## Zaku II Switch Review

-ThereminGoat, 12/10/2023

This is the first switch review with a rhyming title in it in 406 days.

Let's go ahead and completely disregard the fact that I've just now realized that any "V2" switch will always have a rhyming title scheme whenever I review it. The idea felt incredibly profound when it hit me earlier this week, okay? Or perhaps this is worth mentioning just to make very evident how monotonous and all-consuming the past few weeks of work have felt like. In addition to trying to cram seemingly every kind of project and production trial through the sparsely populated weeks between Thanksgiving and Christmas, everyone at work has seemingly been going through various iterations of the 10-Day Plague which is not making the work feel any better. You know, the pox of every upper respiratory illness known to man that hits the middle of the second week back from vacations where everyone travels all over the world to mix and mingle germs and drag it back to the workplace. (It also hits college students too in case those of you reading this think you're somehow immune to this by way of cheap ethanol-induced vaccination.) While I myself have managed to avoid the worst that this year's flumonia-strep virus has to offer, my rigorous hand sanitizer usage has still left me just a little bit run down and congested which isn't helping my sleep either. It strangely does feel like its inspiring my writing at least, or at least this feels like the most characteristically 'strange' introduction I've provided in some time now. I'll really know if I've made an introduction truly out there enough if someone on Reddit bitches about not knowing if the Zaku II switches are *tactiles* or linears by the end of the first paragraph.



**Figure 1:** Definitely not me writing this in a literal fever dream.

Continued punching down at the illiterate harbored on r/mk out of the way, I do want to reiterate for those of you who are regular readers that I am still up in the air as to if there will be a second full length switch review published this month. Unlike previous years, this upcoming weekend's review date falls exactly on Christmas Eve and I suspect that I'll have some travel plans or engagements which may eat away at my time to write a review leading up that date. Regardless of if I get the time to publish a full length review or not, know that there will at least be *some* sort of content published then, which is very likely to be force curves, measurements, or maybe even a few festive scorecards. Normal review weekends after this date will continue as expected, moving on into 2024 or the *fifth* calendar year of posting reviews now. (The first switch review was published all the way back on November 26<sup>th</sup> of

2019...) With that existential crisis now pinned on me after that realization to aid in my fevered writing, I figure it's about time to just go ahead and get on with the switch review...

## **Switch Background**

Unlike most other switches which I end up reviewing here at length, the second iteration of the Zaku switches from Bolsa Keyboard Supply are ones that I'm actually a bit late to relative to the rest of the community. Forever cursing their quick sale rate and seemingly low stock count, I swear that I've tried to buy these switches on at least two separate occasions prior to finally picking them up in my latest round of switch purchases. While I'm sure I could have just reached out to the owners of Bolsa Supply, as they've graciously donated some prototype switches to me throughout the years and have been big supporters of the collection from behind the scenes, sometimes it just feels better to go about things the more 'proper' way, especially if I'm giving my full take on a switch in a review. Speaking of the proper way of doing things, though, without having detailed some of the switches which this company has stocked over the years *or* how the Zaku switches have made it to a *second* iteration without having been mentioned on this site previously, I think we should probably get to doing that.

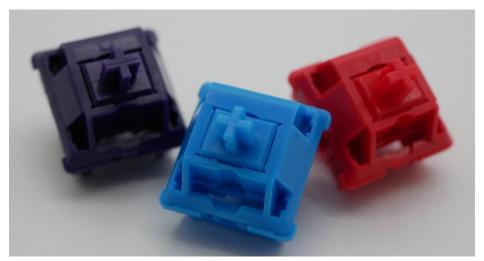


Figure 2: Bolsa Supply Techno Violet, Blue Laguna, and Corsa switches from left to right.

Bolsa Keyboard Supply, which is often shortened to 'Bolsa Supply' or just 'Bolsa', is a keyboard and keyboard accessory company based in Cosa Mesa, California that opened in the middle of 2020. Starting initially with a handful of product offerings common to most keyboard startups like basic switches, stabilizers, and lube, Bolsa Supply has grown quite substantially over the past few years and now offers branded keyboards, customized deskmats, and a slew of collaborative offerings with other established keyboard brands. Over the past three and a half years of their existence, Bolsa Supply has gone on to release a handful of custom designed switch offerings, varying both in the themes of their designs, manufacturers, and types as well. Relating to automotive colors, Bolsa Supply has released the Techno Violet, Corsa, and Blue Laguna switches, respectively paying homage to iconic colors of Ferrari and of the BMW E36 and E46 M3 series of cars. Moving in a different direction, Bolsa Supply has also seemingly been inspired throughout the years by the Japanese sci-fi franchise 'Gundam', with switches released in line with the designs and color schemes of the giant fighting robots that I admittedly know absolutely nothing about. Working in reverse order of their debut, the Banshee switches are the latest to be featured in this Gundam-inspired switch series following up the incredibly popular Zaku II and Zaku switches.



**Figure 3:** Bolsa Supply Gundam family of switches including Zaku II, Banshee, and Zaku from left to right.

Starting all the way back in an announcement in April of 2021, the Zaku switches were not only the first switches of Bolsa Supply's Gundam lineup to be offered, but the first customized switches to ever be offered by them at the time. Featuring long stem poles, 63.5g double stage springs, and a polycarbonate over nylon construction, the off-white Zaku linears were the epitome of Tecsee's production capabilities at the time and stood poised to be exactly what the community was looking for in linears. As a result of meeting the community where they were interested, as well as a healthy dose of engagement with the switches by content creators in the pre-release weeks, the Zaku switches were incredibly popular in the community and to date are still some of the most discussed custom Tecsee linear offerings to have ever been made. With the Zakus arguably helping catapult Bolsa Supply into success over the past few years as a result of their unique sound profile, it's no surprise that Bolsa Supply then chose to try and double dip on this popularity in the teaser of the Zaku II switches in late January of 2023. Hoping to try and strike a similar vein of interest in what the keyboard community has since moved onto in their fascination with switches in 2023, the Zaku II switches were designed with trying to maintain a similar sound profile as the original polycarbonate over nylon Zaku release, but in a medium-strength tactile platform instead of a linear one. After a similar campaign of teasers and content creator-led marketing, sale of the Zaku II switches began in March of 2023, with the general community reception appearing to be slightly dulled as compared to the original Zaku switches, though still significantly greater than most other custom switch offerings in 2023.



**Figure 4:** Zaku II promotional sales photo from Bolsa Supply's sales page.

As of the time of writing this review, the Zaku II switches are still available for sale regularly on Bolsa Supply at \$0.55 per switch in packs of 35 only. (Or, \$19.25 per pack.) While the longevity and continued stocking of really any switch is not something I can ever accurately predict, I feel confident in assuming that the Zaku IIs will remain available for several years moving forward as all previously mentioned Bolsa Supply custom switches from the preceding paragraphs continue to remain in stock regardless of whether they were released one or three years ago. In addition to being available directly from Bolsa Supply, it appears that they have retained the same Canadian proxy of Ashkeebs for distribution of Zaku II switches that they have also had for most of their other major releases.

#### Zaku II Performance

## **Appearance**

At the highest level, the Zaku II switches come in a light, lime-green colored housing with a dark green colored stem that was aimed at mimicking the colorway of the MS-06F Zaku II robot from the aforementioned Gundam anime which inspired it. To that end, it does appear that these switches pretty closely resemble that colorway, though perhaps they are maybe a touch lighter in the housings than some of the insanely expensive models of the MS-06F Zaku II that I could find online. In addition to this unique external colorway, the Zaku II switches also feature a nameplate with a small Japanese Torii on it, which is not only the logo of Bolsa Supply, but also the nameplate that has been used for all of their customized Tecsee offerings to date. Beyond these external features, though, any further points worth noting about the appearance and details of the Zaku II switches occur at the mold level and are discussed below.



**Figure 3:** Zaku II switches and their components.

Looking first at the lime-green polycarbonate top housings of the Zaku II switches, these feature very little externally that hasn't been seen many times over in other Tecsee-made switch releases. Aside from the customized Bolsa Supply nameplate, the top housings come in a four pin attachment style and have a long, thin rectangular LED/diode slot with centered circular indentation for aftermarket LED support. Internally, while the housings are a bit more detailed than what has been seen in some of the most recent reviews on this website, they don't bare any features which haven't already been seen in other reviews such as the Neapolitan Ice Cream and Tecsee Sapphire Switch Reviews. These common-to-Tecsee features include a set of eight mold ejector circles along the outer rim of the top housing, a faint pair of mold ejector circles at the upper portion of the housings where topping out occurs, and a single number mold marking on the interior edge of the LED/diode slot. With the exception of the Bolsa Supply logo nameplate, these housings thus appear detail for detail identical to other Tecsee releases throughout the years.

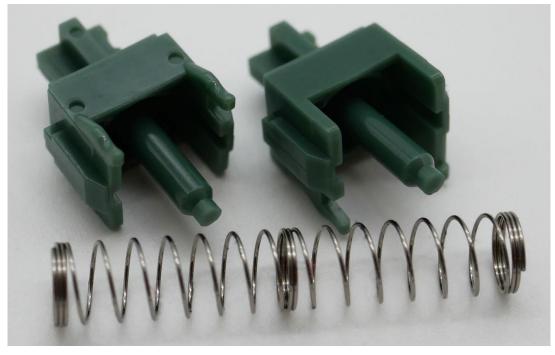


**Figure 6:** Zaku II top housing external design showing inverted Bolsa Supply logo nameplate and long, thin rectangular LED/diode slot with centered circle indentation.



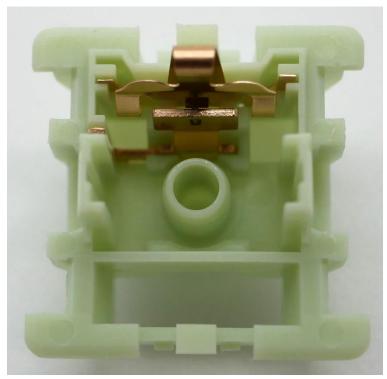
**Figure 7:** Zaku II top housing internal design showing mold ejector circles on all edges of switch as well as single number mold marking on the interior edge of the LED/diode slot as commonly seen in Tecsee switches.

Moving next to the elongated stems and 63.5g, double-stage springs of the Zaku II switches, these too fall in line with common design tropes present across Tecsee releases throughout the years. (While I will continue to hammer the "similar to previous releases" button throughout this Appearance section, to a degree this makes sense given that Bolsa Supply was explicitly attempting to mimic the features which made Zakus so successful when they were first released three years ago.) These common stem features include strongly tapered slider rails, a tiered center pole, and small mold ejector circles located on the front plates of the stems above the tactile stem legs. In terms of the stem length, the Zaku II stems appear only moderately elongated at 13.44 mm in average total length as compared to a 348 switch-average stem length of 13.04 mm. As for factory lubing, there does appear to be the smallest amount present though it is only isolated to stem legs as to try and mitigate stem leg/leaf scratch commonly seen in aggressive tactile switches. The silver colored springs for the Zaku II switches come in a two-stage format with normal threading in each of the stages and an overall length just shy of the 22.0 mm mark, pushing them towards the longer end of stock switch springs available in switches today.

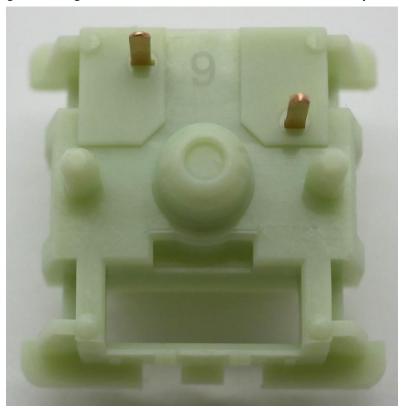


**Figure 4:** Zaku II stems showing tapered slider rails, tiered center poles, and minor factory lubrication on stem legs next to the elongated, two-stage stock spring used in the switches.

Finally arriving to the lime-green nylon bottom housings of the Zaku II switches, these too feature a set of details and mold markings that have been previously seen in other Tecsee switch releases. Internally, these features include a moderately bulky set of north and south side spring collars, a pair of mold ejector circles in the base of the bottom housing, and some ridges within the slide rails to reduce the surface area of contact between the stems and the housings. No factory lube is really apparent anywhere in these housings, and even on the leaves themselves, something which is fairly common to see among switches which do have these points lubricated. (This fact alone almost makes me doubt if I actually felt any factory lube present on the stem legs at all earlier in this section...) Externally, the housings come only in 5-pin/PCB mount configuration and feature a large, single letter mold marking that is inverted and located between the metal PCB pin out pads where the vast majority of mold markings are commonly located. While this marking does appear slightly more shifted to one side and larger than has been seen in some older Tecsee switch releases, such as the first iteration of the Tecsee Sapphires, this general location and type of mold marking is still consistently used by Tecsee to date.



**Figure 9:** Zaku II bottom housing internal design showing mild north and south side spring collars, ridges in the slider rails, and absence of dislocated factory lubricant.



**Figure 10:** Zaku II bottom housing exterior design showing 5-pin/PCB mount construction and inverted, single number mold marking in location similar to that of other Tecsee switch releases over the years.

#### Push Feel

In general, its pretty uncommon for the community to have access to marketing from vendors or switch designers which explicitly drills down into the design intent behind the details of any given switch. While the average marketing for a switch may explain the rationale behind the color combination of the switch or why this company really wanted their own < insert adjective here > tactile switch, the multimonth lead up to the sales of the Zaku IIs provided quite a bit of detail from the Bolsa Supply team as to what they wanted from these switches. From this marketing, which primarily came by way of their Discord server, we know that Bolsa Supply wanted a sharper tactile switch with a "P shaped" (early in downstroke) tactile bump that was a little bit stronger than their already existing tactile Corsa switches but not nearly as strong or powerful as "something like Boba's or Holy Pandas." As well, they also really stressed that they tried to keep measurements of components and housing materials as similar to the original linear Zaku switches as possible in order to mimic both the feeling and sound that made the "Zaku switches unique." In spite of the fact that that may feel like a decently stacked list of goals for any newer tactile switch to try and measure up to, even in shortened and condensed form, I'm pleasantly surprised at just how well Bolsa Supply nailed these goals in the execution of the Zaku II switches.

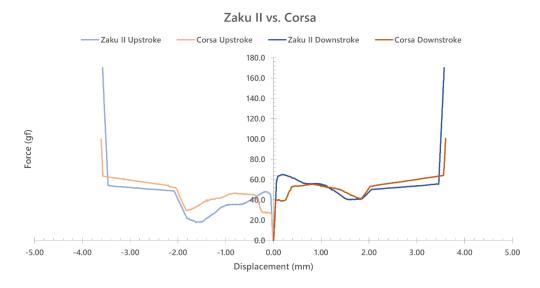


Figure 5: Comparative force curve between Bolsa Supply's Zaku II and Corsa tactile switches.

Starting out the gate with addressing the desire of a medium-strong tactile bump that is a touch stronger than that of Bolsa Supply's Corsa switches, the comparative force curve graph in Figure 11 above shows that this was clearly accomplished. The Zaku II switches have a snappy, medium-strong tactile bump which has absolutely no pretravel leading up to it and a force that is stronger than a good amount of tactile switches out there today, but not quite as harsh to get over as some notoriously strong switches like Moyu Blacks or OG Holy Pandas. What perhaps may be an unintended feature of the Zaku IIs, though, is that of the strange 'double bump' that appears in the downstroke force curve of the switch. While it is possible to feel these multiple tactile peaks in touch when moving *very* slowly through the stroke of the Zaku II switches, I can't detect it or pick it out *at all* when typing at any remotely reasonable speed. As for the housing collisions, while they do feel quite a bit unbalanced as a result of the polycarbonate over nylon construction, they both hit with a sort of firm, responsive, and pointed feeling that does well to accent the sharper nature of the tactile bump present in these switches. As is expected, the bottoming out is the more pointed and harsher of the two housing collisions as a result the lengthened stem distance leading to a reduced travel distance around 3.50 mm or so.

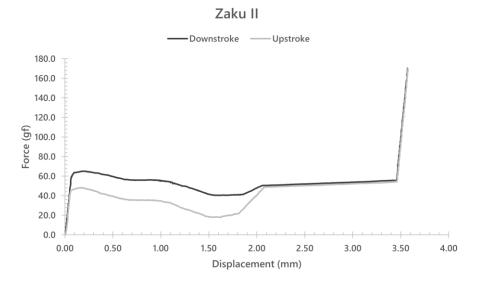


Figure 6: Solo force curve diagram for the stock Zaku II switch.

Surprisingly, for the lack of switch lubrication that I was able to visually see when inspecting the Zaku II's components for the 'Appearance' section above, the Zakus IIs are decently smooth switches from Tecsee. While there is a sort of larger grain scratch that permeates throughout the stroke of the switch and is especially noticeable at the tactile bump as a result of the stem leg/leaf interaction, it's not as if this really detracts all that much from the push feeling of the switch, adding more of a depth to the stroke than taking away from smoothness instead. If anything, the largest detraction from the overall feeling of these switches is their slightly higher than average cross batch variability. While no switch is borderline unusable, the strength of the tactile bumps, the sharpness of the bottom out, and even the prevalence of the scratch in the Zaku IIs varies quite a bit from switch to switch in their stock form and may require some cherry picking from enthusiasts seeking to use them in a build as is. After some thoroughly un-rigorous testing, it appears that a good amount of this variation is lost from the switches upon applying some lubrication of my own to them, however consistency issues in stock form shouldn't be considered a non-issue just because they can be mitigated in an aftermarket fashion.

#### Sound

Further crutching the writing of these performance sections on the marketing copy from Bolsa Supply leading up to the debut sale of the Zaku II switches, it was also pretty well stressed that they wanted the Zaku II switches to be loud, higher pitched, and have a pronounced bottoming out sound as a result of the elongated stem pole. Again, Bolsa Supply appears to have clearly nailed this target as the Zaku II switches are loud, medium-high pitched switches with a bottoming out sound that is as loud, if not sometimes a touch louder than the snappy tactile bump itself. While I am not quite as much of a fan of the disparate tones that come from housing collisions on polycarbonate and nylon so close to each other, they do feel more balanced in their sound as a result of being on either side of a tactile bump that occupies a mid-ground between those two extremes. The tactile bump, itself, is slightly higher pitched than the bottom out, lower pitched than the topping out, and carries a sort of leathery, snappy tone to it as a result of that barely (if at all) lubed interaction point between the stem and leaf legs. With all of those performance notes in mind, though, what clearly wasn't desired in the Zaku IIs is that of the subtle metallic pingy undertones that are noticeable in some switches and especially so at higher actuation speeds. The noted switch to switch variation is actually more present in the sound of the Zaku IIs than that of their push feeling, and this is especially true with respect to this ping sound and the pitch of the tactile

bumps as well. All in all this makes for a very 'mixed bag' of sounds when it comes to the Zaku II switches in which some extreme, slightly more abrasive sound goals that were aimed for were well met, yet with seemingly accidentally dragging in some extraneous imperfections.

### Wobble

The stem wobble is perhaps the least interesting part of the Zaku II switches as it is nearly perfectly in line with the average performance for Tecsee switches with a noticeable, likely not too problematic amount of wobble in both directions. The switch to switch variability present here does slightly manifest in some switches seemingly to have marginally less N/S direction stem wobble than E/W direction wobble, though I really want to stress that this is truly marginal at best. The performance on this point is certainly nothing to be excited or go crazy for.

#### Measurements

Zaku II Switch Measurements				
	Component	Denotation	mm.	
	Front/Back Plate Length	Α	7.10	
	Stem Width	В	5.53	
	Stem Length with Rails	С	8.49	
Stem	Rail Width	D	2.18	
	Center Pole Width	Е	1.86	
	Rail Height	F	5.23	
	Total Stem Height	G	13.44	
	1			
	Diagonal Between Rails	L	9.32	
Bottom	Interior Length Across	M	9.59	
Housing	Rail Width	N	2.62	
	Center Hole Diameter	О	2.19	
	1			
Top	Horizontal Stem Gap	X	7.63	
Housing	Vertical Stem Gap	Y	6.08	
Methods	Number of Switche	3		
	Replication Per Meas	3		

If you're into this level of detail about your switches, you should know that I have a switch measurement sheet that logs all of this data, as well as many other cool features which can be found under the 'Archive' tab at the top of this page or by clicking on the card above. Known as the 'Measurement Sheet', this sheet typically gets updated weekly and aims to take physical measurements of various switch components to compare mold designs on a brand-by-brand basis as well as provide a rough frankenswitching estimation sheet for combining various stems and top housings.

Zaku II			
Switch Type: Tactile	Tecsee		
Total Stem Travel	3.455 mm		
Peak Force	65.0 gf		
Bottom Out Force	55.6 gf		
# of Upstroke Points	964		
# of Downstroke Points	1040		

**Figure 7:** Numerical details regarding the Zaku II switch force curve diagram.

The latest in the content-adjacent work that I've picked up, the new 'Force Curve Repository' is now hosted on GitHub alongside the Scorecard Repository and contains all force curves that I make both within and outside of reviews. In addition to having these graphs above, I have various other versions of the graphs, raw data, and my processed data all available for each switch to use as you please. Check it out via the 'Archive' tab at the top of this page or by clicking any of the force curve cards above.

## Break In

Zaku II Break In Testing				
Metric	Activations			
Wetric	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	+	++	+++		
Deterioriation	-				
Null Change					

#### **Break In Notes:**

### 17,000 Actuations

- At 17,000 actuations, the biggest change in the performance of the Zaku II switches is the notable increase in inconsistency in the push feeling of the switches. Housing collisions begin to feel more disparate between top and bottom out and the tactile bumps themselves begin to drift a bit from their stock form, resulting in a less homogenous set of switches that are broken in.
- Additionally, stem wobble in both N/S and E/W directions increased a tiny amount in the Zaku II switches broken out to 17,000 actuations. This is not all that uncommon across all of the switches which I've review on this site thus far.

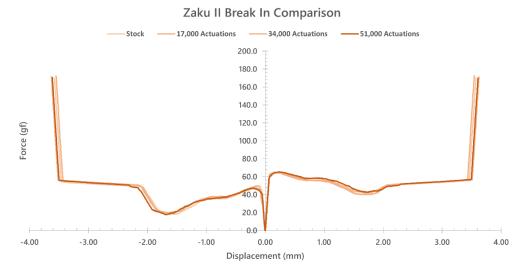
#### 34,000 Actuations

At 34,000 actuations, the variation that was felt in the push feel of Zaku IIs tested out to 17,000 actuations also began affecting the sound of the switches as well. The biggest change in the sound profile of the Zaku IIs broken out to 34,000 actuations is that of a slightly increased prevalence of spring and/or leaf ping present in switches. While still not large or overwhelming enough to likely bother the vast majority of users, it *is* still possible to pick this out in my experience.

### 51,000 Actuations

- Surprisingly, the changes that occurred in the push feeling and sound of the Zaku II switches after breaking them in up to 34,000 actuations appear to have stopped at that point. Out at 51,000 actuations the switches were no better or worse than their 34,000-actuation counterpart when it came to this variability.

- The only change which was noted in the Zaku IIs which were broken out to 51,000 actuations is that of a slightly increase N/S and E/W direction stem wobble over that of the previous break in batches.



**Figure 8:** Comparative force curve diagram showing no distinctive trend in change of Zaku II force curve diagrams throughout the break in process.

# **Comparison Notes to Other Notable Tactile Switches**

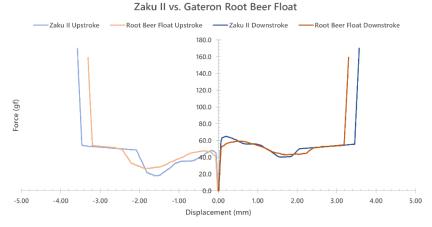
*Note* – These are not aimed at being comprehensive comparisons between all factors of these switches as this would simply be too long for this writeup. These are little notes of interest I generated when comparing these switches to the Zaku II switches side by side.



**Figure 9:** Switches for comparison. (L-R, Top-Bot: Gateron Root Beer Float, Cookies n' Cream, MODE Tomorrow, White Lotus, PunkShoo Runner, and CK x Haimu Pastel Mint)

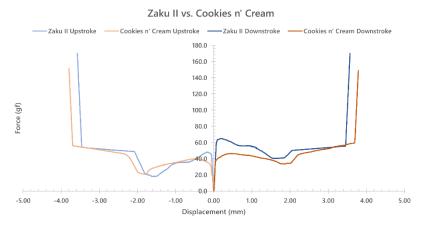
## Gateron Root Beer Float

- Surprisingly, the comparative force curve for these two switches below don't actually do justice to just how similarly strong the tactile bumps in these two switches feel. Sure, the Zaku II switches feel as if they have a bit more depth to their bump than the much more 'narrow' feeling Root Beer Floats, but they do feel similarly snappy to each other.
- In terms of both push feeling and sound, the housing collisions of the Gateron Root Beer Floats feel a bit better executed and complement each other more so than those of the Zaku IIs.
- With respect to stem wobble, both of these switches are fairly mediocre and sit as okay in the grand scheme of modern keyboard switches. The Root Beer Floats, however, ever so slightly edge out the Zaku IIs in both N/S and E/W direction stem wobble.



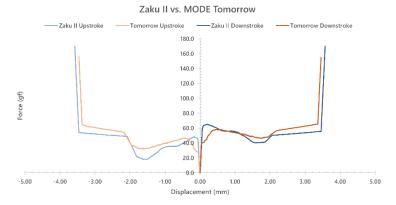
## Cookies n' Cream

- Unlike the Gateron Root Beer Float comparison above, the force curve plot below for these two switches pretty accurately belays the difference between them. In addition to the Cookies n' Cream switches feeling *much* more soft in their tactile bump than the Zaku IIs, the bump also feels a tiny bit further into the downstroke than the Zaku IIs which start right at the top of their downstroke.
- The Cookies n' Cream switches absolutely demolish the Zaku II switches in terms of stem wobble, having much less N/S and E/W direction stem wobble than even the best Zaku II switches in the batch that I received.
- In terms of their sound profile, the Zaku II switches are not only quite a bit more loud than the Cookies n' Cream switches, but they pack in a lot more pointed and poke-y sort of sounds from the stiff tactile bump, bottoming out onto the stem pole, and polycarbonate top housings.



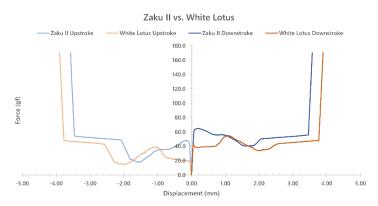
## **MODE Tomorrow**

- The MODE Tomorrow switches have noticeably less N/S and E/W stem wobble in them than the Zaku II switches.
- While the MODE Tomorrow switches are most certainly tactile as is evident from the comparative force curve below, they feel *much* less tactile than any other switch on this list and even less than what their force curve belays. I suspect that this is in large part due to a smaller difference between peak tactile force and 'baseline linear behavior' in the curve of the Tomorrows than the Zaku IIs. In a head to head comparison the Zaku II switches almost make the Tomorrows not even feel tactile.
- These two switches are also polar opposites of each other when it comes to their sound profiles as the Tomorrows' all-nylon housings and low-strength tactility give a muted, subtle, and much more low-key audio presence than the much louder, more 'in your face' Zaku IIs.



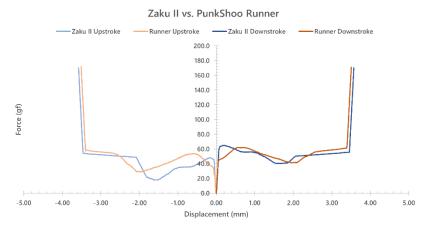
## White Lotus

- In terms of the sound profiles, even though the Zaku II switches are far from what I would personally seek out in a tactile switch, the Zaku IIs are the much cleaner and more well executed switch of these two. Some of the White Lotuses I've received in my batch have a sort of squeaky and slippery tone in their tone that accents their subtle, mid-stroke tactile bump in the most god awful way.
- With respect to stem wobble, however, the White Lotus switches have the leg up on the Zaku IIs as they have very little N/S and E/W direction stem wobble. In fact this wobble is minimal enough to likely be better than the average Durock/JWK made switch.
- Squeaky slippery-ness aside, the White Lotus and Zaku II switches are fairly similar to each other in terms of their overall smoothness, though the White Lotuses have a much smaller grain feeling to their scratch than the comparatively large grain, leathery texture that the scratch provides to the Zaku IIs.



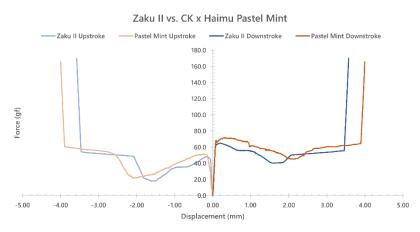
### PunkShoo Runner

- Force curves be damned; In a similar fashion to the MODE Tomorrow comparison drawn above, the PunkShoo Runner switches hardly feel tactile at all compared to the Zaku IIs even in spite of having fairly similar peak tactile forces. The Zaku IIs are far and away the more tactile of these two switches, both in execution and in essence.
- While the Runner switches have a touch less N/S direction stem wobble than the Zaku II switches, they do have a greater amount of E/W direction stem wobble.
- Much like with the majority of other switches on this comparison list, the Zaku II switches are much louder, more pointed, and provide a much more forward and present sound profile than the PunkShoo Runners.



#### CK x Haimu Pastel Mint

- Of all of the switches on this comparison list, the CK x Haimu Pastel Mint switches feel as if they have the most similar tactile strength to that of the Zaku IIs, though in the strangest way the bumps in the Pastel Mints feel much more 'skinny' than the Zaku IIs. You could almost convince me as if the surface area of contact between the stem legs and leaves in the Pastel Mints was somehow much smaller than that of the Zaku IIs, though I have absolutely no data to back up that claim.
- In terms of stem wobble, the CK x Haimu Pastel Mint switches are a touch better than the Zaku IIs in both the N/S and E/W directions.
- The main notable difference in the push feelings of these two switches, aside from their tactile bumps, is that the Pastel Mints have a much more noticeable scratch feeling which detracts from their overall experience in the linear portions of their strokes.



## **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.

Zaku II			
Switch Type: Tactile		Tecsee	
28 /35		Push Feel	
17	/25	Wobble	
6	/10	Sound	
15	/20	Context	
6	/10	Other	
72	/100	Total	

### Push Feel

Starting right at the top of their downstroke with a punchy tactile bump, the Zaku II switches are the medium-hard hitting tactile incarnations of the incredibly popular Zaku linear switches from Bolsa Supply. Much like their linear predecessors, these switches also have a pronounced, pointy bottoming out onto nylon and thinner, sharper feeling topping out onto a polycarbonate top which fall decently in line with the tactile bump strength, but not incredibly well. In addition, there is some large, leathery scratch noticeable across some of the switches in the batch that doesn't detract too much from their performance, but also isn't completely unnoticeable either.

#### Wobble

The Zaku IIs have an average amount of stem wobble for a Tecsee-made switch. A decent but note likely problematic amount of N/S and E/W direction stem wobble that won't bother the majority of users who try these switches.

## Sound

As was aimed for by Bolsa Supply, the Zaku II switches hit the snappier, higher pitched, and louder vibes that these switches were going for and they did it well. Scratch isn't so much noticeable in the sound profile of these switches, though there is a small amount of switch to switch variation in the tone and volume of the tactile bumps which may be noticeable to some.

#### Context

Priced at \$0.55 per switch, the Zaku IIs already have gained a lot of attention in the community as a result of their association with the beloved Zaku linears before them. While there is still a bit of polish that could be put on their performance here, these switches absolutely nail what Bolsa Supply was going for and they're assured to be around for many years to come.

#### Other

Very few brands have ever tried to make a tactile analog to a linear switch before, and of those attempts Bolsa Supply has clearly done it the best here. They deserve quite some credit for such.

#### **Statistics**

Average Score		Zaku II			
26.5	/35	Push Feel	28	/35	Push Feel
17.2	/25	Wobble	17	/25	Wobble
5.6	/10	Sound	6	/10	Sound
12.8	/20	Context	15	/20	Context
6.1	/10	Other	6	/10	Other
68.2	/100	Total	72	/100	Total
Zaku II Overall Rank		T-#95/270 (72/100)			
Zaku II 'Hard' Rank		T-#98/270 (51/70)			
Zaku II 'Soft' Rank		T-#73/270 (21/30)			

If you are looking at this statistics section for the first time and wondering where the hell are the other 269 switches that I've ranked are, or what 'hard' versus 'soft' ranks refer to specifically, I'd encourage you to head on over to my GitHub linked in the table above or at the links in the top right hand of this website to check out my database of scorecards as well as the 'Composite Score Sheet' which has a full listing of the rankings for each and every switch I've ranked thus far.

## **Final Conclusions**

I'll come right out of the gates and be the first to say that I personally am not a fan of the Zaku II switches. On top of already not being pulled much towards tactile switches in general myself, I am also not a fan of the following switch features independently: polycarbonate over nylon housings, bottom outs on to pointed stem poles, and higher strength tactile switches. As you probably have gathered by this point in the review, not only are these features that the Zaku II switches have, but these are features that they prominently display and were intentionally sought out for by Bolsa Supply in the design phase of the Zaku IIs. To that end, I think that its kind of hard to point to the Zaku II switches as being anything less than a success when viewed through the lens of Bolsa Supply wanting to provide a tactile version of their incredibly popular Zaku linear switches. Is there some objective room to improve in the execution of these switches? Absolutely, Better tolerancing to reduce stem wobble, a decent attempt at factory lubrication by Tecsee, and even some higher level design changes to try and minimize switch to switch variation are all very much things that Bolsa Supply and Tecsee could have sought out to try and not only make these the tactile version of the Zaku switches, but the improved and tactile versions of the Zaku switches. Even in spite of this, I have no doubt that the intersection of people who were fans of the original Zaku linear switches and interested in tactile switches will absolutely be thrilled with how these switches turned out. While I personally will not be buying a set of these Zaku IIs as is for my own personal use, I genuinely hope that Bolsa Supply continues to support these switches and continues the expansion of their Gundam lineup of switches. The community clearly is more than happy with how this family of switches is continuing to expand and evolve several years after it first started.

## **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!

### 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!

#### MechMods UK

- A rising vendor based in the UK, Ryan and crew have been a pleasure to work with and have nearly everything you'd need to build your first or fourteenth keyboard. Go build your latest or greatest one right now with them by using code 'GOAT' at checkout for a 5% discount!

## **Dangkeebs**

- A longtime supporter of the website and the collection, Dangkeebs has quite possibly the widest variety of switches of any vendor out there. Not only is their switch selection large, but it rotates and is constantly adding new stuff too. You're going to need 5% off your order with my affiliate to save off the cost of all those switches!

## SwitchOddities

- The brainchild of one my most adventurous proxies, SwitchOddities is a place where you can try out all the fancy, strange, and eastern-exclusive switches that I flex on my maildays with. Follow my affiliate code and use code 'GOAT' at checkout to save 5% on some of the most interesting switches you'll ever try!

#### Cannonkeys

- Does anybody not know of Cannonkeys at this point? One of the largest vendors in North America with keyboards, switches, keycaps, and literally everything you could ever want for a keyboard always in stock and with an incredibly dedicated and loving crew. Follow my affiliate link above in their name to support both them and I when you buy yourself some switches!

### Kinetic Labs

- One of the most well-rounded keyboard vendors out there, Christian and crew have been supporters of all my switch and switch-adjacent needs for some years now. I'm honored to have them as an affiliate and think you should check them out using my affiliate link above to support both them and I when you check out their awesome products!

#### Keebhut

- Want to try out some switch brands that fly under most vendor's radars? Keebhut is always seeking out that next latest and greatest and has been super helpful in hooking me up with new brands over the past year. They are all about sharing that love as well, and want to give you 5% off your next order with them when you use code 'GOAT' at checkout!

# **Further Reading**

Bolsa Supply's Zaku II Switch Sales Page

Link: https://bolsakeyboardsupply.com/products/zaku-ii-switch

Wayback: https://web.archive.org/web/20231209014610/https://bolsakeyboardsupply.com/products/zaku-

ii-switch

Ashkeebs' Zaku II Tactile Switch Sales Page

Link: https://www.ashkeebs.com/product/zaku-ii-tactile-switches/

Wayback: https://web.archive.org/web/20231209014522/https://www.ashkeebs.com/product/zaku-ii-

tactile-switches/

Bolsa Supply's Zaku II Switch Teaser

Link: https://www.youtube.com/watch?v=82d\_KS64pkk

Shoobs' Zaku II Switch Review

Link: https://www.youtube.com/watch?v=a6PlcipsxfA

Captain Sterling's Zaku II Sound Test and Review

Link: https://www.youtube.com/watch?v=CYcA\_ZQLRXM

Nishi's Zaku II Tactile Switch Review

Link: https://www.youtube.com/watch?v=U3u3nuSlOVo