Introduction to the Ladder Test, Shooting and Aiming

by AJ 2 Comments

Loading your own ammunition can be beneficial, but handloading or reloading can be an intimidating process when trying to determine the true potential of your loads and rifle. Here we provide a basic introduction to load development.

One reason why hunters handload or reload ammunition, other than being cheaper and choosing better components, is to have ammunition custom made for a specific weapon or rifle. Custom ammunition should be loaded in such a way that the full potential of the rifle and equipment can be exploited. But how is the ideal load and combination determined? Determining the load for a specific rifle, with a combination of case, primer, propellant and bullet, can be an intimidating and long-winded exercise. You may want to refer to the Modern Reloading 2nd Edition for reloading information, or ask experienced reloaders with a similar rifle and caliber for help or advise.

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Okay, now you know the recommended safe starting point and maximum load. A reloader should usually start at the minimum load and gradually move up in increments to the maximum. Load a few cartridges at each load increment – about three to five cartridges for each 0.5 grain increment. These cartridges are then shot in their groups for groupings at 100 yards. The best grouping at the desired velocity is chosen as the ideal load.

One thing is for sure, one never determines the ideal load with little effort and few shots. This usually involves burning a lot of gunpowder with the associated unnecessary wear on the weapon and very often a sore shoulder. And what happens when the climate changes, you go beyond 100 yards or there are slight differences in the composition and loading of cartridges? Is a load determined in the above way really ideal under different circumstances and distances, and will it be able to forgive small variances during the reload process?

Fortunately, there was a very famous gunsmith named Creighton Audette. He came to the rescue of reloaders with an excellent method of addressing many of the above shortcomings. With his method, the ideal load combination can be determined in less than 40 shots. He called his method the Incremental Load Development Method, but it is commonly known as the Sweet Spot, or Ladder method.

Aiming and Shooting:

However, before you get to this method, there are other critical aspects that you must first pay attention to, such as how to shoot accurately from a shooting bench. For this you do not necessarily have to have the latest custom rifle, blueprint action, imported barrel, competition crown and rifle scope of stargazing quality. You have to at least pay attention to the following:

- The rifle should suit you. When laying up, you should be comfortable and relaxed without the need to force your body into uncomfortable postures. Find a competent gunsmith who will help you fit the rifle and stock to your body. Small changes can do wonders.
- The gunsmith can check the general condition of the rifle and especially look at the barrel, crown, trigger, action and bedding of the action in the stock. However, always remember this golden rule: Listen to advice, but use your common sense and if in doubt, get another opinion. Don't scratch where it doesn't itch and try to fix what is already working. The final test always remains to shoot with the rifle. If you want to be sure, find someone who is known for his ability to shoot and test. So do not rush, or make changes to the gun at all if it is not needed.
- Look at the shiny wear marks on the back of the locking lugs. Make sure there are signs that the locking lugs are at least partially making contact.
- Thoroughly clean the barrel by removing all deposits of propellant, lead and copper. Bore Tech Eliminator, is a great product for this.
- Make sure all the locking screws and scope mounts are securely fastened, using a Fat Wrench to torque the screws to the correct specs are highly recommended to rule out any uncertainty and to prevent stripping any threads.
- Test the rifle scope for parallax deviation from the rifle, supported by sandbags, at a target that is at the same distance as you are about to shoot. Look through the rifle scope at the target without touching the rifle and move your head up and down and left and right. If the cross-hair, as you turn your head, moves from the target, the rifle scope has a parallax error at that distance. With rifle scopes that have parallax adjustment, the problem can be eliminated. Most rifle scopes without a parallax adjustment are set to be parallax free at 100 yards.
- The natural aim point or NAP is also important. Here's how it works: Close your eyes and lean towards the target. Choose a position that is comfortable for you. When you open your eyes, the point you are looking at through the rifle scope is your NAP. If you are not on target, move the gun and repeat the process until your NAP is on target.
- Follow the shot through, by not lifting your head off the stock during or shortly after firing the shot. Force the shot in your mind through the target. This means the shooter must capture the position of the crosshair on the target the moment he presses the trigger on his target(yes, press the trigger, do not pull it). That way he'll know where the bullet hit. The shooter is therefore deliberately trying to keep the rifle aimed at the target throughout. This will ensure that the rifle is stable from the moment the shooter decides to pull the trigger until the bullet leaves the barrel, or during the "perpetual second".
- In general, it is good to cultivate good shooting habits such as applying the correct trigger pressure and control. Make sure the weapon is not tilted when shooting. Control your breathing, and even better, learn to shoot between heartbeats, but that takes practice and range time. Be careful of jerking the trigger, you want to apply smooth consistent pressure on the trigger throughout the entire path of trigger travel. It is important to also adjust your grip so that only the part of your finer touching the trigger is moving, and not part of your hand, palm or other fingers when you are pulling the trigger, this is what snipers refer to as dragging wood.
- Use a good bench rest type of shooting position that thoroughly supports the rifle front and rear. The shooter should be able to keep the cross hair on target with the minimum adjustment – he should just push the trigger.