

Dwell Time And Your Trigger

By Darrell Holland

We all indulge in flights of fancy during the quiet moments in our life. One popular indulgence is that we are a shooting machine and that we NEVER flinch. Hmmm, I wish that were a reality...

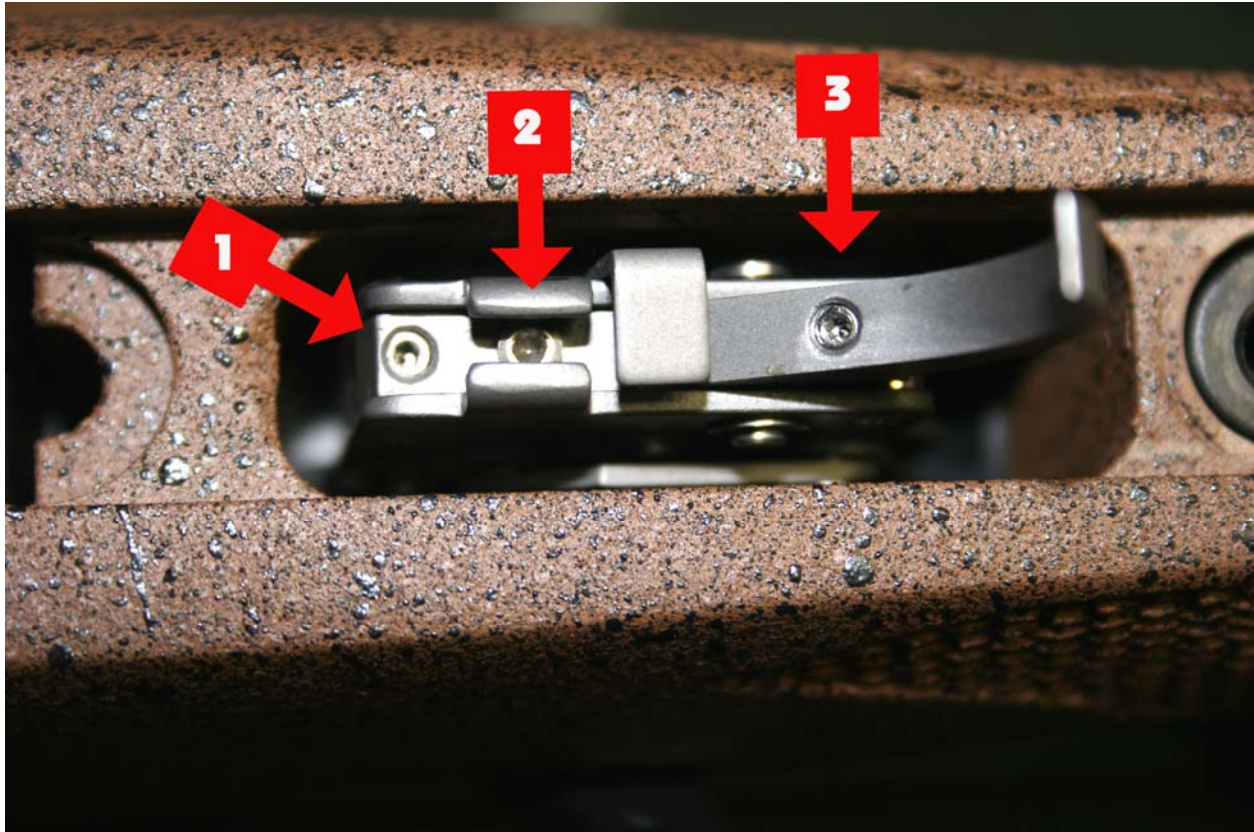
In most Cultures men can do 3 things "Really" well! Those being; drive like Michael Schumacher, make love better than Casanova and out shoot Daniel Boone in 3 out of 5 matches! Unfortunately, when the lights dim, when we buckle up or grab our trusty rifle, the results are less than admirable?

By understanding the workings of our trigger and dwell time, we can turn in a better performance in the shooting game at least! For the other 2 items you are on your own...

Dwell time may be best described as the amount of time the bullet is in the barrel after the trigger breaks and we have ignition. This critical time is around .025 thousands of a second and the rifle will recoil rearward approximately .250 -.375 inches before the bullet exits the barrel. Variables being the weight of the rifle, muzzle velocity and bullet weight. For all practical purposes we'll stick with the above numbers in explaining dwell time and the hazards of too little over-travel.

Most serious shooters have installed Jewell triggers in their long range rifles, if not, you may be missing something? Having a light trigger pull weight in your rifle is an important asset when it comes to precise long range shooting. The exact weight is indeed a bone of contention with many shooters and many campfire stories have gotten out of hand regarding the subject. I like a pull weight of around 1-1.5 lbs in most of my hunting rifles, this allows a safe and feel-able trigger weight under cold hunting conditions, at least for me. Jewell triggers can be adjusted to ounces safely, but this is mainly necessary in target and varmint rifles that are shot from the bench. Each shooter needs to feel comfortable with his or her pull weight, shoot as light of a pull weight as you are comfortable with.

Having a heavy trigger pull weight on your rifle can lead to errant shots, especially if the over-travel is not adjusted properly. Jewell triggers are really quite easy to adjust, for those of you that are not familiar with those adjustment screws, "Listen Up".



Screw #1 is for sear engagement! **With an unloaded rifle**, cock the gun and turn this screw “clockwise” until the gun fires. Note the location of your allen wrench (clock face setting) and turn “counterclockwise” 6 hours or half a revolution. This properly sets your sear engagement.

Screw # 2 is for over travel! The meat and potatoes of this article for improving your shooting. Most of us have over the years adjusted or had our over-travel adjusted to the most imperceptible movement possible. We touted and showed the rifle to our friends and absorbed the ooh's and ahh's when they tried the trigger pull. It was great balm for our ego and we thought we had done the right thing? Oh really?

Humor me for a minute and kick-back in the sofa chair while I explain. With an over-travel adjusted so tight, as soon as the trigger breaks the force required to discharge the rifle is now imparted directly into the rifle while the bullet is still in the barrel! Hmmm?

If we are shooting the “NEW” 300 Testosterone Magnum in an 8 lb. rifle the results are going to be less than desirable, especially when shooting in a field position. Very few shooters can give a perfect trigger squeeze with such a violent recoiling rifle. We usually yank, slap or jerk the trigger keeping in mind the horrendous noise and recoil that are soon to follow. If our trigger pull was adjusted to 3.5 lbs and our yank, slap or jerk (commonly referred to as “trigger squeeze” in higher social circles) to discharge the rifle was 5-7 pounds and immediately we come up against the over-travel stop, we are imparting that energy into the rifle! An errant shot is

guaranteed! Those extra forces we impart into the rifle with a heavy trigger pull and minimal over-travel can and do affect the shot. These errors are magnified the farther the target.

The “CURE” being to screw the over-travel screw in tight, providing the maximum amount of over-travel allowing the bullet to exit the barrel before our “trigger squeeze’ can affect the shot! This gives us the extra edge needed to improve our scores and make more consistent hits at long range. It may also save you the embarrassment of the gun not discharging when the trophy of a lifetime is standing 100 yards away and the gun won’t go off due to crud, grit or debris between the trigger and over-travel adjustment, preventing the sear from disengaging.

To complete our story let’s go to Screw # 3.

Screw # 3 is trigger pull weight. Jewell triggers come with several springs that go under this screw to change pull weights. Turning the screw “clockwise” increases the pull weight and “counterclockwise” reduces the pull weight of our given spring. Adjust to a pull weight that you are comfortable and safe with!

Note these adjustments apply to JEWELL TRIGGERS ONLY (Remington and Winchester rifles) This article pertains to rifles and shooters who have JEWELL TRIGGERS installed.

In future articles we’ll explore cures for man’s other flights of fancy. In the meantime, be safe and shoot straight!

Respectfully,

Darrell Holland

Those Tiresome Maintenance Chores

By Darrell Holland

How many times have we neglected our rifle over the years? Tired and wet, we return home to hibernate and replenish those vital body fluids lost during the hunt. Oftentimes we toss aside our most trusted friend in our selfish desire to seek comfort on the home front. Sound familiar? You bet it does!

A hundred and fifty years ago such slothful behavior would not have occurred... Back then, the rifle was a useful tool that kept pesky Indians and desperados from taking our scalp. If we neglected taking care of our rifle the results would have been our removal from the "Gene Pool," not a pleasant thought?

In today's world we seldom need our rifle to save our skin, depending on the neighborhood we live in? We do however trust that rifle to put meat on the table and trophies on the wall depending on our preference? Why then are we neglectful in taking care of our closest friend?

Laziness and lack of fear are probably the best two descriptions. Its time we put a little TLC back into our game. I can recall my grandfather setting at the kitchen table sharpening his knife as a kid. He indeed had one of the sharpest knives in the county and as a kid I was in awe at how effortlessly it sliced paper. My uncle would always wipe down and nurture his rifle after a day in the field, another positive impression that was left on me in my youth. They were good role models that helped shape my future and nurturing ideals for guns and the outdoors.

Back then guns were wood and steel, the fiberglass and Tupperware stocks we now enjoy would have been a sacrilege. Oil finishes and blued steel were the yardsticks men were measured by. This in part created a bond between the rifle and its owner, something that has been lost in the age of stainless steel and plastic.

A few of the factories manufacture what I call a 'Disposable Rifle' plastic and stainless steel that many feel requires no maintenance. Outside of Political pandering, nothing could be farther from the truth. All guns require a certain amount of care and maintenance and the sooner we realize this, the better off we and our guns will be!

Take the time to wipe down the rifle after hunting in a rain storm. Pull the barreled action from the stock at least twice a year and wipe it down getting the crud, pine needles and other debris from the barrel channel. Flush out the trigger group with carburetor and choke cleaner once a year, never apply love potions and or magic lubes to the trigger group as they are a magnet for dust and debris that will come back to bite your fanny. Always confirm your zero after removing the barreled action from the stock, torque the action screws to the same setting.

Apply anti-seize compound to the backside of your locking lugs. Apply some super slick cam grease to the cocking cam of the rifle to prevent galling and provide easier cocking.

**Apply Anti-seize compound
to the backside of the locking
lugs**



COCKING CAM



Most importantly keep the barrel clean, as a custom gunsmith we see more chrome-moly barrels lost due to neglect than are shot out. The powder and copper fouling left in the bore from a season of “ shooting at” deer, act like a sponge and absorb moisture during the winter months to rust and pit the bore. A few seasons of this and our trusty friend does shoot as well as expected. With our careless demeanor there comes a price, new barrels are not cheap!

Apply a piece of electrical tape to the muzzle to prevent snow and rain from entering the bore. This tip may save a long and unproductive trip back to the truck should you stumble and stick the muzzle in the mud or snow?

Above all, create a relationship with your favorite rifle, stroke it and care for it, sit by the fire and recall the great shots it has made and the company it provided on that long walk back to camp. Become one with the rifle and it will never let you down, neglect it and failure is just around the corner!

Until next time.

Be safe and shoot straight,

Respectfully,
Darrell Holland