

## TTC Tiger Switch Review

-ThereminGoat, 05/15/2022

Well hey there, everyone. It certainly has been a hot minute since the last one of these reviews was posted, and for once I don't actually mean that in a sarcastic sense. For those of you who may stop by to read every now and then but aren't consistent followers of me on my various social media platforms, I've been away for the past month due to a slew of personal reasons outside of this hobby. (Trust me, I couldn't possibly get tired of switches even if I tried to.) Without providing all that much detail to it, over the course of the past month I was wrapping up my last intensive semester of graduate courses with all manner of homeworks, midterms, final papers, and exams shoved in to make the remaining few weeks as busy as possible. Smack dab in the middle of it, as well, I contracted COVID which pretty squarely put me down for the count for a week and has still left me some lingering symptoms a few weeks after finally testing negative again. Between the stress of schooling and then added stress of exams and all manner of graduate school related fun, I unfortunately had to step away from the reviews in order to make sure I could square all of that away and to get back to you all in as few of pieces as possible. And to that end, I'm back and clearly hitting the ground running.



**Figure 1:** And I most certainly have the bags of new switches to prove it too.

Over the course of the next few weeks, I intend to get fully back into the routine of content as established prior to my brief COVID and academic based hiatus. This will continue to include full length reviews every other weekend, scorecard related content in the other every other weekend slots, and maildays and social media posts throughout the course of the week in between the content on the weekends. In addition, and without spoiling anything specifically, I do want to share that I have *many* content related plans that I've been working on for this summer to be released in the upcoming months. These may include me finally getting to test out some hypotheses I've had regarding switches and modifications, reviews of switches which I've been eagerly anticipating for some months now, and even some new types of alternative content to work into full length reviews as well as on the side much like the measurement sheet and scorecard repository. As well, I hope you all keep your eyes trained on both the 'About' tab of my website as well as the bottoms of my reviews in the coming months as I will be adding a slew of new sponsors and/or affiliates. While this is nice for me as these companies are helping me out with respect to funding the website and obtaining switches, it's also pretty nice for you all since you'll get a little bit of a discount on their stuff as well.



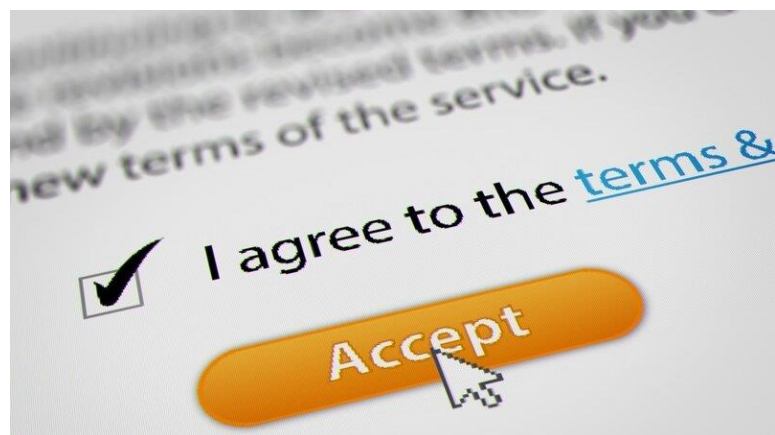
**Figure 2:** Maybe these will have something to do with those plans...

Finally rounding off my characteristically verbose return announcement, as well, I want to thank all of you for your support and kindness over the past month of me being gone. While simply reading the website in my absence, alone, was enough to keep my spirits lifted, countless people reached out to me to help me stay on top of new releases, check in on how I was doing, and catch me back up to speed during my breaks I had from all of the other stuff going on. The first thing I did when I got home from my last final was to start opening all of the switch boxes that had been piling up by my desk, and I'm here spending my first free weekend getting back into the swing of writing reviews since I had grown to miss it so much over the course of the past month. So thank you everyone for having me back again and for making the welcome feel so warm. I hope that's actually what it is and not just another fever setting in.

## Switch Background

Prior to delving into the background of TTC switches over the course of the past year as well as the Tiger switches which have brought you all here today, I want to make a note about my procurement of these switches purely for transparency. Both the Tiger and OG Tiger switches which I have reviewed here came directly from TTC after they had reached out to me regarding these new switches. I've not been paid for a review nor did I even agree to do a review of these switches, though after having tried them out I couldn't help but share these for the countless number of unique points which I've highlighted below.

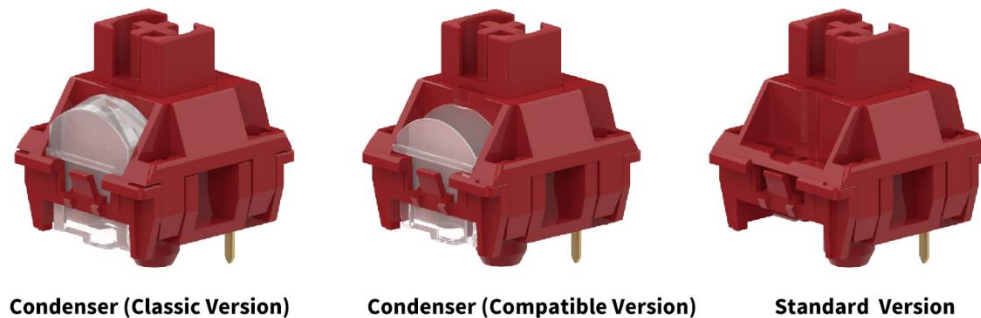
Additionally, I did pick up a second box of the OG Tiger switches for my collection, which was graciously donated by community member Jova who is not affiliated with TTC in any way, shape, nor form. While I don't think this notice regarding switch procurement is all that necessary, I do still want to be transparent regarding any potential biases I may implicitly have as a result of such.



**Figure 3:** Not going to lie, it does make me feel like I'm including one of these buttons whenever I wrote one of these paragraphs.

In quite a few of the reviews that I've wrote thus far in 2022, I feel that I've made my personal feelings regarding progress and innovation among switches this year fairly well evident. Namely, a large amount of the progress in the MX footprint that has come about in the western-facing mechanical keyboard community has come about primarily as a result of Kailh and Gateron. Looking at the insane amount of releases from the combination of Chosfox and Kailh as well as the 'new' design features in Zeal's Clickiez switches, it's not too much of a stretch to come to that conclusion with previous innovative brands such as Tecsee and Durock/JWK seemingly stalling by comparison in 2022. However, this claim about innovation is fairly narrow in its scope when one considers that this is progress solely in the *western* facing side of the keyboard hobby. Going equally far back into the end of 2021 and throughout 2022, TTC has been producing an equal, if not greater amount of variety in designs within the MX footprint as these aforementioned companies, and is one of the many reasons why I wanted to complete this review in the first place.

Stepping completely out of chronological order, one of the first innovative details that TTC had introduced over the span of the past year or so has been that of various LED 'Condensers' within their switches outfitted for various purposes. As can be seen in Figure 4 below, modern TTC switches such as the TTC Flames, Bluish Whites, and Gold Pinks now all come in variants which have 'Classic' and 'Compatible' condensers in addition to that of a standard top housing which only has a through-hole LED slot. While the exact debut of this very minute feature is unknown to me, its implementation has appeared to come about over the course of 2022 and likely stretches a tiny bit back into 2021 as well based on the fact that some collectors I know located over in Asia have stated that many people have seen all of these varieties for sale in recent month. It's worth noting here that I am not presently aware of the differences between the two types of condensers in terms of functionality and implementation into prebuilt boards,, though if I had to wager a guess it would be likely due to a difference in keycap clearance depending on switch orientation in the PCB.



**Figure 4:** Render showing the various types of LED layouts now offered in TTC switches.

Moving both backwards in time and forward in relevancy, a singular example of rather drastic innovation within the MX footprint came in the middle of December 2021 in the form of the TTC Heart switch. Also known as 'TTC Loving Heart', 'TTC Love', or 'TTC Honey Heart' switches, depending on which source they are obtained from, these switches feature an entirely brand new modular stem design in addition to a piecewise bottom housing construction unlike that of anything previously seen in the MX style footprint of switches. As can be seen in the marketing render below in Figure 5, the Heart switches features a two part stem which detaches at the intersection of the keycap mounting cross and the stem legs, as well as a small heart shaped piece of plastic which could be sandwiched in between the two. Additionally, at the bottom of the render, the part labeled as #9 appears to be just the stem pole hole of the bottom housing which separates cleanly from that of the outer ring of the bottom housing (Part #6) which

holds the leaf and contains the stem slider rails. While no alternative colored versions of the TTC Heart switches were released until May of 2022 in the form of the HiGround x Attack on Titan exclusive keyboard with TTC Titan Hearts, early marketing renders from these switches appear to emphasize a modularity in design scheme or colorway of the various parts of the TTC Heart switch. Whether or not TTC intends to release modular, alternatively colored or material parts for the TTC Heart switches in future runs of the switch is currently unknown as of the time of writing this review.

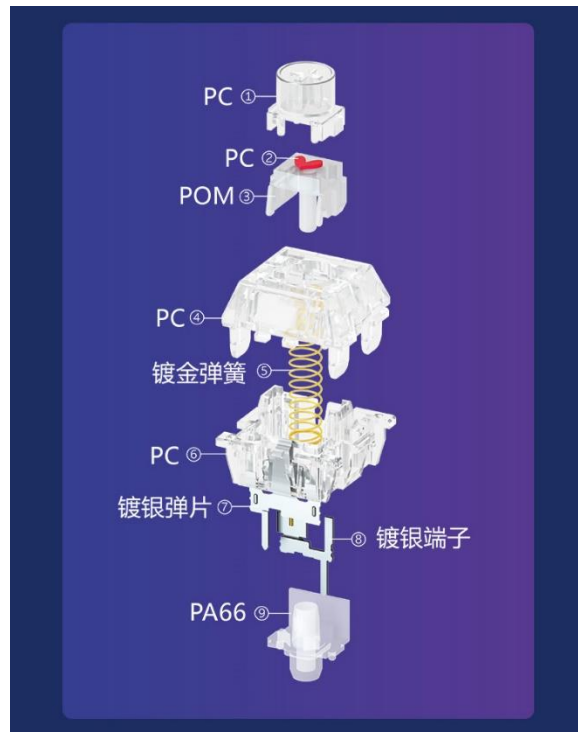


Figure 5: TTC Heart exploded marketing render showing various switch components.

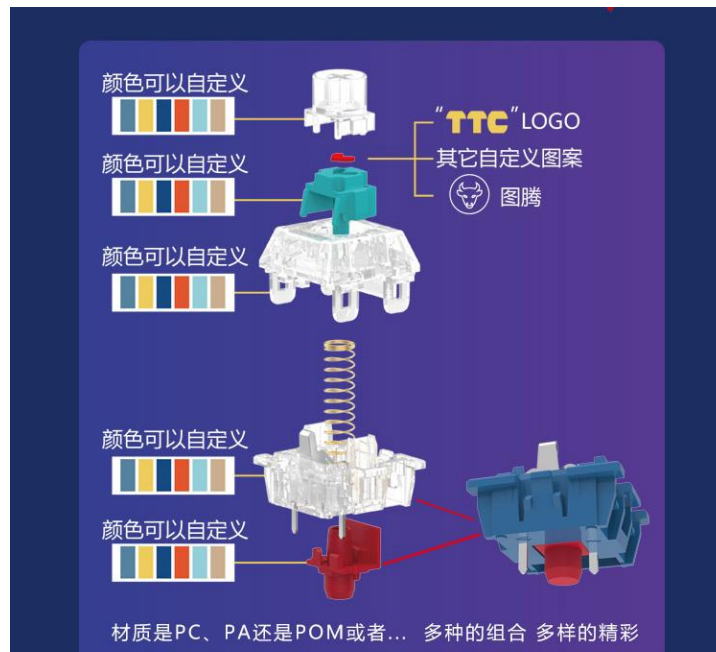
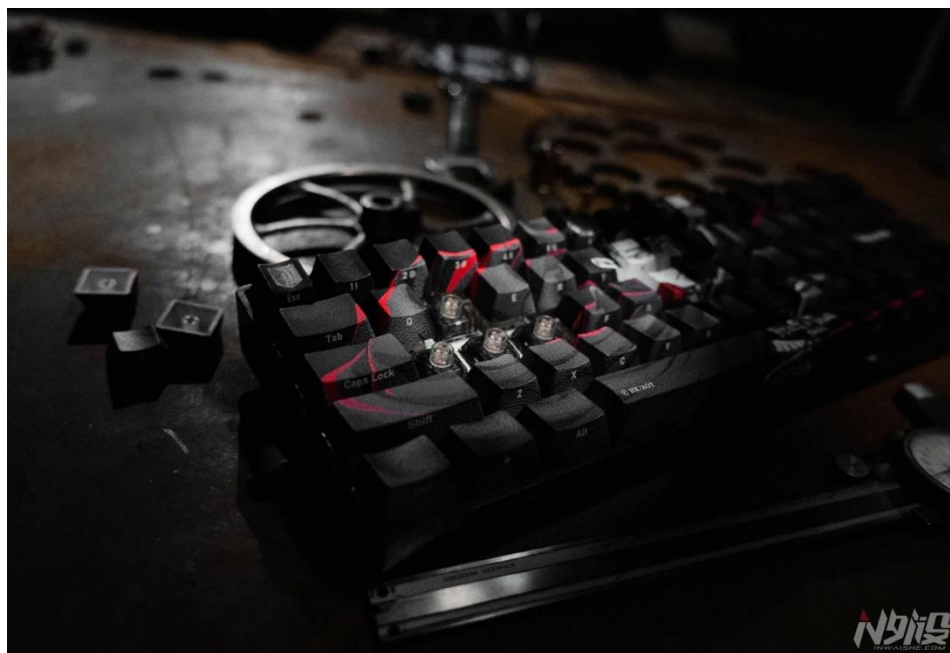


Figure 6: TTC Heart exploded marketing render showing modularity in component color and material.





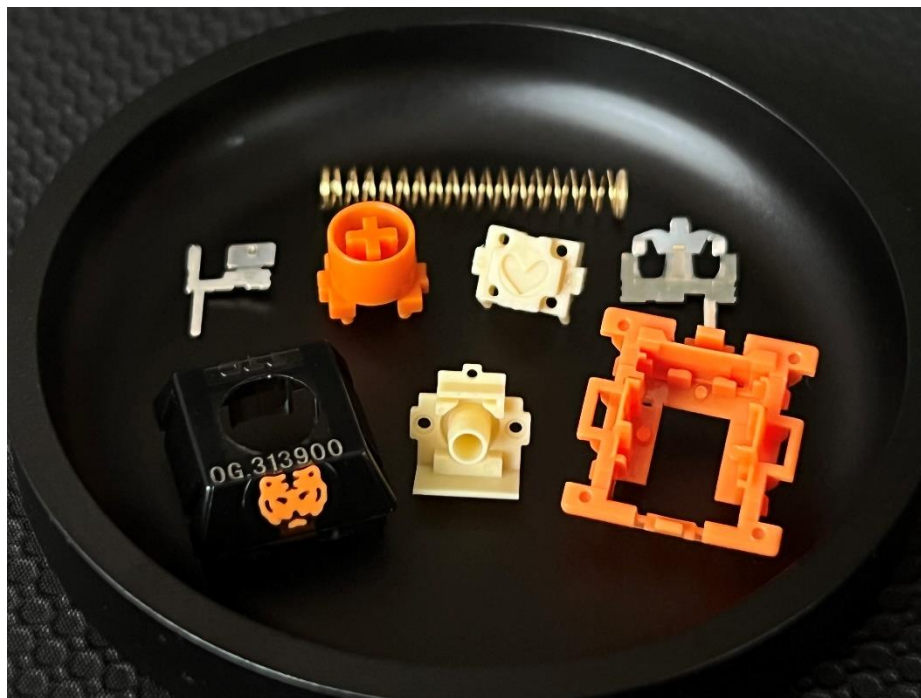
**Figure 7:** HiGround x Attack on Titan keyboard promo shot featuring TTC Titan Heart switches.

Furthering upon the points of innovation first introduced in the TTC Heart switches, shortly thereafter TTC introduced the TTC Tiger and OG Tiger switches in early to mid January of 2022. Themed after the tiger due to 2022 being associated with the Chinese Zodiac sign of a tiger, TTC released two variations of this switch with varying degrees of complexity, design, and associated innovation. Looking to the standard TTC Tiger switch, these switches feature the same sort of large, boxy housing of that of the TTC Heart switches as well as that of the two-piece bottom housings, though these are otherwise fairly ‘plain’ by innovative TTC standards. Aside the orange and smoky black colorway of the TTC Tiger switches, additional thematic elements include that of a grey tiger emblem on the south side of the top housing and a matching grey ‘Ren Yin’ ancient Chinese character on the north side of the top housing. (Ren Yin being that of the Chinese Lunar calendar in 2022 according to the TTC marketing team). While general availability of the TTC Tiger switches in the west is still fairly limited as of the time of writing this review, the initial price point of these switches appears to be in the range of \$0.80 to \$0.90 per switch depending on the source from which they are obtained.



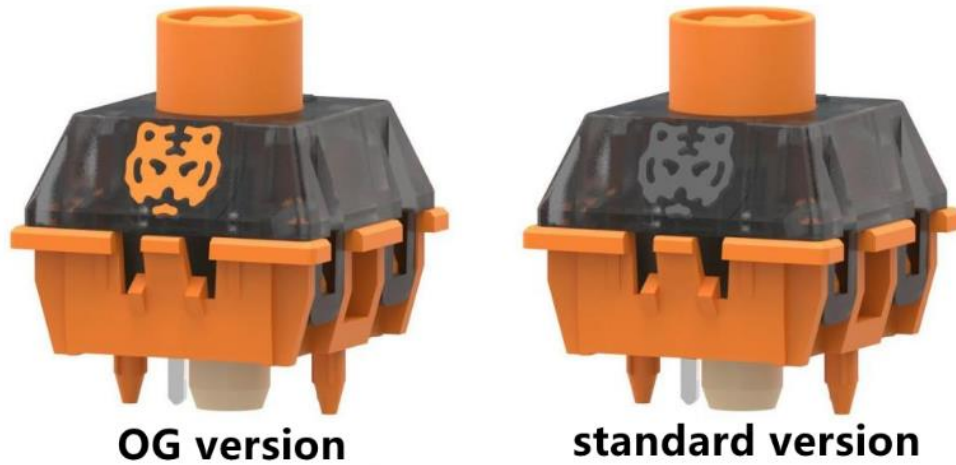
**Figure 8:** At this point, I'm just running this review out for length. Enjoy a cool photograph I took of my Tiger switches in a pile.

The TTC OG Tiger switches, in comparison to that of the standard Tiger switches, are both significantly more pricy, exclusive, and innovative at several points. While the colorway and two-piece bottom housing design is shared between the Tiger and OG Tiger switches, the OG tiger switches additionally feature a two-piece stem design that separates at the intersection of the keycap stem mount and slider rail in identical fashion to that of the TTC Heart switches. In fact, as can be seen in Figure 9 below, which is an image from Japanese switch collector @Xe\_ry on Twitter, the bottom halves of the stem feature the same heart shaped design implying they use similar, if not identical molds. In addition to this already complicated design scheme, the OG Tiger switches also feature two unique top housing designs which have not been previously seen in any other switch to the best of my knowledge. The first is that of an orange colored tiger head design on the south side of the top housing, which was colored grey on the top housings of the standard Tiger switches. The second, and much more interesting feature is that of a serialization on the top housing, with each unique switch supposedly featuring a number from 000001 to 999999 as can be seen below.

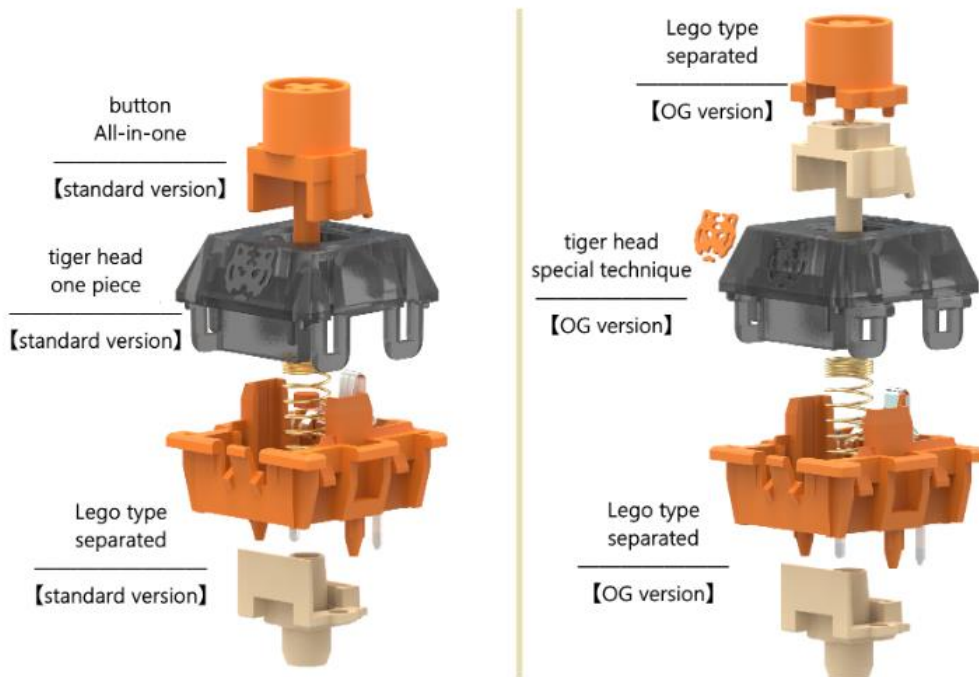


**Figure 9:** TTC OG Tiger switch components as shown by @Xe\_ry on Twitter.

The serialization of each individual TTC OG Tiger switch is by far one of the single most unique design features I've ever seen in switches thus far. While truly a pain in the ass for a collector like myself attempting to seek out one of every single switch, it makes for a truly interesting commemorative experience and may lead to more interesting thematic releases and switch designs in the future. It's worth noting here that as of the time of writing this review, I've not seen any OG Tiger switches labeled outside of the 300000 to 399999 range, which may indicate some sort of potential limitation in this design scheme or an overall exaggeration of the serialization of switches by TTC's marketing team. As a result of the serialization of the OG Tiger switches, these switches came in packs of 10 with fancy packaging and a few other features which will be thoroughly documented below for a much steeper price. Initially priced around \$20 at the point of release, the instantaneous sell out and then relisting of these OG Tiger switch boxes on various eastern facing reselling sites saw their prices jump to around \$30-40 per box where they currently sit as of the time of writing this review. While it is unknown if this sort of design scheme will be repeated in future years for Lunar New Years celebrations and TTC switches, I do have some sliver of hope that this will stick around for the next 5 years since the next Year of the Goat is in 2027...



**Figure 10:** TTC sales page render demonstrating difference between standard and OG TTC Tiger switches.



**Figure 11:** TTC sales page render demonstrating the difference between standard and OG TTC Tiger switch components.

## TTC Tiger Switch Performance

*Note:* This review is focused primarily on the cheaper, more common TTC Tiger switch. Any references or discussions of the OG Tiger switch will be explicitly stated in order to not cause confusion.

## Appearance

As briefly touched upon above in the Background section, the TTC Tiger switches come in a black and orange themed colorway to mimic that of their namesake animal they were inspired by. Overall, the switch is significantly ‘larger’ in terms of volume than that of standard MX-style switches and even that of more boxy style designs such as that of Kailh’s Box line of switches. The overall size of the TTC Tiger switches is most similar in size to that of the Zeal Clickiez, TTC Heart, and Taiwan Jet Axis switches, without many switches in the MX footprint being comparable in size. Additionally, the TTC Tiger and OG Tiger switches both contain identical, 25.5 millimeter, single-staged gold springs which is the longest spring currently in use in a TTC switch as of the time of writing this review.



**Figure 12:** General size comparison between various 'large' MX-footprint switches. (L-R, Top-Bot: Kailh Fried Egg, Zeal Clickiez, TTC Tiger, Taiwan Jet Axis Yellow)

Looking first at the top housing of the Tiger switches, the top housings are large, squared off, and are extremely dark translucent black in color. On the top side of the top housing, a TTC logo sits on the south side of the housing in nameplate-esque fashion in terms of both size and font. On the south side edge of the top housing, directly adjacent to that of the TTC logo, is an extremely thin raised Chinese character for ‘Ren Yin’, which has symbolic relation to that of the Chinese Lunar Calendar at the time of release of these switches. On the north side of the top housings, opposite the Ren Yin character is that of a grey, similarly raised tiger logo. Moving to the external sides of the top housings, the east and west sides which feature the attachment pins to the bottom housings have significant grooves carved into them above that of the 4 attachment pin locations. Additionally, it’s worth noting that the attachment pins are ‘hollow’ in that they have a region cut out through the center where the attachment point is made unlike that of traditionally solid top housing attachment points.

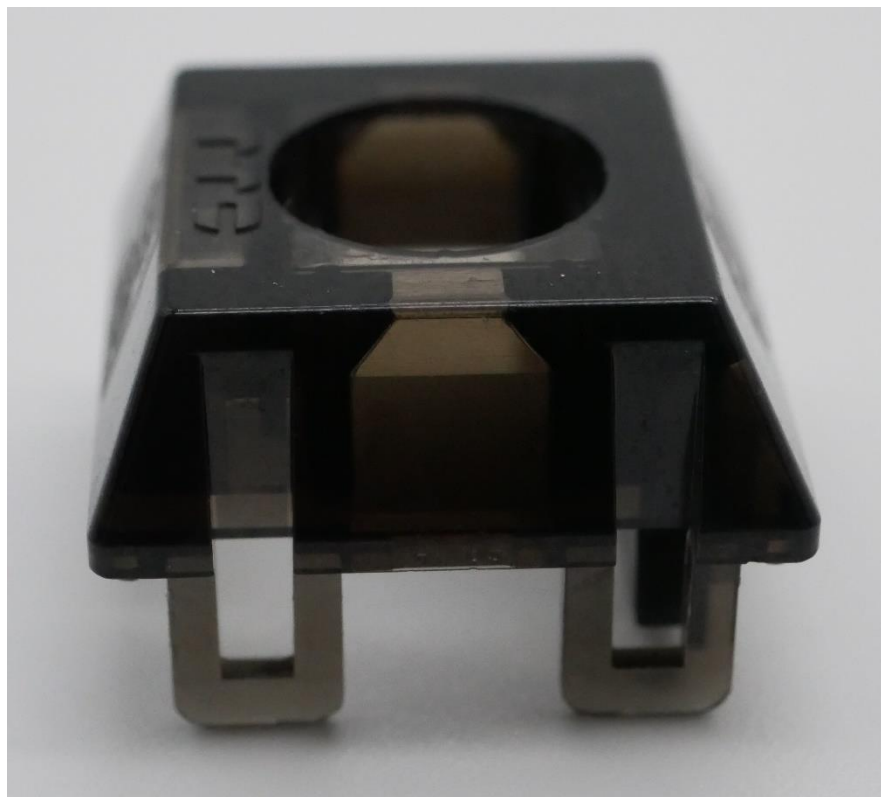


**Figure 13:** TTC Tiger top housing shot showing TTC nameplate and Ren Yin symbol.





**Figure 14:** TTC Tiger top housing shot showing grey tiger symbol on the opposite side of the housing from the Ren Yin and TTC logos.



**Figure 15:** TTC Tiger top housing side profile showing hollow attachment pins and grooved regions overtop of such.

Internally, the top housings are rather unique from switches I've previously covered in reviews on this website and have many details worth pointing out. First and foremost, the internals of the south side (directly beneath that of the tiger logo) feature a large, rectangular region which fully occupies the 'LED cutout' region in the bottom housing design. Opposite of this, in the north side directly beneath the TTC logo and Ren Yin symbol, the top housings have a small open region in order to accommodate the leaf in the closed position. Along the upper rim, as well, there are mold markings on the east side of the top housings featuring a single capital letter followed by a pair of numbers in rather small font. Looking to the center hole in the top housings, they don't appear significantly different than that of any other switch release save the fact that the central hole is round to accompany the round, dustproof stem design of the Tiger switches.



**Figure 16:** TTC Tiger top housing internal design features showing large LED-blocking outcropping, circular central hole for stem, and hollow attachment pins.

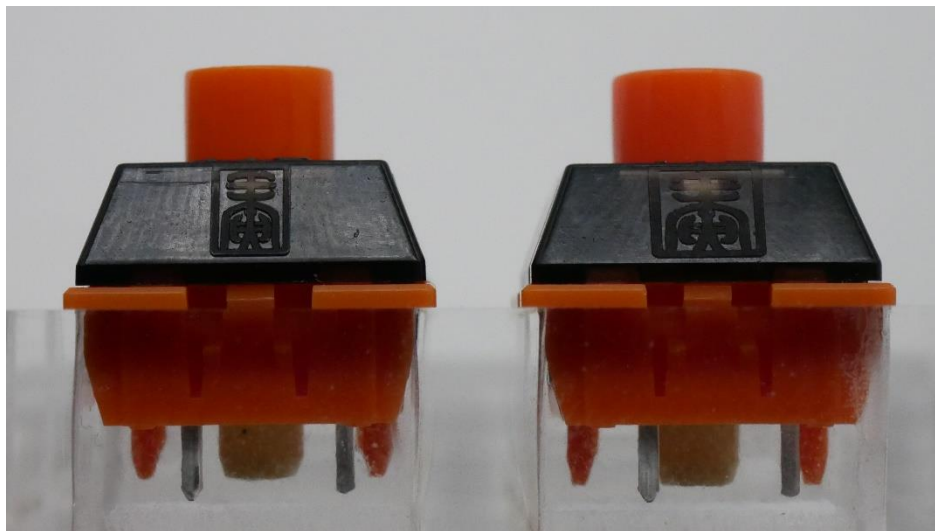


**Figure 17:** TTC Tiger top housing mold marking closeup.

In the OG Tiger switch variants, the top housings are identical in design to that of the standard Tiger switches save for three distinctive features. The first difference between the two switches is that the external tiger logo of the OG Tiger switches is orange and sits on a slightly raised stage whereas it is grey in the standard Tiger switches. The Ren Yin symbol, however, is *not* orange on the OG Tiger switches and remains similarly raised and grey in color to the standard Tiger switches. Interestingly, the Ren Yin symbol is much more narrow on the OG Tiger switches than the standard ones, as can be seen in Figure 20 below. The final differentiating feature is that of the 'OG: XXXXXX' serialized stamp on the OG Tiger switches only. Directly adjacent to the tiger logo on the south side of the top housings, the font for the serialization appears slightly etched as if by a laser, whiteish-greyish in color, and is left justified to the west side of the top housing.



**Figure 18:** TTC OG Tiger (Left) and standard Tiger (Right) switch comparisons of top housing tiger symbol.



**Figure 19:** TTC OG Tiger (Left) and standard Tiger (Right) switch comparisons of top housing Ren Yin symbol.

Moving next to the stems of the Tiger switches, they are rather simple looking relative to that of all of the other switch components. Featuring a round, dustproof style keycap stem mount region as opposed to the traditional plus or boxed style design, this region sits on top of an otherwise fairly normal looking stem. The slider rails feature an ever so slight taper and the central pole features a more

aggressive taper to a slightly thinner final point. Additionally, the back and front plates are unadorned from mold markings or ejector circles. It is worth noting though that there appears to be a seam that runs along the circumference of the stem in a similar location as to what appears to be the color separation in the OG Tiger switches. I was unable to separate the stem pieces though in the standard Tiger switches leading me to believe that they are potentially a single piece. Or at the bare minimum they will remain there unless I am completely willing to forgo my fingernails to try and pry the damned things apart. The stems do appear to come extremely lightly factory lubed, primarily on that of the stem legs in order to prevent any unwanted stem/leaf interactions. In some of the switches that I did open, I feel that I may have noticed extremely thin amounts of lubrication on the edges of the stem legs, as well, though it was rather difficult to tell.



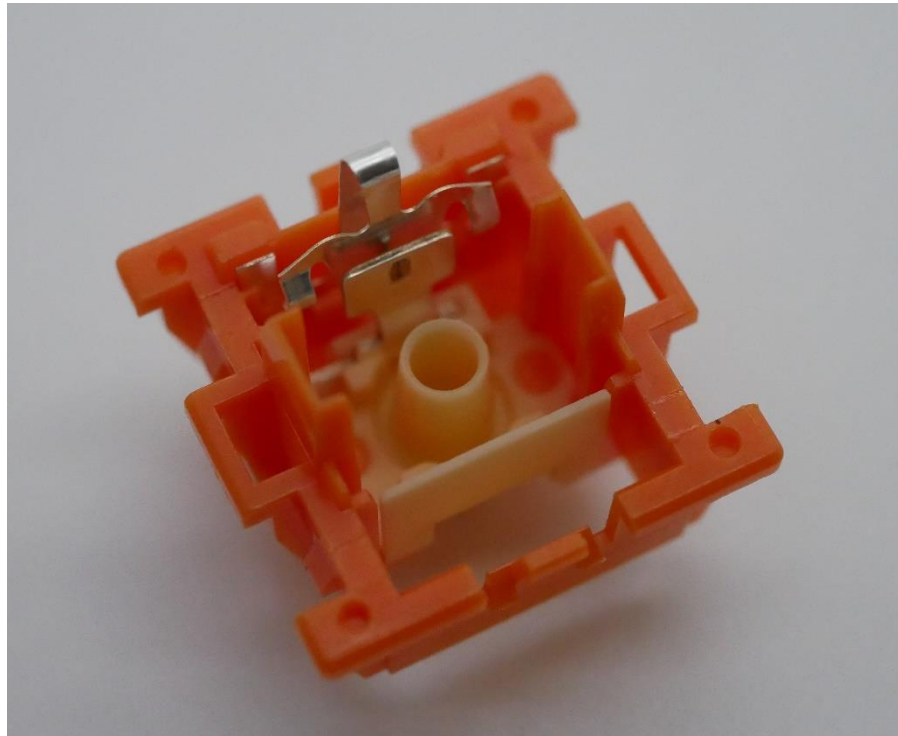
**Figure 20:** TTC Tiger stem design showing tapered slider rail, tapered central pole, and 'seam' line running across the front plate.

The TTC OG Tiger stems, by comparison, appear to come from both a completely different set of molds than that of the standard Tiger switches and are of a completely different design. Rather than being one cohesive piece, the stems in the OG Tiger switches are two tone in color, coming in an orange over light yellow/tan color and are separable as shown above in Figure 9. The separation seam occurs at the bottom of the keycap stem mount and the top of the slider rail piece, with the tan colored slider rail piece appearing to have the same heart-shaped indentation in identical fashion to that of the TTC Heart switches. This point, alone, leads me to believe that the stem molds used in the TTC OG Tiger switches are identical to that of the TTC Heart switches whereas they are different for the standard Tiger switches.

Moving next to the bottom housings of the Tiger switches, they are yet again radically different from previously covered designs in reviews on this site. Looking internally, the upper rim of the switches is already interesting due to the fact that it has four deep and narrow mold ejector marks in the upper corners as well as a pair of squared 'loops' on the east and west sides of the rim. While some ejector circles are often located on the upper rim of various other switches, these often are rather shallow in depth and wide in diameter. The loop features which are pointed out, though, bear no resemblance to any other switch that I can recall. Internally, the completed bottom housings feature a south and north side spring collar and a slightly tapered central pole hole. However, these features are split between two separable and differently colored pieces - that of a tan color similar to that of the bottom half of the stem in the OG Tiger switches, and that of an orange piece. The orange piece comprises the outside rim of the bottom housing as well as the back leaf mount whereas the tan piece comprises the spring collars, the central pole

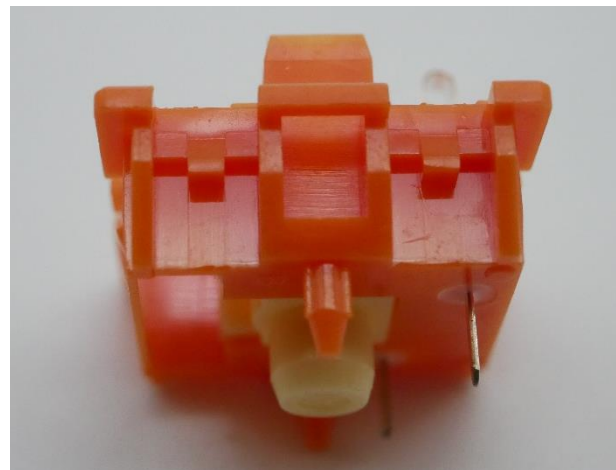


hole, and the front leaf mounting point. The two pieces appear to attach to each other via internal peg points, with one being between the two halves of the switch leaves and the other two being directly at the bottom of the slider rail regions.

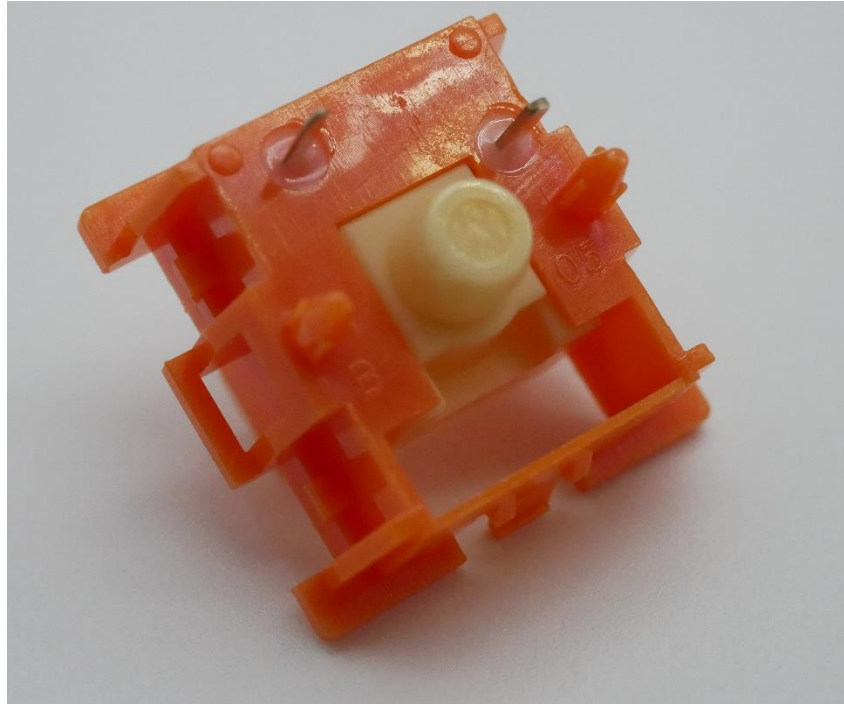


**Figure 21:** TTC Tiger bottom housing internals showing two-part construction with attachment pins.

Moving externally, there are again several interesting features worth noting. On the east and west sides of the bottom housings, there are raised clasps that attach to the hollow top housing attachment pins as noted above. On the bottom side of the bottom housings, the most immediately noticeable feature is that of the large, rectangular LED region. While this would normally be a region through which through-hole LEDs could be secured in the complete switch configuration, as noted above with the top housings there is a solid outcropping which occupies this region in the closed configuration. The bottom housings are also 5 pin, featuring two PCB mount pins on both the OG and standard Tiger switch variants. The PCB mounting pins also are different than standard offerings in that they feature a slight amount of a glue or epoxy substance around their attachment points. Finally, the last feature worth noting is that of the mold markings, which sit on both sides underneath the PCB mounting pins in orange. In a similar fashion to the mold markings in the top housings, the bottom housings have a single, capital letter on the left-hand side and a pair of single digit numbers on the right-hand side.



**Figure 22:** TTC Tiger bottom housing externals showing attachment pin mounts as well as pointed PCB mount pins.



**Figure 23:** TTC Tiger bottom housing external design showing PCB mount pins, mold markings, and glued-in PCB pins.

### Push Feel

Rated at 55g. of bottoming out force and 3.7mm in total travel distance, the Tiger switches sit pretty squarely in the middle of various other linear offerings from TTC as of the time of writing this review. (For example, the TTC Speed Silver switches are 58g of bottoming out force with a 3.4 mm travel distance whereas the TTC Flame Reds are 53g of bottoming out force with a full, 4.0 mm travel distance.) To that end, and much like many of the other offerings from TTC currently, the Tiger switches perform quite well as lightly weighted linears, but do not stand out distinctly from each other. In terms of smoothness, the ever so slight factory lubrication does a great job of preventing any sort of unwanted interactions between the stems and leaf legs, though it ultimately doesn't make the switches feel quite as smooth throughout the stroke as one would hope. (This may in fact be due to the fact that this lubrication is not *intentionally* applied to the slider rails, and the few instances I noted of such were due to assembly error.) As described previously in other reviews, these Tiger switches could be easily described as having much more of the switch 'character' throughout the stroke than that of aggressively hand lubed switches.

With respect to the housing collisions, the TTC Tiger switches are incredibly well balanced at both ends, though just a tiny bit thin feeling versus what one would expect from a switch this size. Due to the sheer volume of the switches alone, one would think there is much more room to place plastic which could help mute or even dampen the sound of a switch, though this would certainly be an argument against that fact. While I want to point to the modular design as perhaps part of the reason that this may be occurring, in similar fashion to that of Matrix Lab keyboards and their 4,000 screws per keyboard, I think the much more relevant detail is that of the reduced travel distance of the Tiger switches as well as their bottoming out onto the stem pole. Without much room to hide behind faults or minor issues in the stroke of the switch due to its rather light spring weighting, I think that the reduced travel distance and/or lack of a slow spring to emphasize the bottoming out makes for a particularly distinctively pointed bottoming out which may be problematic to some users depending on their preferences.

## Sound

In terms of the sound of the TTC Tiger switches, they are yet again rather close to that of the notes in the Push Feel section above though with perhaps some slightly toned-down elements. While there is not any sound present from scratch nor any sort of ping related issues, there is still a sort of medium pitched thinness to the sound that is a little bit counter to expectations for a switch so bulky. Much to the credit of TTC, though, the topping and bottoming out sounds are both incredibly well balanced, medium pitched, flat, and only a tiny bit thin to the ears. Another point worth noting is that this sound doesn't appear to change much with faster actuations, which was a bit surprising as well. In my experience, switches that bottom out onto the stem pole or have thin-ish sounding housing collisions at lower activation speeds always see both of these features become significantly more pronounced at higher activation speeds. The Tiger switches, however, don't have nearly as steep of an increase here as other switches with these characteristics, with higher activation speeds being comparably similar in terms of overall sound to that of slower activation speeds.

## Wobble

For what it's worth, the sheer amount of engineering that went into the design of these switches did extremely well to nail down the stem wobble to an extremely minimal level. While there is still some very minor amounts of stem wobble that is equal in all directions due to the roundness of the stem design, it is definitely not enough to bother any user nor likely to be a factor in builds with large profile keycaps such as that of MT3 or SA. As well, it's worth noting that there is absolutely no top housing wobble in the TTC Tiger switches even after having opened and closed them several times.

## Other

Given the premium price point and design of both the standard and OG TTC Tiger switches, there's absolutely no surprise that the informal packaging section has made a return to this review in the form of the 'Other' section. Looking first to the standard TTC Tiger switches, my batch came shipped in a hard cardboard silver and grey box with a black plastic casing on the inside which stored the switches. The silver external box, while quite fancy, is nearly entirely in Chinese characters and thus is beyond my understanding as to what explicitly it is stating. The black internal case featured a raised TTC logo on the top housing as well as front and backside sticker 'seals' keeping the housing from opening in transit. Inside, the 100 switches in my batch were stored loosely with some extra foam packing to prevent jostling during transit. The minimum size of a batch required in order to obtain this packaging in the standard TTC Tiger switches is unknown, though I would imagine that this is only done for orders beyond that of 70 switches.



**Figure 24:** TTC Tiger standard switch grey/silver external box top and front side design.



**Figure 25:** TTC Tiger standard switch grey/silver external box bottom side design.



**Figure 26:** TTC Tiger standard switch internal box design with front sealing sticker.



**Figure 27:** TTC Tiger standard switch internal box design with back sealing sticker.



The OG Tiger switch packaging, on the other hand, was significantly more premium than that of the standard Tiger switches and was reflective of both their special edition status and elevated price point. Coming in a similar style hard cardboard external box with plastic interior carrying container, the design features of both of these are definitely more striking in the OG Tiger packaging. Coming in an orange and black colorway, the OG Tiger box features an image of the switch on the topside, the logo of the tiger and Ren Yin symbol on the sides, and much more useful operational information on the sides of the box. The internal orange plastic case features a clear top case over an orange bottom case with a similar set of seals on the front and backside. Internally, the switches are held in place by pairing of plastic shells, with 5 sets of switches on the left and right-hand sides of the box. In the center, a round, clear keycap as well as a small light-based PCB display unit are present as an extra special piece to go with the packaging. In both of the OG Tiger boxes which I've received, the ordering of the serialized switches appears to start in the upper left-hand corner with a number ending in '0' and moving down the left-hand side followed by the right-hand side until the bottom right hand corner switch ends in '9'. As stated previously, while I've not seen all that many examples of these boxes out in the wild, I nor any collector I know has come across switches labeled outside of the 300000 to 399999 range.



Figure 28: TTC OG Tiger switch orange external box top and front side design.



Figure 29: TTC OG Tiger switch orange external box bottom design.



**Figure 30:** TTC OG Tiger switch internal box design with front sealing sticker.



**Figure 31:** TTC OG Tiger switch internal box design with back sealing sticker.



**Figure 32:** TTC OG Tiger switch internal box arrangement with plastic holding shell.

An additional point worth noting here in the ‘Other’ section of this review is a distinct trouble that I encountered with the design of the TTC Tiger switches and opening and inspecting them for this review. Likely due to the ‘hollow’ nature of the attachment pins on the top housing as well as the general overall size of the TTC Tiger switches, I for the life of me could not open these using the small, Ai03 aluminum switch opener that I’ve been using for several years now. In fact, I had to resort to a small flathead screwdriver tip in order to be able to pry the mounting pins off, with the incredibly long spring causing the housings to separate rather violently when I did such. This of course led to me climbing under my desk while swearing to myself for a minute trying to figure out where this black top housing went in the dark.

### Measurements

*Note:* Due to the unique design features of the stem and top housing opening for the stem, not all of the measurements for this switch are completed. Additionally, the measurements will *not* be included in the measurement sheet as to not skew the averages and statistics of the switches currently tracked there.

<b><i>TTC Tiger Measurements</i></b>			
	<b>Component</b>	<b>Denotation</b>	<b>mm.</b>
Stem	Front/Back Plate Length	A	-
	Stem Width	B	-
	Stem Length with Rails	C	-
	Rail Width	D	1.95
	Center Pole Width	E	2.01
	Rail Height	F	5.04
	Total Stem Height	G	13.95
Bottom Housing	Diagonal Between Rails	L	9.58
	Interior Length Across	M	9.69
	Rail Width	N	2.59
	Center Hole Diameter	O	2.29
Top Housing	Horizontal Stem Gap	X	-
	Vertical Stem Gap	Y	-
Methods	Number of Switches Used		3
	Replication Per Measurement		3

## Break In

<b>TTC Tiger - Break In Testing</b>			
Metric	Activations		
	17,000	34,000	51,000
Push Feel (Overall)		-	-
Smoothness		-	-
Ping (Spring/Leaf)			
Wobble (Overall)	-	--	--
Stem Wobble	-	--	--
Top Housing Wobble			
Sound (Overall)	-	-	-
Scratchiness			
Ping (Spring/Leaf)			

Color Scale			
Improvement	+	++	+++
Deterioration	-	--	---
Null Change			

### **Break In Notes:**

#### 17,000 Actuations

- While there is no appearance of scratchiness nor spring/leaf ping at 17,000 actuations, the sound overall does take a slight dip in quality as the Tiger switches begin to sound just a tiny bit thinner and slightly higher pitched. Overall, though, they're still much better with respect to these issues relative to switches which traditionally get the label of 'thin' and 'high-pitched' in their respective stock forms.
- The stem wobble at 17,000 actuations does increase ever so slightly, but not to any appreciable degree to likely cause any sort of issues for most users. Like the stock stem wobble, its equal in magnitude in all directions due to the rounded nature of the stems.

#### 34,000 Actuations

- In addition to the same degree of change noted in terms of thinness in sound as that of 17,000 actuations, at 34,000 actuations there is an increased feeling of the 'character' of the switch. In a way, it almost feels as if the very thinly and sparsely applied factory lubrication (if it is even there) has worn away and the only smoothness still being operated on is purely a function of the material chosen and manufacturing quality.
- The stem wobble does take a noticeable step up in terms of prevalence at 34,000 actuations. This is starting to get to a point where a few points would be deducted from the score of the stem wobble of these switches versus that of the stem wobble score for a stock TTC Tiger switch.

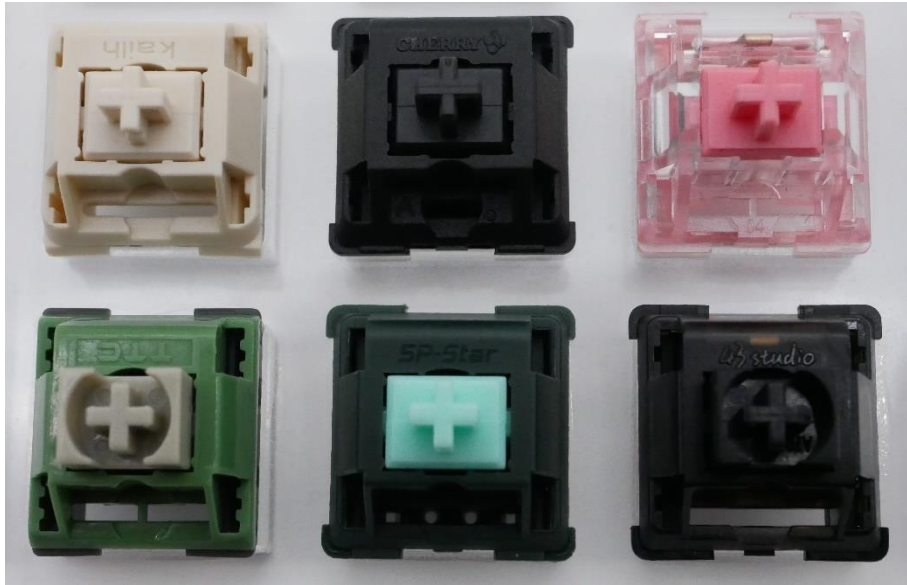
#### 51,000 Actuations

- At 51,000 actuations, there doesn't appear to be any distinctive differences in quality from that of the comparisons made at 34,000 actuations. While I've not had many break in sheets used in my reviews thus far, this is the first time I've personally encountered this in my testing.



## Comparison Notes to Other Notable Linear Switches

*Note* – These are not aimed at being comprehensive comparisons between all factors of these switches as this would simply be too long for this writeup. These are little notes of interest I generated when comparing these switches to the Tigers side by side.



**Figure 35:** Switches for comparison. (L-R, Top-Bot: Novelkeys Cream, Cherry MX Black, KTT Strawberry, TTC Wild 55g, SP Star Sacramento, Obsidian Pro)

### Novelkeys Cream

- In terms of overall sound, the Novelkeys Cream switches are quite noticeably louder and higher pitched than that of the TTC Tiger switches in stock form. Its additionally relevant to point out that a big component of stock Cream sounds is that of scratch, which the Tigers simply don't have.
- The stem wobble on the Novelkeys Cream switches is a bit more noticeable than that of the TTC Tiger switches, but by no means bad in an overall sense.
- Due to the bottoming out on the stem pole as well as the overall lighter weight of the Tiger switches, they have a much more pointed and abrupt feeling bottom out than that of the Cream switches.

### Cherry MX Black

- Much like with the Novelkeys Cream switch comparison above, the sound of the MX Blacks is driven much more by scratch than that of the Tiger switches. However, the Cherry MX Blacks are overall much more quiet and bass heavy in terms of sound than the Tiger switches.
- Not to anyone's real surprise, the MX Black switches have a greater amount of stem wobble in both N/S and E/W directions than the TTC Tiger switches do in any direction.
- In terms of the topping out feeling, these switches certainly have a comparable level of depth and thinness at this point of collision, though the MX Blacks feel a bit more grainy and less coherent than that of the TTC Tigers.

### KTT Strawberry

- Of all of the switches on this list, the KTT Strawberries are by far the quietest switch and are thus significantly quieter than the Tiger switches at all activation speeds.
- In terms of smoothness, the comparison of these two switches is an excellent example of my description of a 'smooth' switch versus one that has 'character'. The KTT Strawberry switches are incredibly smooth in stock form, though almost entirely as a result of the factory applied lubrication. While the Tigers are still *smooth*, they also feel a lot more light and airy compared to that of the thicker feeling of the KTT Strawberries due to this lack of factory lubing.
- Much like with the Novelkeys Cream comparison above, given the reduced travel distance and bottoming out onto the stem pole, the TTC Tiger switches have a much sharper and more pointed bottoming out than that of the KTT Strawberry switches.

### TTC Wild (55g)

- With respect to push feeling, the TTC Wild switches not only are a tiny bit scratchy in comparison to that of the Tiger switches, but the downstroke feels slightly more encumbered and resistive.
- Both the bottoming and topping outs of the TTC Wild switches have probably the most similar level of sharpness to the Tigers out of any of the switches on this list, though the Wilds definitely do feel slightly less clear and more toned down.
- The stem wobble in the TTC Tiger switches is a noticeable improvement over that of the TTC Wild switches, not that they were particularly poor in the N/S nor E/W directions previously.

### SP Star Sacramento

- The overall sound of the SP Star Sacramentos is one that is not only much more quiet than the TTC Tigers, but also has much more of a scratchy, grainy tone to it. The TTC Tiger switches, by comparison, are rather 'crystal clear' in their housing collisions and sound much more refined.
- The housing collisions of the TTC Tiger switches are noticeably more sharp and pointed than that of the Sacramento switches, though not in an unpleasant way. As discussed above in the full-length review, the Tigers walk a rather fine line of being pointed without being overbearingly sharp in their housing collisions.
- Without much competition, the stem wobble of the TTC Tiger switches is significantly better than that of the SP Star Sacramento switches.

### Obsidian Pro

- Of all the switches on this list, the Obsidian Pros are the most similar to the TTC Tigers in terms of overall volume of sound. Much like with the other switches, though, the Obsidian Pros are ever so slightly more grainy and slightly flatter sounding than that of the TTC Tiger switches.
- Again, without much surprise, the TTC Tiger switches have noticeably less stem wobble than that of the Obsidian Pro switches.
- While the bottoming outs of these two switches are markedly different, their topping outs are not too dissimilar in that they share a similar level of pointedness and sharpness.

## Scores and Statistics

*Note* – These scores are not necessarily completely indicative of the nuanced review above. If you’ve skipped straight to this section, I can only recommend that you at least glance at the other sections above in order to get a stronger idea of my opinion about these switches.

TTC Tiger		
Switch Type: Linear		TTC
29	/35	Push Feel
22	/25	Wobble
5	/10	Sound
14	/20	Context
8	/10	Other
<b>78</b>	<b>/100</b>	<b>Total</b>

### Push Feel

The TTC Tiger switches are a rather light linear by western standards at 55g of bottoming out force, but TTC well executes this linear switch in this spring weight. Packed in with tons of unique features, the housing collisions are a bit flatly pointed but incredibly well balanced, and the switches are smooth without any substantial factory lubrication involved. While there are some aspects that make this switch feel a bit ‘thin’, the Tigers provide a rather subtle overall feeling that isn’t captured well in many linear switches.

### Wobble

Due to the round nature of the stem design, the TTC Tiger switches do not have N/S and E/W directionality to their stem wobble, yet are still quite free of wobble in any direction. Slight variability in wobble across a batch is noticeable, but not to any degree as to turn away users.

### Sound

The TTC Tiger switches are significantly more subtle than their name implies, packing a medium volume, slightly sharp and high-pitched pair of housing collisions on either end of a smooth, scratch-less sounding stroke. Given this lack of factory lubing, though, the sound of the Tigers tends to have the most variability across actuation speeds and placement within boards.

### Context

Being developed and released as part of the Lunar New Year’s 2022 celebration, these were released by TTC using further developed innovation on top of their already impressive TTC Heart switches. Demanding a higher price point as a result of the marketing and associated engineering, these switches are well performing but slightly priced beyond expectations.

## Other

The single greatest point about the TTC Tiger switches which should be rewarded and makes their usage worth the price is the sheer depth of engineering, attention to detail, and associated features that comes with these switches. These are truly historical in terms of switch design.

## Statistics

Average Score			TTC Tiger		
26.5	/35	Push Feel	29	/35	Push Feel
16.8	/25	Wobble	22	/25	Wobble
5.6	/10	Sound	5	/10	Sound
12.7	/20	Context	14	/20	Context
6.0	/10	Other	8	/10	Other
67.6	/100	<b>Total</b>	78	/100	<b>Total</b>
TTC Tiger Overall Rank			T-#14/165 (78/100)		
TTC Tiger 'Hard' Rank			T-#16/165 (56/70)		
TTC Tiger 'Soft' Rank			T-#29/165 (22/30)		

## **Final Conclusions**

As a first review to come back to after a month hiatus from writing, the TTC Tiger switches were certainly my best option I could have chose to strike back out onto the path with. Aside the fact that they have clearly stretched my word and figure counts beyond what I “normally” write, these switches had a lot of features that were incredibly exciting for me to get to explore. As you’ve all clearly seen by this point in the review, the sheer attention to detail and extent of engineering which went into the TTC Tiger switches, and many other recent TTC releases as of late for that matter, is simply insane. Separation of the stem into multiple components, separation of the bottom housing into two components, and added top housing real estate for customizability, designs, and even unique features such as serialization on the OG Tiger switches made for pretty much a switch enthusiast’s field day to get to cover. With all of those incredible details in mind, I absolutely love that TTC has gone through the efforts that they did in making both the Tiger and OG Tiger switches. Innovation in the MX footprint, and especially such that is as drastic as these and the TTC Heart switches, is simply not valued enough and rewarded enough by consumers in the hobby and these are the types of details and variations which keep switches fresh years after the explosion in customization options. Trust me, if they’re exciting for *me* to get to check out after well over 1500 unique different switches tried, they will forever be as exciting if not more for most people out there who haven’t explored switches as much.

With that praise for the things that that TTC has accomplished here in mind, I will say that the performance is slightly underwhelming relative to that of my expectations. That is not to say that these switches performed poorly, as in fact they did quite the opposite. From the general smoothness sans



significant factory lubing, incredibly well-balanced housing collisions, to overall performance in a light spring format, these switches perform great. They also happen to perform just as well as many other current TTC offerings. The added engineering, marketing, etc. really lead me to anticipate these to *feel* significantly different than that of other recent TTC linear offerings, which have more or less been spectacular and one of the most slept on brands in the west, though I don't think they quite did it. Additionally, as a result of this I feel that the higher price for the standard TTC Tiger switches may be a bit hard for western audiences unfamiliar with TTC to stomach. While I certainly can justify the price to my accountant, many people may not see these as anything significantly different performance-wise than what they can already easily get from TTC in various other switches. And thus, their adoption may be a bit hard for people who value purely a switch's performance over that of its other qualities. That being said though, I really think that more hobbyists *should* try these switches if they get the opportunity for much the same reason that renting sports cars is an enticing opportunity for many people out there. Even though you may not end up wanting to daily drive the TTC Tiger switches, they pack in a truly unique experience from box to build that is unique and a bit special among the uncountable number of switch releases out there these days. I can only hope to see further improvement, variation, and changes upon these designs and details in the future from TTC.

## Sponsors/Affiliates

### Mechbox.co.uk

- A wonderful UK based operation which sells singles to switches that I've used above in my comparisons for collectors and the curious alike. Matt has gone out of his way to help me build out big parts of my collection, and buying something using this link supports him as well as my content!

### KeebCats UK

- A switch peripheral company based out of the UK which sells everything switch adjacent you could ask for, they've been a huge help recently with my film and lube supply for personal builds, and they want to extend that help to you too. **Use code 'GOAT' for 10% off your order when you check them out!**

### Proto[Typist] Keyboards

- An all-things keyboard vendor based out of the UK, proto[Typist] is a regular stocker of everything from switches to the latest keyboard and keycap groupbuys. While I've bought things from the many times in the past, they also are a sponsor of my work and allow me to get some of the great switches I write about!

### MKUltra Corporation

- We may have stolen a few government secrets to get this one together. MKUltra is a US vendor that truly fills all the gaps other vendors simply don't offer and is continuing to expand their switch and switch related peripherals by the day. **Use code 'GOAT' for 5% off your order when you check them out!**

### Divinikey

- Not only do they stock just about everything related to keyboards and switches, but they're super friendly and ship out pretty quick too. Divinikey has been a huge help to me and my builds over the last year or two of doing reviews and they'll definitely hook you up. **Use code 'GOAT' for 5% off your order when you check them out!**

## ZealPC

- Do they really need any introduction? Zeal and crew kicked off the custom switch scene many years ago with their iconic Zealios switches and the story of switches today couldn't be told without them. **Use code 'GOAT' (or click the link above) for 5% off your order when you check them out!**

## **Further Reading**

### TTC's Tiger Switch Information Page

Link: <http://www.ttcswitch.cn/product/124.html>

Wayback: <https://web.archive.org/web/20220514081134/http://www.ttcswitch.cn/product/124.html>

### iPopularShop's TTC Tiger Sales Page

Link: <https://www.ipopularshop.com/products/ttc-tiger-switches-3-pin-linear-45gf-light-switch-whole-box-including-a-roar-switch-tester-and-10-roar-switches?variant=41597585391766>

Wayback: <https://web.archive.org/web/20220514081232/https://www.ipopularshop.com/products/ttc-tiger-switches-3-pin-linear-45gf-light-switch-whole-box-including-a-roar-switch-tester-and-10-roar-switches?variant=41597585391766>

### u/inwaishe TTC OG Tiger Switch Video

Link:

[https://www.reddit.com/r/MechanicalKeyboards/comments/sdmye7/ttc\\_tiger\\_keyswitch\\_og\\_limited\\_edition/](https://www.reddit.com/r/MechanicalKeyboards/comments/sdmye7/ttc_tiger_keyswitch_og_limited_edition/)

Wayback:

[https://web.archive.org/web/20220514081310/https://www.reddit.com/r/MechanicalKeyboards/comments/sdmye7/ttc\\_tiger\\_keyswitch\\_og\\_limited\\_edition/](https://web.archive.org/web/20220514081310/https://www.reddit.com/r/MechanicalKeyboards/comments/sdmye7/ttc_tiger_keyswitch_og_limited_edition/)

### TTC OG Tiger Aliexpress Sales Page

Link: <https://www.aliexpress.com/item/1005004034733223.html>

Wayback:

<https://web.archive.org/web/20220514081413/https://www.aliexpress.com/item/1005004034733223.html>

### TTC Tiger Switch Typing Test

Link: [https://www.youtube.com/watch?v=KFwrevRC\\_ac&ab\\_channel=in%E5%A4%96%E8%AE%BE](https://www.youtube.com/watch?v=KFwrevRC_ac&ab_channel=in%E5%A4%96%E8%AE%BE)