Slicking the 1876 Centennial Rifle (A. Uberti) in 45-60 or the Chaparral 1876 Rifle in 45-60 by Thomas (Tom) Horn aka James Hicks



My Winchester 1876 Centennial Rifle 28" Barrel in 45-60 Caliber by A. Uberti



My Winchester 1876 Rifle 28" Barrel in 45-60 Caliber by Chaparral

The 1876 is popular in CAS in the Long Range Shooting events. I like many of you enjoy shooting. Before I start let me INFORM YOU that I am not a professional gunsmith, just a shooting enthusiast and one who loves to tinker with his guns. I am not one who likes to send my weapons to someone who lives many miles away from me, and wait 6 to 8 weeks or longer for something I feel I can do myself. So like all things... there must always be a

DISCLAIMER STATEMENT: If you are unsure of your ability to fully disassemble the rifle and do what I am about to tell you, then I suggest that you send or seek the help of a qualified gunsmith.

Before doing any work *MAKE SURE THE RIFLE IS SAFE and HAS NO ROUNDS IN THE MAGAZINE.*

Note: This article applies to both the Uberti and Chaparral 1876 (the rifles are the same as far as their actions. There are some differences between the two, mostly cosmetic, and this article is not about making a comparison between the two.)

The rifle as it comes out of the box is not the easiest to lever. The 1876 is a TOGGLE LINK RIFLE and it is IDENTICAL to the 1873 except it is larger. I just say it is an 1873 on steroids.

The action work will differ in some ways than the '73. Most folks who either pay to have an action job/or they do it themselves, will:

- Install short stroke kits,
- an aluminum carrier,
- remove the Lever Spring and Carrier Spring and install Whisper Springs (piano wire) or the new PGW Action Springs;
- lighter weight firing pin with spring;
- light weight firing pin extension;
- Lever Safety Spring; a stainless steel magazine spring and follower;
- Grabber Front Sight,
- Flat Buckhorn rear sight
- and the list goes on ... so they can get a '73 to shoot slicker and faster.

Then there are those who do what they call "Poore Richards Action Job"... they just weaken the springs and leave everything else as is. Slicking a cowboy rifle is all in the beholders opine. But it does appear that most of the champions in this sport have their '73's about as slick as one can make them.

The **1876 action** job is kinda like making a '92 slick (the secret for making the '92 race ready is ALL IN THE SPRINGS). Forget about Short Stroke Kits, Whisper Springs and the like... as of this writing, those things are not available as of yet... and there is no need. The 1876 is NOT A MAIN MATCH RIFLE so there is no need FOR SPEED. What is needed is just a good SMOOTH LEVER ACTION. Some folks do not mind if their rifle sounds like an M60 tank when levering it. I am not of that group. So grab cup of java and read about ... How I Did It. Pretty simple folks...

The things we are going to do to the 1876 Rifle:

- Weaken the Main Spring
- Weaken the Lever and Carrier Springs
- Replace the Lever Safety
- Weaken the Trigger Spring
- Inspect the INSIDE of the Rifle Frame for Burrs and other irregularities
- Bevel Hammer top forward edge and check for burrs

Tools used by me: A dremel with sanding stones. Sandpaper/emery paper in grits starting with 100 and up to 800 grit. After you work on the parts "use old panty hose or old nylons to test". Ifn you do not have a Dremel Tool then use Diamond files for removing the metal.

NOTICE: I cannot tell you **HOW MUCH METAL TO REMOVE** from the SPRINGS. This is a remove and re-install procedure till it feels right FOR YOU.

REMEMBER THIS: WHAT YOU REMOVE CANNOT BE PUT BACK ON!

Tis better to remove a little at a time and re-install the part and TEST.

If you are not of the type that wants to do it that way... then I suggest that you go to VTI's Website page *http://www.vtigunparts.com/store/default.asp* and pre-order the items that you are going to weaken before you start. That is INSURANCE in case you REMOVE too much metal.

Remove the Rear Stock.

You have two screws, one on top of the Upper Tang (the rear most screw) This is a long machine type screw. The second screw is in the Lower Tang and it is the Rear most screw, it will be a pointed Wood Screw. Jiggle and pull the rear stock off.

The first thing I will address is the Lever Safety.

This is that little gadget, that if you do not have the Lever all the way UP the rifle will not fire, further identified by a small metal "tit" right behind the trigger. You have four (4) options with this.

- 1 leave it as is.
- 2 remove it completely.
- 3 weaken the spring by removing metal.
- 4 Last but not least is the one I recommend. Go to Pioneer Gun Work website (*http://www.pioneergunworks.com/Competition_Parts.html*) and order Joe Alves' Lever Safety Spring for the Model 73 rifle @ a cost of \$6.00. This Lever Safety for the '73 works in the 1876 and when you go to shoot you never have to fully remember to have to squeeze the lever.

I tried removing metal on the factory installed spring but it was still not the way I like it. So I forked out the \$6.00 and that solved that problem. It will also work in the Chaparral.

Here is what the Lever Safety Spring looks like:



The Lever Safety Spring installed.

There is a Small drift pin in the Lower Tang. Drift out this pin, remove the factory installed Lever Safety Sring and install the new one. You will be surprised at how this helps when firing the 45-60.



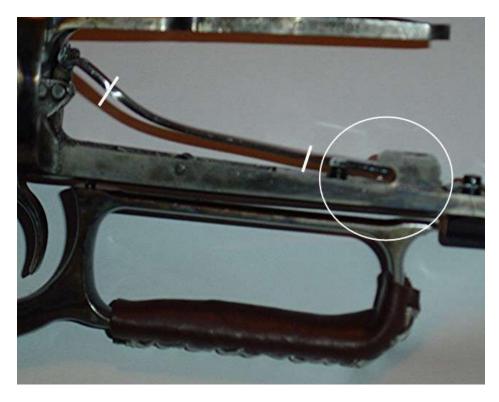
Now we will go to Main Spring.

This is that curved Spring that the Hammer is attached to with two claws. Here is WHERE you have to **be careful** on how much metal to remove. Remove TOO MUCH... the rifle will not fire. But fear not... this spring is a BIG THICK PIECE OF METAL and you really have to remove a lot to make it not work right.

Look at the picture below and remove metal between the two white lines... some folks call this HOUR GLASSING. Just remove what you think and re-install and test with empty cases and only the primer loaded. Keep removing metal till you get the hammer the way you like it. This will also improve the levering and take some of the heavy pressure off the down stroke of the lever.

DO NOT REMOVE ANY METAL ON THE REAR OF THE MAIN SPRING where it goes into the L Shaped holder. See picture below where the white circle is.

After you get the Main Spring the way you like it, polish the Main Spring removing all of the grinding marks... I polished mine to a mirror finish, but that is not required. I just think it looks better and more professional.



After you get the Hammer (Main Spring) the way you want it and making sure it will fire the primers.

We will now go to the Trigger Spring. My Uberti and Chaparral came ROB with close to a 9 lb Trigger Pull. Some folks like a heavy trigger... Ifn you fall into that group leave it as is. I am not of that as I like for the Trigger Pull to be somewhere at 2.5 lbs to no more than 3 lbs of pull. Here is a picture of the Trigger Spring as it comes from the factory.

Using your dremel tool or Diamond File we want to remove metal from both sides of the Spring. The picture (right) shows the Trigger Spring adjusted or weakened so that it is right at 2.5 lbs of pull.

Finish off the Trigger spring to a mirror finish or makes sure you have all the DEEP GRINDING MARKS removed. Re-install the Trigger Spring.

The last two items left to do are the Lever Spring and the Carrier (Elevator) Spring. The picture shows the two Springs as they come from the factory. What we want to do is remove metal from the underside of the springs. You do not want the Lever Spring SO WEAK that the LEVER will move downward under its own weight, So this is a remove and re-install till you get the Lever the way you want it.

The next picture will show one spring modified and the other spring not modified to give you an idea of how I did it. The Spring on the top has not been modified. The Spring on the bottom has and you can see the difference. AGAIN... I CANNOT TELL YOU HOW MUCH METAL TO REMOVE. Remove some and re-install and work the lever till you get the Lever and Carrier the

way you like it. What you remove... cannot be put back on.

The next thing one wants to check is the INSIDE of the rifle frame. Check the area where the Carrier (Elevator) slides up and down. This area should be slick and no burrs ANYWHERE.

Wipe the area with the nylons or panty hose... ifn it snags, remove the snag.

Check the inside of the Brass Carrier where the Carrier Arm slides into the bottom slot of the carrier, remove any burrs in this slot.

Check your toggel links and makes sure they have no burrs to include the Carrier Arm.







The LAST ITEM we will look at is the TOP FRONT EDGE of the Hammer, that forward edge right above where the Hammer hits the Firing Pin Extension. This edge should be slightly "ROUNDED" just take your Diamond file and remove very little metal, you do not want a sharp edge on this part of the Hammer. As you lever, the firing pin extension is going to hit the hammer in this area. By insuring the edge is slightly rounded the firing pin extension will glide over the edge and cock the hammer move easily.



After you have done all of the above. Fully reassemble the rifle, and before you re-install the parts that you have modified, make sure all metal dust is removed and the parts are lightly oiled.

Your 1876 Centennial Rifle 45-60 caliber or your Chaparral 45-60 is now ready to take to the Long Range and your lever hand will not have brused fingers from levering it.

That is How I Did it...

Note for those who re-load or roll your own.

The 1876 Uberti and Chaparral are TOGGEL LINK Winchester Copies or some will say, Elevator Loading System. The 1876 is no different than the 1860, 1866 and 1873 (other than bigger) ALL THESE RIFLES ARE OAL affected.

If you are a reloader, you must make sure that your 45-60 ammo adheres to the OAL limits for that caliber, otherwise you will have ammo jams or just plain old "rifle won't cycle". That in itself can also be very frustrating. The correct OAL for the 45-60 caliber is 2.250" If your cartridges are longer than that, you will have feeding problems. I will not get into LOADING DATA for this article. But for those folks who are just getting started into shooting the 45-60 Rifle... you will not find loading data at the different powder making companies. This caliber rifle is considered obsolete and there is no published SAAMI Guidelines.

There is an article in the 49th Version of Lymons Reloading Data written by Bryan Pierce on Shooting the 1876 Winchesters and he shows some loading data in the article. He speaks of trimming the cases to the correct length and other pertinent information that would be useful to folks who shoot the 45-60.

There is data on the web. One of my favorites is <u>CASS City</u>

They have a CASS City FORUM for the 1876 Rifle. 1876 Rifle FORUM

My good friend Silver Rings out in Colorado has posted a lot of loading data for the 45-60 on this forum using an array of different powders and different grain bullets.

Also, according to the Bryan Pierce article as I remember it, the Uberti's and Chaparral copies of the 1876 has a Max Pressure of 28,000 CUP. Based on that information you will be safe to use loading data for the 45-70 Government (Trapdoor Rifles). Hodgdon Reloading Data Center states ... *This data intended for Springfield "Trapdoor", Rolling Block, and Antique Replicas. Max pressure, 28,000 CUP.*

Nothing is more pleasing than going to a Long Range Shoot, and the folks there look at your rifle and ask to handle it. Then they say, WOW, she is slick, who did the action work.... you look them in the eye and smile and say.... ME.

Happy Trails to all of you... Enjoy the 1876 Winchester Centennial Rifle or the Chaparral 1876... This rifle in history was VERY SHORT LIVED. Winchester took John Moses Brownings patent of 1884 and this was the death of the Toggel Link Rifles, a slow death, as many of the Toggel Link Rifles were manufactored for 20 to 30 years after the turn of the century... but JMB statement after working on the Toggel Link Rifles as a young man; when he said... "I can do better than this". That he did, he was truly a genius.

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