RANGE

RIDE
BEYOND

DESIGNED AND TESTED
IN THE BACKWOODS OF
BRITISH COLUMBIA

MEDIA KIT

EMBARGO: JUNE 23, 2021
9AM PST

Norco imposes an official hold on any intel associated here within until June 23.

RANGE

Ride Beyond

Dedication to the ride has got you here. You push harder. Aim higher. And it keeps getting tougher to break through to the next level.

All it takes is one bike. This bike.

Whether you measure it in KOMs, podiums, or during après-ride shenanigans, your hunger for speed and progression is insatiable - but it’s also the monkey in your hip pack.

The new all-carbon Norco Range is engineered to ditch the monkey and unleash the speed and confidence you’ve always known is lurking inside. Precision tracking in the rough, superior climbing efficiency and a completely new angle on suspension make Range the fastest bike in Enduro, and your ultimate burly Big Mountain companion.

The High Virtual Pivot design helps maintain momentum on descents, neutralizes braking forces, and it positions mass low on the frame for a perfect mix of agility and stability, so all you need to focus on is choosing the fastest line.

RIDER BENEFITS

RANGE C1 PICTURED

RIDER ISOLATION

The Range's High Virtual Pivot suspension design isolates you from wheel movement by maintaining a rearward axle path while minimizing the effect of braking forces on suspension action.

HIGH SPEED CONVICTION

With minimal variance in the distance from the front tire's contact patch to the rider's centre of gravity throughout the size range, Range makes speed easy over the most demanding Enduro courses and Big Mountain terrain.

EFFICIENT CLIMBING

The Range's High Virtual Pivot suspension design efficiently-transmits drivetrain energy and provides a stable platform when pedaling by controlling anti-squat under power with a deliberately-positioned idler.

LOW CENTRE OF MASS

High-speed stability and agility are achieved by positioning the suspension components low in the frame, and minimized un-sprung mass ensures sensitive, consistent suspension action.

ON COURSE & OFF THE GRID

Every design, geometry and component spec decision amplifies the rider's focus on the trail, so you don't burn energy you don't have to, and speed never gets overwhelming - just a composed, engaged ride over sustained high speed, technical efforts on the race course or in the mountains.

RIDE ALIGNED™

Norco's exclusive Ride Aligned™ Design System matches each Range to the human who rides it. Rider-first geometry and suspension kinematics combine with custom fit and suspension tuning using the Ride Aligned™ Setup Guide to provide unparalleled, personalized performance from day one.

RANGE

RANGE
C1

RANGE
C2

RANGE
C3

RANGE
FRAMEKIT

Due to Covid-related scheduling and component availability challenges, Bike Specifications are subject to change without notice. Specifications may not be exactly as shown in photo.

RANGE

KEY FEATURES

INTENDED USE:	ENDURO & BIG MOUNTAIN
FRAME MATERIAL:	FULL CARBON, 170MM TRAVEL
FRAME / WHEEL SIZE:	S, M, L, XL / 29"
SUSPENSION TRAVEL:	F: 170MM R: 170MM
TIRE SIZE:	2.35 - 2.5"

ADDITIONAL FEATURES

LONG TRAVEL DROPPER POSTS (UP TO 200MM)
LOW STANDOVER
750ML BOTTLE CLEARANCE
INTEGRATED ACCESSORY MOUNT
UPDATED FRAME PROTECTION

RANGE C1

Colour: Black/Silver

FEATURES

+ FULL CARBON FRONT TRIANGLE, SEATSTAY AND CHAINSTAY, 170MM TRAVEL
+ FOX 38 FLOAT FACTORY GRIP 2 170MM TRAVEL FORK AND FOX DHX2 COIL FACTORY SHOCK
+ SRAM XO1 EAGLE DRIVETRAIN AND CODE RSC 200MM BRAKES
+ DT SWISS EX1501 CARBON ENDURO WHEELSET WITH 240 36T ENGAGEMENT HUBS
+ MAXXIS ASSEGAI DD FRONT AND DISSECTOR DD REAR TIRES

SPECIFICATIONS

Frame	Full Carbon, 170mm Travel, Ride Aligned™
Fork	Fox Factory 38, Grip 2, FLOAT, 170mm Travel, 44mm Offset
Rear Shock	FOX DHX2 Factory Coil, HSC/LSC, HSR/LSR, Custom Tune, 205x65mm Trunnion
Headset	Cane Creek Internal Sealed Bearing
Grips	DMR DeathGrip Soft, Thin (S, M), Thick (L,XL)
Handle Bar	Deity Skywire Carbon, 800mm, 25mm Rise
Stem	Alloy, 40mm Length, 35mm Clamp
Seat Post	OneUp Adjustable Dropper, 34.9mm, 150mm (S), 180mm (M), 210mm (L, XL)
Saddle	Ergon SM10 Enduro Comp
Front Brake	SRAM Code RSC, Metallic Pads
Front Brake Rotor	SRAM Centerline, 200mm
Rear Brake	SRAM Code RSC, Metallic Pads
Rear Brake Rotor	SRAM Centerline, 200mm
Rear Shifter	SRAM XO Eagle
Rear Derailleur	SRAM XO1 Eagle
Cassette	SRAM Eagle XG 1275, 10-52T
Chain	SRAM Eagle
Crankset	SRAM X1 Eagle Carbon, DUB, 32T, 170mm
Bottom Bracket	SRAM DUB PF92
Chain Guide	Custom MRP SXg
Front Hub	DT Swiss 240 Enduro, 15x110mm Boost, 6 Bolt
Rear Hub	DT Swiss 240 Enduro, 12x148mm Boost, XD, 36T engagement, 6 Bolt
Spokes/Nipples	DT Swiss Stainless
Rims	DT Swiss EXC 1501 Enduro 29" Carbon Wheelset
Front Tire	Maxxis Assegai 2.5", DD, 3C MaxxGrip, TR
Rear Tire	Maxxis Dissector 2.4", WT, DD, 3C MaxxGrip, TR
Valves	DT Swiss Tubeless Presta
Sealant	Stan's - 200ml

RANGE C2

Colour: Brown/Copper

FEATURES

+ FULL CARBON FRONT TRIANGLE, SEATSTAY AND CHAINSTAY, 170MM TRAVEL
+ ZEB ULTIMATE 170MM 29ER FORK AND FOX DHX2 COIL FACTORY SHOCK
+ SRAM GX EAGLE DRIVETRAIN AND CODE R 200MM BRAKES
+ E*THIRTEEN LG1 EN 29" RIMS WITH DT SWISS 350 36T ENGAGEMENT HUBS
+ MAXXIS ASSEGAI DD FRONT AND DISSECTOR DD REAR TIRES

SPECIFICATIONS

Frame	Full Carbon, 170mm Travel, Ride Aligned™
Fork	RockShox ZEB Ultimate RC2, 170mm Travel, 44mm Offset
Rear Shock	FOX DHX2 Factory Coil, HSC/LSC, HSR/LSR, Custom Tune, 205x65mm Trunnion
Headset	FSA #57E Internal Sealed Bearing
Grips	DMR DeathGrip Soft, Thin (S, M), Thick (L,XL)
Handle Bar	Deity Ridgeline, 800mm, 25mm Rise
Stem	CNC Alloy, 40mm Length, 35mm Clamp
Seat Post	TranzX YSP-105 Adjustable Dropper, 34.9mm, 150mm (S), 170mm (M), 200mm (L, XL)
Saddle	Ergon SM10 Enduro
Front Brake	SRAM Code R, 4 Piston, Metallic Pads
Front Brake Rotor	SRAM Centerline, 200mm
Rear Brake	SRAM Code R, 4 Piston, Metallic Pads
Rear Brake Rotor	SRAM Centerline, 200mm
Rear Shifter	SRAM GX Eagle
Rear Derailleur	SRAM GX Eagle
Cassette	SRAM Eagle XG 1275, 10-52T
Chain	SRAM Eagle
Crankset	SRAM GX Eagle, DUB, 32T, 170mm
Bottom Bracket	SRAM DUB PF92
Chain Guide	Custom MRP SXg
Front Hub	DT Swiss 350, 15x110mm Boost, 6 Bolt
Rear Hub	DT Swiss 350, 12x148mm Boost, XD, 36T engagement, 6 Bolt
Spokes/Nipples	DT Competition DB Stainless
Rims	e*thirteen LG1 EN, 32H, 29"
Front Tire	Maxxis Assegai 2.5", DD, 3C MaxxGrip, TR
Rear Tire	Maxxis Dissector 2.4", WT, DD, 3C MaxxGrip, TR
Valves	e*thirteen Tubeless
Sealant	Stan's - 200ml

RANGE C3

Colour: Red/Silver

FEATURES

+ FULL CARBON FRONT TRIANGLE, SEATSTAY AND CHAINSTAY, 170MM TRAVEL
+ ROCKSHOX ZEB CHARGER R 170MM TRAVEL FORK
+ FOX DHX2 COIL FACTORY SHOCK
+ SHIMANO SLX/DEORE DRIVETRAIN AND MT520 4-PISTON 203MM BRAKES
+ MAXXIS ASSEGAI DD FRONT AND DISECTOR DD REAR TIRES

SPECIFICATIONS

Frame	Full Carbon, 170mm Travel, Ride Aligned™
Fork	RockShox ZEB, Charger R, 170mm Travel, 44mm offset
Rear Shock	FOX DHX2 Factory Coil, HSC/LSC, HSR/LSR, Custom Tune, 205x65mm Trunnion
Headset	FSA #57 E Internal Sealed Bearing
Grips	DMR DeathGrip Soft, Thin (S, M), Thick (L,XL)
Handle Bar	6061 Aluminum, 800mm, 25mm Rise
Stem	e*thirteen Base, 40mm Length, 35mm Clamp
Seat Post	TranzX YSP-105 Adjustable Dropper, 34.9mm, 150mm (S), 170mm (M), 200mm (L, XL)
Saddle	WTB Volt 250 Sport
Front Brake	Shimano BR-MT520, 4 piston, Metallic Pads
Front Brake Rotor	Shimano RT-64, 203mm
Rear Brake	Shimano BR-MT520, 4 piston, Metallic Pads
Rear Brake Rotor	Shimano RT-64, 203mm
Rear Shifter	Shimano SLX SL-M7100-R
Rear Derailleur	Shimano SLX RD-M7100
Cassette	Shimano Deore CS-M6100-12, 10-51T, 12 Speed
Chain	Shimano Deore CN-M6100
Crankset	Shimano Deore FC-MT510-1, 32T, 170mm
Bottom Bracket	SRAM DUB PF92
Chain Guide	Custom MRP SXg
Front Hub	Shimano HB-MT410, 15x110mm Boost, Center Lock
Rear Hub	Shimano FH-MT510, 12x148mm Boost, Micro Spline, Center Lock
Spokes/Nipples	Stainless - Black
Rims	Stan's Flow D, 32H, 29"
Front Tire	Maxxis Assegai 2.5", DD, 3C MaxxGrip, TR
Rear Tire	Maxxis Dissector 2.4", WT, DD, 3C MaxxGrip, TR
Valves	Stan's Tubeless
Sealant	Stan's - 200ml

FRAME GEOMETRY
RANGE

CARBON C1 / C2 / C3

Frame Size	S	M	L	XL
Wheel Size	29″			
Travel (Front/Rear)	170/170			
Reach	420	450	480	510
Stack	618	630	641	653
Head Tube Angle	63.75	63.5	63.25	63
Fork Offset	44			
Seat Tube Length	370	395	410	455
Effective Seat Tube Angle	76.5	76.75	77	77.25
Rear Center Length	440		442.5	447.5
Bottom Bracket Drop	20			
Bottom Bracket Height	355			
Horizontal Top Tube Length	568	598	628	658
Wheel Base	1203	1243	1285	1329
Stand Over Height	662	663	665	695
Head Tube Length	100	115	130	145
Trail	136	138	140	142
Recommended Seat Post Drop	150	170	200	
Maximum Post Insertion	245	275	290	335
Stem Length	40			
Crank Length	170			
Tire Size	2.35″ - 2.5″			
Water Bottle Compatible	1 x 750 mL			

FORGED

The Real Story

Take a peek behind the curtain on what it took to create the Norco Range.

The Range is the result of the largest-scale team effort of anything we've ever produced.

It took absolutely everything we have to create; Inventing a whole new way of developing frame geometry, countless hours obsessing over suspension design and kinematics, then trail-testing 'til we knew we'd got it just right.

There's No Other Way.

(pssss. click the play button)

WHAT SETS THE NEW RANGE APART FROM PREVIOUS GENERATIONS?
AKA: WHAT MAKES THIS BIKE SO DAMN FAST?

Yes, the new Range looks fast AF, but it's so much more.

It's a completely new bike designed from the ground-up for the world's fastest, roughest Enduro courses, and to meet the needs of Big Mountain riders who crave speed on technical trails in the backwoods.

The new design is the result of applying our Ride Aligned™ Design System in a whole new way, specifically to achieve our performance goals for Range, and the meeting the needs of Enduro riders.

Also, this proprietary Norco design process determined that, not only does each frame size benefit from different rear-centre lengths and seat tube angles, but the ideal head tube angle (HTA) is different for every frame size. Slack HTAs offer riders a great deal of protection for rough terrain, but they make it tough for smaller riders to keep their weight over the front tire, so riders benefit from successively steeper angles as frame sizes get smaller.

Fractions of degrees and millimeters may seem insignificant on paper, but on-bike testing confirmed that these seemingly small changes made a big difference in how the different frame sizes performed.

With a blank slate, we made a list of precisely what we wanted to achieve with the rear suspension performance in terms of axle path, shock tune, anti-squat and suspension performance while braking. The Ride Aligned™ process, combined with a completely new suspension design, allowed us to tick all of the boxes - mass is kept low in the frame due to the suspension layout and shock position, active suspension for exceptional tracking in the rough, a balanced level of suspension support front and rear to maintain stable body position in varied terrain, and efficient pedaling on climbs.

WHAT IS THE NEW SUSPENSION DESIGN CALLED?

High Virtual Pivot

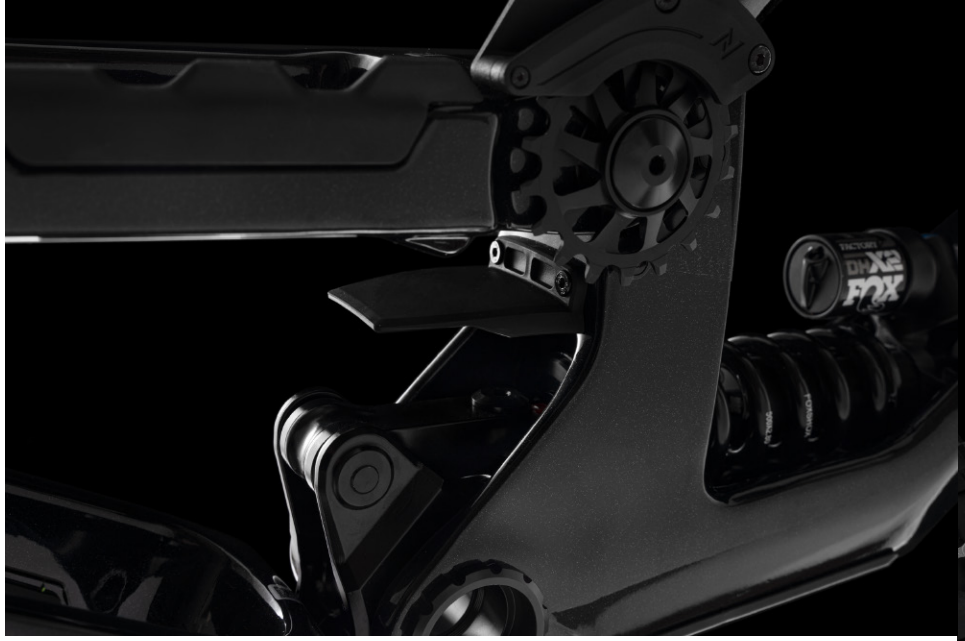
The High Virtual Pivot design's pivot point is not fixed and moves as the suspension cycles. This creates a rearward axle path while controlling its path through suspension travel to provide lower levels of anti-rise than would be possible with a HSP layout of similar axle path. This translates into a suspension that carries momentum exceptionally in rough terrain due to its axle path but remains active under braking to maintain grip and control.

WHAT KIND OF MAINTENANCE WILL BE REQUIRED TO KEEP THE RANGE'S SUSPENSION WORKING ITS BEST?

In developing the Range, we worked closely with Norco Factory Team mechanics to ensure that it's simple to maintain, and easy to work on in a race environment.

Bearings are easily replaced, hardware is robust, and processes are straightforward.

This design requires no more maintenance than any other suspension frame. Verify pivot bearings are smooth, ensure bolts are torqued to spec, and clean it with soapy water after you get it dirty.



WHY IS THE RANGE ONLY MADE IN CARBON FIBRE?

Because of the shapes and profiles of tubes and frame components used to achieve the Range's High Virtual Pivot suspension design, carbon fibre construction is the ideal material to achieve the strength, durability and performance we needed to build into the Range.

WHY DOES THE RANGE HAVE 29 INCH WHEELS FRONT AND REAR?

We engineered the Range to be the fastest Enduro bike available - and our testing consistently shows that 29" wheels roll faster in the conditions riders face on most Enduro race courses.

With Range, even the smallest riders benefit from 29" wheels front and rear. Riders can stay centred on the bike, even in the steepest, nastiest terrain, and the rearward axle path gets the 29" wheel back out of the way to avoid rider contact under heavy compression.

While a 27.5" wheel can theoretically fit the frame, doing so will have a significant effect on the geometry we've engineered into the Range. In order for a "mullet" bike to ride properly, the smaller rear wheel must be designed-in from the outset.

WHAT PROMPTED THE MOVE AWAY FROM THE HIGH SINGLE PIVOT (HSP) DESIGN?

Norco re-defined how riders perceive high pivot bikes with the Aurum HSP. When we introduced it, it was a state-of-the-art, Factory Team-proven solution that confirmed how a rearward axle path helps maintain momentum in the rough while minimizing drivetrain kickback.

In the years since its introduction, technology has progressed. Our research and Factory Team development confirms that the Range's High Virtual Pivot design allows a comparable rearward axle path to HSP while allowing the rear suspension to remain more active under braking than is possible with high single pivot designs.

WHY DOES IT NEED AN IDLER?

Due to Range's rearward axle path, the distance between the rear axle and BB grows considerably as the suspension moves through its travel. Routing the chain directly between the BB and cassette with this axle path would result in a dysfunctional level of anti-squat and significant chain growth causing excessive pedal kickback. Routing the chain around an idler in a location that minimizes chain growth better isolates the rider from inputs at the rear wheel, resulting in reduced rider fatigue. Additionally, the ability to control anti-squat with idler location provides a stable platform when pedaling.

WHAT IS THE MAINTENANCE REQUIRED FOR THE IDLER?

The idler rotates on precision sealed cartridge bearings. Over time, it's foreseeable that these bearings, and the teeth may experience wear, like any other drivetrain component.

Periodic verification of smooth operation can be performed by disengaging the chain and spinning the idler. If it exhibits noise, lateral play, or excessive resistance, the bearing can be pressed out and replaced. If the teeth exhibit excessive wear, the entire idler is replaceable.

HOW DO YOU MAINTAIN CONSISTENT SUSPENSION KINEMATICS BETWEEN SIZES WITH VARYING CHAINSTAY LENGTHS?

Maintaining proportional rear centre (RC) lengths across frame sizes is a key parameter of our Ride Aligned™ Design System.

RC length adjustment on Range is accomplished with size specific dropouts. Implementing RC adjustment in this way requires an adjustment to pivot locations at the linkarm to ensure the leverage curve is identical across all frame sizes. Without adjustment at the linkarm, the variation in RC length across sizes would alter the leverage curve and the ride characteristics of the bike as a result. For this reason, we have designed Range with size specific linkarms that should not be interchanged between sizes. Interchanging dropouts and linkarms between frame sizes will compromise the ride characteristics of the bike and the accuracy of the recommended Ride Aligned™ suspension settings.

With so many "flip chip" suspension designs entering the marketplace, we understand that the temptation to mix and match is high. The new Range's suspension is highly calibrated with a custom-tuned shock and size-specific leverage curves so it can be precisely-tuned as we've engineered it, so there's no need to mess around with chips or links.

HOW DO I PRECISELY TUNE A COIL SPRUNG REAR SHOCK?

The Ride Aligned™ Setup Guide for Range provides recommendations for rear shock spring rates in both 50 lbs/in increments and 5 lbs/in increments.

While coil springs are most commonly available in 50 lbs/in increments, certain riders find these jumps can provide a setup that feels too soft or too firm depending on their body weight, weight distribution, skill level and trail conditions.

By providing spring rate recommendations in 5 lbs/in increments, these detail-oriented riders can find the extra level of precision they're looking for in their suspension setup.

We've found adjustable-rate springs such as those available from Sprindex to be excellent tools for dialing-in this level of rear shock spring rate.

WHAT REAR SHOCKS CAN I RUN IN THE RANGE?

The Range is optimized and tuned to match the linear spring rate of a coil spring, and the frame is optimized to fit the structure of 2021-22 Fox DHX2 and 2021-22 RockShox Super Deluxe Coil shocks. It's possible that other aftermarket shocks simply will not fit on the Range, whether coil or air.

Also, because the stock DHX2 shock features a linear spring rate with a custom damping tune, mounting other coil or air sprung shocks will negatively affect the ride quality and precision we've engineered-in.

CAN I RUN A DUAL CROWN FORK?

While the Range is optimized for a single crown fork, some riders may want to run a dual crown.

We have extensively tested the Range on the trail and in the lab, confirming it can be run with forks up to 180mm in both single crown and dual crown configurations. So, riders have options depending on their terrain and preferences, without voiding warranty.

WHAT IS THE NORCO FACTORY TEAM RUNNING FOR DH?

During the development process with the Range, we recognized that the traits that made the High Virtual Pivot suspension layout perfect for Enduro would also be well-suited to the performance requirements of a World Cup DH bike. While our initial testing of Range as an Enduro platform shaped the starting point for the downhill bike, the feedback we received from the Norco Factory Team riders on the downhill prototypes was instrumental in defining the final kinematics for Range.

The bolt-on rear dropout design offered a unique opportunity to adapt the geometry of Range to be appropriate for downhill without the need to alter carbon frame components, (In fact, that's why you can see the bottle mounts in all those highly-analyzed video stills after the DH proto debuted at Crankworx last summer!) so we designed linkarms specific to downhill that provided the wheel travel and leverage curves required for the demands of World Cup courses and the Norco Factory Team's fastest riders.

Through extensive testing and iteration with our team, we arrived at a prototype that was ready to compete at the highest level of downhill racing.


RIDE
BEYOND
DESIGNED AND TESTED
IN THE BACKWOODS
OF BRITISH COLUMBIA
NORCO.COM