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TEARDOWN | REVIEW

TriAir

I take a step back and take in the Banshee Titan in its freshly mulleted format. Even with the 2.6" tire in the back, the bike is riding fairly low. That's before sagging the 155mm rear-travel 29'er. My first reaction is to flip the drop-outs into their higher setting to boost up the bottom bracket, but my position on the bike riding around the neighbourhood was sweet - both sitting

and standing - and I figured I should hit some trails first.

It also occurs to me that if the geometry feels perfect, other than some too-regular smoking of pedals, the SR Suntour TriAir I'm riding also can lend an assist. It feels supple at a wide range of sag settings, so I can add some air pressure. I've been running it wide open up-and-down on the Titan, but I can always reach down and add some platform on the climbs. Finally, I can add a spacer or two to the negative air chamber to help the Banshee ride a bit higher in its travel.

As it turns out, I've done none of these things. I've had a couple of close calls, snagging my bash-guard hard, but the TriAir brings to bear enough support while feeling poppy and playful, that I'm loving the bike set up as it sits. Options abound, the Banshee plays very nicely with the 425 USD rear shock, and I think that the TriAir will work very well with most any suspension design. But, it's worth noting that, for this review, I only rode the SR shock on the Titan.



The SR Suntour TriAir is available in huge range of sizes. There are six Trunnion mount options, five Metric options, and two Imperial options.



Yes, the TriAir shares a fair few parts but no, it's not "just" a DVO Topaz. The key difference is the internal floating piston (IFP) in place of the DVO's bladder.

SR Suntour's stated use case for the TriAir is "Downhill, Enduro, Freeride" but with a system weight that's about an empty-beer-can over 400-grams, it's going to be a great choice for any trail bike that clears the piggyback. The smallest Trunnion option is 185x50mm (largest 225x75mm), the smallest Metric option is 210x50mm (largest 250x75mm), and the Imperial shocks come in 7.87x2.25" and 8.5x2.5".

As an aside, I hadn't previously noticed how much longer Metric shocks are compared to their Trunnion cousins. I'm sticking with my not-a-fan status for Trunnion - especially the way most companies implement it - but when we are talking about fitting water bottles and 200mm dropper posts in size small frames and choosing between Trunnion and Metric the ever-growing ranks of Trunnion shock spec'ed bikes does start to make some sense.

For the case of the 155mm Banshee Titan that I'm reviewing -

part one is [live here](#) - the shock size is, the very common, 205x65mm Trunnion. This also fits my Marin Alpine Trail, which was the intended platform to review this shock, but due to borrowing all the parts off of my A.T., I didn't have the opportunity to test the TriAir on that bike.

DIY

For anyone who is currently doing their own basic rear shock maintenance, an air spring service is as simple as they come. That's also true of swapping in/out air system reducing spacers for the positive and negative chambers, so the rider that already takes care of basic air sleeve services and tuning is going to have zero trouble digging into the SR Suntour TriAir.

Digging a step further into the shock is still not a project that I'm tackling personally without some expert guidance. I know a number of folks who have tackled full rebuilds on their own shocks with varying results, and if that's you, then the TriAir deserves a solid look for a couple of reasons. For one, the air-backed IFP (Internal Floating Piston) is adjusted with a shock pump rather than a nitrogen charge. There's also the fact that the TriAir requires no proprietary tools to build and as long as you measure things like the IFP depth whilst taking it apart there is no proprietary knowledge needed to put it back together.

I know when I'm in over my head, so I took this TriAir to see my friend James at [SuspensionWerx](#). James is already mid-season slammed thanks to a starring role Off-Broadway (Welch street to be exact) performing 'Bike Love In The Time Of Corona' so I want to throw in an extra "Thank You Uncle Jimmy" for making the time to give you a proper peek inside what you can get for a shock with just over four bills USD.



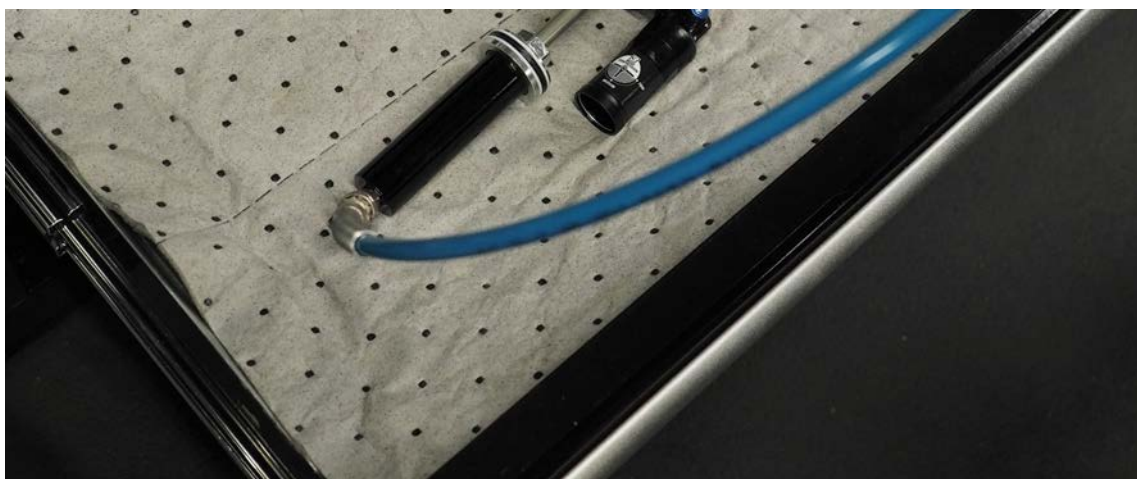


You don't need a vacuum pump to bleed a TriAir shock, if you're going to take your time and do it at home...



...but James at [SuspensionWerx](#) is already spring-time busy at the shop and this way he gets a guaranteed-good bleed the first time.





The damper's all back together and ready for the air spring. That was the quickest teardown article ever? Kidding, kidding, next section.

Teardown

Whether you're just swapping in/out spacers in the positive and/or negative air chambers to change how your air spring rides, or it's time for a basic service, the TriAir pulls apart just like other air-can-wearing-an-air-can shocks. Let out the air, pop off an o-ring at the body end of the air can, and slide the air can down to expose the positive and negative air chamber volume spacers.

Looking to lube, or swap, the air can seals? Just grab your trusty rubber strap wrench and the inner air can will unthread from the shock bridge and pull down over the body.





Getting a pair of smooth alloy jaws for my vice is one of my current life goals for both home and wrenching at the shop.



I rode the shock with 0-to-3 spacers in the positive air chamber and nothing in the negative chamber for my test period.

With the Titan, Banshee has a suspension design that already likes to ride high in its travel, and after playing around a lot with different suspension settings, I ended up running the TriAir close to the minimum recommended sag. That's particularly true once I had mulleted the bike. For riders who want to run their bike towards the maximum amount of sag, or who have bikes that tend to squat a lot into their travel, the SR shock has the option to decrease the volume in the negative chamber.

For the rider looking for a custom setup - lighter, heavier, tuning around a weird bike - the TriAir offers a level of custom tuning thanks to using both a rebound and compression shim stack. In SR nomenclature, this shares the same 'PCS' designation as their fork dampers. I rode the shock with the stock configuration

as delivered, and at 195-ish pounds riding the Banshee, I was very happy with the support from the compression circuit on open and the range of the rebound adjustment.



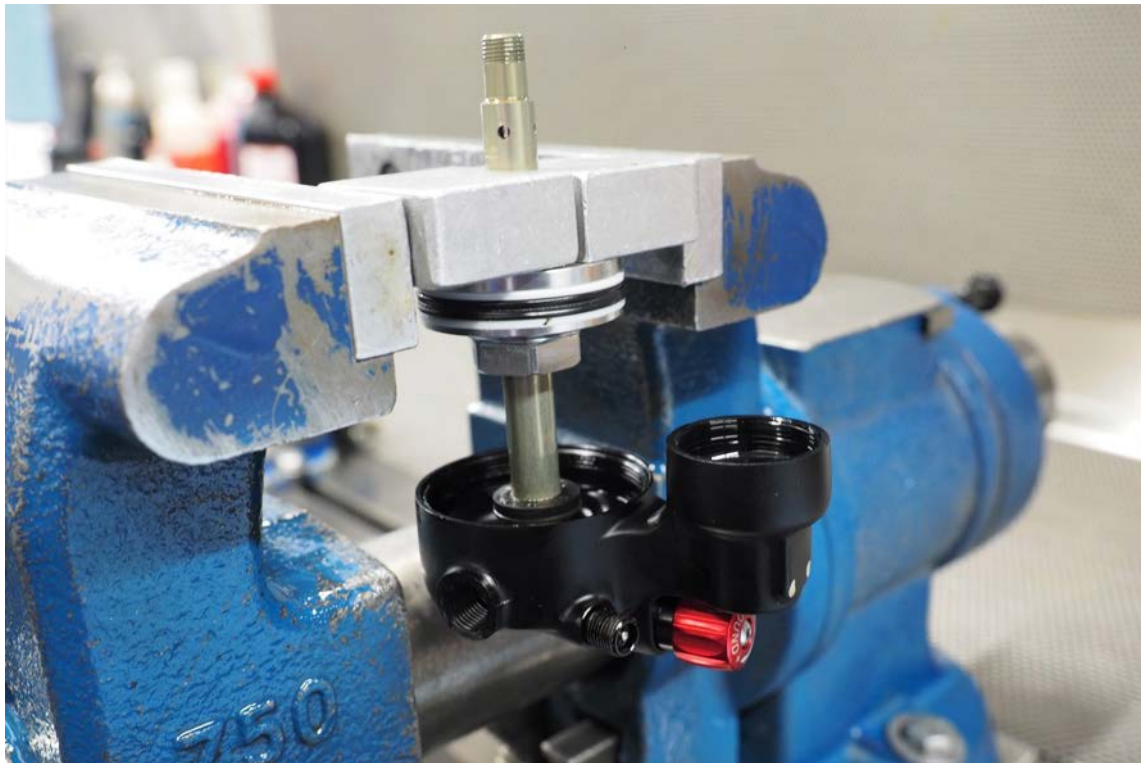
Compression stack all laid out. For the purpose of this review everything was put together as stock.



And just like that, I have a couple sips of beer and it's ready to go back in the shock.

Some folks who I've talked to who are riding the TriAir - it's a shock that seems to be gaining traction, at least in the circles I travel - have complained of it being too slow or too fast for their specific preference, air pressure (the spring rate they're damping), or bike. That's a relatively easy fix at a custom tuner like [Envelo](#), SWerx, or the nice folks at [S4 Suspension](#), and some really handy folks with an understanding of how shim-stacks work have even tackled it themselves.

I should probably add some sort of disclaimer about not randomly attacking the shim stacks on the pressurized-air bomb you are then going to bolt to your bike and ride down gnarly terrain at high speeds. You know, without having a decent idea what you're doing. But frankly, I see so many examples of *loose-loose* self-installed lock-on grips working on bikes that I'm probably too jaded to write one that doesn't come across as elitist and insulting.



Reservoir, IFP, and compression stack all removed. It's rebound time.

•

I'm impressed with the quality of the hard parts throughout the shock. No shock, and especially no air shock, is going to resist some of the frame alignment issues I've seen but at least SR gave the TriAir a fighting chance. I'm increasingly surprised, specifically for Trunnion mount shocks, that suspension manufacturers aren't wanting to see the condition of Trunnion mount bearings as part of determining whether a shock issue is the result of a *defect in manufacturing and materials* versus a fully seized-and-pitted pair of tiny rusted bearings putting all kinds of forces into a shock that it wasn't designed for.

In that sense, the massive Trunnion-mount bearings and awesome suspension alignment of the [Banshee Titan](#) I'm testing this shock in could almost be seen as cheating compared to many Trunnion mount bikes I've ridden and worked on that I could have been testing this shock in. Of course, the shock feels smooth without any sideloading to bind up the body on compression! Of course, it feels smooth and consistent without seized Trunnion bearings changing how the suspension works!



The damper is back together.



Setting the IFP pressure.



A final note on IFP pressure is that it is tuneable from 180psi to 240psi. I started at 215psi or so - it's a very small chamber and my shock pump wasn't expensive - and did play around with the range. I think the way the IFP pressure affects the initial feel of the TriAir is going to vary from frame-to-frame but I didn't notice

any difference on the Banshee jumping up to 240psi and as I write this I'm second guessing myself on whether I noticed a difference at 190psi. That could be simply that I'm not as in tune with my bike as other riders, it could be that I'm a bit more immune to the placebo affect, and I think maybe a bit of both mixed with the KS-Link platform is the most obvious explanation.

Still, as with swapping around volume spacers, it's very easy to adjust the IFP pressure without even removing the shock from the bike so why not give it a go while bracketing in the rest of the settings?

DTYD

I've previously written about the SR Suntour's [Demo To Your Door](#) program, so I'll just quickly note here that it is also available for the TriAir rear shock. The cost of the program is a 99 USD deposit on a shock and that scores you three weeks from the arrival date to get it dialed in and judge for yourself on your local trails.

Most importantly in the context of using online reviews of the product, it lets you see how a TriAir shock works on your specific bike versus the platform that the shock is being tested on. Unfortunately, the program is currently only relevant to NSMB readers located in the US of A but if you'd love to see SR extent it to your country absolutely fire them a nicely worded e-mail.





Getting my personal mechanic to sort out the install of a DTYD Auron. Still love that blue colour and wish it was a stock option. Thanks again to my friend Jac at [Essential Cycles](#) for the loan of the bike.

Up, Across, & Down

Technically the TriAir has three compression modes, including a firm-enough option that's going to make any efficiency-crazed rider who isn't settled on having a true hardtail-firm locking plate happy. I can't say that I never touched this lever and I did play with it on my first ride so I could say that the three modes were perceivably different - and they are - but I never once reached for the knob while riding. And that includes long road rides/climbs and always steep single-track climbs.

To some extent, this may come down to the Banshee's steep climbing position, which does not need any kind of pedaling platform to prevent that feeling of sitting on the back tire in the steepest climbs, and of course, the Banshee's suspension system is also coming into play here where some single pivot bikes I've ridden I can imagine I would have used the middle 'Trail' setting frequently.

I ride out of the saddle often on climbs - a habit I carry over from riding my single speed - sometimes just for short efforts rather than dumping gears and other times for sustained periods just because. Either way, I found that there was plenty of support

from the air spring and compression circuit for punchy out of the saddle efforts with the shock wide open. Now, when I say punchy I'm referring to getting plenty of support from the shock to feel like I was generating forward momentum for my additional efforts. I'm not making any claims that a 155mm Titan with TriAir and 2.6" tires goes uphill like an XC bike here.



The TriAir shock was controlled and playful at the same time and totally changed my Banshee Titan experience compared to the stock Float X2. I'm riding faster and having more fun. Photo: [Mr Lungtastic](#)





I've run it with the Titan and dual 29" hoops - [Bontrager Line Elite Carbons](#) - and now with my own mullet wheelset. I was surprised to not have to make any adjustments for the smaller rear wheel. Photo: Mr Lungtastic

Pedaling across rooted, rocky, terrain the shock is well composed and I find the Titan is very efficient if I just keep the power on and ride the bike - seated or standing. What's interesting about this to me is it's a trait that the bike shared with the stock 2021 Float X2 and the TriAir does it at least equally while also bringing much more playful pop to descending. In that sense, the SR Suntour shock is very similar to examples of the DVO Topaz that I have ridden.

Here again, I would leave the shock in the wide-open setting regardless of the trail type but I can certainly picture bikes I've ridden in the past that don't sit nicely in a sag-pocket where I think I would have been happy to have the trail mode at hand.



I've had a chance to ride the SR Suntour TriAir in a wide range of conditions from the most delicious frozen-and-tacky carpet of traction,

to spicier patches of snow and ice, to the greasiest conditions the North Shore has on tap.

It's a DH-rated air shock and this is a 155mm Enduro bike that if anything feels like it has more travel now, so descending is probably the performance factor that most folks would expect to be dialed. I rode the TriAir with the Titan set at both chainstay lengths (452mm and 462mm) with a 29" wheel and with the shorter (452mm) dropouts with my mullet setup. Combined with the Banshee, it's at least as planted and composed as any air shock I've ridden and it compliments the KS-Link very well.

Compared to my own coil shock, I enjoy how much more pop even a semi-meh rider like myself can generate on the Titan thanks to the frame design. It feels more like a monster truck with the coil, but the performance is still excellent, and the exact ride of the shock is much more adjustable using the air shock. As cliché as it sounds as I channel my Fox ALPS-5 marketing handbook, the TriAir can be tuned to bring a better-than-coil experience to the trail by doing an excellent job of absorbing bumps and maintaining traction while at the same time delivering a fun, fun ride popping off everything.

And that's coming from someone who isn't particularly great at popping off anything. It's enough of a confidence boost that I actually don't have a hard time leaving my rigid single speed at home when I'm going for a pedal and know the trail will be extra chunky or extra jumpy.

I always recommend bracketing settings and getting out on some trails you know to dial in everything. I started off running the TriAir too slow - it's definitely a common issue - and also too soft coming off the Float X2, but now I'm happy with air pressure and rebound settings that works for me for most terrain. In terms of adjusting that air pressure, I'm running right around

Banshee's minimum target of 28% sag and settled on that number with both my mullet and 29" rear wheel options. That could change again if I switch to running the higher bottom bracket setting because currently the bike is low-low-low-low.



Other than some brief experimenting to see how the platform performed, I've ridden the TriAir exclusively with the shock wide open for this Titan test.



With infinite time I would like to do some more extensive back-to-back testing with various air volume-spacer configurations - which is possible on the trail.

Trunnion Value

If you made me pick a best-shock-for-the-money, I would have a hard time not picking Cane Creek's Inline coil shock. I think the performance, weight, price, and longevity are setting a great example for other dampers. The issue is, of course, that the Inline shocks don't come in a Trunnion configuration. For a Trunnion shock talking quality v. performance v. price, I don't think the TriAir can be beaten.

So on that note, SR Suntour! Why don't you make a coil version of this shock?! Pull off the air cans, slap on a steel body with threads, wind on a spring, and voila! Everything I love about the TriAir with a bit more spring and shock weight, less heat generated from less friction, and well, let's be honest, there are reasons so many mountain bikers in the Fromme parking lot are running coil shocks these days regardless of the extra weight. It would probably be necessary to offer a bit firmer open compression setting, but again this is easy thanks to the architecture of their shim stack.

As an aside, if you're replacing a sh*t-kicked air shock with all the anodizing worn off *one side* of the body and/or shaft I'd recommend going with a coil - that's any coil shock - over an air shock including the TriAir. Your frame is most likely side-loading your shock and you'll significantly improve performance by removing all the friction that is happening at the same time that your shock is eating itself. Your new coil shock may still eat shafts, but these will be much cheaper to replace and cause much less friction.



A solid value on paper at 425 USD / 536 CAD. Playful and poppy without sacrificing traction or control. I think the SR Suntour TriAir is a great air-shock option.

As with the [Durolux EQ fork](#) that I've been running paired with the TriAir, I think it's necessary to look at performance outside of any pricing classification to really judge this unit. I'd put my TriAir shock experience - admittedly only tested on one platform, the Banshee Titan - up against any other air shock I've ridden at any price. Have I ridden every air shock on the market? Heck no. Have I ridden a lot of different examples on a lot of different platforms? That's a yes.

It's a winner on performance. It's a winner on price at 425 USD / 536 CAD. It comes with a great network of aftersale support centers. And yes, some folks will pay any amount extra to get a certain brands' sticker on their new air rear shock but if that isn't you, I don't think you can go wrong with [SR Suntour's TriAir](#).

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