
THE EVOLUTION
OF TRAIL
GENIUS
TECH
AND FACTS
REPORT
SCOTT

TEN YEARS IN THE MAKING

The Genius has been defining the Trail Bike segment since 2003

10 Years ago, Scott conceived the Genius, the first "Do-it-All" super-lightweight Carbon Trail Bike. From inception, it was developed for the trail rider who desires a bike that possesses proficient uphill performance while remaining capable on demanding technical trails and descents. The heart of the Genius has always been its mode sensitive suspension platform matched with Lockout all via the convenient handlebar mounted switch. The Genius shock produces three unique modes - Lockout, Traction and Full travel. TracLoc transformed Trail riding in that it made the rider think carefully about the bikes attitude and the efficiencies offered when three unique modes are available right at your fingertips. Now with TwinLoc you get simultaneous control of the front and rear suspension combined with mode sensitive suspension and a Full Lockout. Often imitated, there is no substitution for the Total Control TwinLoc offers. Today's Mountain Biker has evolved, and so has SCOTT's approach. Our engineers have totally re-invented the Genius, and the new 700 (27.5") and 900 (29") series of Genius take Trail Riding to the next level. It's been 10 years since the first stroke of Genius, it's about time we change the game, again.

"In 2003, I was the first Racer who won the World Championships on a Full Suspension Bike - the only victory in history with a bike with 120 mm travel. We defined the All Mountain Category. The idea of the Do-it-all-Bike remains also for the all new Genius."

Thomas Frischknecht, Teammanager Scott-Swisspower-Team
World Champion – Genius RC – 2003

2003

Frischi World Champion on the 1st Genius (120mm Tacloc)

2004

Traction Control

2005

1st Carbon Genius Frame

2009

Redesigned Genius, Equalizer 2

2010

TwinLoc

2011

Genius LT

2013

Genius 900

THE MASTERMINDS

A Wealth of MTB Intellect

RENÉ KRATTINGER, **PRODUCT MANAGER**

"The achievements of the Genius remain unmatched even today. Not only with the World Championship title it earned, but the fact that it has set the standard for the Trail Segment for a decade is amazing to me."

BENOIT GRELIER, **BIKE ENGINEER**

"The new Genius leaves nothing to be desired. We've raised the bar with regards to the new frame's standards. The entire package, combined with Nude2, is lighter weight and stiffer than ever while improving overall performance."

JOE HIGGINS, **BIKE ENGINEER**

"Wheel diameter and travel is chosen harmoniously whilst respecting our geometry targets. Providing the Genius in two wheel sizes at two different travel lengths while maintaining the same geometry satisfies all kind of Trail Riders."

THOMAS FRISCHKNECHT, **TEAM MANAGER**

"The most impressive feature of the new Genius is its wide spectrum; you can ride it on Any Trail and any situation. The new offerings with choice in wheel sizes and travel will once again make the Genius outstanding."

THE EVOLUTION OF TRAIL

The Modern Trail Bike is an Any Trail, Any Time Machine

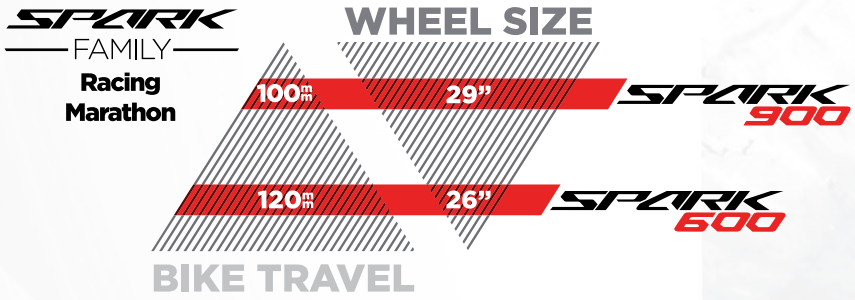
Let's face it, Trails have evolved. No matter what Trail you ride, you want a bicycle that can handle anything, and do it well. Whether it's that Epic Singletrack that you look forward to riding over, and over or that tough uphill that leads to a fun or demanding descent. Quite simply it's All Terrain Bicycling (ATB). No matter the terrain YOUR BIKE will handle it. That was the spirit of the very first Mountain Bikes and that's what this evolution of the Trail Bike represents; one bike to rule it all. This is Mountain Biking in its purest form. The most capable Trail Bike ever produced, the Genius is full-suspension chassis that's designed to handle Any Trail, Anytime.

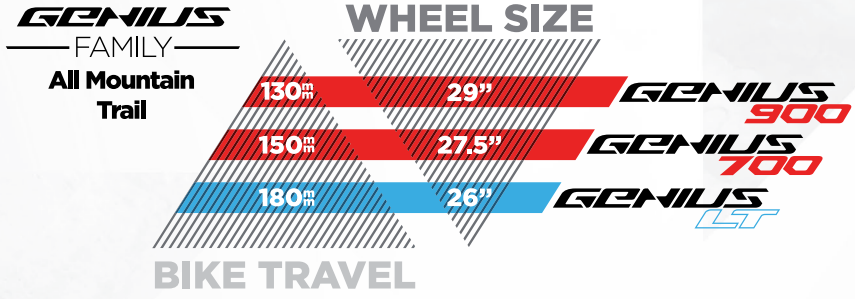
The new Genius is offered in two unique forms. The Genius 900 has 130mm of travel and all the benefits the 29" wheel has to offer without the negative effects that forcing too much travel onto the wheel size incurs. The Genius 700 utilizes an entirely new wheel standard that is positioned nearly between 26" and 29". The 27.5" tire/wheel combination offers the benefit of improved roll over trail obstacles and increased traction, like 29", but without travel limitations. Because of this we can offer it in 150mm. Now when you look at the MTB product SCOTT offers we truly have an array of products from XC to All Mountain that fits every need. Suspension frames are now offered in 100-120-130-150-185 millimeters with 26", 27.5" and 29" wheels where they are best suited. The result is a pair of new bikes unmatched for the Trail Segment.

THE CASE FOR TWO WHEEL SIZES

When we decided it was time to re-design the Genius, we intended to improve the Trail segment. We also improved upon the investment made during the Spark development. The result is a much lighter and better tracking bike. When it came to observing historic design parameters we took convention and threw it out the window. Only a unique approach would serve this project, while abstaining from hanging onto antiquated standards.

The new 29'r movement has gained international acceptance, but has limitations, namely in regards to length of available travel. SCOTT Engineers found that 130mm was the optimum length of travel for the 29" wheel size without compromising frame geometry. The incumbent Genius was already offered in150mm of travel, so it became clear early on in this project that the Genius was going to need to have 2 options in order to be relevant not only in the marketplace but also in our Mountain Line of bikes. We honored the 29" wheel standard and embraced the emerging 27.5" wheel size in order to produce a Fabulous Pair of Trail Bikes. Pick your Pleasure.





GENIUS 700 150MM OF TRAVEL COMBINED WITH 27.5" WHEELS

The Genius 700 series are full suspension bikes designed to handle Any Trail, Any Time. Its larger wheel size blends the benefits of the big wheel with increased travel. At 150mm it's the ultimate Trail Bike suitable for all trail conditions.
The 27.5" wheels standard offers improved traction and rollover when compared to 26" but does not have the travel limitations 29" wheels do. Change your Wheels, Change your Mind.

GENIUS 900 130MM OF TRAVEL COMBINED WITH 29" WHEELS

The Genius 900 series are full suspension bikes designed to handle Any Trail, Any Time. They blend the 29" wheel standard with 130mm of travel, the maximum available. This is the ultimate Trail Bike suitable for any terrain you can find.
These 29" wheeled bikes maximize the benefits of the larger wheels standard by combining it with the longest travel available without compromising perfoemance. Big Wheels, More Travel.

KEY FEATURES

The most important technical aspects of the all new Genius

Nude2 compression style shock with DPA (Dual Positive Air)

Dual Positive Air is the system used by SCOTT to attain two unique spring curves for TwinLoc and LTD (Lock-Trail-Descend) equipped bikes. Either a single air chamber or a combination of the two chambers allows for two unique geometry and travel modes within TwinLoc. When a smaller single chamber is used, there is less air volume and therefore the travel is shorter and the bike is less sagged, offering a steeper more agile bike geometry. When both chambers are employed, the air volume is increased allowing the bike to sag into a slacker position with more negative travel and more available travel at an engineered spring curve specifically for the full travel mode.

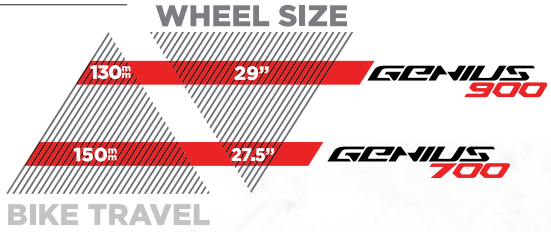
The Nude2 shock is also considerably lighter than the Equalizer2 shock and the mounting position is more protected. Set-up is also easier due to a single positive air valve and more visible sag indication. Changing the shock mounting position also allowed us to run a steeper Seat Tube angle thus allowing riders who enjoy a more compact frame to run a longer post without affecting the relative Top Tube length.

TwinLoc- One Lever, Total Control of the Shock and Fork

SCOTT's patented TwinLoc System has evolved beyond just Lockout. The Genius now offers unique suspension settings for all three modes on both the shock AND the fork simultaneously. Choose between Lockout, Traction mode and Full mode options via handlebar-mounted TwinLoc switch, perfect for Climbing, Riding and Descending. The previous Genius only offered air spring volume adjustments.

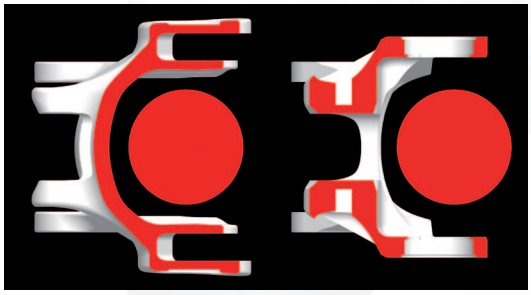
Travel to Wheel Size Optimization

Wheel size and travel are chosen in combination while respecting our geometry targets. By offering two wheel options on the new Genius we are optimizing the advantages of the bigger wheels relative to the desired travel. The 27.5" wheels offer improved traction and rollover effects when compared to 26" and can still be engineered with longer travel. The 29" wheeled version offers the maximum amount of travel without compromising geometry and performance. One of the biggest factors affecting performance is the bike's BB offset so we've designed two models that have reasonable offset relative to their wheels size. It's truly Genius.



Improved Linkage and OS Pivots

The Genius benefits from the knowledge acquired during the Spark re-design and features a new forged linkage that is more capable of managing the loads on it as well as sleek and tucked into the frame design. All of the pivot bearings are now oversize and wider, producing a frame that's more laterally stiff. A bridge has been placed in the Seat Stays to improve performance as well.



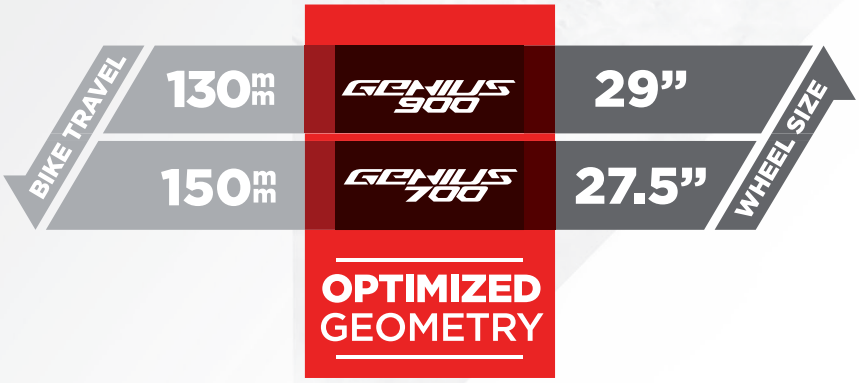
IMP Frame

The Genius mainframe is now moulded as a single piece with IMP. A tapered Head Tube and PF BB further reduce weight while increasing performance. The Seat Post is now 31.6mm while the cables are internally routed. The dropouts are IDS-SL so you can choose between 3 different rear axle standards easily while saving additional weight. The rear brake integrated direct mount saves weight and hassle.

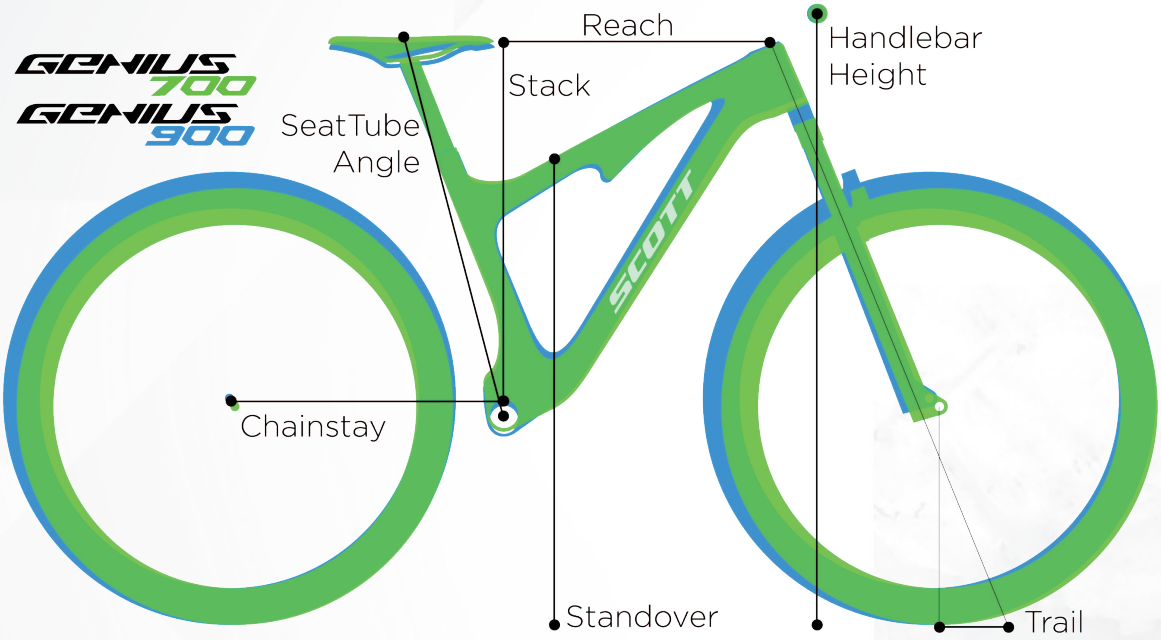
OPTIMIZED GEOMETRY

Two Different Bikes – Same Fit

Geometry is the key for a perfect bike. When it comes to building a new bike with bigger wheelsizes, engineers are challenged. The 29" movement has called for bigger wheels on bigger bikes, so the trail bike segment is the next battle field. Designing a proper geometry for the 150 mm segment, engineers face travel limitations when building frames with 29" wheels. That's why the SCOTT engineers developed the only proper solution building two bikes with two different wheelsizes, maximizing travel for both 27.5" (150 mm) and 29" (130 mm). One of the major achievements is in having built two bikes with the same geometry, thanks to their travel and wheel size balance. Having consistant geometry on both bikes, trail riders can choose their favorite bikes according to their personal desires and body height.



Geometry comparison: Genius 700 and 900

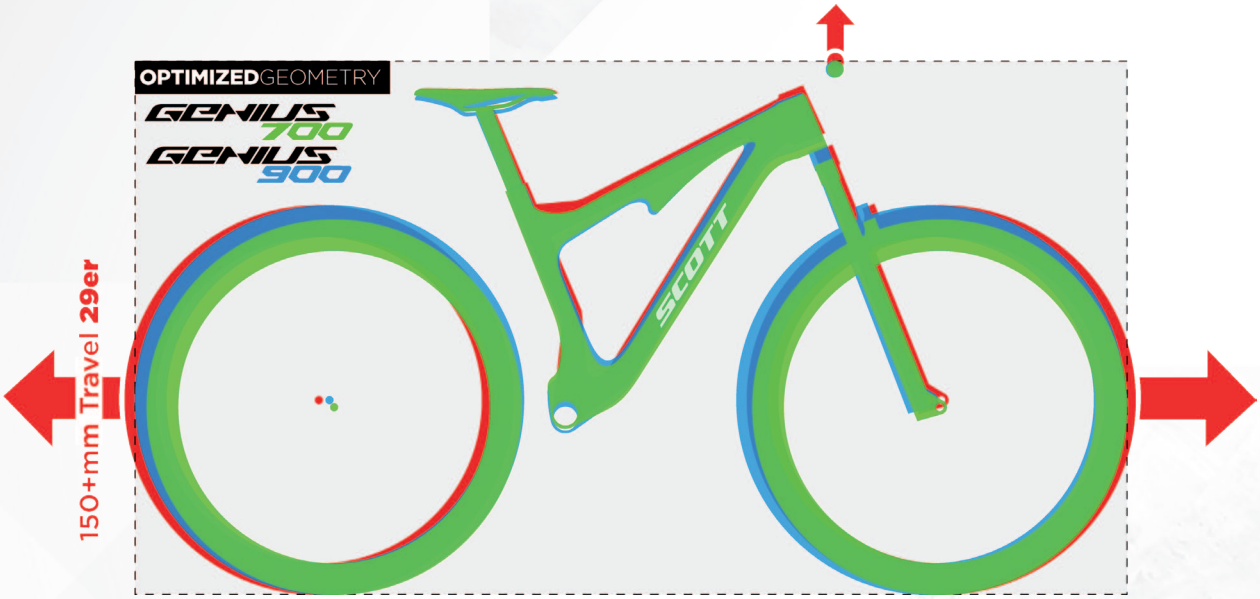


This graphic compares the geometries of the New Genius 700 and 900. It reveals that the geometries are almost identical in spite of their differing wheel sizes. Because the bottom bracket drops as wheel sizes increases, the BB axle migrates further below the wheel axles for a low slung feel. With the new Genius, riders will therefore enjoy a more 'in-the-bike' experience than ever before and reap the rewards of improved handling and stability. The Genius 700 and 900 are the only bikes in the Trailbike segment which offer adjustable geometry. By changing the shock mount chip, BB height increases 6 mm and steepens the head tube angle 0.4°, while handle bar position remains unchanged.

Geometry comparison: Genius 700 and 900 vs the old Genius

This graphic compares the geometries of the old Genius (black) to the New Genius 700 (green) and 900 (blue). The saddle height of the old Genius 26" is the highest in this graphic. By lowering the bottom bracket, both saddle height and standover were effectively lowered on both new versions. Further, because bottom bracket height is correlated to the amount of suspension travel, the Genius 900 with 130mm of travel actually has the lowest BB height. The reach increased 20 millimeters to better suit evolving cockpit preferences, and is also consistent with the Spark and Scale. By moving the shock from behind the seat tube to under the top tube, SCOTT's engineers have been able to reduce the seat tube offset to simplify fit when compared to the old 26" Genius, especially for riders running long seatposts.

Geometry comparison: Genius 700 and 900 vs a virtual 150mm/29" Genius



This graphic shows a 29" bike with 150 mm of travel (red) and the negative impacts of the additional travel. As travel increases, handlebar height, chainstay length, wheelbase and standover height all move outside our optimized geometry definition.

FACTS

- ***Genius 700 and 900 offer consistent geometry thanks to their travel/wheelsize balance***
- ***29" wheels are acceptable with max. 130mm of travel***
- ***27.5" wheels allow for shorter chain stays which enhances handling***
- ***Because BB height is defined by suspension travel, the***
- ***Rider is closer to the ground on bigger wheels***
- ***Standover height is reduced on both, Genius 700 and 900, compared to the old Genius***

130mm 29" GENIUS 900

150mm 27.5" GENIUS 700

0.4° | 6mm
Changing from low to high chip position increases BB height 6mm and steepens the HT angle 0.4°

A COMPARISON OF WHEEL SIZES

Some helpful data when considering which wheel is right for you

With three wheel sizes to choose from it's best to find the size that suits your needs rather than getting hung up on a diameter. Once you've chosen type of bike you want, look at the geometry to be sure the fit works for you while the travel suits your riding style. Bigger can be better, but only until the travel reaches a certain measure. See the research below.

Improved roll-over effect is the most prolific attribute when it comes to 29" wheels. The big wheels are great for rolling over nasty roots and rocky sections, essentially making it easier to ride these conditions. Improved traction is also a key factor with the increased wheel diameter compared to 26" wheels as tire contact to the ground is larger.

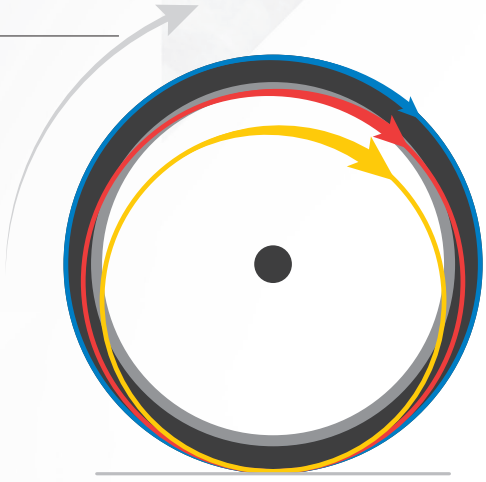
When discussing the pros and cons of the big wheeled bikes, shorter riders find themselves in an ambivalent situation. They want to benefit from the 29" wheels, but suffer from the negative effects when fit is considered. Additionally, the increase in rotational weight challenges many lower watt-producing riders, so the performance gains are negated when the rider cannot accelerate the wheel system as quickly.

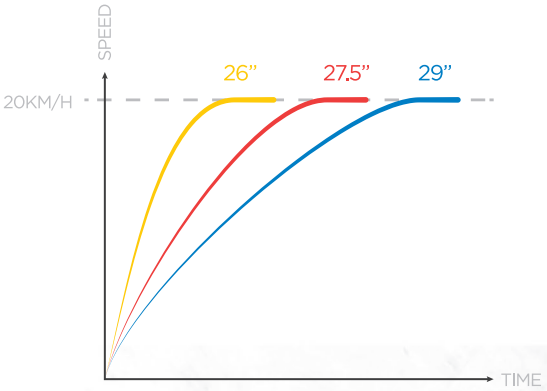
SOTT RESEARCH: COMPARISONS OF THREE WHEEL SIZES

■ 26" WHEEL / ■ 27.5" WHEEL / ■ 29" WHEEL

1. ACCELERATION

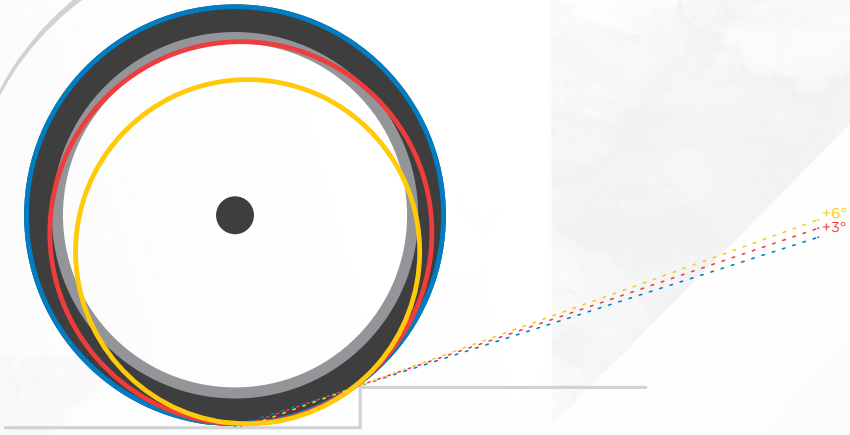
Diameter and rotating mass directly influence the acceleration of a wheel. The 29" wheel has both the largest diameter and the most rotating mass, and therefore takes the most energy and time to accelerate. The 26" wheel accelerates fastest, and the 27.5" wheel falls in between.





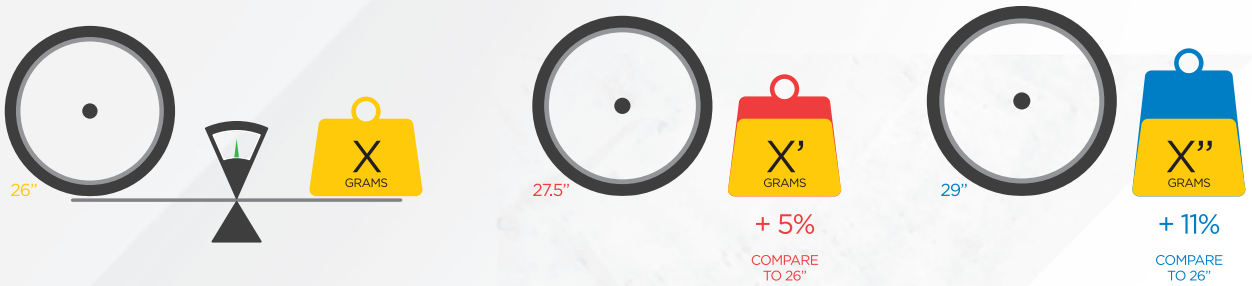
2. ANGLE OF ATTACK

Increased wheel size decreases the angle of attack.
That means bigger wheels make obstacles seem smaller.



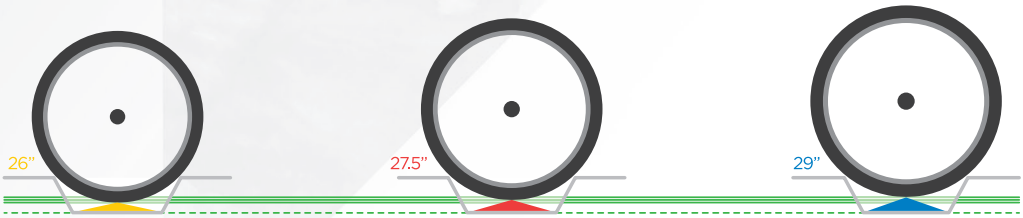
3. WEIGHT

The overall weight of the 27.5" wheel is only 5% (+ 140g) more than a 26" wheel, compared to 11% (+ 430g) more weight for the 29" wheel. Calculation is made on the same type of wheels set front and rear, tires and inner tubes. Based weight for 26" is 2450g



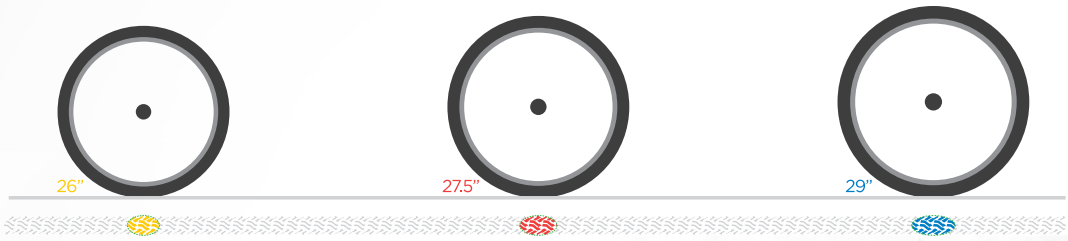
4. IMPROVED ROLL-OVER

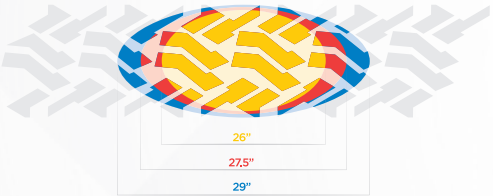
A larger wheel rolls over objects with greater ease due its increased diameter. The wheel literally spans a greater distance without being impeded. So you stay rolling over rough stuff and maintain your speed through the corners.



5. MORE TRACTION

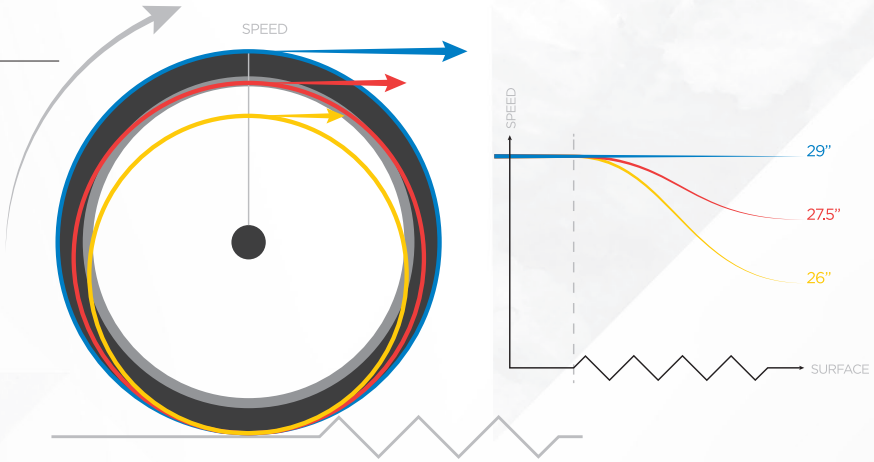
The larger contact patch of a bigger wheel better connects the rider to the trail and provides improved traction over smaller wheels. This means more control and better braking.





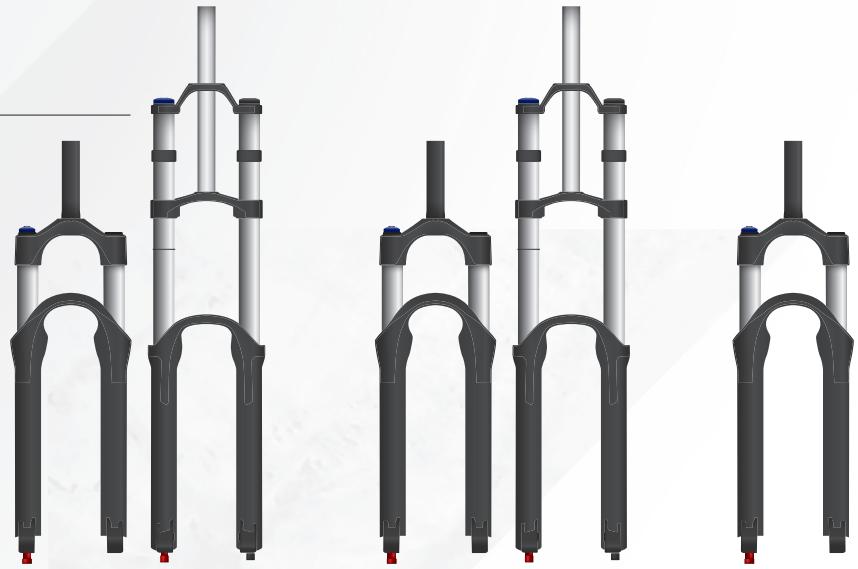
6. MOMENTUM

Larger wheels carry momentum better than smaller wheels. This means you continue to roll through technical sections without being hung up on objects and slowed down.



7. TRAVEL RANGE

There are currently more and longer suspension travel options available for 26" and 27.5" wheels than for 29" wheels for which options are still limited to designs offering less than 130mm of travel in order to keep the kotpite height at the right geometry.



26"
80MM → 200MM

27.5"
80MM → 200MM

29"
80MM → 130MM

SCOTT Research: Wheelsize Results Overview

26"	27.5"	29"
PROS • *More Responsive* • *Best Acceleration* • *Works with longest travel* • *Fits in small bike sizes* • *Short chain stays* • *Stronger wheel construction due to shorter spoke lengths*	**PROS** • *Increased Roll-Over* • *Increased Momentum* • *Increased Traction* • *Less rotational weight than 29"* • *More Agile than 29"* • *More suspension travel options* • *Short chain stays* • *Balanced Stability and Performance* • *Geometry closer 26"* • *Great balance of Agility and Momentum*	**PROS** • *Best Roll-Over Performance* • *Carries Momentum* • *Maximum Traction surface* • *Best stability on easy trails* • *Lowest suspension stress* • *Great for larger frame sizes* • *Increase stability on long curve*
CONS • *Smallest Traction surface* • *Limited Roll-Over* • *Agility* • *Lowest rotational weight and gyroscopic affect* • *Highest stress on suspension*	**CONS** • *Small weight penalty* • *Wheel/Tire availability at present*	**CONS** • *Maximum of 130mm travel* • *high cockpit* • *Geometry limits for small sizes due to handle bar height* • *Wheels weights* • *More inertia at low speed.*

FACTS

- ***29" offers the best Roll Over and Traction benefits***
- ***27.5" wheels split the difference between 26" and 29"***
- ***27.5" wheels allow for more travel with bigger wheel benefits***
- ***27.5" wheels offer the best balance of acceleration, traction and Roll-Over***
- ***The size of the wheel affects geometry and travel***

5%
The 27,5" wheel is only 5% heavier than the 26"

1st
MTB World CUP, 2 wins on 27,5"

150|27.5
PERFECT COMBINATION

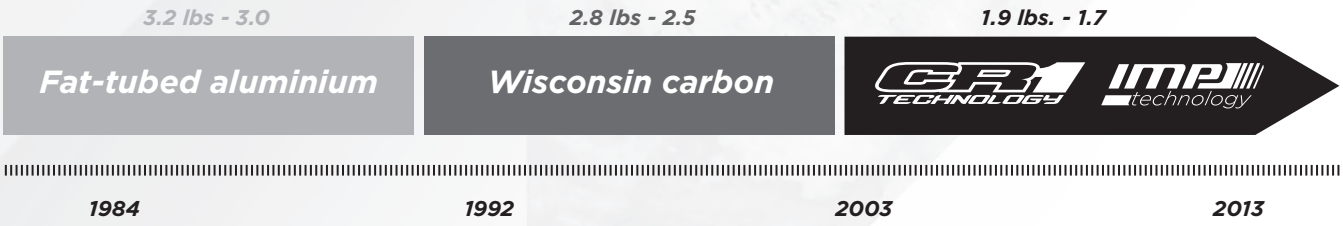
FRAME TECHNOLOGY

SCOTT – The Carbon Experts

Scott has always been a leader in Carbon frame technology, going way back to the Endorphin in (1992) which was one of the first Mountain Bikes made completely of carbon fiber. In 2003 SCOTT Engineers revolutionized frame construction with the CR1 Process. This was procedure of creating individual tubes with the layers completely managed in order to avoid wrinkles and gaps between the layers, as well as mitering the joints and Carbon Welding them.

Modern History of Frame Technology

Timeline of technology leadership



The CR1 was so advanced from the standpoint that it could be replicated with consistency in production and increased the overall fatigue life and impact strength of a carbon frame. Making carbon more 'manufactureable' by perfecting the CR1 process and being able to duplicate tolerances at a much higher output rate also lowered the cost of a carbon frame without compromising on quality, thus making carbon accessible for anyone. This time period will always be synonymous with SCOTT's Carbon Expertise because the quality of frame that could be produced and the overall weight was vastly improved when compared to other materials, and the price was more reasonable. We can honestly say that SCOTT initiated the move from Aluminum to carbon fiber industry wide.

With the introduction of IMP in 2007 we moved ahead of the pack and distanced ourselves from the copycats who had reverse engineered the CR1 Process. IMP allowed us to create multiple tube structures in a single step while maintaining the integrity of the layers and optimizing the material used at the joints. We were then able to introduce complex shapes into the design of the frame, further managing the loads the tubeset realizes during use. The result was a lighter overall weight and an increase in strength. We use the industry standard HMF (High Modulus Fiber) fiber for constructing many of our frames while we reserve our proprietary HMX (High Modulus Xtreme) for our high end frames that are on average 100 g lighter. The result of this exclusive combination is a truly unique stiffness/weight ratio. Complimenting the IMP process, our frames benefit from our Naked External Tube set (NET) finish, which eliminates the cosmetic carbon layer to shave precious grams. The IMP process is found throughout our entire line of carbon bicycles.

SCOTT CARBON KNOWHOW

1 DESIGN & ENGINEERING

2 PRECISION TRIMMING OF THE HMX CARBON FIBER

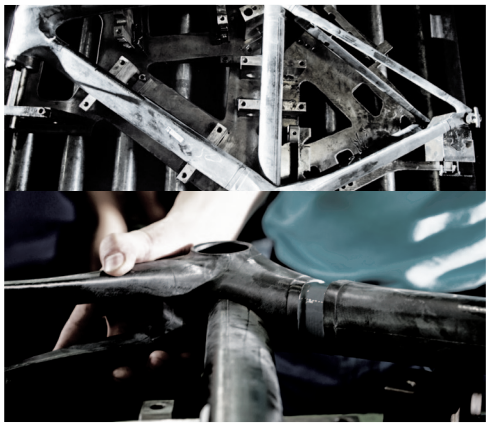
3 PREPARING THE LAYERS

4 IMP - PREFORMING

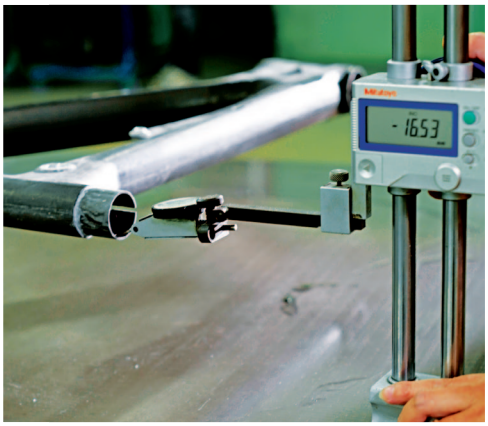
5 IMP - MOLDING PROCESS

6 MACHINING

7 BONDING & SECOND STEP LAYUP



8 QUALITY CONTROL



9 TESTING STRENGTH & STIFFNESS

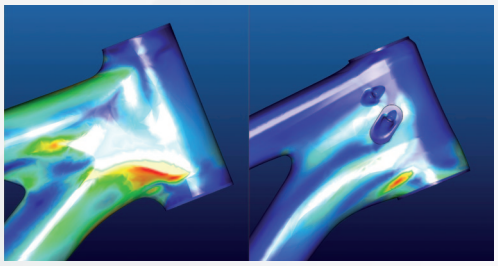
10 MASKING AND PAINTING

11 APPLYING DECALS & CLEAR COAT FINISH

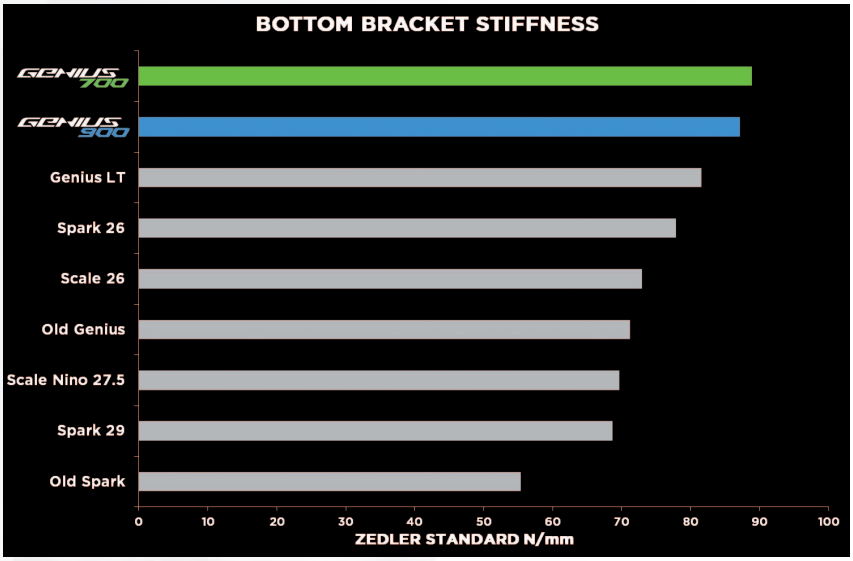
12 QUALITY CONTROL & SHIPPING

Stiffness Results

The frame of the new Genius is stiffer and lighter than ever. SCOTT Engineers have managed to build a lighter and better chassis by focusing on the most important areas like bottom bracket, head and seat tube. The new Genius shows significantly less stress in the headtube area, when compared to the old Genius (see bottom left image). This new Trailbike is the stiffest frame overall in the whole SCOTT bike range, even stiffer than the Genius LT (see comparison on the right).



FEA HT Old Genius (left) vs. new Genius 700



Frame Technology - Highlights for the new Genius frames

The new Genius 700 and 900 are more robust than the Spark and on par with the Genius LT in regards to lateral stiffness and overall strength. There are several key features that play a role in these improvements.

Molded Oversize Bottom Bracket

The PF BB 92 bottom bracket is molded using our IMP technique. Because its shape is optimized to manage the main pivot load and seamlessly interface with the down tube it offers much higher lateral stiffness so that riders' pedal input is efficiently transferred into torque.

Forged Mono 'U' Link w/ Geometry Adjustment

The newly designed Mono Link is low profile and able to handle the loads of a harder hitting Trail Bike. The link is more solid than the one used on the Spark with an additional bridge incorporated in the design while the bearings have been moved outboard into the seat stay to widen and stiffen the link.

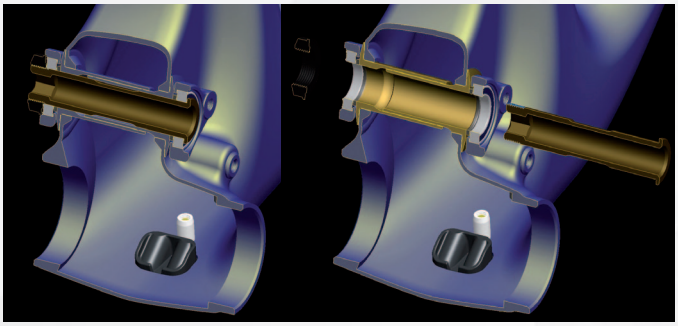
The link also features adjustable geometry by way of a shock mount chip. Simply flip the chip to either mounting position to affect the bottom bracket height and head tube angle by 6mm 0.4 degrees respectively. The Genius is the only Trail Bike on the market that offers this feature.

IDS-SL Dropouts (Interchangeable Dropout System-Super Light)

Interchangeable and lightweight, the IDS-SL dropout system works with 142x12mm, 135x12mm and 135x10mm QR rear axle standards. Shred the turns more aggressively and with enhanced control, because the rear end is laterally stiff.

Tapered Head Tube

The Genius features a tapered head tube for a seamless joint to the oversized down tube. This increases stiffness, safety, durability, and control.

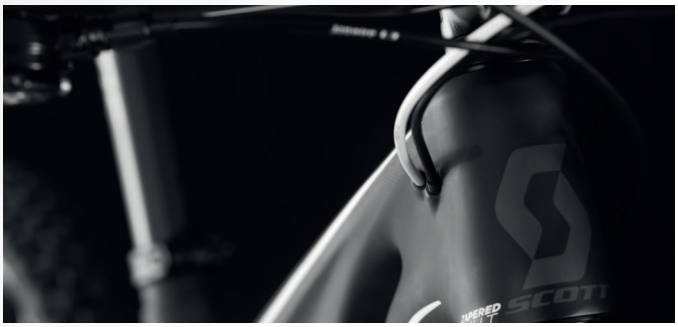


Oversize pivots

Increasing the pivot diameter better manages loads, and in turn increases the lateral stiffness of the frame. Because of this, we've upgraded the pivot axle sizes to match those used on all of our current suspension bikes.

Direct Post Mount

We've saved even more weight by eliminating bulky brake hardware for mounting the rear caliper and integrated a direct post mount to the chain stay. This mounting position also decreases the load the brakes apply to the swingarm parts.



Internal Cable Routing

Routing the cables internally saves weight by omitting bulky hardware and looks cleaner. The cables can endure a longer lifetime as they are hidden from view and protected within the frame.

Chainblocker and ISCG Mounts

The chainblocker plate protects the frame from "chainsuck" by blocking it from falling off the inner ring and damaging the frame. The system is compatible with 3x and 2x front drives.

An optional ISCG adaptor allows riders to run a chain device for single or 2x chain set and is removable to leave a clean, light mainframe when not in use.

FACTS

- *The Genius 700 and 900 are stiffer than prior Genius*
- *The Genius 700 offers the best BB stiffness in the SCOTT MTB range, followed by the 900*
- *29" wheels reduce suspension stress*
- *27.5" offers best balance of stability and performance*
- *Improved frame standards throughout: Tapered Headtube, 31.6mm seatpost, pressfit BB, ISCG, IDS-SL, PM 180*

+20% Head tube and BB stiffness compared to the old Genius

-6% Weight compared to old Genius

2300 GRAMS Weight frames including shock

135x10
135x12
142x12
Rear Axle Options

SUSPENSION TECHNOLOGY

The Move from Pull Shock to Standard Compression shock

When redesigning the Genius we decided to follow the direction of our Spark product and switched from the Equalizer OTS (Oil Transfer System) to Nude2 DPA (Dual Positive Air). The DPA system is more advanced and still offers TwinLoc functions while using more advanced and tune-able methods of damping. With Nude2 DPA we can offer mode sensitive damping so that Traction and Full mode have completely unique compression and rebound characteristics.

3 modes | **1 lever** | **TOTAL CONTROL**

TWINLOC

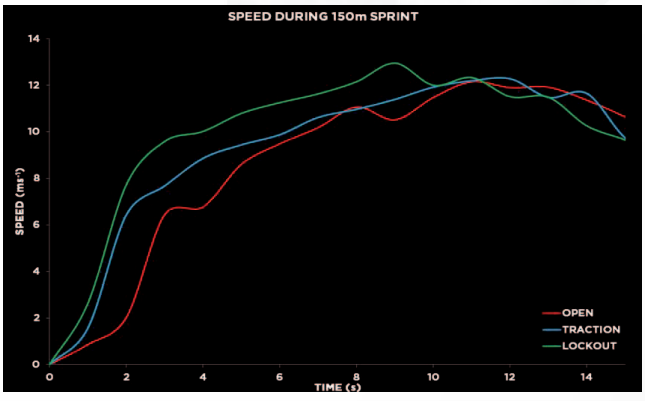
TwinLoc: The Original Three Position Handlebar Mounted Control

The Advantages of TwinLoc

The patented TwinLoc system is found on all of our full suspension mountain bikes. TwinLoc now features Traction mode on both shock and fork so you can choose between Lockout, Traction mode and Full mode options via this unique handlebar-mounted switch. It is perfect for Climbing, Riding and Descending. With One Lever you have Total Control of the shock and fork simultaneously.

The Traction advantage: Sprinting with maximum effort in all three modes.

This graph shows SCOTT Swisspower athlete Thomas Frischknecht repeating the same flat trail section in all three modes with maximum power. In Traction mode the rider accelerates nearly as fast as in lockout mode. Traction offers an excellent balance between efficiency and suspension performance.

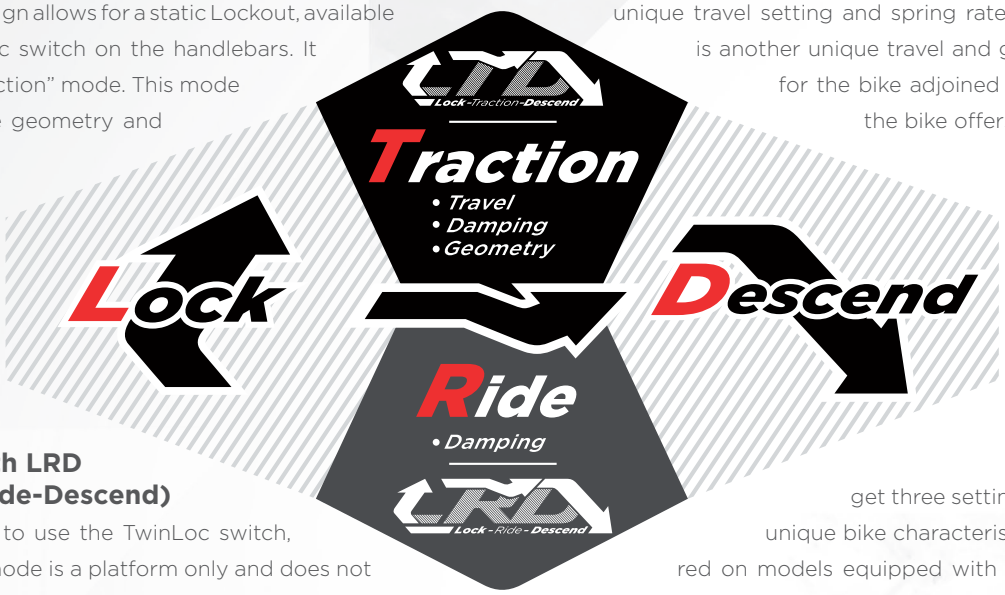


THREE POSITIONS, TWO APPROACHES

TwinLoc is offered in two forms, LTD and LRD

TwinLoc with LTD (Lockout-Traction-Descend)

LTD is only available on SCOTT bicycles equipped with our DPA (Dual Positive Air) suspension technology. This unique suspension design allows for a static Lockout, available via our TwinLoc switch on the handlebars. It also offers "Traction" mode. This mode offers a unique geometry and travel adjustment because of the air volume adjustment via DPA. This differs from a 'Platform' that does not allow for a unique travel setting and spring rate. Descend mode is another unique travel and geometry setting for the bike adjoined by the full travel the bike offers.



TwinLoc with LRD (Lockout-Ride-Descend)

LRD continues to use the TwinLoc switch, but the 'Ride' mode is a platform only and does not offer a geometry adjustment or a travel setting. You still get three settings, but not three unique bike characteristics. LRD is offered on models equipped with aftermarket suspension, like FOX.

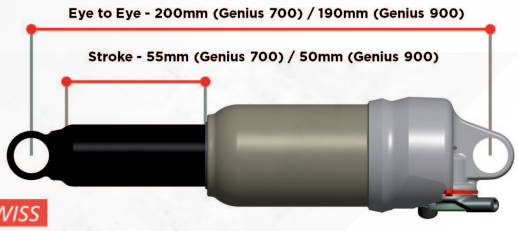
Co-Developed Suspension Module

SCOTT Engineers 'Co-Develop' the suspension Module by simultaneously working on the swingarm design along with the shock. This means that the geometry settings for each mode in LTD are engineered for your riding pleasure. When you are designing a frame with LTD it's important to have an end result in mind for the three unique modes and only when you work on the shock and the swingarm together can you get the results you want. Our competitors buy shocks to suit their designs as an afterthought while we co-develop.

Nude2 Rear Shock

The second evolution of our Nude rear shock gains performance and technology while remaining lightweight. It works exclusively with our patented TwinLoc system and comes stock on both 27" and 29" versions.

The Nude2 is a completely new shock with an improved air spring and damping system. The shock possesses a more progressive damping curve and mode sensitive damping than its predecessor. This means that both travel modes have separate damper settings relative to their travel length and effective forces. When collecting data for the Genius project, we also calculated rider input data, including forces such as the rider's gyro-scoping pedal stroke and its' effects on the suspension. We simulated a rider's pedaling and jerky motions made while pedaling or clearing obstacles, and measured their influence on the suspension. Many other designs assume that a rider is static and coasting, or they only include acceleration forces on the suspension and drivetrain. We are more concentrated on suspending the movement of the rider instead of negating pedaling forces.

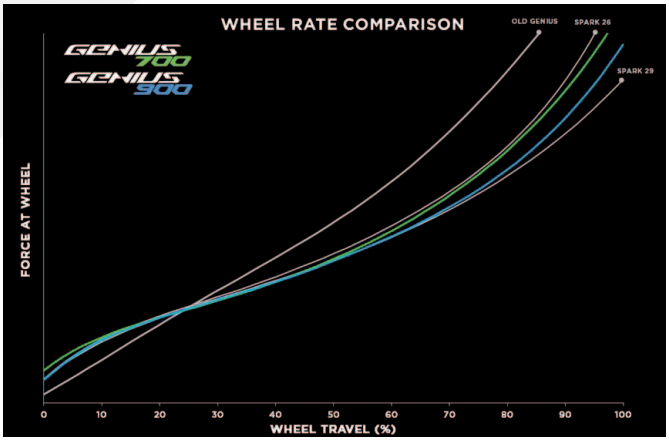


DT SWISS

nude2	GENIUS 700	GENIUS 900
Eye to Eye	200mm	190mm
Stroke	55mm	50mm
Wheel Travel	150mm	130mm
Ratio	150/55 = 2.7	130/50 = 2.6
Weight	241g	236g

Dual Positive Air (DPA) *Unique Air Spring Volumes for each mode*

Dual Positive Air is the system used by SCOTT to attain two unique spring curves for TwinLoc and LTD (Lock-Trail-Descend) equipped bikes. Either a single air chamber or a combination of the two chambers allows for two unique geometry and travel modes within TwinLoc. When a smaller single chamber is used, there is less air volume and therefore the travel is shorter and the bike is less sagged, offering a steeper more agile bike geometry. When both chambers are employed, the air volume is increased allowing the bike to sag into a slacker position with more negative travel and more available travel at an engineered spring curve specifically for the full travel mode.



Front Suspension

We worked with our suspension partners, both FOX and RockShox, to build forks with damping that matched our rear shocks. All Genius 700 and 900 series bikes offer mode sensitive damping front and rear and work with our TwinLoc switch.

FACTS

- ***For the first time all Genius models have three distinct suspension settings on both shock and fork***
- ***With TwinLoc LTD suspension travel, damping and geometry can all be adjusted via handlebar mounted switch***
- ***The new Nude2 compression style shock reduces weight (-200g) compared to the prior Equalizer2 shock***
- ***The shock is mounted in a more protected position and sag is easier to measure***
- ***Both travel modes have unique damper settings relative to their travel length and effective forces***
- ***The TwinLoc lever is extended – and offers an even better handling***

1 Twinloc Lever controls front and rear

241 GRAMS Weight of the Genius 700 shock

3 LTD offers three modes and three distinct travel/damping settings

SPARK

MAXIMUM ATTRACTION

SPARK 600

RACING 80% TRAIL 20% ALL MTN 0%

TRAVEL WITH TWINLOC
0 – 85 - 120 mm

WEIGHT
1830 Gramm

FOR WHAT

- ***XC Race, smooth singletrack riding***
- ***Great handling on singletrail***

FOR WHO?
XC Racers, smaller riders and traditionalists

SPARK 900

RACING 80% TRAIL 20% ALL MTN 0%

TRAVEL WITH TWINLOC
0 – 70 - 100mm

WEIGHT
1850 Gramm

FOR WHAT
XC Race, smooth singletrack riding

FOR WHO?
Big Wheel enthusiasts and XC Racers

GENIUS

THE EVOLUTION OF TRAIL

GENIUS 900

RACING 10% TRAIL 80% ALL MTN 10%

TRAVEL WITH TWINLOC
0 – 90 - 130mm

WEIGHT
2300 Gramm

FOR WHAT

- ***Trail***
- ***Performs well on climbs, fowy singletrails and technical descent***

FOR WHO?
Big Wheel enthusiasts with an appetite for increased travel

GENIUS 700

RACING 0% TRAIL 80% ALL MTN 20%

TRAVEL WITH TWINLOC
0 – 100 - 150mm

WEIGHT
2300 Gramm

FOR WHAT

- ***Trail riding, technical courses***
- ***Performs well on climbs, fowy singletrails and perfect handling on technical descent.***

FOR WHO?
Trail riders who've been looking for the benefits of the Big Wheel but want more travel

GENIUS LT

REDEFINING ALLMOUNTAIN

GENIUS LT

RACING 0% TRAIL 20% ALL MTN 80%

TRAVEL WITH TWINLOC
0 – 85 - 120 mm

WEIGHT
2850 Gramm

FOR WHAT
All Mountain Adventures

FOR WHO?
All Mountain riders who find themselves in exposed backcountry terrain or trails with less climbing and more downhilling