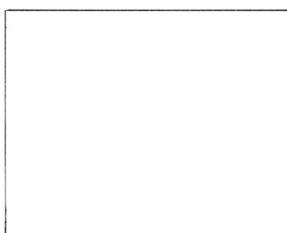
Completely White Picture: The film was either greatly overexposed or it was accidentally fogged, due to the following reasons —
1. The safety cover was pulled out before loading the film pack or the film pack was removed after the safety cover was pulled out.
2. The dark slide was not inserted when detaching the Film Back S or the dark slide was pulled out from the detached Film Back S.

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**Very Light Image:** The image is very light because —
1. There was a mistake in the exposure setting and the picture was greatly over-exposed, or
2. Black-and-white film was exposed at the film sensitivity of the color film. (The ASA film speed switch must also be checked when using the CdS MF Finder S or the CdS MM Finder S.)


Many Small White Specks: These specks are an indication that the yellow tab was pulled too swiftly. The yellow tab should be pulled less rapidly. Small pink specks may appear when using color film.


Equally-spaced Specks: These specks are an indication that the rollers are dirty. The rollers should be cleaned at specific intervals.
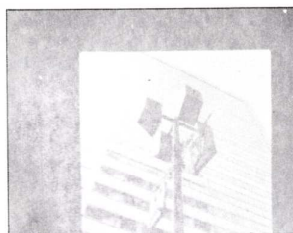
Muddy-looking Print: The picture was not developed long enough. Both black-and-white and color films should be developed for the full time recommended in the instruction sheet of the film pack. Under-developed color film will tend to be a brownish pink while black-and-white film will be a muddy gray color. The film should be developed for a longer time if the temperature is cold, or the Cold-Clip should be used in the case of color film.
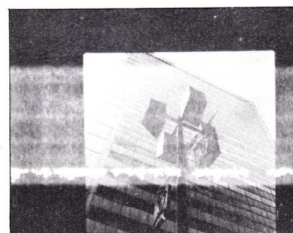
Oblong Area in Print: An oblong area, which will be pink or red in the color print, indicates that the white tab was not pulled all the way out of the Film Back S. As a result, the white tab is pulled back into the Film Back S, when the yellow tab is pulled out, and spoils the print. In other words, the white tab must always be pulled all the way out of the Film Back S.
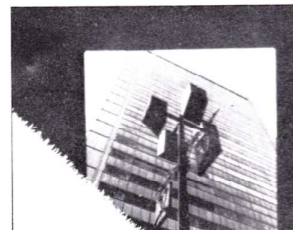
Undeveloped Edges or Corners: These undeveloped areas usually occur when the yellow tab and/or white tab are not pulled out straight but at an angle. The developer is not spread evenly over the picture, in this case, with the result that the edges and corners may not develop. Both tabs must be pulled out straight and swiftly, in one uninterrupted action. If the yellow tab is not pulled out in one

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smooth and uninterrupted action, at an even speed, and not at an angle, development of the print will be affected.

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