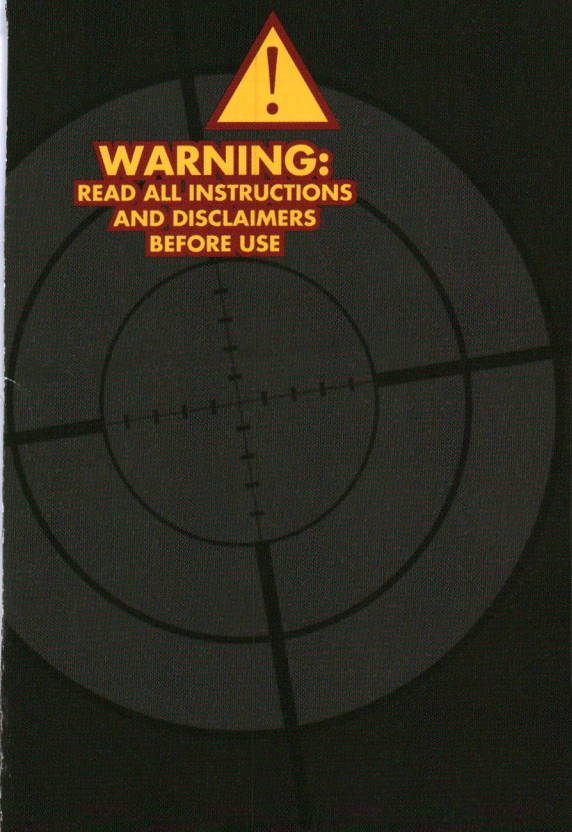
SHARP SHOOTER 22 LONG RIFLE RELOADER

MADE IN USA

PATENT PENDING

MADE IN THE USA



WARNING:
READ ALL INSTRUCTIONS AND DISCLAIMERS BEFORE USE

ALL THE TOOLS YOU NEED TO RELOAD 22LR

- CRIMPER
- BULLET MOLD 2 CAVITIES
- RIM CLEANER
- RIM PACKER
- POWDER DIPPER
- POWDER FUNNEL
- EYE DROPPER
- COMPLETE INSTRUCTIONS
- LIFETIME WARRANTY

22LRRELOADER.COM

DISCLAIMER

Sharp Shooter LLC has no control over how reloading is conducted by the individual or what components are used. Every change in equipment, procedure, and component lots will affect ballistics and/or the safety and usefulness of a load. Therefore, no warranties are implied or expressed by the data and copy contained in this book. We specifically disclaim any warranties of fitness for any and all particular purpose and specifically disclaim any and all liability for consequential damages of any kind.

The individual assumes all risks for the safety of reloading ammunition. Improperly loaded ammunition or the failure to follow all necessary precautions may result in serious personal injury and/or death to the shooter or bystanders.

In addition, home refined chemicals are not in their purest form and this could cause instability and erratic performance.

CASTING PRECAUTIONS

- Cast only in a well-ventilated area. The ideal place is outdoors. Never breathe lead dust, lead fumes, or fluxing fumes.
- Wear heavy protective gloves, aprons, and goggles when casting. Splatters of hot molten lead can cause very serious burns.
- Be cautious when using fluxing materials. Some are flammable. It is best to avoid this style of flux in favor of modern noncombustible types.
- Never eat, drink, or smoke, and keep your hands away from your mouth when handling lead in any manner. Thoroughly wash hands when through with the lead handling operation.
- Water, even in minute amounts, will cause a violent eruption of molten lead. Make sure all equipment is absolutely free of any moisture. Keep moisture of any type away from casting area.

GENERAL PRECAUTIONS

- Always check barrel and remove obstructions before firing or if light recoil or off-sound occurs.
- If firearm fails to fire, point muzzle in safe direction and avoid exposure to breech while carefully unloading.
- Use shooting glasses and hearing protection.
- The reloading data is for reference only; it is not definite material.
- Procedures in this book may be illegal in your state or area; therefore, readers should contact the proper authorities before attempting any reloading of ammunition.
- All of the priming compounds in this manual and black powder are very corrosive, so clean your gun regularly.
- Don't ever become complacent when reloading.
- Caution 22LR rounds are dangerous within 1.5 miles.

******Note: This is not a complete listing of all possible precautions.**
(ALWAYS USE COMMON SENSE)****

BRASS PREPARATION

Homemade 22LR Reloads

Brass preparation is very important. The first step is to examine the case and make sure there are no splits in the case. Secondly, look for dents that would obstruct the bullet from going in smoothly or make it hard to chamber the round. See Figure 1 for examples of split and dent cases. Now that we have some good cases, we need to make sure the cases fit in the gun that you will be shooting them out of as we are not re-sizing the brass. Place the cases in the chamber and make sure that they fit. Once you are done with this step, we need to do the most important part which is cleaning the rim of the case where the old burnt primer compound is. This is easily done by using the rim cleaner (see figure 2: side A). Scrape in the rim of the case. Tap out the old primer compound. Get out as much as possible. This is a very easy and quick step, but definitely one of the most important. The better the rim is cleaned out, the better the results on re-priming the case.

One additional step that can be done but is not necessary is:

1. Use a small punch or small flathead screwdriver and tap out the dent made by the firing pin. By doing this, you can now get primer compound into that spot and do not have to worry about lining up the case in your chamber so that spot is not hit again. The problem with knocking out the dent is that if you do too much it will create a bubble and the round will not chamber. Additionally, and more importantly, is that it will weaken the brass and may create cracking when you do it or create a blow back when you fire it. As we discussed in the history section, some of the old kits that were produced came with a punch and some did not. It is not necessary and can create more trouble than it's worth in our opinion.

Figure 1: Split and Dented Cases

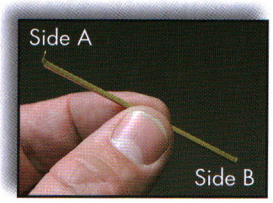


Figure 2: Rim Cleaner and Packer
Side A: Hook for cleaning rims
Side B: Square end for packing

Now that our cases are prepped, we are ready for primer compound.

Making primer compound can be very technical and difficult for two main reasons: 1) there are lots of hard to get components within the current laws and resource limitations of today and 2) ensuring the right percentage of the components are mixed thoroughly. This, of course, can be done following the instructions in this pamphlet. Like we said, there are products that are readily available in our current market places such as the tips of strike anywhere matches (remember, tips only). The white tip is the only part of the match that contains sensitive enough material to be used as a primer compound. Other readily available products that can be used as a primer compound are: paper roll caps, ring caps, strip caps, and party poppers (all pictured below in Figure 3). All these are easy to locate items and contain compounds like phosphorus sesquisulfide and silver fuliminate. Both are highly explosive, very unstable, and very sensitive; so, use EXTREME caution!!! Mix in small batches for safety and quality control.

Figure 3: Examples Materials for Primer Compound

STEPS TO MAKING PRIMER COMPOUND WITH MATCHES

1. Cut tips of 4 to 5 Strike anywhere matches (see figure 5).
2. Mash match tips into powder form. This is best done between a folded piece of paper (needs to be a fine powder when you are done). See figure 6.
3. Pour match head powder into the case then add 2 drops of either: water, acetone, or sugar-free distilled alcohol (e.g., vodka, etc.) in the case (see figure 7).

4. Now that you have the wet primer compound in the case, you need to get it into the rim of the case. Use the square end of the rim cleaner to push compound into the rim all the way around. Now your case is primed. Allow the compound to dry. Once the compound is dry, you're ready for powder.

*****Acetone dries in about 20 to 30 minutes, while water can take up to 12 hours to dry. The primer compound has to be absolutely dry or the rounds will not fire.*****

STEPS TO MAKING PRIMER COMPOUND WITH OTHER MATERIALS

1. Use paper roll caps, ring caps, strip caps, and/or party poppers.
2. To get the compound out of these products use the square end of the rim cleaner to lightly rub compound off the paper rolls (see figure 4). This will turn it back into a powder. It takes 8 to 10 caps for one cartridge. Other products vary due to sizes that are offered so you will need to use your best judgment (rubbing too hard will set the compound off very easily). To keep them from sparking, lightly dampen them with water or acetone.
3. Pour paper roll powder into the case then add 1 drop of either: water, acetone, or sugar-free distilled alcohol (e.g., vodka) in the case. See figure 7.
4. Now that you have the wet primer compound in the case, you need to get it into the rim of the case. Use the square end of the rim cleaner to push compound into rim all the way around. Now your case is primed. Allow the compound to dry. Once the compound is dry, you're ready for powder.

*****The primer compound has to be absolutely dry or the rounds will not fire.*****

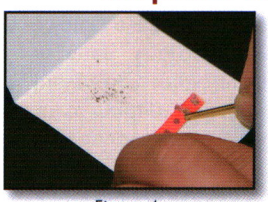


Figure 4:
Extracting primer compound from caps

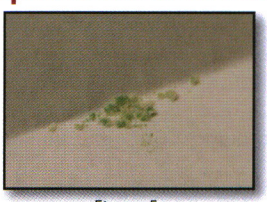


Figure 5:
Five match tips cut off and ready to grind into primer compound.

Figure 6:
Grinding primer compound from match tips

Figure 7:
Putting drops of acetone into 22LR case to liquefy compound to allow for easer insertion into rim of case.

POWDER AND POWDER OPTIONS

When it comes to powders for 22LR, the original 22LR were loaded with black powder. Today's 22LR are loaded with blends of smokeless powder (see figures 8 and 9). What you will need to load a 22LR is black powder (now synthetic). Hodgdon Pyrodex works great. Since black powder is still readily available, it is probably your best option. Try to get pistol black powder; it is a much finer cut and will burn more consistently. Shot gun and some pistol powders work good as well (for example, IMR 700X, IMR PB, Alliant Unique, etc.) In an extreme situation, another option that can be used is the part of the match that was not used in the primer compound (red or green part of the match). When doing this, you will definitely want to use your 25gr bullet. Based on our experience, it takes 4 to 5 matches (strike on the box matches) to get you a decent charge of powder. If you have a different type of match, you will have to vary that charge. Matches must be ground into a powder.

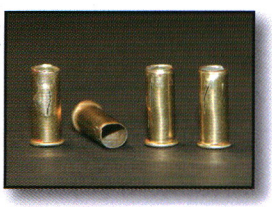


Figure 8:
Powder Dipper

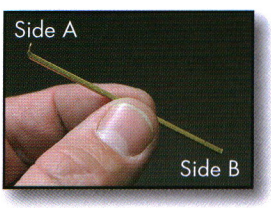


Figure 9:
Examples of Powders

Disclaimer: These are averaged numbers. For precise measurements, use an accurate scale.

Bullet 38gr round nose
Barrel length 21"
Barrel twist 1-16"

Powder Type	Powder ChG GRS	Muzzle Vel F.P.S.	F.P.E.
IMR PB	1.0 1.5	1117 1363	105 157
IMR 700X	1.5	1125	107
Hodgdon Pyrdodex P	1.5	1208	123

Bullet 25gr solid point
Barrel length 21"
Barrel twist 1-16"

Powder Type	Powder ChG GRS	Muzzle Vel F.P.S.	F.P.E.
IMR PB	1.0 1.5	1045 1446	67 116
IMR 700X	1.5	1417	111
IMR 7625	1.5	1112	69
Alliant Unique	1.0 1.5	804 1251	36 87
Hodgdon International Clay's	1.0 1.5	1352 1720	101 164
Hodgdon Pyrdodex P	1.5	920	47

Bullet 25gr solid point
Barrel length 16 1/2"
Barrel twist 1-16"
Do not use in barrels over 18"

Powder Type	Powder ChG GRS	Muzzle Vel F.P.S.	F.P.E.
Match heads	5 ground match heads	547	17

Powder Dipper Measuring Chart

Powder	Large	Small
H Pyrodex	1.1gr	0.5gr
IMR PB	0.7gr	0.4gr
IMR 700X	0.7gr	0.4gr
IMR 7625	0.7gr	0.4gr
H International Clay's	0.6gr	0.3gr
Alliant Unique	0.6gr	0.3gr

See figure 10 below regarding powder dipper.

Disclaimer: These are averaged numbers. For precise measurements, use an accurate scale.

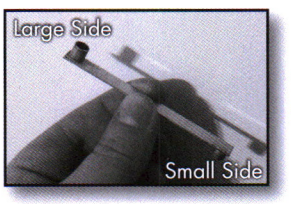


Figure 10: Two-Sided Powder Dipper

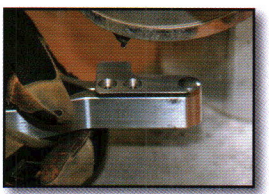
CASTING (MOLDING) BULLETS

Casting bullets is very easy, but if you are not familiar with the process there are some dangers to understand. Always make sure your lead, ladle, and/or melting pots are as dry as a bone. Any water on the lead or in the pot when heated will accumulate in a pocket and explode sending liquid lead flying everywhere. Eye protection is a must. Also, fumes are toxic, so make sure there is good ventilation while indoors and when outdoors remove yourself or any others downwind when casting over an open fire.

Now all you need is lead. Easiest ways to find lead is to buy wheel weights (it is important to note, that not all wheel weights are lead), pick up bullets at your shooting range, or melt down old fishing weights. All lead is not created equal. For example, wheel weights have tin and other hardeners in them. To combat this problem, after the lead item (wheel weights, etc.) is liquefied, add wax to your pot (candles work great). This is called fluxing and it helps clean the lead by bringing more impurities to the top where you can skim them out with a metal spoon. Even without fluxing, dirt, copper jackets off of old bullets, steel

clips off of the wheel weights, and so forth will come to the surface allowing you to skim them off and get rid of them. If you do not flux wheel weights then your bullets will be harder. This can be a benefit, but you need to know that they will also weigh a little less because they are not pure lead.

Now that we have clean, melted lead in your pot, warm your bullet mold up by placing over the pot or close to the flames for a moment. This will help the bullets come out of the mold with as few blemishes as possible. Next step is to pour your lead into the top of your mold and fill it completely (see figures 11 and 12 below). Wait a few moments until the lead dries (it's still very hot as lead melts at 328 degrees). Tap the sprue cutter with a mallet or piece of wood. This will cut the sprue off of the bullet and give you a flat surface on the base of the bullet (see figure 13 and 14 below). Then inspect the bullet and make sure there are no major blemishes (see figure 15 for blemish free, homemade 22LR bullets). If there are, then re-melt and start over (nothing lost). If there is some overflow on the bullet where the mold opens, this can be easily solved by either scratching it off with your fingernail or with a knife. You can choose to lube your bullets, but it is not a must. Many old timers never lubed their bullets, but this will cause some lead build up in your rifling. There are many options out there. The easiest is bullet lube made for black powder rifles. Now all we have left to do is seat and crimp the bullet.




Figures 11 and 12: Filling your mold and filled bullet mold.


Figures 13 and 14: Use of mallet to tap sprue cutter and flat surface base of bullets.

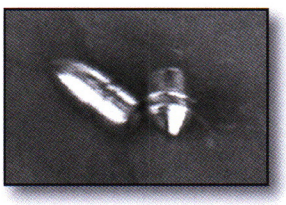
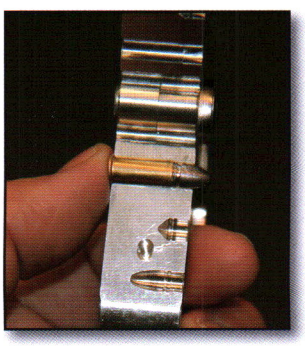
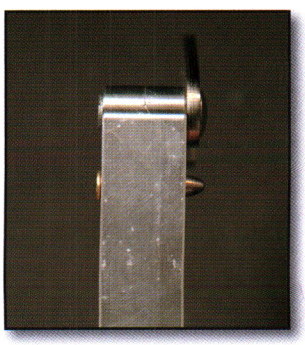


Figure 15: Homemade 22LR Bullets

SEATING AND CRIMPING THE BULLETS

This is a very easy step. Use the case that has been re-primed and now has powder in it; hold the case in your fingertips and press the heel of the bullet into the case (see figures 16 and 17). Once the heel is all the way in the case, the bullet will stop. Caution – do not push the rim of the case on anything as the whole rim is full of very sensitive primer compound and you do not want the cartridge going off in your hand. Place in crimping station making sure the rim of the case is flush with the tool and close the handles. You will feel a slight resistance or some pressure. Open handles and you have a completed 22LR and it's off to the woods!

Figures 16 and 17: Use of crimping station to seal cartridge to create proper back pressures.

HISTORY

The history of 22 rimfires started back in 1845; it was called 22BB. We have come a long ways since then. The modern 22LR has increased velocity, range, and power. The 22LR is the most popular and most used round in the world. It is also one of the most versatile. The biggest drawback to the 22LR is that it is a rimfire cartridge. This means that the primer is built into the cartridge, and the compound is spun into the rim which creates an enclosed primer. When the firing pin strikes the rim, it ignites the primer compound. When you bring up reloading 22LR or any kind of rimfire, you will get a million reasons why you cannot reload them or why it's not economical. BUT history has shown us that 1) it can be done and 2) in times of ammunition shortages or self-reliance situations, humankind has made it work so that it is economical.

Siberian trappers that live in the bush most of their lives and are limited by law that they may only have 300 rounds of ammunition, have been using 22 reloading kits since the 1900's. In America, during the depression, when money was tight and then there was an ammunition shortage due to WWII, we used these kits during and following the Great Depression. In those days people for the most part did not have a ton of guns and the few they had, they had to make it work no matter what. So, a 22LR reloading kit was a very useful tool. This knowledge was all lost over the years once we could all go buy bricks of 22LR for $10 to $20 dollars.

Reasons why they say it cannot be done: 1) re-priming takes very sensitive primer compound. Some of the original 22LR kits produced came with compound and some did not. We will show you in this pamphlet how to make your own and how it is readily available. 2) Getting the old primer ding out (this is actually an option that does not need to be done at all!). Some of the old kits came with a tiny punch used to knock out the primer ding. 3) Molding a bullet that is heeled. The 22LR has a heeled bullet. If you look at a 22LR, the brass is the same size as the bullet. The base of the bullet is smaller. This is the heel of the bullet (you cannot buy a commercial 22 caliber mold and use that bullet in a 22LR). 4) Crimping the very top of the brass and having a tool to do so.

We have put the 21st Century 22LR reloading kit together all in one tool and a pamphlet that shows you easily accessible materials and how to use them to reload your 22LR during those times of ammunition shortages, self-reliance situations, and/or restrictions.

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