

ProSeal Instructions for Minolta Hi-Matic Rangefinder Series

Please read these instructions completely before you start. Knowledge builds 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 interesting as possible. This is a great rangefinder, and the job you're doing now is very important in repairing one of its most common problems. You have been given these instructions as a free gift for buying one of my light seal kits or for some other reason. I am assuming you have already read my basic light seal replacement instructions.

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) Solvent--Naphtha (cigarette lighter fluid is the same thing) or denatured alcohol are my favorites. (3) a paper towel or two. (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:



I'll use the model F for an example. The full-sized Hi-Matic is a little different, but not much. Beneath the top plate, you will see a long thin rail slot. There is a corresponding slot at the bottom. In the top slot, you will see the frame counter reset lever (pin) about 1 inch or so from the right side. There will be a seal at the hinge end, too. It may be on the door or it may have been relocated to the camera body. We'll replace it on the film door. There is no latch end seal.

You may see black residue on the camera body and the film door edges. Use your small screwdriver as a dropper to carefully drop solvent where you need it. I normally use enough to saturate it, but not to the point of dripping. An old plastic bottle (like a contact lens cleaner bottle) makes a good solvent dropper, too. The procedure is to let it sit a few minutes, and then begin scraping it off. You may use a toothpick with the sharp end removed, your bamboo tool from the light seal kit, a wooden cuticle stick, or you may use the tip of your small screwdriver. Work carefully and try not to scratch the painted surface. 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.

Now we're going to clean out the rail slots on the camera body and replace those seals. Here's how:

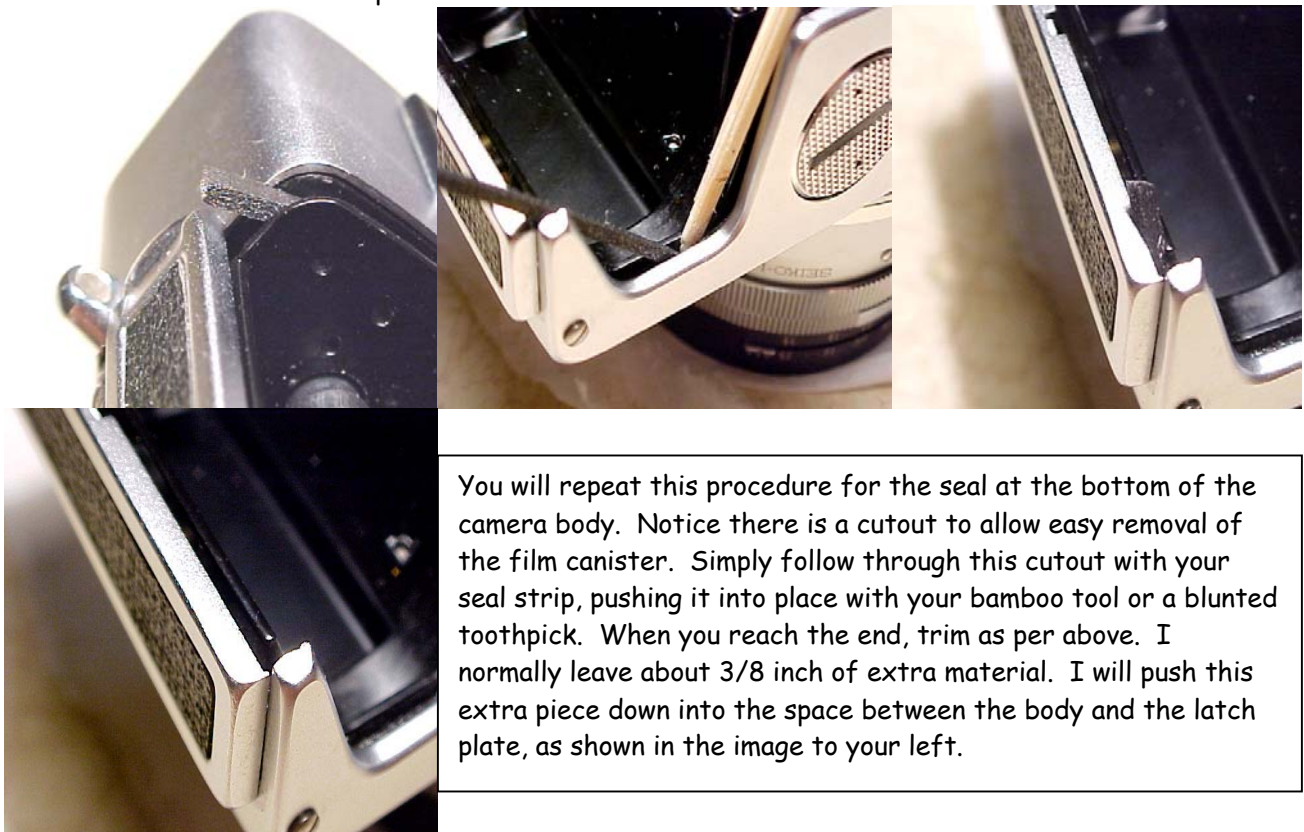


Place a small bit of paper towel in the slot and push it down with your tool. Next, drip a little solvent onto it...enough to wet it, but not to the point of being messy. Use your tool to push it through the slot, cleaning the old goop out. You may need to repeat this three or four times until the slot is nicely clean. Push the old material away from the reset pin, so you don't get old goop under it, then clean the slot on the other side of the pin. Repeat for the lower slot.

When you have the slots clean, take a long 2mm piece of seal material from your kit and press it into the slot using your fingertip. Start at the hinge end and work toward the frame counter reset lever. Don't let the seal material turn or twist and press it into the slot with the thin end of the little bamboo tool, as below. When you get to the film frame reset pin, cut the strip so that it will stop right at the pin, as shown. Start the strip back in the slot on the other side of the pin.

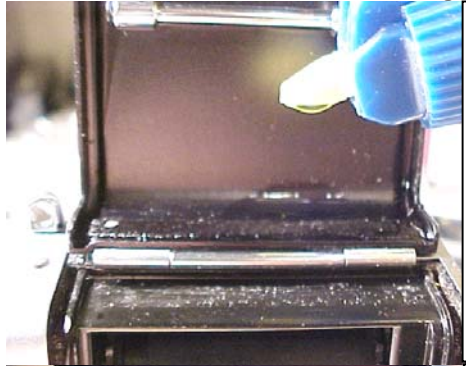


Don't worry that there is no adhesive. With this seal you don't need it. I designed it so the pressure of the seal material against the channel walls will keep it in place perfectly and provide a full-channel and completely effective light baffle. When you reach the end, use a razor blade, small knife or tiny scissors to trim the excess so the strip will tuck under the latch cover—see below:

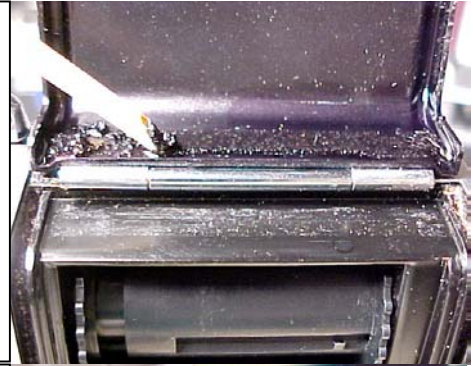


Now, with a blunted toothpick or the thin tip of your bamboo tool, trace the seal's length, pressing it gently down into its slot to seat it. Don't poke into it or damage it.

Now, let's remove and clean the hinge end seal.



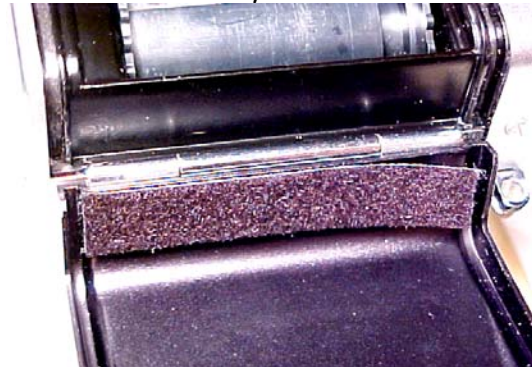
To the left, I drop some solvent on the hinge end seal and let it soak a minute or so. To the right, I use the large end of the bamboo tool to scrape the old seal material off. The bamboo tool (or a similar wooden one) will not damage the camera's paint.



We'll want to clean the hinge area really well, as per the image to your left. In this example, the slots have not yet been cleaned. To the right, I use a bit of towel soaked in solvent to clean the film door edges. We don't want them to foul your new seal material.



Cut a piece of 1/32" fabric seal material to fit. The dimensions of the piece you will need are 46mm x 8mm wide. Remove the protective backing, and carefully install it. Please note this seal does not reach from end to end on your film door. Here is a view of how it should look:



The seal material starts and stops at the place where the door "breaks" into the trough on both ends. You can see this clearly in the picture to the left. If you happen to install your seal piece crooked, simply drop some solvent on it and let it soak a minute or so. This will free the adhesive, allowing you to re-locate the piece. Be careful not to poke into the seal piece when it is wet with solvent, or you could damage the fabric. Move it gently if you need to do this.



When finished, this is how your new seal material should look. You can see the slots have been re-sealed in this image. Since there is no latch end seal, we're finished, and your Hi-Matic is ready to take excellent pictures. Also, because we used a fabric seal at the hinge end and high grade LDPE in the film door slots, it is unlikely you will ever have to worry about light leaks again.

Now, please close your film door and let your camera sit a few hours or overnight to allow the new seals to adjust to their new surroundings.

A little further into the camera we go...

Is your rangefinder foggy or not as bright as you wish? I'll show you how to clean it. First, we remove the top plate of the camera:

Jon Goodman --- 2004