

## Film Development Procedure

### Load Film

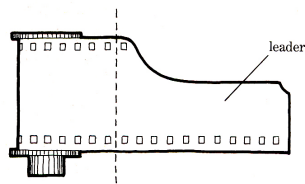
Load film onto the reels in the *photoflex film changing "room"*. You need complete darkness for this procedure. **NO LIGHT**. If you have only one roll of film to develop, put it on the bottom of the two-reel tank and put a blank reel on the top.



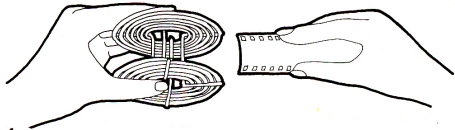
#### Loading the film onto the reel



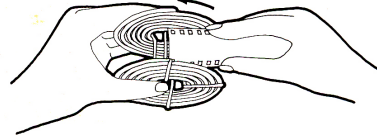
A. Remove the protective cover. Here, a can opener is used to pry open the metal cassette that holds a roll of 35-millimeter film.



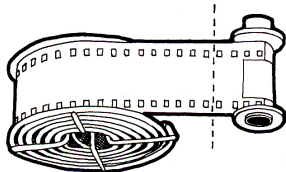
B. Cut off the film leader. Make sure the cut is straight.



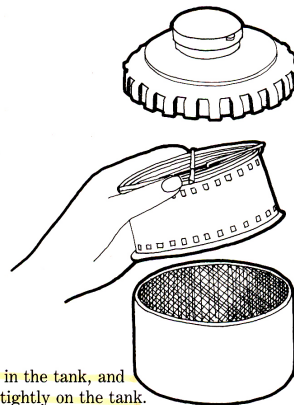
C. Begin to roll the film onto the reel. Keep the film pinched slightly between the thumb and forefinger.



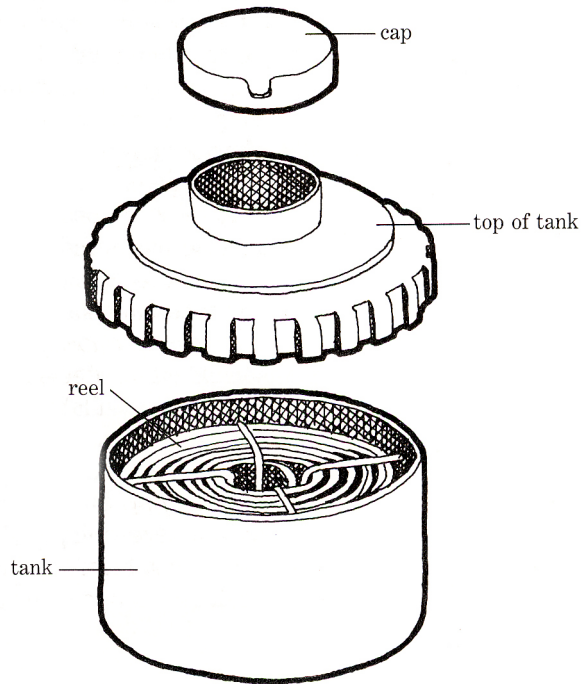
D. Turn the reel counterclockwise, and it will pick up the film and load almost automatically.



E. Cut the end of the film off its spool.



F. Place the reel in the tank, and put the cover tightly on the tank.



See pages 141-145 in the Horenstein *Black & White Photography: A Basic Manual* for how to load plastic reels and other details.

Loading a film onto the reel:

<https://www.youtube.com/watch?v=vgUEFWJxRos#t=485>

## Film Development Procedure FP4+

### Preparing the Chemistry

Dilute the developer and bring it to 68°F. You need 16oz for a two-reel tank. Have an additional 32 oz water that is also 68°F. Make sure the fixer is also at 68°F.

### Prewet

Fill the film tank with the 68°F tap water. This is called a “prewet”. Gently tap the tank on the sink bottom and agitate for one minute. Pour out in sink.

### Developer and H2O rinse

Fill the tank with the developer. Tap gently on the sink bottom and then agitate constantly for the first minute and then 10 seconds out of every minute after that. Fifteen seconds before the total time has elapsed (FP4+ with *sprint developer* at 68°F will be 8 minutes 30 seconds) pour out developer *into* sink. Rinse 5 times with running water at 68°F. Do this quickly (as developer will continue to develop).

### Fixer (Recycle)

Pour in the fixer (*sprint fixer*). Tap the tank gently on the sink bottom. Agitate constantly for the first 10 minutes then 10 seconds every minute thereafter. After the time has elapsed, pour the fixer into the recycle container or put it into a container to reuse (hypo-chek will test if it is spent). NEVER pour it down the drain.

### H2O Rinse and Hypo-Clear

Rinse the film again three times with running water.

Pour in the Hypo-Clear (This Fixer Remover that is also know as Perma Wash or Orbit) and constantly agitate for two minutes.

### Final Wash and Photo-Flo

Now wash the film for 10 minutes in 68 degree water in the Hurrican Washer, if available. Keep the film on the reels.

Your last step is the wetting agent called Photo Flo (1/4 capful to 32 ounces of water). Soak the film for one minute without agitation. Take the film directly from the tank to the drying cabinet without rinsing. (Discard the photo and water after use). Let it dry completely. Cut it down when dry. Put it into plastic negative pages immediately.