

9-21-2021

# T-Rex front rest

by Rodzilla Shooting Products

## Introduction

First of all, let me say, thank you for purchasing my front rest.

This rest was designed and developed over several years of testing at F-Class matches around the country. As a long-range competitor, I have used most front rests available over the years and they all have features I like, but also have deficiencies and Lack features I have wanted in a front rest. I started by making a list of features I would love to see in **one** rest. The T-Rex met every one of these goals and I even discovered a few unique features along the way. When it comes to my personal shooting, I have never been one to choose economy over quality and generally feel that “good is not cheap and cheap is not good” For the front rest I put my name on I did not start with a price point in mind, but instead just started with a blank page and set out to build the very best front rest I could. The T-Rex **IS** the **BEST** I can build.

## Dimensions:

Footprint of the base is 12.5” wide and 11.25” front to back.  
Vertical adjustment range is 5.125”

weight is 21lb 14oz. cased weight is 36Lb.

the joystick adjusts from 15 $\frac{3}{4}$ " to 20 $\frac{3}{4}$ " long.

## **Features and Adjustments:**

### **The 2 Top Option**

#### **F-Class roller top**

- The T-Rex front rest has a very innovative 5-Axis top that features a swiveling top plate. You no longer need to have the feet of this rest set squarely to the target to get a consistent set up from one relay to the next as the top accommodates misalignment and maintains a consistent amount of breakaway under recoil for improved accuracy.
- Another very unique feature is the very small (one inch long) sand bags placed under the edges of the forearm rails that pivot front to back. This feature means you no longer need to level the front leg of the rest front to back. This sand rail configuration delivers, not only a very low contact patch with very little drag but also a high level of consistency.
- The Ears slide in and out and adjust to forearm widths from just under 3" to over 4". There are four Delrin rollers placed 3" apart front to back instead of conventional sand bags. Rollers running on the sides of your rifle causes very low breakaway friction therefore contributing to consistency.

## **IBS top**

The IBS legal top features the same rotating top plate parts but uses the late model Farley sand bag instead of the rollers and sand rails from the F-Class version. The IBS top has removable, adjustable ends, to tension the sides of the sand bag for perfect fit against the sides of the forearm. We like the Edgewood bags which come in 3" or 4" widths and can be made with stiff sides or standard. We don't supply the sand bags as there are several manufactures and styles to choose from. Also, since the IBS top is ½" taller than the F-Class version we supply a ½" longer bolt to raise the dual pivoting forearm stop for proper fit. Again, this top will only accept the late model Farley bags.

- The dual front forearm stop pivots radially and is adjustable for length on a slotted front post. The forearm bumps up against two nylon bumpers so the force on both sides of your forearm is equal. The bump stops are adjustable for height by placing them in a series of holes in the vertical plane.
- You have two options for the level. Unlike other rests that place the level under the rifle we place ours out on the outer edges so you will always have your level in view. Set it up on the left or right depending on what works best for you.

## **Remote vertical adjustment of the crosshairs**

- The coarse vertical bridge adjustment can be done while in position behind the rifle and looking through the scope. A long drive rod is provided with a quick engagement tip which rotates the pinion lug and also locks the bridge. Engage the tool provided into the drive mechanism on the pinion and turn clockwise to lift the bridge on the geared rack. Once the crosshairs are centered on the target there is a locking mechanism just to the right and a bit lower than the pinion drive. Locking the bridge is optional when the clutch is adjusted properly but will ensure the bridge cannot move under recoil especially with larger calibers. Once the bridge is adjusted and locked you just pull back on the rod to disengage it and set it aside. You can reattach the drive rod anytime during a relay without getting out of position. The bridge travels up and down on double sealed ball bushings running on hardened vertical 1" posts. This design allows for very low friction and no play or movement of the bridge assembly except in the vertical plane.

### **The Vertical clutch adjustment**

- There is a 3/8" fine set screw on the front side (or target side) of the bridge assembly that loads a friction clutch disk against the front side of the geared rack. This arrangement allows you to adjust your friction to hold the weight of your rifle. After positioning the bridge to center your crosshairs on the target you can lock this position

with the vertical locking bolt described above. For clutch adjustments use the 3/16" Allen wrench provided and start with about 1/8 turn or 45 degrees after the set screw makes contact with the friction disk. Adjust the set screw/disk just enough to hold the weight of the rifle. When properly adjusted the drive rod will move the bridge up and down with low to moderate effort while looking through the scope. NOTE: We set the friction clutch to hold 15Lb which is approximately the weight of the forearm of a 22Lb rifle.

### **The X-Y assembly**

- Unlike all other rests the T-Rex features double sealed ball bushings for vertical and horizontal movement. This design allows for very low friction of the X-Y movement. There are 4 of these bushings for horizontal and two more for vertical. These ball bushings are sealed and run on very hard, polished rods. There is no maintenance required. There are two ¼-28 thumb screws (black knobs) on the target side of the bridge on either side of the front joystick bearing housing. These two screws bear against Teflon pads on the front of the X-Y mechanism. Adjust these two thumb screws inward (about ¼ turn after touching the Teflon wear pads) just enough to remove the small amount of play front-to back of the top and then lock them in position with the locking collars. Tightening these thumb screws will also add just a bit of resistance to the

joy stick movement. **We recommend making this adjustment after setting the counter balance as described below.**

**Note:** there are set screws (4 total) above and below the two black thumb screws on the target side of the bridge assembly. Do not adjust these set screws as they are set and locked at the factory to remove the small amount of primary play in the X-Y assembly.

- **Caution:** do not over tighten these thumb screws or you could damage the ball bushings or rods in the X-Y assembly. Only add friction after adjusting the counter balance so your balance is not disguised by any excess friction. NOTE: Remember, the benefit of low friction is precision of crosshair placement.

### **Adjusting tension on the joy stick (vertical and rotational)**

- First run the bridge up to the highest position on the vertical posts.
- There is an access hole in the bottom of the bridge (on the target side) centrally located just below the round bearing retainer. Use the 1/8" Allen wrench supplied to engage this set screw. Back this set screw off a 1/2 turn to remove all resistance to the X-Y mechanism before making counter balance adjustments. After the counter balance procedure is completed, you will retighten this set screw to add

resistance to the joy stick rotation and add just enough vertical tension to hold the joy stick in the full up or down position.

### **Setting the counter balance for your rifle weight**

- To counter balance the weight of your rifle, merely place your rifle in the rest and adjust the joystick to the desired length as the joystick length will affect your counter balance. Now loosen the two black thumb screws on the target side of the bridge that add friction. (see the above instruction regarding X-Y friction) Also with the 1/8' Allen wrench, back off the forward bearing set screw as described above to allow the joystick to freely move up and down without any friction.
- There are three counter balance set screws that preload springs in the X-Y mechanism to make the rifle float or balance. The two set screws in the center are set nearly flush with the bottom of the bridge and have the springs almost compressed to the maximum. (just short of coil bind) there is also another set screw sticking down from the bottom on the right side of the bridge with about 1/2" exposed. This screw can be turned by finger pressure. Turn this single set screw in until the weight of your rifle is neutralized or balanced. If your rifle is too light for proper adjustment back out the two center screws several turns each to remove counter balance and then readjust the longer screw up or down to fine tune the balance. With

proper adjustment your joystick will bounce up from the bottom and bounce down from the top when released. The joy stick should go equally toward the center when the counter balance springs are set perfectly. Again, by backing out the counter balance set screws the weight of your rifle will cause the joy stick to drop lower and inward will cause the joystick to go above center.

As the T-Rex has very little internal X-Y friction you will be able to get a perfect counter balance quickly, precisely and without the compromise between counter balance and friction we have all experienced with other front rests. NOTE: Turning in the two central counter balance set screws too far can cause the springs to coil bind and the joystick will stop short of the lowest position.

### **Adjustable joystick length**

- Another feature that the T-Rex offers is an adjustable joy stick length. Just loosen the thumb screw, position the stick to your liking and re-tighten the thumbscrew. **Note:** the stainless-steel bushing on the end of the aluminum joystick can be rotated to place the thumb screw on the right or left but make sure it is perpendicular to the slits on the joystick or it will not lock onto the steel shaft properly.

## **Sand feet**

- The optional (Phoenix type) sand feet come with threaded studs locked into them. You will not experience these threads coming undone causing the rest to wobble which is common on other setups. To lock the feet after leveling the T-Rex snug down the 2" scalloped lock knobs against the cupped spring washers. **NOTE:** place the cup down against the base. There is no need to overtighten or hard lock these top lock knobs. Make sure the standoff boss on one side of the scalloped lock knobs is against the cupped spring washers. **Note:** the locking knobs can be run onto the studs with the raised boss pointing up and the cupped washers placed on top of the boss (cup up position). Now screw the assembly up from the bottom of the base for added height of your rest. This option places the lock knob just under the base plate but the scalloped lock knobs are still accessible. This configuration works best if you use a tall rear bag or when the front of the berm is lower than the rear bag and you need a bit more height.

## **Protective finishes**

- The base plate is powder coated steel and the aluminum parts are hard anodized for a lifetime of service

## **Fitted case**

- A custom hard case is available for the T-Rex for storage and transport. The case is made from tough, light-weight, polypropylene copolymer. It has a rugged O-ring seal that makes it air and water tight up to 3ft deep. our case utilizes an automatic pressure release valve so that it adjusts to its environment. It is also ATA/TSA ready for airline travel. The case is lockable with comfort molded handles and spring-loaded latches and features custom cut convoluted open cell foam glued into the lid plus a 1" thick base pad glued into the bottom to lock the base from shifting around. There are two 4" thick, lift out pieces custom cut to secure the feet, tools, and base during transport.

- **Maintenance**

There is no maintenance required other than drying the unit thoroughly if shot in the rain like any other piece of shooting equipment. Never close the case on a wet rest as the case is sealed when latched and rust will form on non-stainless parts. I recommend a thorough wipe down every month or two with a rust preventive, especially on the vertical rack and guide posts.

### **Lifetime Warranty**

- Maybe the best feature of all is it is entirely made in the USA. All Rodzilla shooting products carry a lifetime

warranty on workmanship and materials regardless of whether you purchased directly from us or second hand.