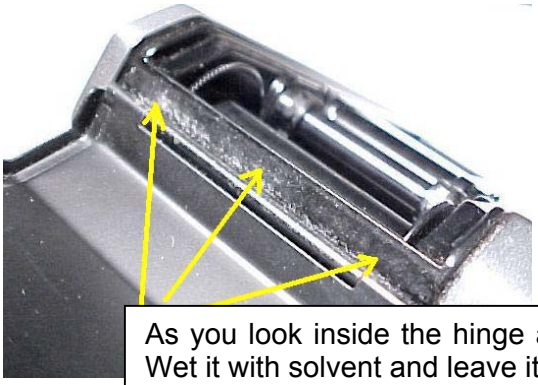
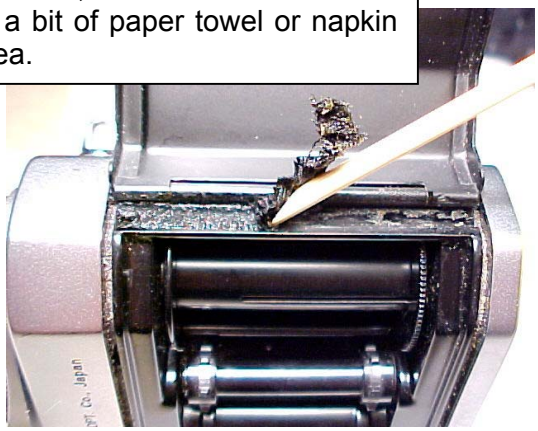
ProSeal Instructions for Pentax Spotmatic SP SLR

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:



As you look inside the hinge area, you'll see a worn out thin fabric seal there. Wet it with solvent and leave it to soak for a minute or two. Then begin scraping the old seal off with the large end of your bamboo tool, as shown in these four images. Once the seal has been removed, use a bit of paper towel or napkin and solvent to completely clean the hinge seal area.



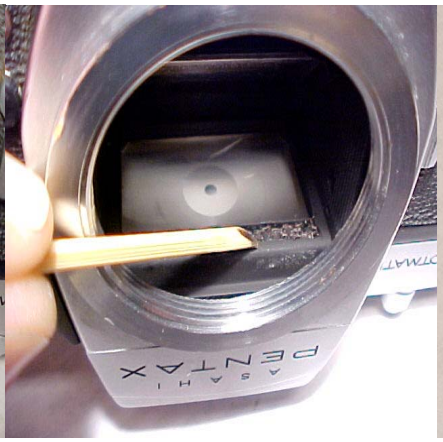
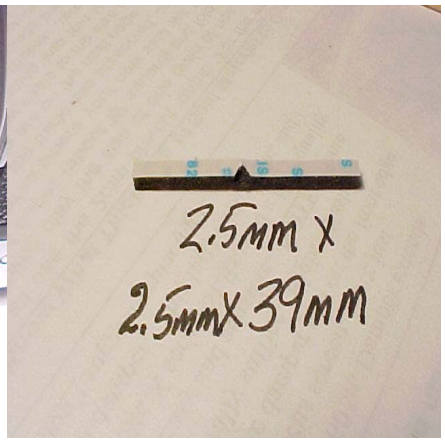
You can use your small screwdriver as a dropper (or an old dropper bottle like one used to dispense contact lens cleaner) to carefully drop naphtha (lighter fluid) or denatured alcohol on the hinge end seal. I normally use enough to saturate it, but not to the point of dripping. Let it sit a minute or 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. 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. Remember to get these nice and clean.

Left: Using a bit of paper towel or paper napkin, I am dropping a bit of solvent on it as I push it through the film door slot with the small end of the bamboo tool. Be careful to avoid the film frame reset lever, and keep doing this until the slots are completely clean. You'll use several bits of paper towel. Don't get the paper too wet…just enough to saturate it. Clean the top slot on both sides of the film frame reset lever and then clean the bottom slot completely. Work carefully and take your time doing this.

To replace the slot seals: 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. 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. Be careful not to let the strip turn or twist as you work, and install with the glossy side up.

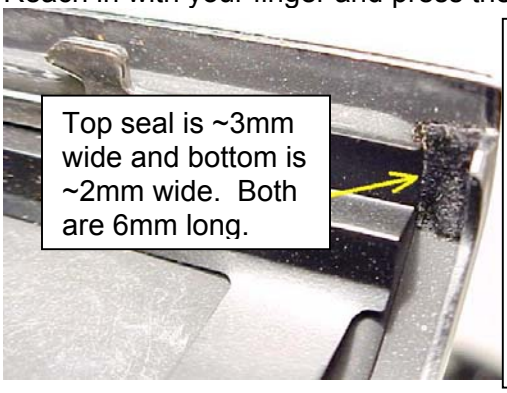
You have some choices with the hinge seal…

Left: Using either a 1mm thick piece of self-adhesive fabric seal or a 1mm thick piece of self-adhesive foam seal, cut a strip which is 5mm wide x 51mm long. Then, **lick** the adhesive side (to delay adhesion temporarily) and slide it in place neatly under the hinge of the film door and align at the edge of the body. Right the original style: Use a 51mm long piece of 1.6mm fabric seal or 1.5mm foam cut 4mm wide. Lick it well (and lick the hinge area of the body) and use your bamboo tool to push it under the hinge lip and align it with the ledge you see there. Now on to the mirror damper…

The first image shows how I will begin removing the old damper pad using a typical X-Acto type hobby knife. Using the knife's tip, I will carefully slice through the old pad as close to the bottom as I can. The middle picture shows how I will remove the remains of the old foam & adhesive by pushing the large end of my bamboo tool along the small ledge of the frame. Be careful to lean the camera toward you so anything you remove will fall out the lens opening and not onto the focus screen. Keep doing this until you remove most of the old material, but do not use any solvent in this area. Take your time. The final frame shows the dimensions of the new damper pad (2.5mm x 2.5mm x 39mm), and it also shows how I have used a small pair of scissors to cut a notch which will go over the little screw in the center of the frame.


Above are two more pictures. First, 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 and keep it from sticking to anything yet. Place it straight and let it dry for about 20 minutes. In the second frame, you can see how I'll press the damper pad down. Set your shutter speed to "B" and cock and trip your shutter, holding down on the shutter release button. This will keep the mirror up against the foam. Reach in with your finger and press the foam uniformly down with the mirror frame.



Two more seal pieces to replace: On each side of the latch end, you will see two small 1mm thick pieces of fabric seal. Depending on the condition of your camera, yours may be gone or nearly invisible. These are simple to remove and replace. Moisten with solvent and remove with the bamboo tool. Cut from 1mm self-adhesive fabric seal material two replacement pieces. Remove the backing paper, **lick** the adhesive side and guide into place. Once dry, press for the final fit. (example to the left is not the latch end of a Spotmatic, but the end of a Nikon which used the same style.

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. Nothing will be gained from using materials unsuited for your camera, and you could actually damage your camera by using incorrect thicknesses or foam which is too stiff. On the hinge end and the latch end, I use 1mm self-adhesive fabric seal. You could use my 1mm open-celled foam seal at the hinge end, 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 to 20 minutes or so, you can return and press it down again.

Jon Goodman --- 2005