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I have an old shotgun that I shoot fairly well, but it does recoil upwards after firing the first shot. I am told that altering the pitch at the end of the stock will correct this problem. Is this true and will modifying the pitch change where the gun actually shoots?

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Changing the pitch of your stock should help correct your problem of the gun recoiling upwards. In your case you need to add pitch which means you can do one of two things. You can add length to the top of the rear end of the stock (the heel) and leave the distance on the bottom of the stock (the toe) the same. This can be simply done by getting what is called a pitched spacer or you can go and get some balsa wood, try a 5mm piece, and sandpaper the wood down at an angle to achieve the same result. The other alternative is to actually cut the stock which means that you will have to remove the desired length from the toe and leave the heel the same length. Experiment with the first way to start with. It may make the gun a little long to shoot with, but you will get the general idea if it is helping. Pitch can be measured by standing the gun up on its recoil pad against a straight door frame and measuring the distance from the end of the barrel back to the frame. There is no correct pitch measurement as it is determined by your body frame and size around your chest as well as the technique you are shooting. People that stand very upright to shoot generally need more pitch than those that lean over the gun. As a general rule larger chest people need more pitch than skinnier people. For example with my body type and technique my pitch measurement is around 50mm. Pitch can also be measured by the degrees the barrels angled are off a straight line when placed upright. This requires some better tools than the previous method which just requires a ruler. The second part of your question regarding whether changing pitch will alter where your gun shoots is a subject of much debate. I have a shooting friend that thinks that adding and subtracting pitch will solve problems ranging from barrel flip all the way through to global warming and rising mortgage interest rates. It doesn't! In theory adding or subtracting pitch should not alter the point of impact of your gun. This is generally done by adding wood on the comb of your stock thus making you look down on the barrel which will make the gun shoot higher or taking wood away which will have the opposite effect. If altering the pitch significantly changes where you place your face on the stock and therefore what you see down the barrel of the gun then yes it will probably change where the gun shoots. Patterning the gun is the only real way to ascertain for sure.

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