Making a Leather Covered Recoil Pad

You can install a leather recoil pad with a few basic tools and a bit of patience. To do this you must first fit the new rubber pad to the gun first. I suggest using a Pachmayr Decelerator or other classical pad with smooth sides. You do not want any of the basket weave or other patterned pads. As smooth a surface as possible, as anything under the leather will show through.

Do not use one of those super soft pads. You will have a heck of a time covering it with leather.

You will also need a supply of thin smooth leather. I used goatskin because it's very pliable. It does not have to be finished and dyed, but that makes the job easier. Finished tanned leather takes the shape even better than goatskin, and is easier to use.

Once you have fit the pad to the stock remove it. Measure the thickness of your leather. Now you have to grind the sides of the pad down as much as the thickness you just measured. You must retain the same angles, or you'll have to start all over again.

Once you have this done, look at the pad. All the sharp angles on the facing side (where it meets your shoulder) need to be rounded. Many people forget this, and the pad doesn't take the leather well.

Once the pad is shaped you must fix it so that you can install the pad once it is leather covered. Since the screw holes are not going to be accessible in the normal manner this is important. You must cut a hole in the pad directly over each screw. I use a .44 Special case chucked into a drill for this. It makes a clean plug with no tearing. Brass tubing works also.

Once you have the holes cut you can start to work with the leather. You need to soak it in warm water until it is totally saturated. Do not use boiling water!

While the leather is soaking get a 2"x4" and cut about 12" off of it for a jig. Mount the pad to the cut end of the 2"x4". I find it very easy to work with this jig when held in a vise.

Take your leather and (with the pad held steady) lay it over the pad. Tack one point of the leather to the jig, and then stretch the leather over to the other side. Stake this point down also, and proceed around the pad. Try to work on opposite sides of the pad with each tack. You want the leather to be smooth on all sides, and to conform to the shape of the pad. Keep the leather wet during this operation.

Once you have it fitted, and a minimum of wrinkles around the base you should set it aside to dry. The leather will tighten on the pad while drying.

When it is totally dry, you can cut away any unused leather. I start my trimming about 1" below the base of the pad. When that is done cut a careful slit in the leather over the screw holes. You can make an X, but do not go too far, as you do not want the cuts to show on the finished pad. Remove the pad from the jig.

The pad must be dry. If not, you are going to make your job harder at this point.

Start cutting the overlapping leather so that it can go under the base of the pad. Don't let the cuts go all the way to the pads base, but try to pull as much as possible under the base, and glue it down with leather cement. This will give you a smooth finish where the pad meets the wood. Try to minimize the overlap of the leather. (You may want to do only a portion of this at a time, letting the part you just rolled under dry before continuing).

Once you have this done, and all the edges are rolled under fit the pad to the stock. This should be easy, as all you have to do is screw it back on. Now you can see how well you measured. If you have to redo the job the time is now.

If you have measured correctly, and the pad looks good, you still have to fill those holes for the screws. To do this you will need to make some plugs. I use pink erasures from the office supply store. Use a smaller case to cut the plugs. Remember they will be smaller by 4x the thickness of your leather, .38 Special can work if .40 is too large.

Cover the plugs with leather, and fold down the bits over the holes. Tack it all down with more leather cement. (Do not put the plugs into the holes until the leather cement in the screw holes has dried!)

Once the leather is all dried in place condition it, and polish it, and you will impress the heck out of your friends and customers. A leather pad ads a big touch of class, and says custom to everyone.

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of your friends and customers. A leather pad ads a big touch of class, and says custom to everyone.

When I first started working in a shop we would get maybe one request a month for this type of pad. It wasn't an advertised thing, just word of mouth. Most of what I wrote above is the result of trying (or being shown) several different ways to do the job. This works best for me (my thanks to all the guys who showed me the way).

I found Rubber cement to work well as an adhesive. Tandy leather also had a can of stuff that was made for leather

I haven't tried it, but I was looking at some stuff designed to fix tennis shoes and think that might work also.

I did forget to mention that the jig should be shaped at the pad end so that the wood does not come near the edge of the pad. That helps to keep the line clean when you tack the leather down to dry. I just use the belt sander to rough shape the jig.

Be prepared for a little frustration the first couple times you attempt this. But if you're a working gunsmith you'll soon find that so few people will do the job you'll get a whole new clientele.

Recoil Rob

Member # 80 Posted September 21, 2004 06:49 PM Here's the first one I attempted on a 20ga Flusie.



Years ago I had a smith add a red rubber pad to lengthen the pull. It was functional but didn't look great and would sometimes get caught on my jacket.

It had two slits for the screws and I used one of Brownells special bits to remove the pad. $\underline{\text{Brownells Bit}}$



I then sanded the pad down a bit to accommodate the thickness of the leather. I probably could have taken it down a bit more but it still looks OK.

I used the leather from a discarded pair of women's gloves. Just the right thickness and one glove does one pad. I mounted the pad on the edge of a 1x4, clamped it in a vise and coated it with barge cement.

I have never liked the look of plugged screw holes and really didn't want to deal with that procedure. My screws were very tight in the pad so I screwed them all the way in until just before they would start to strip. I imagine if your screws are looser and you screw them down then give a turn of wire around them where they exit the back of the pad to keep them in place. The idea is to have the screws fully turned into the pad.

I then wet the leather, wrung it out, and also coated it with barge cement. I stretched it over the toe, then the heel, then the sides and worked it around until all the wrinkles were out. I then pulled the excess over the edge of the pad and gave a turn of surgical tubing to keep it tight and let it dry overnight.

When it was dry I took off the tubing and used an Exacto knife to cut off the high spots. You get a kind of pleated effect on the bottom, cutting out wedge shaped pieces and gluing the wedge

that's left down to the butt. I gave it a light sanding to smooth it out.

I then opened up the screw holes that are in the stock so that the screws that are in the pad would slip right in without contacting the side or bottom of the hole. I coated the screws and the back of the butt pad around the holes with release agent, filled the holes with Acraglas, attached the pad with the screws going into the holes and clamped the pad to the butt using two long clamps from the breech face to the back of the pad where the screws went through. When it dries the pad is held to the stock by the screws which are now socked home into an Acraglas hole. If I ever need to remove the pad I can put two small slits through the leather, insert a special bit and loosen the screws.

Gave me a nice clean look, the pad is on tight, and no dealing with plugs.

This is topic Covering a pad with leather - pics. In forum DoubleGun BBS @ gunshop.com at gunshop.com - The Double Gun BBS.

To visit this topic, use this URL: http://gunshop.com/ubb/ultimatebb.php?ubb=get_topic;f=1;t=018474

Posted by **Recoil Rob** (Member # 80) on August 05, 2005 01:24 AM:

I've been meaning to post this for some time; this is how I did my leather pads without plugs. The pics are from the second one I did, it was a Pachmayr Decelerator and it doesn't look as smooth as the covered red pad from the first one I did, learn from it. The pad is sanded very slightly undersized to make up for the thickness of the leather.

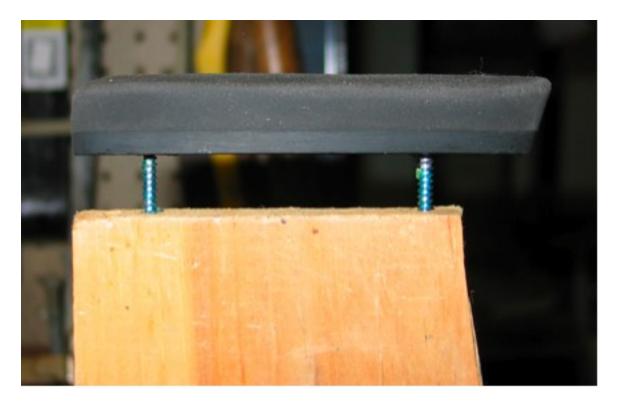
1- Here's the pad off the gun, I made a template showing the location of the screw hole slits. That way if I ever need to remove the pad I can just make some small slits in the leather.



2- I've coated the screws with release agent.



3- The screws are turned into the pad as far as they will go. I add a little Acraglas around where the screw exits the pad and after it cures I give the screw an extra tweak. This assures the screws are tight against the pad.



4- The pad is mounted onto a piece of 1x6" and coated with Barge cement. Barge is a leather cement and can be bought from most cobblers (shoe repair shop).



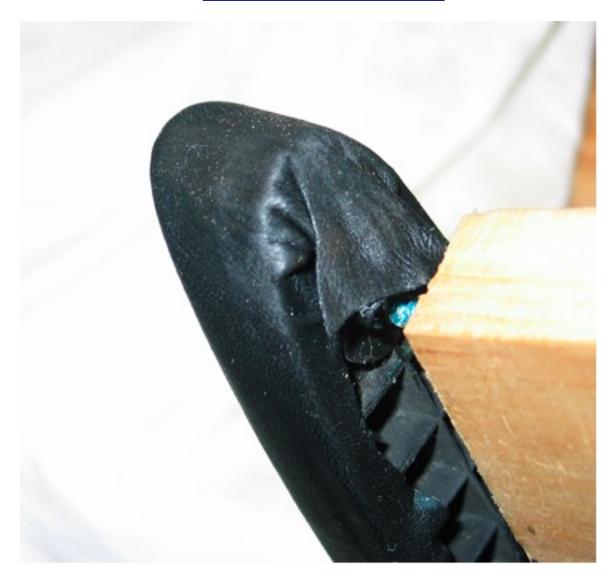
5- The leather was cut from an old glove. They come in all different shades and types of leather. I found this one in a train station, but thrift shops are a good source. You'll get one pad from a glove.



6- Piece of leather is wetted down and coated with barge cement.



7- The wet leather is stretched over the pad. It can be lifted and repositioned before it cures. I start by stretching it across the pad from side to side, then from heel to toe. Any wrinkles will be evened out by moving a little leather to each side of the wrinkle.



8- The ends require some bunching of the leather and moving around to get the wrinkles out but you only need to make sure the leather is smooth down the sides. Don't worry about the leather that is bunched up on the underside, it will be removed later.

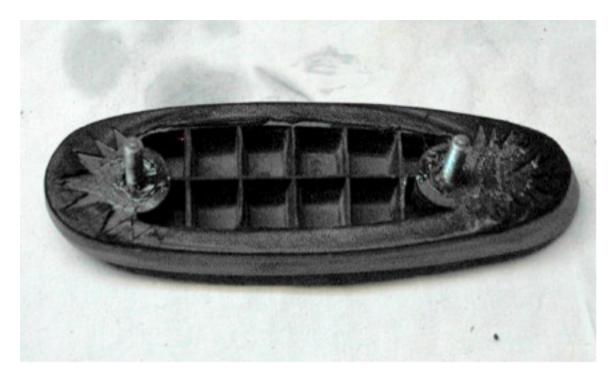


9- The leather is held down tight with surgical tubing and allowed to dry 24 hours, then removed.



10- The pad is split out of the wood.





11- The bunched up wrinkles are cut from the underside in a pleated pattern and glued down with Barge cement.



12- The screw holes in the butt are enlarged.



13- The holes are filled with Acraglas. I find that using a small piece of rigid tubing from a spray can allows air to escape from the bottom of the hole as the epoxy is pushed in. You can also put your finger over the end of the tube while pulling it up. This creates a vacuum that sucks the epoxy down into the hole. Estimate to use enough to fill the hole with the screw pushed in.



14- The screws are given a final coat of release agent as is the area of the pad around the screw hole, about 1/4" around. This keeps any oozing epoxy from adhering to the back of the pad. As you push the pad into the butt see how much epoxy oozes out. If it's excessive remove it with a small knife or screwdriver blade. The pad is centered in the butt and clamped up to cure.



15- Finished pad on my Chas. Hellis 2" 12 bore. If it ever needs removal I can make two small slits using the template and the release agent allows the screws to be turned out.