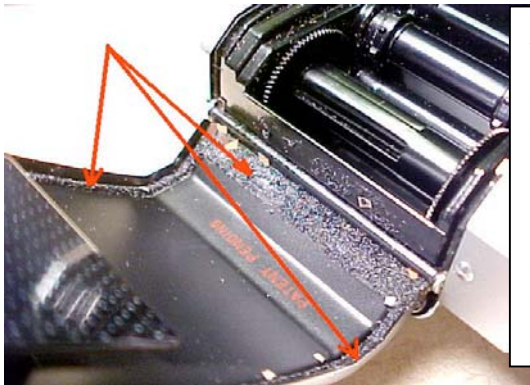


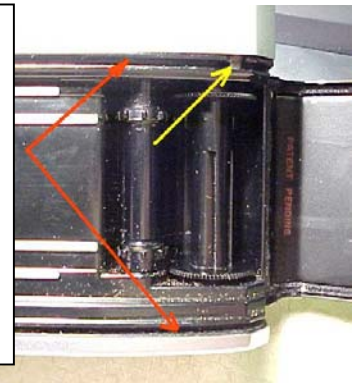
## ProSeal Instructions for Mamiya/Sekor 1000 DTL SLR

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.

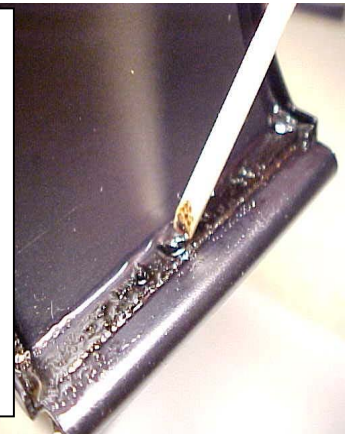
Here are some things you may need: (1) a safe surface to work on—I like to use a piece of cardboard about 1.5' by 1.5', but you can work on fiberboard, newspaper or anything else handy—the important thing is to protect the surface beneath you. (2) Naphtha (cigarette lighter fluid is the same thing) or 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:



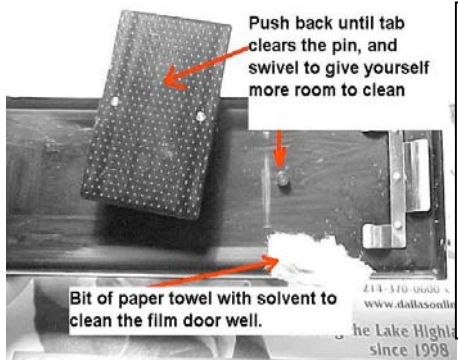
As you look inside, you'll see the old deteriorated seal foam inside the hinge area and running down the inside edges of the film door. To the right, you will see the two slots into which seal was also installed, and you will also see the film frame reset lever in the top slot. Later we'll discuss the seal at the latch end.



Our first job will be to clean the old foam off. 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 to the right is from Nikon EM model, but procedure is the same)



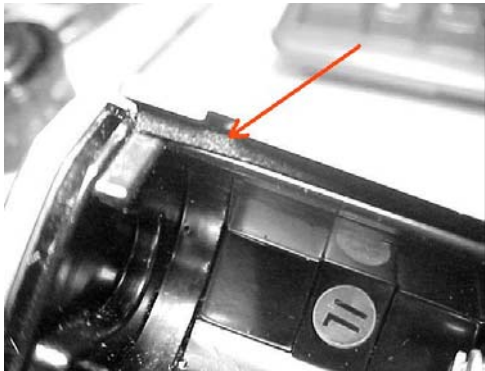
Use your small screwdriver as a dropper (or an old dropper bottle) to carefully drop naphtha (lighter fluid) or denatured alcohol on the hinge end seal. I normally use enough to saturate it, but not to the point of dripping. Let it sit a minute or so and then begin scraping it off. You may use a toothpick 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 I have moved the pressure plate out of the way, and I'm using paper towel to clean the door fully. To the right, you'll see I'm also cleaning out the seal inside the latch end recess using a bit of solvent-soaked paper towel and my bamboo tool.



About moving that film pressure plate: In many of my directions, I suggest moving it out of your way. It is not mandatory to do this, but it does make things easier. Push back on the plate (at the end which faces the latch end of the door) until the tab clears the pin. This will allow you to swivel the door toward the top and then toward the bottom of the door, giving you more room to work. To replace it, reverse the procedure, being careful to only push back until the tab catches the pin. Carefully cut from 1/32" (1mm) thick fabric seal the two pieces for the hinge end seal and the latch end seal—you also can use 1mm open-celled foam, however I prefer the fabric in this case. The hinge end seal is 6mm x 47mm. The latch end seal is 1.5mm x 50mm. Remove the adhesive backing from the latch end piece (catch a piece of it with the edge or tip of your razor blade), **lick the adhesive side** (to temporarily de-activate it), and carefully install the piece in the latch end recess. This is shown below.



Left, I've set the latch end seal in place. After it dries, I'll press it down to seat it with the thin end of my bamboo tool. Right, I have begun installing the new foam strips on the film door...measurements are given below.



The strips for the film door are cut from 1.5mm thick open celled foam and measure 2.2mm x 163mm. They may need to be trimmed for length as they are installed. Lick the adhesive side and begin near the hinge, working carefully. You see I am finishing at the left. To right, I begin cleaning the body slots for the film door edges.



In the above right frame, you will see I have placed a bit of paper towel in the slot and I'm wetting it with solvent. Be careful not to overwet it, and watch out for the frame counter reset lever. You do not want to push old seal material under it or into its opening. I will push wet pieces of paper towel through this slot until the old seal material is all cleaned out nicely. Take your time and clean it well. The next images will explain the method we'll use to re-seal these slots...





Three pictures tell the story: You can see I have installed the hinge end seal on the film door between the upper and lower inside seal pieces. For the slot...Begin at the very end. 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 (visible in the center 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. You do not need any adhesive for these strips. I've designed them so that sidewall pressure will hold them in place indefinitely.

Once you've finished this, the film door is complete. Now to the mirror damper.....



There are three pictures above. The first one shows the old damper pad as I first saw it in my DTL 1000. I could hardly keep from laughing. It looks like somebody used some sort of craft foam in here, and did a bad job in the process. This is a **good example** of why you should *never* use inferior light seal materials in your camera. The middle picture shows how I will remove the remains of the old foam carefully with a hobby knife. In my case, it was easy to slide right under the pad the amateur repairman had installed and lift it out. In other cases, you may need to use tweezers or the hobby knife to carefully pick bits of the old foam off until the area is clean. Be careful not to get any old seal material onto your focus screen, and never use solvent near it. It is too easy to make a mess of your screen or ruin it. Clean all old mirror damper foam from the mounting area, and replace with 2.5mm damper foam—cut it 3mm x 37mm. As you see in the final frame, I've set it into position—this is actually easy. Please remember you can **lick** the adhesive side to delay the adhesive and allow a bit more positioning time. When you have the damper pad where you want it, let it dry and later you can lift the mirror up and press against the pad to give it a final seal. Now it looks much better, 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—there is no substitute for quality, and using the best costs no more.

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.

Finally, enjoy your work. Make yourself a glass of tea, tune your radio to a classical music station and take your time.

Jon Goodman --- 2005