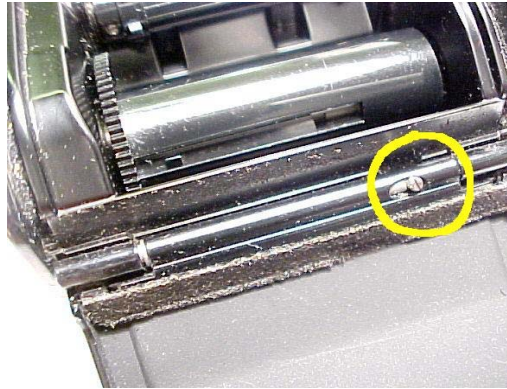


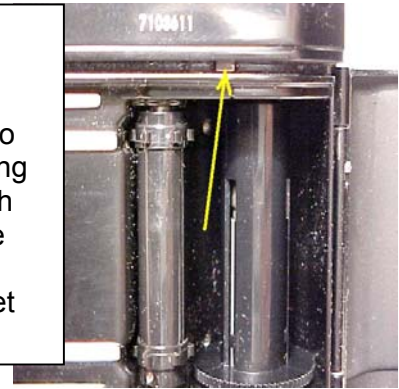
ProSeal Instructions for Nikon FM series SLR

Please read these instructions **completely** before you start. Knowledge strengthens confidence, and like most jobs, this is better done right the first time. I think you'll find it rewarding and fun, and I've tried to keep things as easy and logical as possible. This is a very popular and well-designed SLR, and the job you're doing now is very important in repairing one of its most common problems.

Here are some things you may need: (1) a safe surface to work on—I like to use a piece of cardboard about 1.5' by 1.5', but you can work on fiberboard, newspaper or anything else handy—the important thing is to protect the surface beneath you. (2) Naphtha (cigarette lighter fluid is the same thing) or denatured alcohol for a solvent. (3) 2 or 3 paper towels. (4) some toothpicks or your bamboo tool—if you have access to a wooden cuticle stick, this is a handy tool. (5) a safety razor blade, hobby knife, or small scissors. (6) a small screwdriver (7) a pair of tweezers. Now, let's take a look inside your camera:

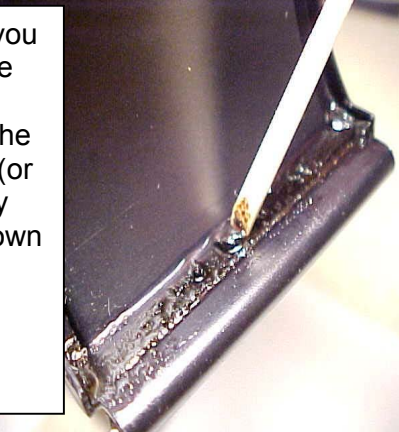


As you look inside the hinge area, you'll see a small screw there (as in the circle). Slide it downward, and you'll be able to remove the film door. Removing your film door will make it much easier to clean and replace the old seal material. To the right, you will see the film frame reset lever in the top slot.

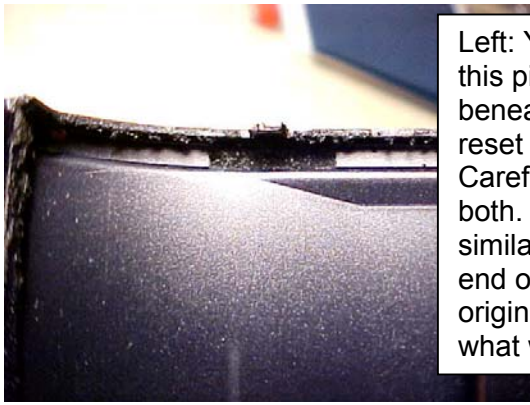


As you look at your film door, you will see the old seal foam at the end. Our first job will be to remove it. Using solvent and the wide end of your bamboo tool (or similar wood scraper), carefully remove the old material as shown to your right and described below.

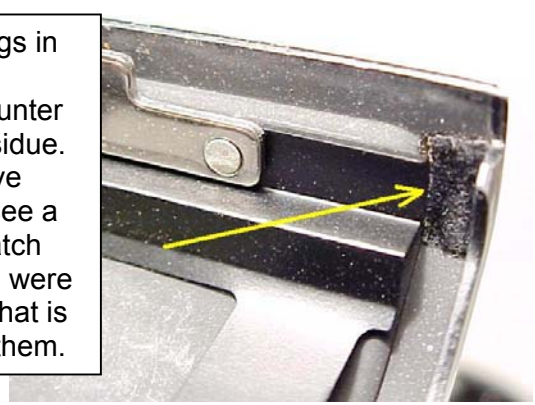
(Door is from EM model, but procedure is the same)



Use your small screwdriver as a dropper (or an old dropper bottle) to carefully drop naphtha (lighter fluid) or denatured alcohol on the hinge end seal. I normally use enough to saturate it, but not to the point of dripping. Let it sit a minute or so and then begin scraping it off. You may use a toothpick with the end broken off, the wide end of your bamboo tool, a wooden cuticle stick, or anything that will not damage the paint. Your work will go better if you are patient and give the solvent time to dissolve and loosen the old adhesive. IMPORTANT NOTE: Observe the precautions on the solvent can. Work in a well-ventilated area and avoid too much skin contact or contact with eyes, and don't drink it. Denatured alcohol is also fine. You will probably see black seal residue on the film door edges—you may wipe that off at any time with solvent on a bit of paper towel.



Left: You will see two things in this picture. A small seal beneath the film frame counter reset tab, and old seal residue. Carefully clean and remove both. To the right, you'll see a similar seal piece at the latch end of the film door. Both were originally thin fabric, and that is what we'll use to replace them.



Carefully cut from 1/32" (1mm) thick fabric seal the two pieces shown above. The hinge end seal is 1 31/32" by 3/16" wide (50mm x 4.5mm). The film frame counter piece is 3/32" by 1/2" long (2mm x 13mm). The latch end piece is about 1/8" x 5/16" (3mm x 5mm). Remove the adhesive backing (catch a piece of it with the edge or tip of your razor blade), **lick the adhesive side** (to temporarily deactivate it), and carefully install the pieces on your film door. On some models, you may have to slide the small piece at the latch end under a ledge plate. Lick it well...you can work it underneath if you do this.



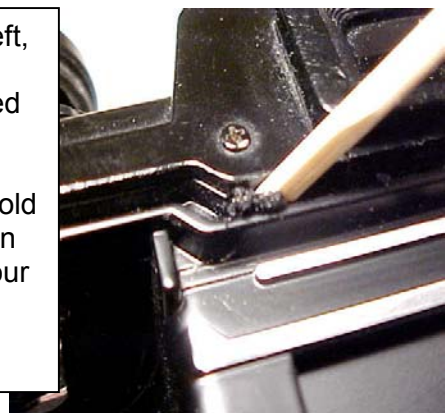
Pretty! Like new again. It is so nice to be using professional materials in your camera, isn't it? Of course it is. If you get either of these pieces installed crooked, you can remedy this. See below for a secret!



Look at the seal pieces above. They are installed nice and straight, and we've done a professional job of restoring your camera to like new condition (or better!). But, what if you got one of these installed crooked? Well, that is not a problem, for I'll share an inside secret that you can use to fix that. Moisten the seal with solvent...naphtha or denatured alcohol. Do not use too much. Let this sit for a minute or two. Then, you will find you can re-position the seal right where you want it to be. Once the solvent dries, your seal can be pressed into place, and it will be as good as new again.



As on this EM model to the left, there may be seal residue on your camera's body. We need to clean it with a paper towel and some solvent. When finished, begin removing the old seal residue from the long thin slots, using the thin end of your bamboo tool or a blunt toothpick.





Next, place a bit of paper towel or paper napkin in the slot, moisten it with solvent and use your bamboo tool to guide it through the slot to clean the old residue out completely. You will have to do this a number of times to get all the old goop out, and be careful to avoid the film frame counter reset lever. You do not want to force any old seal material under it or into the camera body. When the top slot is finished, move to the bottom slot and repeat the process. When both slots are clean, we'll replace the seal material.

Now we're going to replace those slot seals. Here's how:



Three pictures tell the story: Begin at the very end of the slot. Push the "Seal Strip" into place with the thin end of your bamboo tool. Follow through the slot around the corner and trim so it ends right at the film frame reset lever (barely visible in the final frame above). Repeat for the remainder of the slot, starting at the film frame counter and progressing to the latch end. Repeat this for the slot at the bottom, and you're done with that part. This example is of work being done on the EM, but the work is the same for the FM series.

Once you've finished the film door and the slots, you may replace the film door. Now to the mirror damper.....



There are three pictures above. The first one shows what is left of the old damper pad in an FM. The middle picture shows how I will remove the remains of the old foam carefully with a hobby knife.

The final frame shows how to remove the focus screen in the FM2 and FM2n models. If you need to remove your screen and wash it, this would be a good time. **IMPORTANT NOTE:** There are two sides to the focus screen. One is a matte finish, and the other is smooth. The matte finish faces the pentaprism and the smooth finish faces the mirror. When the clip is moved, the frame will pop up and you can extract the screen by holding the tab with a pair of plastic tweezers. You can wash old goop or smudged mirror damper foam off with naphtha, and you can then carefully clean the screen in warm soapy water and rinse with clear water. Allow it to air dry, or dry with a clean lint-free cloth. Clean all old mirror damper foam from the mounting area, and replace with 2.5mm damper foam—cut it 5/32" wide by 1 17/32" long (or 4mm x 38.5mm).



Above are three more pictures. First, a better look at the focus screen frame in the “up” position. Middle, you can see I’ve set the mirror damper pad in place. Please remember to **lick** the adhesive side first to allow you to move the piece more easily. Place it straight and let it dry. Third frame, you can see how I’ll press the damper pad down. Simply lift the mirror up and press against the damper pad. Looks good, doesn’t it?

Guess what? You’re finished, and your camera is back to “like new” condition and ready to enjoy again.

~~NOTES~~

These instructions were given to you as an accompaniment to a general seal kit, or for any of several reasons. You should be able to easily cut your own seal pieces from my seal material, using methods described in my general kit instructions. Your camera is a fine precision instrument, and the materials you are using have been carefully tested to be compatible with its design. You should **never** use inferior seal materials as a substitute. On the hinge end, latch end and the film frame counter, I use 1mm self-adhesive fabric seal. You could use my 1mm open-celled foam seal, however I prefer the fabric in this instance. For the long thin door slots, use a “Seal Strip”—a 2mm non-adhesive strip cut from a foam product I had made especially for this purpose. For the mirror damper, use 2.5mm self-adhesive open-celled foam.

About licking the adhesive first...when you do this, you temporarily de-activate the “stickiness.” This allows you time to position the piece correctly, and it keeps it from sticking to your fingers or tweezers. After 15 minutes or so, you can return and press it down again.

Jon Goodman --- 2004