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Improved Rewound Film Retriever

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How many times have you wished for a means for retrieving film from a cassette into which you had inadvertently rewound the film as you were switching from one film to another or while in the process of double exposing a roll of film or at a time when you simply did not wish to rewind the film completely into the cassette at the end of the rewind process?

Most photographers can recall a number of such instances. There are ways in which the film can be retrieved from a cassette even if it is of the unopenable kind such as most Kodak and now Ilford types. There is even a commercially manufactured film retriever made by Kalt and sold for about $4 at most camera stores. In addition there are improvised methods that produce a fair degree of successful recoveries but these along with the Kalt retriever are by no means 100% reliable. You might also want to take a look at the PhotoForum's FAQ files. In section 28 there are several methods, in addition to these, described.

Among the improvised methods a one uses two-sided sticky tape which is applied to a piece of film and inserted through the felt trap into the cassette with the idea of sticking it onto the film inside and allowing you to pull the film back out of the cassette. This method has a fairly high success ratio but it depends, of course, in you having two-sided tape at your fingertips which is almost as unlikely as having the commercially made retriever around when you really need it!

A second way, which I learned from Larry White of Modern Photography, is to stick a piece of, preferably, undeveloped film onto your tongue and moisten the emulsion side so that it becomes as sticky as if you had used double sided tape and then push this film, wet emulsion down, into the casette hoping that, first, the swollen emulsion will adhere to the film inside and that, second, yanking or slowly pulling on the remaining film will withdraw with it the film from within. This process while simple and cheap is also fraught with uncertainty and if the withdrawal process is carried out with gusto and vigor, it results in much more film being withdrawn from the cassette than expected.

A different approach, somewhat reminiscent of the neat Polaroid film retrieval system, is proposed and described here. There is a rough drawing at the bottom of this article to go along with the words describing it.

First, the assumption is made that you can secure a length of exposed or unexposed 35mm film. This will become your retriever. Cut two lengths, each 3 or more inches long and set one aside.
On the second one, cut the film between sprocket holes starting with the third sprocket hole from one end. Make the cuts along the edge farthest from the edge of the film and cut at a diagonal towards the edge and away from the short end of the film. The cut should end in the middle of the sprocket hole edge. Do this for the 5th, 7th, 9th, and 11th hole and repeat for the bottom edge of the film. You should have created a pattern similar to that shown by the illustration.

Now bend the serrated ends that you have created towards the emulsion side of the film. Make the bend fairly sharp. You will notice that now you can easily run your finger along the ridges if you move from the short end of the film but that you encounter the sharp edges of the barbs as you move against the grain of the barbs.

At the third sprocket hole now bend the film sharply towards the emulsion side. This curl may need to be reinforced each time the retriever is used for a while, since the curl tends to come out of the film with time or through extensive use.

To use the retrieval system which you have created first insert the plain piece of film into the cassette having first allowed room for this extra volume by winding the film spool clockwise a few turns as you hold it with the longer protruding end towards you. This piece should penetrate the cassette to a length of about 2 inches, until it goes once around and gets prevented from further travel by the backside of the felt trap edge. The function of this piece of film is to smooth out the film exit path so that upon retrieval the outwardly winding film does not get caught by the other side of the felt trap edge.

Now insert the film with the serrated ridges under the first piece of film but only until the edge of the third sprocket hole is at the felt lip. Now wind the film clockwise again and as you do so listen for faint "clicking" sounds inside the cassette. Each click indicates the passage of the leading edge of the film past the curled down edge of your serrated retriever. Stop, and actually backwind some, immediately after hearing one of these clicks.

While preventing the spool from turning, insert the serrated retriever film into the cassette about 2 to 3 inches. This places the retriever under the film's leading edge and some of the ridges will attach themselves to sprocket holes on lower layers of the film within.

Now pull on both pieces of film at the same time. As your retriever exits the cassette it will bring with it the film almost 95% of the time the first time and it will remove even the most stubborn film at least 75% of the time. These averages are equal or and mostly better than those of commercial or other improvised systems.

Here is an ASCII drawing of what the two pieces of film look like:

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|   |   |   |   |   |   |   |   |   |
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this is a piece of regular scrap film!

this is what you make out of the film above!

bend "barbs" _down_ towards emulsion side
insert notice then they will slide into cassette
<--- this end into cassette easily but on way back will catch sprocket
first holes


You can usually just use one piece of this sharksin film and stick it as much as will go into the cassette. Then wind the core until you feel resistance. Then pull it out and the film may come out with it.

Or, use two pieces of film, one plain with no sharpskin pattern cut into it and the other which is modified as shown above. Insert a length of plain film as far as it will go into the cassette (usually it will only make one turn inside the cassette and get stopped by the felt. Then insert the modified film "under" the plain one and proceed as above. The function of the _plain_ piece is to smooth out the inside of the cassette so the leader will not have a chance to get caught on the felt light trap's edge.