

CVA™ SUSPENSION - (U.S. PATENT NO. 7,934,739)

1. CVA™ IS NOW PATENTED (U.S. PATENT NO. 7,934,739)

CVA™ is an award-winning suspension design and now it is recognized with a US Patent.

2. THE ONLY 29ER SPECIFIC SUSPENSION DESIGN

CVA™ is the only suspension designed with 29ers in mind. For those seeking big wheels and CVA™ performance, Niner is the way to go. You won't find this design on other bikes.

3. EFFICIENT PEDALING IN ALL CHAINRINGS

CVA™ is designed to be efficient in all chainrings. Because of the location of the lower pivot (under the BB) chain torque effectively isolates and cancels out the forces acting to create inefficiency in pedal stroke.

4. POSITIVELY REVIEWED - AROUND THE WORLD

CVA™ equipped Niner Bikes have garnered praise on the forums and in magazines around the world. Real rider experience supports our system's superiority for your 29er experience. See our website or the next page for more reviews.

ABOUT CVA™ SUSPENSION:

Niner's own Constantly Varying Arc, or CVA™, suspension design is not just another version of the same old thing. It's unique to Niner, designed in-house, specifically for 29" wheels.

Although CVA™ does resemble some of the other parallel link bikes, CVA™ works very differently to isolate pedaling forces and remain fully active under all conditions. Many current suspension designs, especially some parallel link suspension designs, maximize efficiency by concentrating their 'instant center' pivot location at or around the middle chainring. These designs assume that most of your pedaling will be done in the middle chainring and so are designed around this effective pivot location. This also means that there is some compromise to the suspension's

pedalability when NOT in the middle chainring (or when using a 2x10 set up). The better the design, the less noticeable these compromises are.

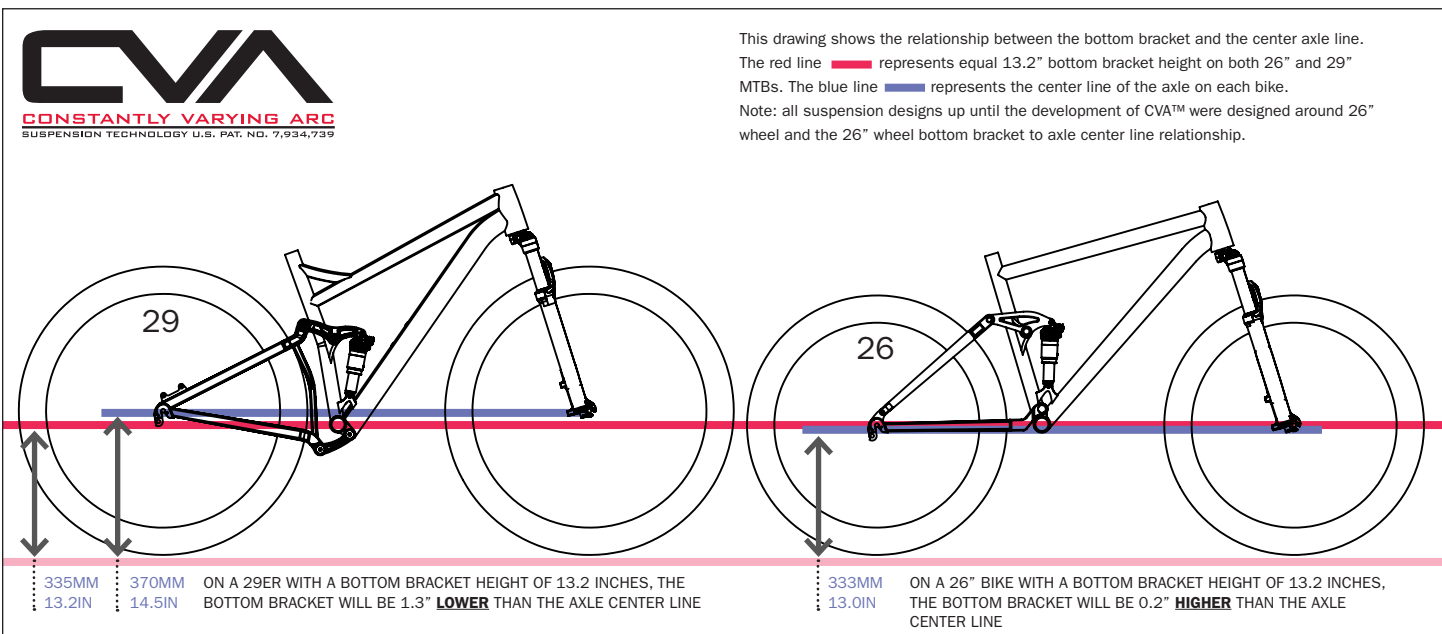
In order to isolate pedaling forces in a broader range of gearing choices, the CVA's™ 'instant center' location is in front of the drivetrain. With the lower pivot under the bottom bracket, the force at the rear axle resulting from chain tension pulls the two linkages in opposite directions in all gear choices, effectively isolating the drivetrain from the rear triangle. In other words, when a rider cranks on the pedals, the chain is trying to pull the lower link down and away from the bottom bracket, and the upper link in its regular rotational path. Since the rear triangle is one piece, the result of these opposing forces cancels each other out, leaving the only outlet for chain-induced torque being rotation of the rear wheel, where it's most wanted.

Past the rearward-most position at sag, the axle path moves in towards the bike at a gradual, constantly varying arc, which insures that there is minimal chain growth throughout the length of travel. This also means minimal pedal feed back in the drivetrain while cycling the suspension, again, essentially isolating it from the fully active movement of the suspension design.

Another key component to CVA™ suspension's active design is the low leverage ratio of shock stroke to suspension movement. This low leverage ratio decreases the amount of air or spring weight needed for any rider weight, which translates to smoother, more effective damping and less drag on the seals.

Ultimately, there are many variables in suspension – we believe that we have created a strong, 29er specific system, and that the best way to test it is to go out and ride a Niner full suspension bike.

WWW.NINERBIKES.COM/DEMO



CVA™ SUSPENSION REVIEWED

DON'T TAKE OUR WORD FOR IT

TEST RIDE EXPERIENCE SUPPORTS CVA™ SUPERIORITY, OVER AND OVER AGAIN.
NINER BIKES ARE SOME OF THE BEST REVIEWED BIKES AVAILABLE - REAL RIDERS, REAL OPINIONS



"THE COMBINATION OF A GREAT SUSPENSION DESIGN AND A BIG WHEEL MAKES FOR A RIDE THAT BORDERS ON, AND WE'RE AS SURPRISED AS ANYONE THAT WE'RE SAYING THIS, MIND-BLOWING."

MOUNTAIN BIKE MAGAZINE



"NINER'S LATEST DUAL SUSPENSION BIKE SHOWCASES THE BEST THAT 29" WHEELS HAVE TO OFFER AND ERASES ALL THE DRAWBACKS."

MOUNTAIN BIKE ACTION

"NINER'S FULL SUSPENSION BIKE WORKS SO WELL IT COULD TURN EVEN THE MOST OLD-SCHOOL RIDER ON TO THE BIG-WHEELED PROGRAM."

MOUNTAIN BIKE MAGAZINE



"...CONFIDENT, SOLID, PREDICTABLE AND FUN...NINER HAS THE MOST EXPERIENCE WITH 29ER SUSPENSION DESIGNS"

FEED THE HABIT



"WE HAVE YET TO RIDE A 26" BIKE THAT CAN MATCH THE LEVEL OF UPHILL AND DOWNHILL PERFORMANCE..."

MOUNTAIN BIKING



"SETTING THE STANDARD FOR LONG TRAVEL, BIG-WHEELED BICYCLES"

DIRT RAG



"IT COULD WELL BE THE SMOOTHEST BIKE I'VE EVER RIDDEN"

BIKE MAGAZINE



"...ENSURES AN ACTIVE SUSPENSION FEEL WITHOUT ANY OBVIOUS PEDAL OR WEIGHT ACTIVATED BOB."

WHAT MOUNTAIN BIKE UK

"AFTER MULTIPLE ROUNDS ON THE NINER JET9, WHAT DOES 198 THINK ABOUT THIS ROCKET? IT'S FAST...BLAZING FAST ACTUALLY. THE NINER JET9'S 80MM TRAVEL PLATFORM MAKES FOR A GREAT ALL DAY RIDE PLATFORM THAT IS INCREDIBLY EFFICIENT."

MOUNTAIN BIKING 198

