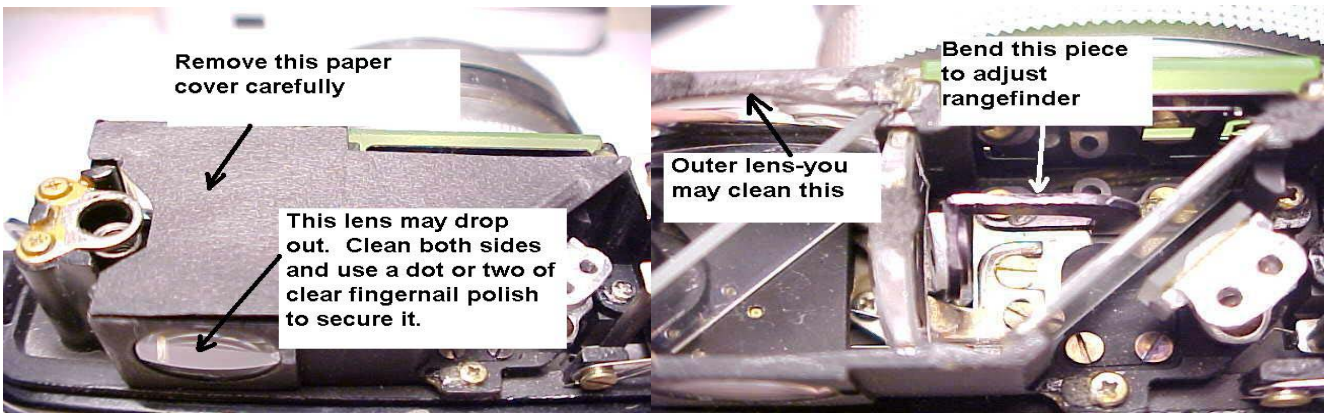
ProSeal Instructions for Petri Racer Rangefinder

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 logical as possible. You're working on a very nice small rangefinder, and the job you're doing now is very important in repairing one of its most common problems, plus we'll discuss other issues this camera may have as well. You have been given these instructions as a free gift from one of my light seal kits, or for some other reason, and for that reason I think you already have studied 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. Before we begin re-sealing, let's make sure all is well with your rangefinder/viewfinder. Take a look:

If your rangefinder is not adjusted properly, or if your viewfinder is cloudy and dirty, fear not…we can fix that. Above please see a top view of your camera. Unscrew the rewind lever by blocking the film fork from turning using a screwdriver blade or a chopstick. On each side of the top plate will be two small screws. Remove them and lift your top up and off. The third frame shows what you'll see. A closer look:

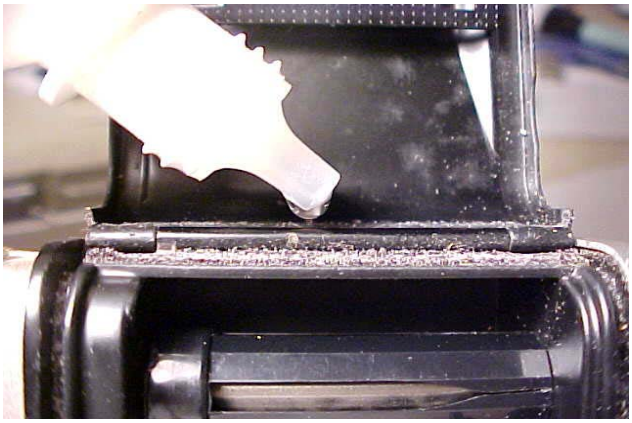


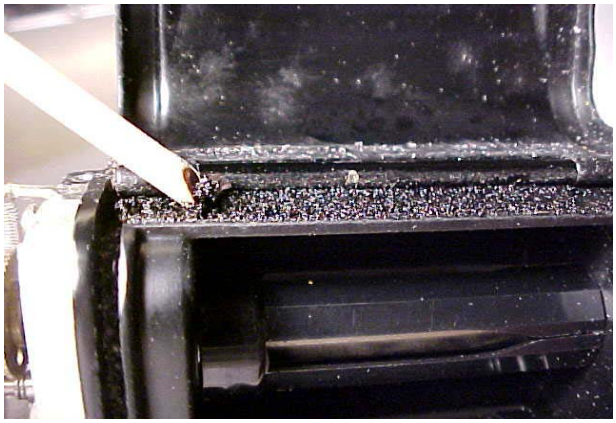
Above, you'll see we have exposed the rangefinder/viewfinder. Only clean the rear lens and the front lens. Any glass cleaner will work fine. As for the rangefinder, if your infinity setting is off, bend the piece shown with needle-nosed pliers carefully to the right or left until the images align. If the horizontal adjustment of your rangefinder is off, bend it carefully up or down until the images align.

Remember, use caution. Once this is complete, you may replace the paper cover and hold it in place with a few dots of household glue or clear fingernail polish. Okay, now for resealing…

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 end broken off, your bamboo tool, 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. SECONDARY IMPORTANT NOTE: **This camera uses some internal plastic pieces**. DO NOT use any solvent such as Acetone or MEK (Methyl Ethyl Ketone) to clean up your old seal material. These are NOT safe on plastics. Let's look:

Above, you'll see where the old seal is located. Below, we begin to remove it:





Drop on some solvent, let it soak in a minute or two and begin removing with your bamboo tool's wide end. Below, we will replace the hinge end seal…

Here's the challenge: this seal fits underneath the hinge. However, it is sticky on the back side, so how can we do that? Easy…first cut the seal piece. It is 1/4 inch by 1 13/16"… cut from 1mm fabric seal. Remove the backing paper by catching a corner of it with a razor or hobby knife (as I showed you in the general kit directions). **Lick** the back side of the strip (or moisten with solvent). Then place it on the body, center it and slide it under the hinge, using your bamboo tool gently if needed. When dry, press it down.

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

First, run a toothpick with the end broken off or the narrow end of your bamboo tool through the slot to remove the gunk. Repeat if needed, working away from the frame counter reset lever (as shown). Don't push old seal material into the frame counter reset area. Then run a small piece of paper towel with a little solvent on it through the slot to finish cleaning it. You will need to do this several times to get the slots fully cleaned.

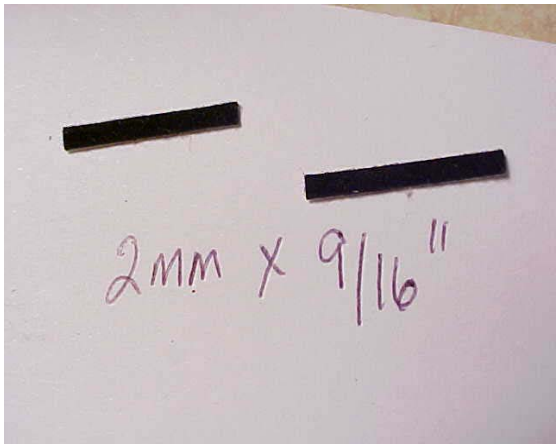
When you have the slots clean, take a long 2mm piece of seal material from your kit and press it into the slot using your fingertip. Start at the hinge end and work toward the frame counter reset lever (but don't cover it or go underneath it). Don't let the seal material turn or twist and press it into the slot with the thin end of the little bamboo tool, as below.

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 finish at end of the rail slot. Repeat this procedure for the part of the slot starting at the film frame reset and extending to the hinge end—use the piece of 2mm material you just trimmed off for this. Repeat for the lower slot. 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. Then, close your door. It is normal to feel resistance from your new seal material until it

"sets" to its new surroundings. Don't worry unless the resistance seems excessive. If you encounter too much resistance, make sure you got your seal material neatly tucked into the ends at both rail slot end.

What about the curved cutout for the canister release? Simply follow around it, trimming at the end. It will overlap at the end a bit. **IMPORTANT NOTE: You will notice old seal residue on the edges of the film door. Clean this off using a bit of paper towel and some solvent. You do not want this to foul your new seals, and besides it is messy and makes your camera less fun to use.**

Final step…the latch end:



Above, you'll see there was seal material at two places inside the latch area. You'll need to clean it out just like we cleaned out the film door slots…with a bit of paper towel soaked in solvent. Use the thin end of your bamboo tool to wipe it back and forth. When all is clean, cut from 1mm fabric seal two pieces 2mm wide by 9/16" long. Lick the adhesive side and fit these down into the area, leaving the middle part open (where the latch connects).

Now, close your film door and let your camera sit a few hours or overnight to allow the new seals to get happy with their new surroundings. Your work is finished, and your camera will have a very effective light seal for years to come.

Jon Goodman --- 2004

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About licking the adhesive side…why should you do this? If you lick the adhesive side (after the piece has been cut and the backing paper has been removed, but before you install it), you will temporarily de-activate the adhesive. This will give you a little extra time to position the piece correctly, and it will keep it from sticking to your fingers, too. After a few minutes (about 15), the piece will dry, and you can go back to press it down for the final installation.