

# TRIGGER TECH TWO STAGE SPECIAL TRIGGER EVALUATION

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Putting the Two stage TriggerTech through the paces at the 2020 TPRC in Arizona

A few years back I was fortunate enough to do a write up on the TriggerTech special for the Remington 700 platform. I have that old article up if you're interested but the short version was that it is a darn fine trigger if you are into single stage triggers. Back then my few items of criticism were petty little things which really had no bearing on the triggers performance but marketing items and such. It was a good trigger and I have had that unit in service all this time without issue. I got to attend the 2019 SHOT show and I heard TriggerTech had some prototype two stage triggers at their booth and I was almost giddy when I was told about it. I made my way over to the booth and proceeded to mess with their newest creations. Overall the prototype units were quite nice and I made a few silly comments about what I thought were items they were still working on. I guess some of my observations weren't far off as everything I perceived as an area of improvement was significantly improved with this Two Stage TriggerTech Special they have allowed me to use before their mass release to the public.



As this was a pre-release of a production version it wasn't in their usual packaging but I still looked at how it came to me. Overall the trigger is a solid sealed unit with minimal opportunities for dirt and dust to get in the assembly. Markings on the trigger are clear so down the road I can't forget how to make an adjustment. The trigger itself claims pull weights of 8-24 oz for stage one and 8-32oz for stage two. There are two adjustment screws on the bottom of the trigger one for each stage. This allows you to adjust while the rifle is still in the stock/chassis if need be. Stage one is adjusted by a recessed screw you access through the trigger shoe. My eyes aren't what they used to be and initially I couldn't tell if there was a hex screw in there. My trigger came with the first stage set at its minimum value of 8 oz so when I first started turning screws I wasn't sure if there was a screw in there at all. Once I realized there was in fact a screw in there I was able to adjust the stage and the click design for both screws was excellent.



A few dry presses of the trigger in the original configuration and I was already impressed. Clean crisp breaks, smooth trigger motion a solid wall between stage one and two, ZERO creep and no considerable overtravel once the shot broke. At this point I was impressed and was mentally preparing myself for replacing all my triggers once this unit came out to the public.

Once I regained composure out came my trigger pull gauge and proceeded to test out the trigger with my Kelblys Atlas Tactical action. Out of the box the trigger came in with pull weights of 8.3oz and 20.3oz total pull weight on average. Repeatability was very good. Most of the variance is from the user taking the measurements and operating the pull gauge and not the trigger

itself. Another instance where this trigger is checking off another box making it a great product.

After the factory testing I started turning screws to see how close or how much further the trigger could be adjusted compared to the setting on the unit itself. The adjustment range is in line with what TriggerTech claims. I was able to get the following values and the variance while measuring is listed in the table below.

Trigger Tech Special 2 stage production unit results						
	Stage 1	Extreme spread (oz)	Std Dev	Stage 2	Std Dev	Extreme spread(oz)
From Factory	8.3	0.3	0.11	20.3	0.48	0.7
Stage 1 MAX Stage 2 Factory	25.9	0.9	0.33	47.5	0.34	0.9
Stage 1 MAX Stage 2 MAX	Not tested	N/A	N/A	60.5	0.50	1.5
Satge 1 MIN Stage 2 MIN	8.1	0.4	0.20	15.8	0.49	1.8
* All listed values are final pull weight on gauge and do not reflect individual pull weight for each stage						
** Measurements conducted with a hand operated digital pull gauge and is not the most precise method for measurement						

After the extreme limits were tested I began tweaking the settings for what I liked. This is where things are completely subjective and going by “feel” compared to by the numbers. For comparison my other two stage triggers I have set at 8oz for stage one and 12oz for stage two totaling 20oz on the pull gauge when all is said and done. Also I recently purchased a TriggerTech Diamond signature for my AR15 which is a very crisp trigger but has stage one set at 4oz which is a little light for me personally. One thing I noticed was that you could adjust stages independently although typically I would suggest adjusting stage one for the wall and then fine tune stage two for the break. I finally went to the lightest possible stage one setting which was at 8.1oz. The first stage feels good and the wall is consistent but I did want to turn the first stage down a very small amount perhaps down to 6 or 7 oz.





I did see a green TT Diamond two stage in one of their social media posts and some photos from the 2020 SHOT show which has a lower stage 1 setting so I may pick up one of those to see if I like a ever so slightly lighter stage one when they are released. Stage two I put at 10oz yielding a total pull weight at 18oz. Although I had my previous triggers slightly higher I could set the TT at a lower value as it was consistent, repeatable, and oh so crisp. My other triggers have what I perceive as a noticeable creep where I need to slowly apply pressure and predict how much creep I have in the trigger before it breaks. This has caused some timing issues with targets that were swinging in the past but the TriggerTech has a phenomenally crisp break and it is the same every time. I did catch myself at the first match I shot with the TriggerTech sending rounds a little early as I had some muscle memory applying pressure to induce the creep before the shot broke. On a recent practice session, I took this TriggerTech two stage for a drive on a spinner target and by the end of the practice session I think I “un-trained” myself to expect creep and I am now accustomed to the clean and precise break the TriggerTech provides. Timing the shot is infinitely easier for me with this trigger than some of my other two stage options.

This trigger has been put through its paces at the Precision Rifle Series Retro TPRC match at Cowtown Range in Arizona. On day two I started to get cocky with how predictable the trigger break was and learned my limitation as a shooter. While closing the bolt and looking through the scope the crosshairs were sweeping towards the target and I thought I had the talent to break the shot and get a quick hit. Unfortunately, on that shot I ran out of talent and broke the shot a little late and the bullet missed low and left as I was sweeping past and didn't get the impact. That was my humble pie for the match and won't try that again... But had I been successful people would have written songs about me I am sure. During the two day course of fire I can say that it was a pleasure using this trigger and not one time can I say the trigger contributed to me missing a shot if you ignore my hubris.



After a good solid test in a match environment I decided to push the trigger a bit further and see how it behaves where others have failed. I have a particular action that has been cranky with a few different triggers. Primarily the issues have been light strikes on the primer, which is most likely due to a lighter than needed firing pin spring. There is one trigger I have that works in the action reliably however it seems to “overcock” the firing pin as it takes extra effort to push the bolt forward and appear to have the firing pin a little bit

further back than with other triggers. I figured this was a good test to see how the TriggerTech behaves with a known “problem child.” This trigger allowed smooth operation and had only a couple light strikes... This was much fewer issues than some other triggers I installed. It certainly is not a problem with Triggertech as others had issues as well and it appears I finally need to up that firing pin spring.

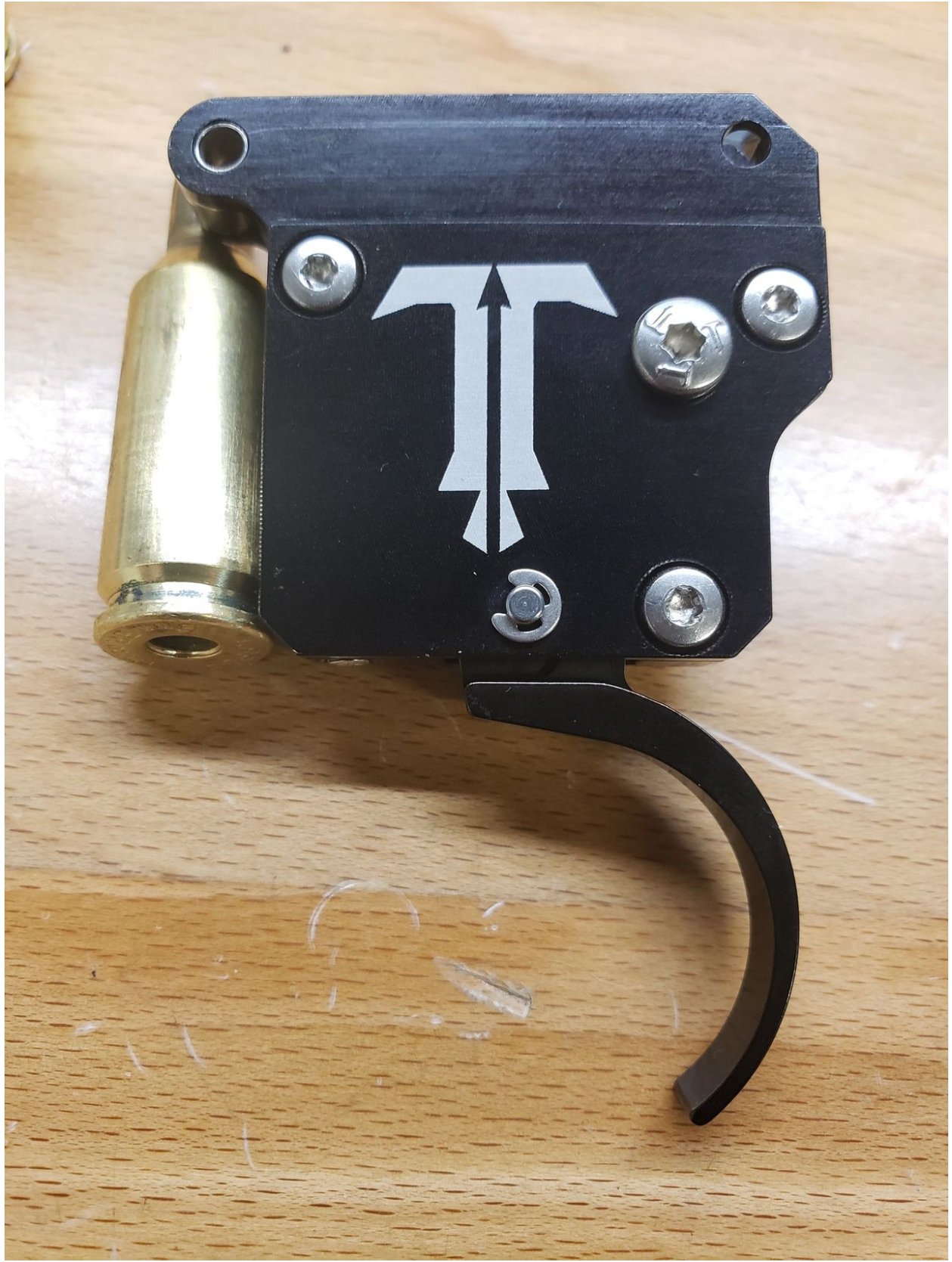
When it is all said and done I am glad I waited on purchasing any triggers until I could give this two stage a try. I am extremely happy with the Special variant and considering how cleanly the shot breaks in the Special I cannot imagine they are able to improve much with the Diamond. I still may look at the Diamond variant for a little more adjustability on the lower end but I could run the Special and be quite content. For the non-competition crowd where pull weights are higher the special is a great choice and will be my recommendation to all those seeking a great feeling two stage solution. I asked TriggerTech about different shoes and they told me all of their options would be available on release which I assume to be the flat, curved and competition curved. Normally I can find something which I would like to see different or something that wasn't quite right. In this case the Triggertech special is delivering exactly what it claims and knowing the Diamond exists with a different range of pull weights I wouldn't change a thing. I know I made the comment in the past whether Triggertech could convert me to a single stage trigger guy, but there is no need for that now. Their two stage unit has exceeded all my expectations, and the only thing I need now is a few more of them.

The only unknown item at this time is longevity and durability. I have only had this trigger for about two months however assuming it has the same principal design as their single stage counterpart it should be trouble free for a long time. I plan on running this through some good old South West silt at matches which has taken down more than a few other triggers over the years.

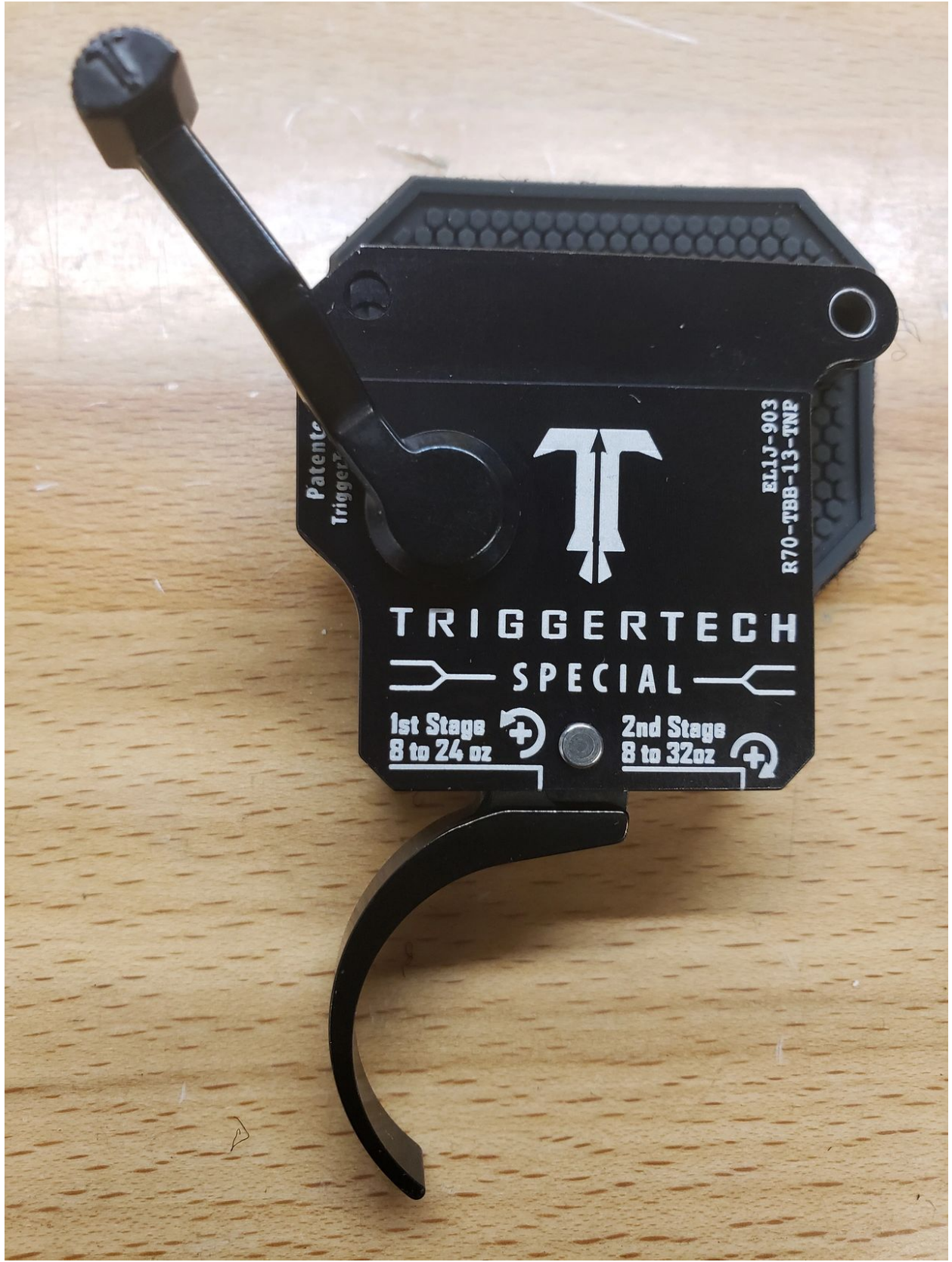












Patented  
Trigger



ELIJ-903  
R70-TBB-13-TNP

TRIGGERTECH  
SPECIAL

1st Stage  
8 to 24 oz



2nd Stage  
8 to 32oz



