



Arktos29 // Owner's Manual



# Welcome to the ride of your life.

At Alchemy Bicycles, we design, engineer, and hand-build the finest bicycle frames available. Priding ourselves on commitment and quality, every Alchemy frame is fabricated by elite craftsmen, each dedicated to the time-consuming and demanding process of creating bicycles individually suited to their riders. Alchemy blends cutting-edge technology and processes with old-world attention to detail and hands-on expertise. Every frame is purpose-built for performance and longevity, providing even the most discerning riders with the ride of their life. We are grateful to have you on our team.

## The Arktos

The Arktos is a one-of-a-kind, do-it-all 6-inch travel full-suspension bike designed to climb and descend with the same aplomb. The Arktos features the patented dual-linkage platform called the Sine Suspension, which has been exclusively licensed to Alchemy by famed designer David Earle. The carbon chassis on the Arktos tube shapes and “Developed in Denver” layup provides torsional stiffness far superior to the current crop of trail bikes on the market.



## Safety

Correct inspection and maintenance of your bicycle is essential to your safety. Inspect your bicycle frequently and follow the maintenance schedules in this manual. If your inspection discovers any issue, do not ride the bicycle until you have corrected the issue. If you do not have the skills or tools for the required repair or corrective work, take your bicycle to your retailer for repair. If you feel uncomfortable inspecting and maintaining your bicycle, take the bicycle to your retailer for service.

Bicycles are not designed to withstand every situation. In a crash or impact, it is not uncommon for the bicycle to have damage and for you to fall. If you fall, your bicycle cannot prevent injury. Cars have bumpers, seat belts, air bags, and crumple zones. Bicycles do not, so even a small crash at slow speed can cause injury or death. At relatively slow speeds, a bicycle can tip over sideways or pitch you over the front wheel. Higher speeds and larger impacts will only be worse.

Although bicycles are built for extreme riding, they are not indestructible. This type of riding is extremely hazardous and puts unpredictable forces on a bicycle that may overload the frame, fork, or parts. If you choose to ride in rugged terrain, you should take appropriate safety precautions such as more frequent bicycle inspections and replacement of equipment. You should also wear comprehensive safety equipment such as a full-face helmet, pads, and body armor.

See below for bike inspection and maintenance tips.

# FRAME FEATURES

- Wheel Size: 29 Inch
- Max Tire Clearance: 2.5 Inch
- Spacing Boost+ 12X157mm
- Travel: 140mm / 5.5 inch
- Shock: Fox Float DPX2
- Fork: 150-160mm compatibility, 180mm max
- Bottom Bracket: 73mm threaded, ISCG05 under BB mount
- Seat Post: 31.6mm with internal dropper routing
- Headset: IS42 Upper – IS52 Lower for tapered steerer
- Drive Train: 1x Only
- Shock Size: 200X56mm / 7.875X2.25"
- Hardware: 8mmX22mm
- Chainring Clearance: 38t (need 3mm offset ring for SRAM Eagle)
- Bearings: Enduro BB 3930 LLU and BB MR 21531 LLU MAX
- Brake Mount: Post mount 74mm for 160mm rotor standard
- Frame Weight: 6.2lbs / 2800g

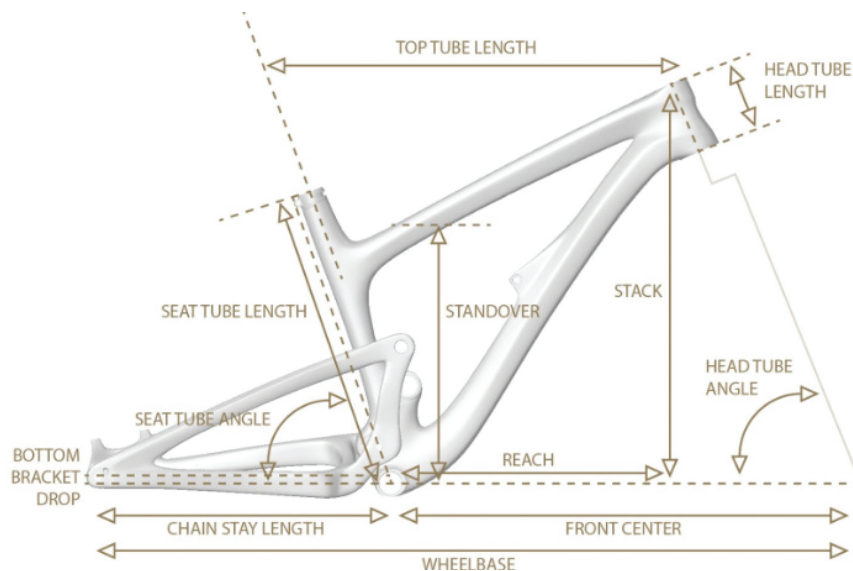


# GEOMETRY

## GEOMETRY

Size	S	M	L	XL
Seat tube length	410	450	483	518
Effective top tube	580	610	630	665
Head tube length	100	110	125	140
Head tube angle	66	66	66	66
Frame stack	620	630	644	658
Frame reach	418	444	452	483
Seat tube angle	74.5	74.5	74.5	74.5
Chain stay length	438.5	438.5	438.5	438.5
Bottom bracket drop	34	34	34	34
Bottom bracket height	343	343	343	343
Wheelbase	1167	1185	1211	1248

\*44mm offset fork



# SINE SUSPENSION

The Arktos features Alchemy's patented dual-linkage platform called the Sine Suspension. The name Sine derives from the way the shock rate, when graphed, resembles a sine wave: It's regressive through the first part of the travel to absorb small bumps and provide climbing traction, progressive mid-stroke to avoid wallowing on big hits, then slightly regressive in the last 15 percent of the stroke to enable the bike to use all 6 inches of travel. Sine is also designed to minimize chain growth when the bike is moving, which improves pedaling efficiency and keeps the suspension active under braking. The Sine suspension system is optimized at 30% overall sag.

## Setting Sag

Sag is the amount of travel the shock compresses under normal rider weight. We recommend that you set the sag on at 30%, but personal preference and riding conditions are also factors influencing the amount of sag needed.

## To check sag:

- 1) Get all of your gear on, so you start with an accurate rider weight.
- 2) With someone holding the bike, stand up on the pedals and get in your normal riding position on the bike.
- 3) Bounce up and down on the bike, compressing the rear end of the bike and the shock, and when you are steady again, have someone push the travel ring up the shock against the wiper seal.
- 4) Dismount the bike gently (so you don't move the travel ring).
- 5) The amount of stanchion shown between the wiper and travel ring is your sag. 30% sag would show 21mm of exposed stanchion between the wiper and travel ring.

# DROPPER POST

## Dropper Post Installation

The Arktos is designed to utilize a “stealth” or internally-routed dropper post. The cable housing is intended to route from the remote handlebar lever, enter the down tube just behind the head tube, and follow the down tube and go directly up into the seat tube.

### Some tips for installation:

- 1) It is best to route the housing before you install the bottom bracket as this makes it easier to route the cable up into the seat tube.
- 2) Follow the minimum insertion line of the seatpost to ensure proper height of the post.
- 3) After you attach the cable and are inserting the post into the frame, make sure you pull on the housing (up near the head tube) so you do not bind the housing down in the frame.

# MAINTENANCE

How frequently you service your bicycle depends on how much you ride and the kind of weather conditions you ride in. Obviously, riding 100% in muddy and wet conditions will mean your Arktos will require far more maintenance than an Arktos that sees normally see dry riding conditions. But, assuming the machine is in good working order and that you ride sensibly (i.e. don't abuse your bike) and not in nasty weather a lot you can use the following guidelines to keep your Arktos in tip-top shape.

## Every Ride

Check Tire Pressure and add air if needed.

Check the tire tread for wear and embedded debris that could cause a flat.

Check that the wheel axles are tight and that the wheels are secure.

Spin wheels looking for wobbles, which indicate you should have your wheel trued.

Squeeze brakes to confirm function and check to see that the brake pads are in good condition.

Compress and rebound the suspension to check that it's working properly.

Check chain & add lube if it looks dry.

Make sure your tools and pack are in good shape and ready to use.

## Monthly

<> 500 miles

Clean the bike and inspect the frame and components for signs of wear such as cracks.

Wipe the chain and relube.

Check the wheels for loose spokes by squeezing the spokes together by hand.

Lube the brake, derailleur and clipless-pedal pivot points

Test bolts tightness of crankarms, pedals, chainring bolts, seat bolt, seatpost bolt, stem bolts, handlebar bolts and all accessory mounting bolts/screws. Make sure to follow manufacturer's torque specs.

Lube the cables to prevent binding and check the cables for fraying and rusting and replace if necessary

Check clipless pedals and cleats for loose screws/bolts

Check suspension to make sure there isn't unnecessary stiction in system. Suspension that is "notchy" feeling when compressed will need service by the suspension manufacturer.

## 6 Months

<> 2,500 miles

Clean, inspect the frame and fork for any cracks or damage.

Check and replace tires if needed.

Check the bearing bind in the hubs, bottom bracket, headset: adjust and/or overhaul as needed.

Check all cables and housings for fraying, breaks, rust and corrosion and replace if necessary.

Check for worn brake pads and replace if needed; also replace worn handlebar tape or grips.

Check for chain, cassette cog and chainring wear and replace worn parts as required.

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## Yearly

<> 6,000 miles

Check all bearing systems: hubs, bottom bracket, headset and pedals: adjust and/or overhaul as needed.

Check all cables and housings for fraying, breaks, rust and corrosion and replace if necessary.

Remove swingarm pivot bolts and by hand check bearings to make sure they are spinning with no friction and replace if needed.

Clean and check wheels carefully for signs of cracks or broken spokes.

Check the bearing bind in the hubs, bottom bracket, headset: adjust and/or overhaul as needed.

Overhaul the pedals to check the bearings and add fresh grease.

Replace brake pads and drivetrain including chain, cassette and front chainring.

Check suspension to make sure there isn't unnecessary stiction in system. Suspension that is "notchy" feeling when compressed will need service by the suspension manufacturer.



# MAINTENANCE

## Bike Care

Using solvents or harsh abrasives to clean your carbon bike could damage the finish or even compromise its structural integrity. To care for your Arktos, simply wash with warm sudsy water, using a soft cloth, sponge or soft bristle brush to clean off heavier buildup. Rinse thoroughly (if you use a hose, don't direct high-pressure spray at your bike). Dry with a soft towel and apply a coating of wax or other surface protectant, followed by a gentle buffing. Be careful not to get any overspray on the brake surfaces.

Now that the frame is clean, it's a good time to check your frame thoroughly for any signs of carbon damage that may impact the frame's integrity. If you suspect your frame may have damage affecting the structural integrity, take your bike to a bike shop or call Alchemy immediately.

## Checklist

- Make sure all frame surfaces in contact with cables are protected. Cable housing rubbing on carbon can wear over time.
- Make sure brake levers, handle bar ends and the fork crown do not contact the frame at full rotation.
- Never clamp any part of a carbon frame in a bike stand or car-rack.
- Never tighten a seat post clamp without a post in the frame.
- Always inspect your frame if you experience any chain suck.
- Always inspect your frame in full after a crash to be sure there is no damage. Look for cracks, dents or loose fibers. Any direct impact to the frame can cause serious structural damage.

# OUR PROMISE

## Warranty

At Alchemy Bicycles, we stand behind our products 100%. We guarantee that your frame will be free of defects in craftsmanship for as long as you own it. Purchase must be made through an authorized Alchemy Dealer. Purchasing an Alchemy frame from third party internet sites (such as eBay) voids our warranty, no matter what the listing says. To validate your warranty, please complete and return the registration card.

## Crash Replacement

We understand that accidents happen. If you crash and break your Alchemy, no matter where you purchased your frame, simply contact us directly about your problem and receive 40% off MSRP on a replacement frame.



Like no other.

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