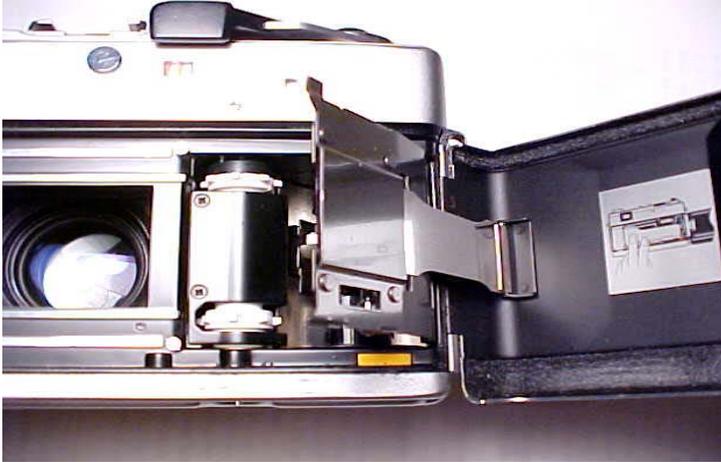




Canonet Second Series Pro-Seal Kit

Please read these instructions **completely** before you start. This is not a race, and like most jobs is better done right the first time. I think you'll find this rewarding and fun, and I've tried to make it as easy and logical as possible. If you have been given these instructions as a result of having bought one of my seal kits, the dimensions of the seal pieces should be on the back cover of the booklet.

Here are the things you'll need: (1) a safe surface to work on—a piece of cardboard, fiberboard, newspaper or anything else handy—the important thing is to protect the surface beneath you from damage. (2) Solvent: Naphtha (cigarette lighter fluid is the same thing) or Denatured Alcohol. (3) 2 or 3 paper towels. (4) the bamboo tool I sent you (or toothpicks or a bamboo skewer—if you have access to a wooden cuticle stick, this is also a good tool). (5) a safety razor blade, hobby knife, or some sort of very sharp knife and a small pair of scissors. (6) a small screwdriver (7) a pair of tweezers (8) ruler or metal straightedge to use in cutting foam. Now, let's study the inside of your camera:



A Sophisticated Seal Design!

At the top of the interior, just beneath the top plate, you will see a long rail slot. Notice there isn't a rail slot at the bottom. In this slot, about an inch or so from the right hand side, you will see the frame counter reset lever. It is important not to cover this with seal material or run any material underneath it. On the film door, you'll see the seal material. The top side uses a thin strip, while the bottom uses a wider strip. There are also seals at the hinge and latch end of the camera.

You will probably see black seal residue on the camera body and the film door. We'll clean this up in just a minute. First, I want you to remove the film pressure plate. This will make your work much easier. Here's how we do that:

First, carefully press the left edge (the one facing the hinge) away from the hinge...in the direction of the arrow I've drawn. Press just until the stainless tabs clear their little brass retaining buttons. Then rotate the plate clockwise slightly to free the top right tab and slide the plate off of the last retaining button. To replace, we'll reverse this procedure. So you can see what the plate and tabs look like, there is another picture included below. As you can see, one tab is different. As with all camera repair, I find working under bright light to be absolutely essential.



For those who want to take this one step further, you may remove your film door. Here is how I do that:



The three pictures above tell the story. First, remove the bottom plate. Carefully note the position and orientation of the sliding battery door. The first image shows it, in case you need a reference point when you re-assemble. Second, using needle nosed pliers, very carefully bend one edge of the retaining bar and separate the Quick Load flap from it. Third, with a tiny screwdriver, push the hinge pin out from the top until you can grip it and pull it through from the bottom...third frame above. Now your door can be separated. Not only does this make it easier to clean, but when we discuss the hinge seal replacement, I'll show you a neat trick to make your camera just like it was when it was new.

Okay, now let's clean your camera. Take your small screwdriver and use it as a dropper to carefully drop naphtha or denatured alcohol on the areas of the door that have seal material attached. If you have a small bottle (like a contact lens cleaner bottle, this is quite handy, also. Use enough solvent on the old seal to saturate it, but not to the point of dripping. Let this sit a few minutes (2 to 5) and then begin scraping it off of your film door. You may use the large end of your bamboo tool, a toothpick with the end broken off, a bamboo skewer, a wooden cuticle stick, or you may use the tip of your small screwdriver. Work carefully and try not to scratch the painted surface. If you do cause scratches, you can touch them up later with flat black paint and a small paintbrush. The main thing when doing this is to be 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.



After you clean the old seal from the film door, you'll need to also clean the old seal off the latch end. This is done the same way. This area is cramped, and you'll have to work carefully in here.



When you've cleaned the old seal material off of the film door completely, it is time to turn attention to the hinge end seal. You will notice this seal (originally a fabric seal) runs underneath a stainless steel flap (part of the Quick Load feature). Moisten the seal with solvent and work a corner out. When you work enough of the strip out that you can grasp, pull the rest out carefully...at a diagonal slant to the hinge. It

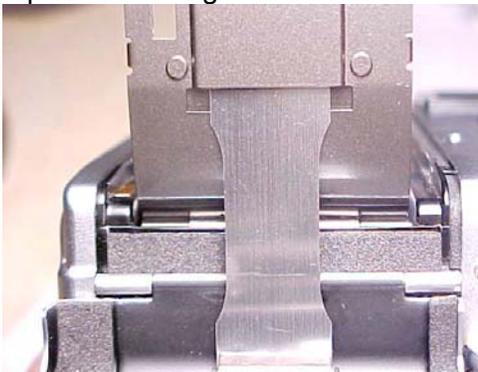
should come out in one piece. Finish cleaning the area. Once you've completely removed the hinge end seal, take a piece of paper towel with solvent on it and clean the lower body edge. Usually there will be old black seal residue on this area, and you don't want to leave that to foul your new seal material. You may need to wipe this two or three times until you get it completely clean. Now would be a good time to have an Arnold Palmer drink—half ice tea/half lemonade—refreshing and sensible.

Now we're going to clean out the top rail slot on the camera body and replace that seal. Here's how:



After I run the thin end of the bamboo tool through the slot to remove the largest part of the seal, I'll put a bit of paper towel in the slot and drop a little solvent on it. Then, I'll guide that through the slot with the bamboo tool until the slot is clean. Next, take the long 2mm strip of seal material from your kit and cut off a piece about 1 ½" long. Start at the hinge end, and press it into the slot using the thin end of the tool. When you reach the film frame counter reset lever, trim with small scissors or razor so the seal ends right there (but don't cover it or go underneath it). Don't let the seal material turn or twist as you install it. 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 side walls will keep it in place perfectly. Repeat this procedure for the part of the slot starting at the film frame reset and extending to the latch end. Trim and guide into the slot's end. Now, with the thin end of your tool or a blunted toothpick, trace the seal's length, pressing it gently down into its slot to seat it. Don't poke or damage it. Now, close your door. It is normal to feel a little resistance from your new seal material. 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.

Now, let's replace the hinge end seal (use the 1.5mm foam or 1.6mm fabric seal for this—whichever you prefer is fine). That piece of seal material is about ¼" x 1 ¾". Remember to use the edge of a razor or knife blade to pick the backing paper away from the foam or fabric. (I had your seal material manufactured with the finest heavy duty adhesive available and the backing requires a bit of "acquired technique" to remove). Please note this seal does not reach from end to end on your camera body. There are little "ledges" between which it sits. You do not want to have your new seal material to go on top of those ledges. Here is a view of that:



You can see open spaces at each end of the seal. The seal starts and stops at small ledges on the camera body. Position the new seal carefully so that it sits straight (butt it up to the hinge) and between the ledges before you press it into place. Lick the adhesive side to delay it from sticking. Once you have it positioned and it is dry, press it into place. Then close your film door slowly to make sure you do not experience too much resistance. If you feel too much resistance, check to be sure you didn't get the seal material over one of the ledges.

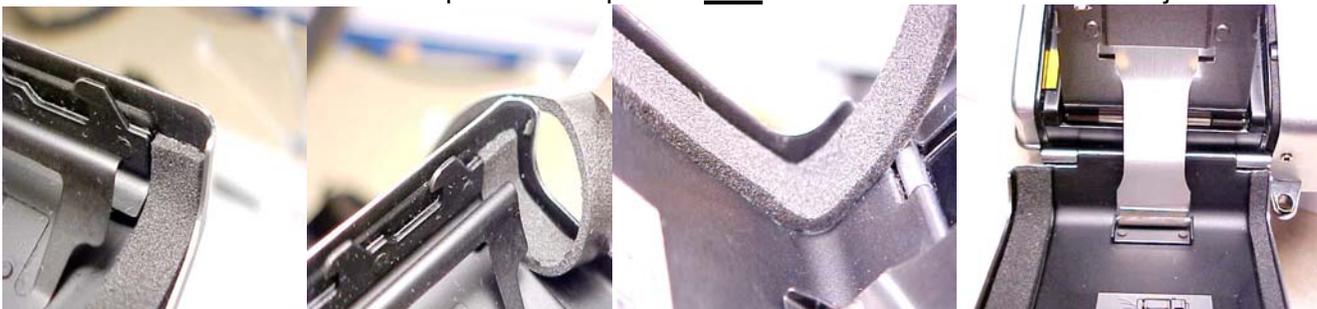
You can re-locate the piece later, but by licking the adhesive side first, this risk can be greatly minimized. In order to re-locate the seal, drop a little solvent onto it and let this sit for a while. Be patient. It may take a minute or two. The solvent will loosen the adhesive, and you may move the seal piece where you want it to be. When the solvent dries, your seal will be stuck. You may press it down again to be sure it adheres firmly, if you wish.

For those of you who removed your film door, here is how I replace the film door seal so as to make it just like new:



When you remove your old hinge end seal, you'll notice it runs underneath the hinge loops and butts all the way up to the edge of the body. We can duplicate this exactly by cutting a piece of the 1.6mm fabric (or 1.5mm foam) seal 8mm x 41mm, removing the backing paper and **licking** the adhesive side to delay the adhesive. Using a tiny screwdriver, push the wet piece down behind the hinge loops carefully as I have done to the left. Let it dry, then press it in place to set it. Re-attach your film door by reversing the steps to remove it, making sure the flap slides correctly in the piece it is designed to open and close.

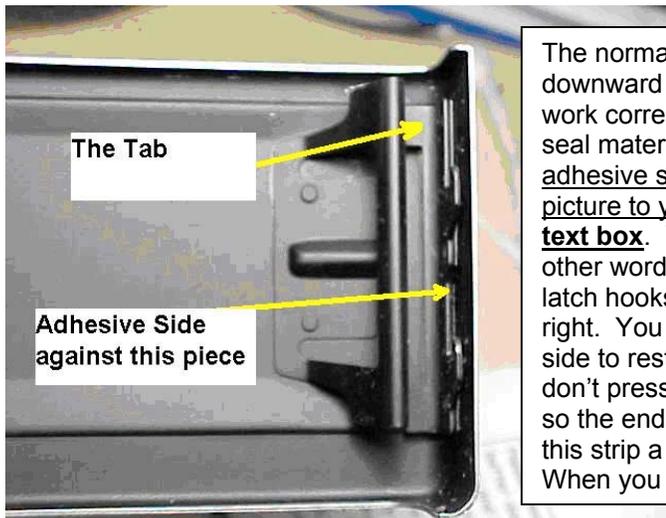
All right, work on the camera body is finished, so let's replace the seal on the film door. First, cut the long wider piece of foam from 1.5mm thick self-adhesive seal material...it is a little over 5" x about 3/8" (8mm) and remove the adhesive backing paper. Starting at the latch end, position the strip carefully so that it starts at the edge of the latch piece and fits between the raised ledge of the door and the upturned flange of the door itself...see the first two pictures below. Working toward the hinge end, keep this piece aligned correctly and straight and when you reach the hinge end follow the contour up to the end—there will be a little material overhanging the edge at the end. Trim the excess neatly flush with a razor blade, being careful not to cut yourself or scratch your camera. Now repeat this process for the long thin piece of self-adhesive foam on the top of the film door. It is about 1/8" (~4mm) x 5" long, also cut from 1.5mm thick self-adhesive foam. Trim as per the final photo. **Lick** the adhesive first to make this job easier.



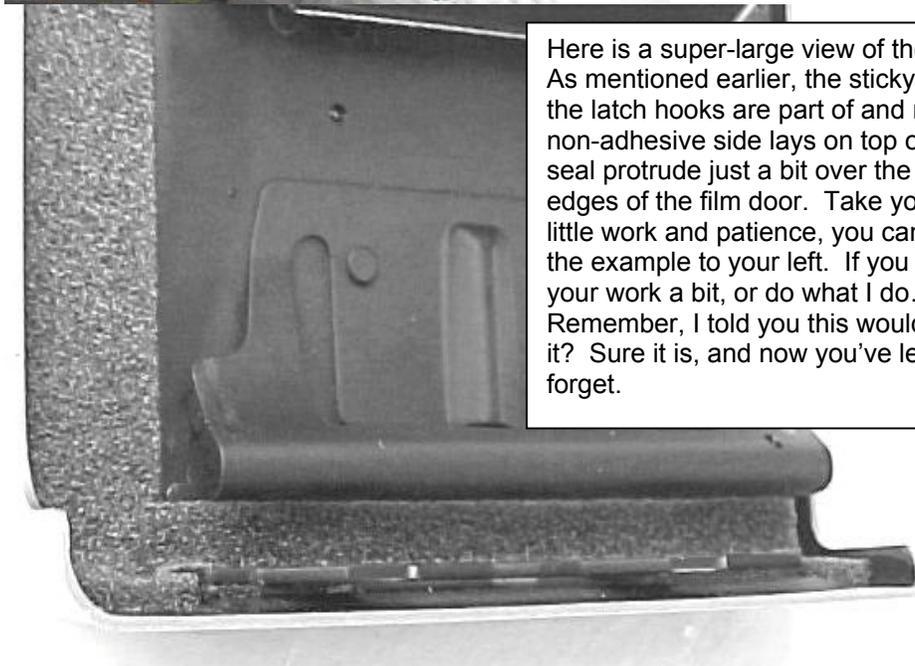
To the left is the way your new seal should look—neat and professionally done. You may replace the pressure plate by reversing the steps to remove it. To the right is a view of the latch end all re-sealed. There is a surprise here, and we'll talk about this next...



The last piece of seal material you have to install is used for the latch end seal. This is cut from 3mm thick self-adhesive foam, and it is 2mm x 45mm) When you cleaned the seal material off of this area, you probably noticed there were two flanges (tabs) underneath the old seal. Let's take a look at those, because this is important.



The normal tendency is to want to place the adhesive side downward onto the two tabs. Please DON'T... your seal won't work correctly if you do. Instead, carefully position the piece of seal material so that the edge sits atop the two tabs but the adhesive side fits on the side perpendicular to them... in the picture to your left, the adhesive side of the foam would face **this text box**. You can see the upper tab in this picture clearly. In other words, stick the adhesive side on the metal piece that the latch hooks are part of. Then, and only then will this seal work right. You must position it carefully. You want the non-adhesive side to rest on the two tabs. Use tweezers and a toothpick and don't press it in place until you're satisfied. You should center it so the ends just overlap the edges of the seal pieces beneath this strip a little bit. **Lick** the adhesive side before you start. When you have it just where you want it, press it into place.



Here is a super-large view of the latch end seal for you to see. As mentioned earlier, the sticky side faces the metal piece that the latch hooks are part of and **not** the two tabs. This means a non-adhesive side lays on top of the two tabs. The ends of this seal protrude just a bit over the seal pieces which run along the edges of the film door. Take your time on this piece. With a little work and patience, you can easily get it just as exact as the example to your left. If you get frustrated, step away from your work a bit, or do what I do...listen to some classical music. Remember, I told you this would be fun, and it has been, hasn't it? Sure it is, and now you've learned new skills you'll never forget.

A word about licking the adhesive side... Licking the adhesive side will cause the adhesive to be deactivated for a few minutes. During this time, you can move the seal piece so that you get it right where you want it to be, and this will keep it from sticking to your fingers as well. It won't hurt you a bit, and it will make your work much less stressful and more professional-like.

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.

Jon Goodman---2003. All rights reserved.