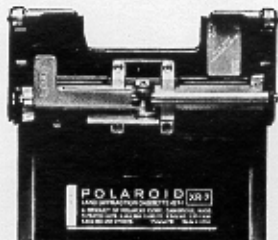


# XR-7 SYSTEM.

## How to load film

The following techniques apply to both Laue and precession photographic methods.

**1. Get ready to load:** Swing the processing arm to the LOAD position, as shown.



**2. Insert film packet:** Hold the packet as shown and insert the cap end (A) into the holder. Do not press on the area marked DO NOT PRESS HERE, where the pod of developer chemicals is located.

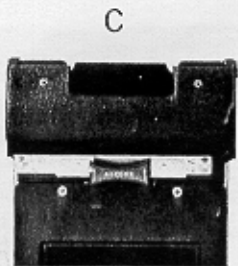
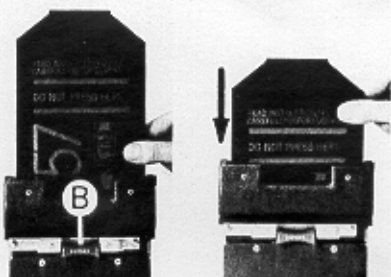
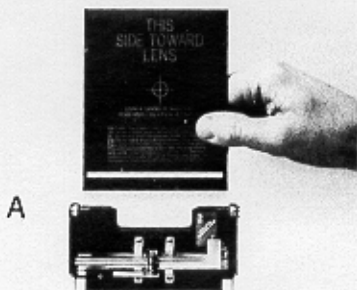
**Important:** You must always insert the film packet so the words THIS SIDE TOWARD LENS face the side of the cassette with the processing arm. If you insert the film incorrectly, you will be unable to make a photograph, and will cause a malfunction (see page 12).

Perform all the film handling operations described below from the other side of the cassette, the side with the red EXPOSE knob (B). Be sure the EXPOSE knob is pushed all the way down.

**3. Push packet in halfway:** Without bending the packet, gently push it past the rubber light seal roller. Carefully work the packet all the way into the cassette.

Take great care not to buckle the packet as you feed it in. Hold the packet at the side edge while working it in, except for the last inch or so.

**4. Shift your grip:** For the last inch or so of movement, hold the packet by the very end and push it all the way in, until it stops. When the packet is completely inserted, its tab end (C) will be lined up with the edge of the cassette, and the tabs will be visible in the cassette recess.



## How to take the picture

**1. Withdraw envelope:** The outer envelope acts as a protective cover (dark slide) for the film. Before you take the picture, gently withdraw the envelope from the cassette until it comes to a firm stop. Don't worry about pulling too far; it will come out almost 6 inches, then stop automatically. The negative will remain inside the cassette, uncovered and ready for exposure.

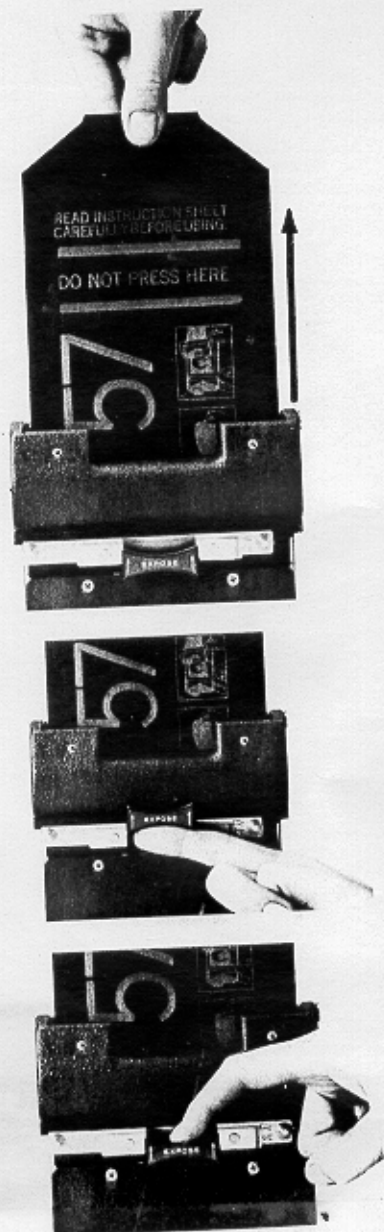
**2. Check for pod:** Lightly run your thumb and forefinger over the pod area, marked **DO NOT PRESS HERE**. It should be perfectly flat and smooth. If you can feel a bump, it means that the negative was accidentally withdrawn with the envelope; push the envelope in again, withdraw it, and check for the pod again.

**3. Push red EXPOSE knob up:** This brings the air pillow into firm contact with the negative, holding it flat against the intensifying screen.

**4. Make exposure:** Open the gate or shutter at the x-ray tube window, and allow the x-ray beam to be directed at the specimen. When the exposure is completed, close the gate or shutter. Take care to eliminate scattered x-radiation by enclosing the area between the tube window and collimator, or by shielding it in some other way.

**5. Push red EXPOSE knob down:** Be sure to push it all the way down. This relaxes the pressure of the air pillow against the negative.

**Important:** Failure to push the EXPOSE knob down at this point will make it impossible to process the film. It may also lead to permanent damage to the



**6. Reinsert envelope:** Carefully reinsert the envelope all the way, until its tab end (A) is once more lined up with the edge of the cassette, leaving the tabs visible in the cassette recess.

### How to develop the picture

The procedure pictured here is for use with Laue installations. With precession equipment you must remove the cassette from the camera, hold it by the edges in one hand, and pull the packet straight out with the other hand.

**1. Get ready to process:** Swing the processing arm to the PROCESS position, as shown. This brings the two steel rollers inside the cassette together. When the packet is pulled out of the cassette, these rollers will crush the pod and spread the developer chemicals over the picture area.

**Important:** Do not touch the processing arm at any time while you are pulling the packet out of the cassette.

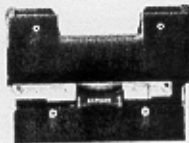
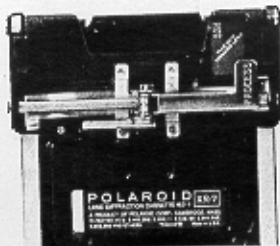
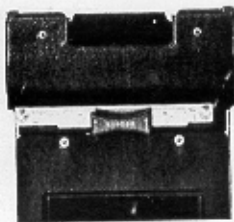
Turn back to the side of the cassette with the red EXPOSE knob. Be sure the knob is all the way down.

**2. Pull packet out of cassette:** Hold the packet firmly with the thumb and forefinger, and pull it straight, all the way out. Pull smoothly, at medium speed, without slowing down or stopping. You will feel a slight resistance toward the end, as the cap reaches the rollers, but keep right on pulling without hesitating. The rollers will separate automatically to allow the cap to pass through.

The picture is now developing. Lay the packet down or hold it by one end without shaking or moving it.

**3. Wait recommended development time:** This is indicated in the instructions packed with the film. When working with specimens that require low room temperatures, you must extend the development time to get proper image quality. For full details, see the film instructions.

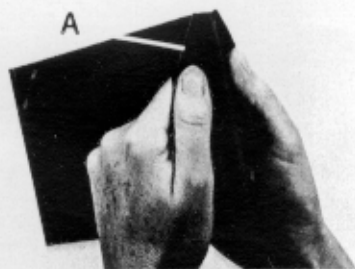
A



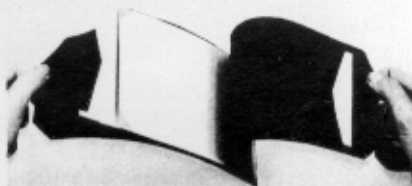
## How to remove the picture

At the end of the full development time, separate the print from the negative in the following manner.

**1. Grip both tabs (A):** Use the full length of each thumb, as shown. Roll both flaps back slightly.



**2. Open the envelope:** Using moderate pressure, tear the envelope open all the way down to the metal cap.



**3. Remove the print:** With your left thumb, hold down the negative and thin paper mask, and with your right hand quickly lift off the print. It will come right out of the envelope. Do not let the print fall back onto the negative.

Avoid contact with chemicals that remain on the film negative. Be sure to read the CAUTION notice on page 19 and in the film instruction sheet.

The negative serves no further purpose; discard it with the envelope.



## Coat the print

Prints must be coated as soon as possible (within one hour) to protect them against scratching and fading. Use the coaters supplied with the film. Use 6 to 8 overlapping strokes, and cover the entire print, including the borders. Keep freshly coated prints separate from each other for a couple of minutes, until they are thoroughly dry. Keep the coater fluid away from furniture, clothing, etc.

Store prints carefully. For best protection, store them in the transparent sleeves or envelopes sold for 4 x 5 negatives and color transparencies. Never

10 write on the back of the picture area.

