

ProSeal Instructions for Mamiya C330 and similar

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 nice camera, 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) Solvent--Naphtha (cigarette lighter fluid is the same thing) or denatured alcohol are what I would use. (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:

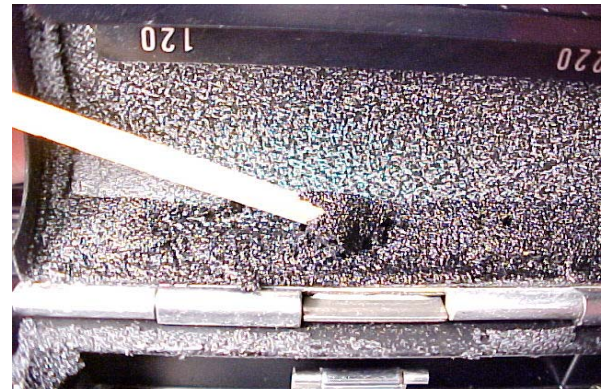
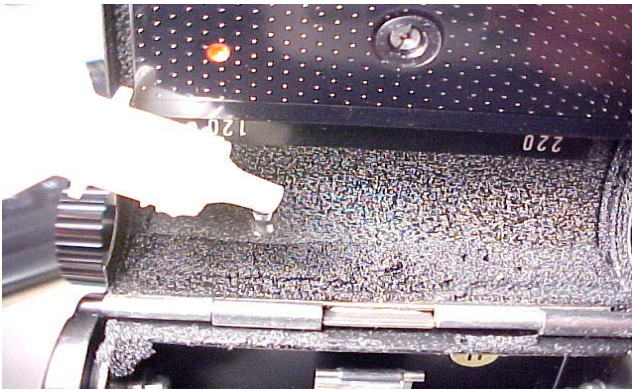


To the left, you see old deteriorated foam on the body and the film door. It was originally only applied to the body. To the right, you will see there is a foam piece at the latch end, and you will notice there are strips running on the inside of the film doors, forming a rectangle of seal all around the perimeter of the film door.

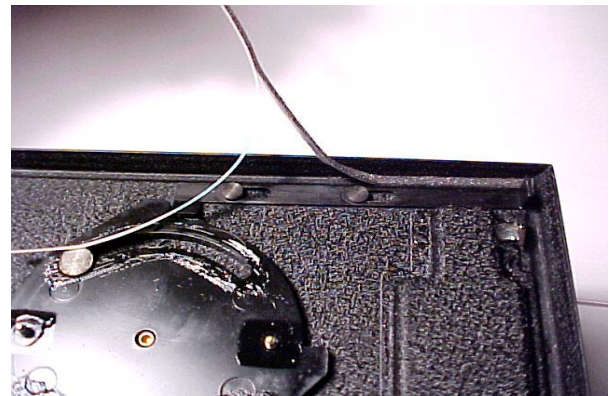


Let's first remove the film pressure plate to make our work easier. Pressing down with your thumb, you will reveal two small screws with thin slotted heads. Unscrew those and lift off the pressure plate setting it and the two spring bars underneath safely to the side.

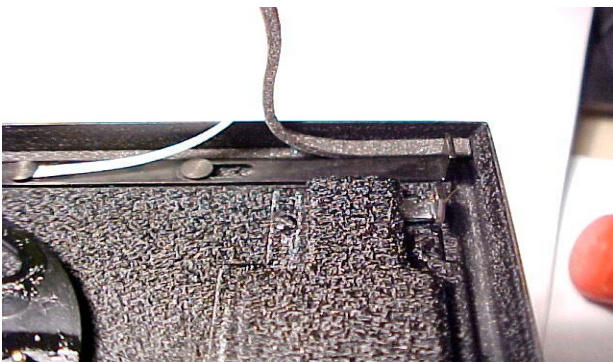
Now, we'll begin cleaning the old foam off. Using a small dropper bottle, I saturate the old foam with solvent (I'm using denatured alcohol) and begin removing it as shown below:



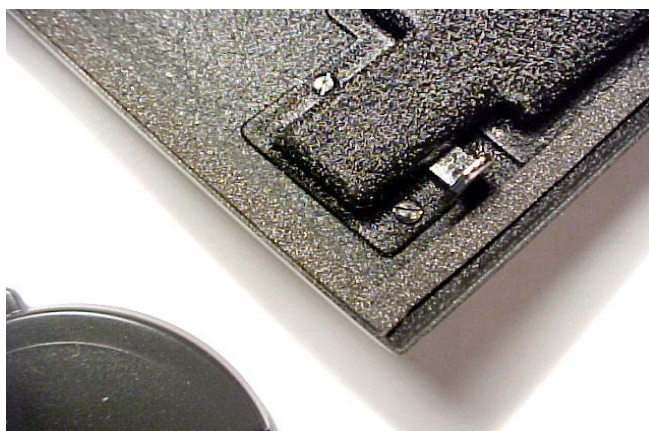
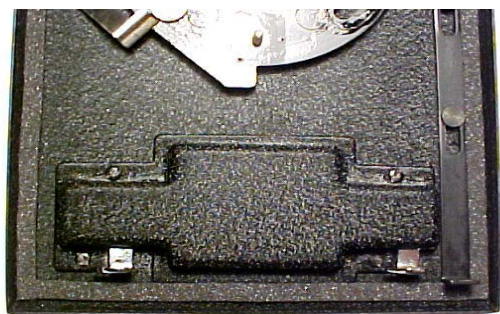
I normally use enough to saturate it, but not to the point of dripping. Let it sit a minute or so and then begin scraping it off. You may use a toothpick with the end broken off, the wide end of your bamboo tool, a wooden cuticle stick, or anything that will not damage the paint. When finished, wipe with a paper towel and solvent. Your work will go better if you are patient and give the solvent time to dissolve and loosen the old adhesive. Remove and clean the areas where all the seals were on the film door in this same manner, getting the door and body as clean as possible. 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. In the frame below, you can see the camera is starting to look better as we get it cleaned.



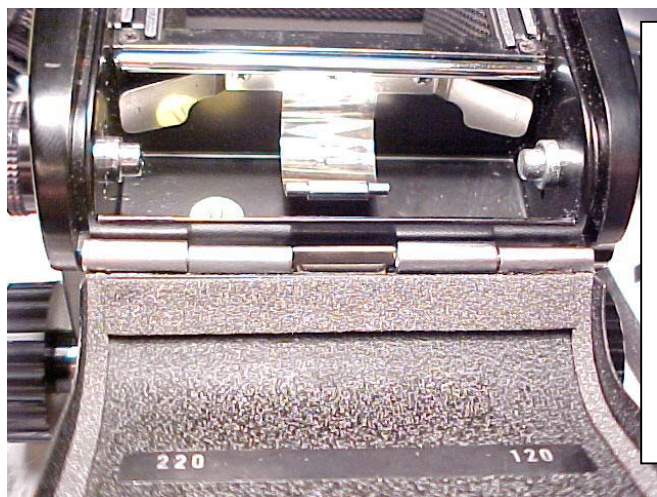
Above right, we see the film door is designed with 1mm deep “troughs” along the edges and the area at the latch end. To avoid our seal pieces falling into these troughs and becoming mis-aligned, I am going to use a 2mm wide piece of 1mm foam to build those troughs up level with the rest of the door. For the sides, cut a piece about 160mm long (by 2mm wide) and apply it as I am doing above. Lick the adhesive side of first half inch or so to allow you to set it right where you want it. Use your bamboo tool to carefully guide in place down the film door, and trim with a sharp razor when you reach the hinge end. Repeat for the other side and the latch end (latch end is 2mm x 70mm).



After the 1mm foam has been set in place, we will laminate a strip of 1.5mm thick foam on top for the final seal piece. Cut two pieces 3mm wide by about 160mm long, and apply them to the top of the long edges as I am doing to your left. The adhesive of this foam has been carefully selected to be the best available and will allow you to laminate the foam successfully and without future problems. Remember to lick the first part of the strip to let you align it correctly.



In the left frame above, you see I have installed the 1.5mm piece for the latch end. Lick the entire adhesive back to this piece, and you will be able to place it just exactly where you want it to be. After about 20 minutes, your saliva will be dry, and you can press the piece down for a final fit. The measurement of this piece is 1.5mm thick x 70mm long. To the right, you can see I've installed so there is virtually no gap at the joint of the two pieces.



Left: The hinge end seal is the final seal, and for it, I will use 1.5mm thick foam which is 8mm wide x 70mm long. Again, I will lick the adhesive side to allow myself time to align it and adjust it to fit as I want. Once all is dry, press down for a final fit and check again to be sure all mating surfaces of the body are cleaned of old foam material. Replace the winding spool, and replace the film door pressure plate, reversing the steps given to remove it. Close the film door and assure yourself it latches well and has no amount of extreme resistance.

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, and you should **never** use inferior materials as a substitute. Using the best costs no more. Remember—your camera is a precision piece of equipment. Do not compromise it or risk damaging it by using low-grade foam or foam of an improper thickness or density.

About licking the self-adhesive side: You'll be working with small pieces of foam with one sticky side, and you'll be working in close quarters. Make it easy on yourself by licking the adhesive side before you install the pieces. This will de-activate the adhesive temporarily, and keep the material from sticking to your fingers or tweezers as badly, too. After 15 to 20 minutes, your saliva will have dried, and you can press the piece down for a final seal.

Jon Goodman --- 2006