

## How to sight in your rifle

## PART II

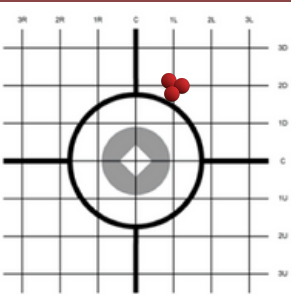


**The three MOST common ways I have seen people zeroing their rifles are as follows:**

1. Take their firearms to a store and have it bore-sighted. Thinking it is now “zeroed”. This is NOT TRUE. Zeroing a rifle with a bore-sight will only put the bullet near the target.
2. Take it to a friend and ask them to zero the rifle for them.
3. Zero the firearm themselves without knowing what they are doing.

To zero a firearm requires actual firing of ammunition and is best to be done at a rifle range with a shooting bench. The question is - Will you be shooting 1 round or 30 rounds to get it to zero? And yes, it is possible to zero a rifle with a single shot, and yes, it could be an expensive exercise if you don't know the basics. Lastly, changing from one ammo brand/weight/bullet to another, you must re-zero as different ammunition has different trajectories.

As many of you might know, my daughter Chanelle is an advent shooter and occasionally drags me to the range. On the last visit, she discovered the fun of “walking the reticle.” She would take a few shots, adjust the turrets, take a few shots, adjust again, and eventually discover how many clicks it took to move the reticle to the point where the bullets were hitting. I could see her enjoying that. Luckily for her, she did not pay for the ammo...



The target above represents a 1" grid and is 100y away. The red dots represent the bullet holes. The POI is 2 inches high and 1 inch to the right. The scope used is a MOA scope with 1/4" adjustment turrets.

Remember, on a scope you adjust the POI towards the POA. Thus, we need 8 clicks down on the elevation turret and 4 clicks left on the windage turret. That will put the POI on the POA.



### So here is what I suggest you do to zero your rifle:

- 1) Buy the ammo you plan on shooting, whether it is for target shooting or hunting.
- 2) Go to a range and ensure you have decent front and rear rests or sandbags to keep the rifle steady on the bench.
- 3) Set up a target at a relatively short distance at the shooting range. I always choose 50 yards.
- 4) Set up the rifle on the bench with a bench rest or bag and ensure it is steady without holding it down.
- 5) Remove the bolt from the firearm (this only works with bolt actions), and looking down the bore, line it up to the center of the target at 50 yards.
- 6) Move your head to look through the scope and adjust the turrets so the crosshair is on the same target you look at through the bore. This might require you to move your head a few times by looking through the bore and the scope. Once you feel comfortable that looking through the scope represents the same point as looking through the barrel, you are ready to proceed.
- 7) Take a single shot, while aiming at the center of the target, also known as the Point of Aim (POA) and look where the bullet has landed, which is the Point of Impact (POI). Based on those results, you now have two choices:
  - a) Calculate the distance on the target from where you aimed to where the bullet hit and adjust the windage and elevation accordingly. This does require you to know what distance each click on the turret represents and which direction you should dial towards. All turrets indicate which direction to dial for UP, DOWN, LEFT and RIGHT. When your shot is high right, you must dial so that the point of impact moves to your point of aim (see attached picture). You must dial LEFT and DOWN
  - b) While the rifle is lying on the rest/bags on the bench, make sure you aim at the same point you were aiming at when you pulled the trigger. NOW, without disturbing the rifle position, you can dial the turrets so the crosshair moves to where the bullet hit the paper. This is tricky, as the slightest movement of the rifle will affect the accuracy of dialling.
- If you zero the rifle at 50 yards, it will shoot very close to a zero at 100 or 200 yards. However, as we know, the trajectory will be different at various distances, and therefore, we need to ensure it is zeroed at 100 or 200 yards, depending on the distance we will shoot when we hunt.
- 8) Moving our target to 100 yards, we make a three-shot grouping.
- 9) This grouping should be within 5-8 inches of the point you aimed at. Take the center of the three bullet marks and dial the scope to move the point of impact to the point of aim. Take another three shots to verify that you are hitting the center.

**Remember, zeroing your rifle is a personal journey. While you can seek advice and guidance, the ultimate responsibility lies with you. Taking an active role in this process will not only enhance your shooting experience but also deepen your understanding of your firearm.**

### What's happening

Hunting season in Alberta is opening on the 25th of August.  
 Torrington Gun Show - 24th, and 25th August  
 Slave Lake Gun Show - 5th, 6th, and 7th September

Tilley Gun Show - 13th, 14th and 15th September  
 Remember to refer a friend to MyGuns for PAL or RPAL  
 Check out the other courses offered by MyGuns