



Atherton
bikes

USER MANUAL
S. 170

WELCOME

Welcome to the Atherton Bikes family! To say this brand has been a lifetime in the making is no exaggeration, Dan built his first bike in 1992 when he was just 10 years old. But by 2019 our dream of pushing bike development as hard as we push our riding became irresistible.

For 5 years we've put our hearts and souls into designing a range of bikes with the same attention to detail we apply to our racing. That bike range has more than proved itself through World Cup wins, consumer awards and World Championship Gold & Silver medals as well as scores of rave reviews from both customers and media.

But from the beginning we've wanted to see more people enjoying our bikes. Welcome to the S-Series which brings the Atherton approach to an aluminium bike, we know you're going to love it

Dan, Gee & Rach.

The S.170

Our Big Mountain Enduro bike in Aluminium.

Like its inspiration the A170, the S170 is super-playful and designed to excel on the steeps. The Aluminium frame is tough enough to survive the worst that Dyfi (and the dig crew) can throw at it, hard-hitting and low-maintenance it's the perfect choice for park shreds or big days out on the toughest trails.



CONTENTS

- 4 FRAME SPECIFICATION
- 5 FRAME GEOMETRY
- 6 FRAME HARDWARE
- 11 ASSEMBLY INSTRUCTIONS
- 12 FROM BOX TO BIKE
- 13 SUSPENSION SETUP
- 14 SERVICE & MAINTENANCE
- 15 PART COMPATIBILITY
- 16 TESTING AND STANDARDS
- 17 ADDITIONAL INFORMATION
- 18 WARRANTY





FRAME SPECIFICATION

Frame Construction: Bonded 7075 T6 Aluminium

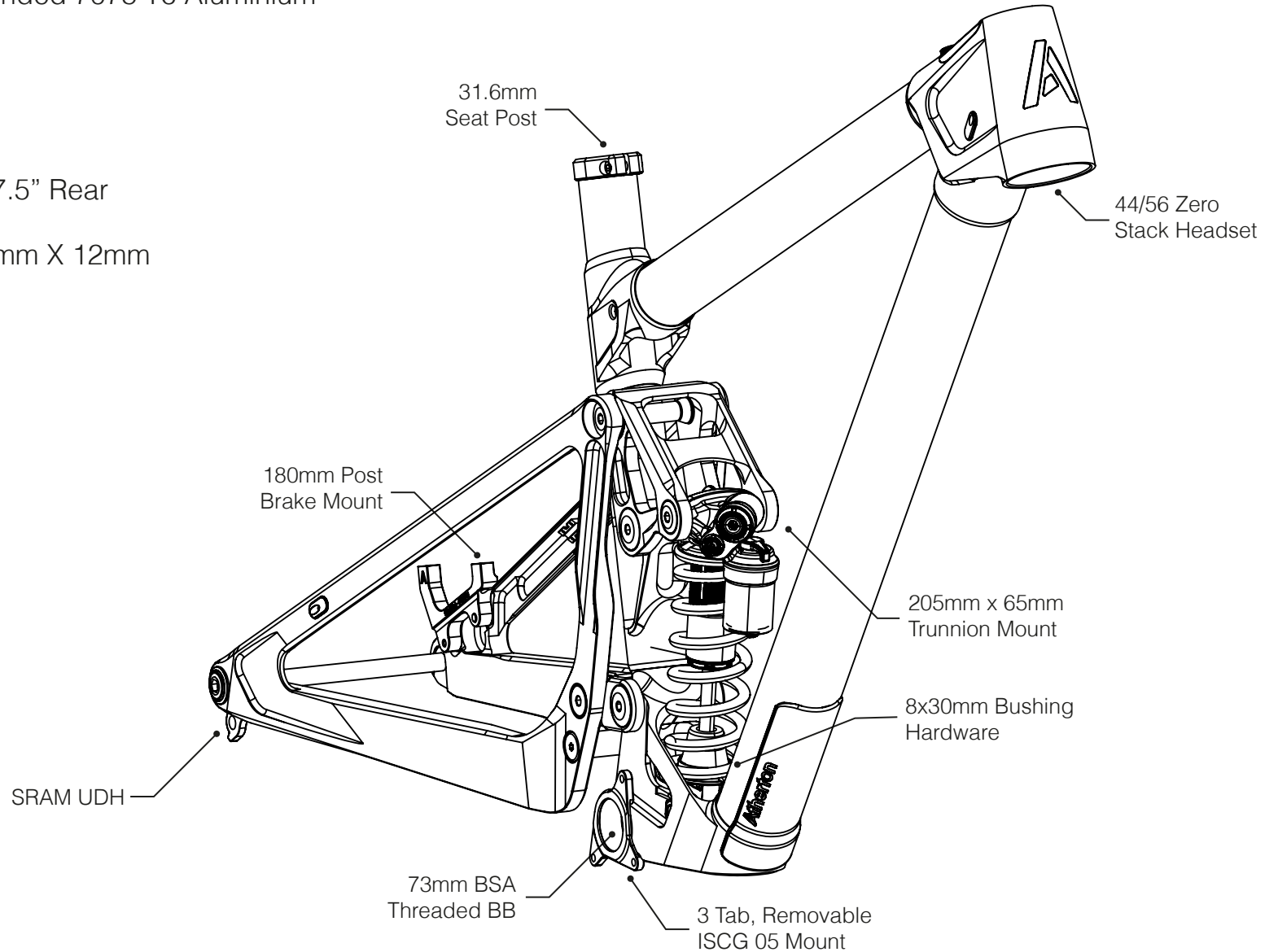
Rear Travel: 170mm

Front Travel: 180mm

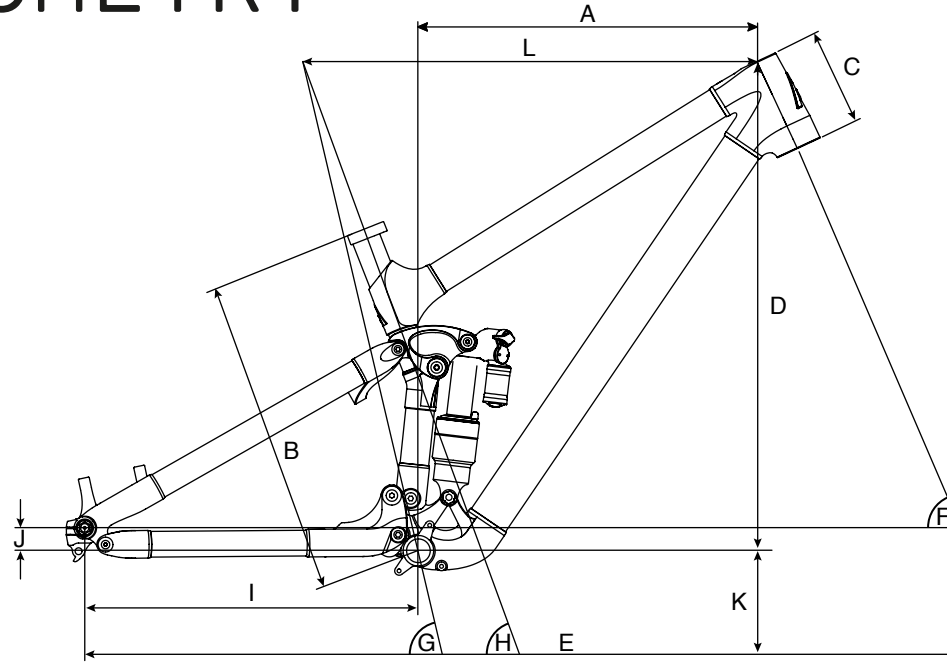
Wheel Size: 29" Front, 27.5" Rear

Rear Axle Spacing: 148mm X 12mm

Cable Routing: Internal



FRAME GEOMETRY



Size	A Reach (mm)	B Seattube Length (mm)	C Headtube (mm)	D Stack (mm)	E Wheelbase (mm)	F Head Angle (°)	G Effective Seattube Angle (°)	H Actual Seattube Angle (°)	I Chainstay (mm)	J BB Offset (mm)	K BB Height (mm)	L Effective Toptube Length(mm)
1	405	395	90	625	1185	63.6	76.6	73.6	430	12	343	555
2	415	395	90	625	1195	63.6	76.6	73.6	430	12	343	565
3	425	395	90	625	1205	63.6	76.6	73.6	430	12	343	575
4	435	395	90	625	1215	63.6	76.6	73.6	430	12	343	585
5	445	420	100	643	1234	63.6	77.6	75.1	435	12	343	587
6	455	420	100	643	1244	63.6	77.6	75.1	435	12	343	597
7	465	420	100	643	1254	63.6	77.6	75.1	435	12	343	607
8	475	440	100	643	1264	63.6	77.6	75.1	435	12	343	617
9	485	440	125	657	1280	63.6	78.6	76.6	440	12	343	618
10	495	460	125	657	1290	63.6	78.6	76.6	440	12	343	628
11	505	460	125	657	1300	63.6	78.6	76.6	440	12	343	638
12	515	480	125	657	1310	63.6	78.6	76.6	440	12	343	648

Geometry based on 593.7mm AC

FRAME HARDWARE



Ref.	Part No.	Description	Qty.
1	013.1001	M6x55 SOCKET HEAD CAP SCREW	2
2	002.2045	SEAT TUBE PIVOT MALE (MM)	2
3	013.1051	6902 LLU MAX BEARING	8
4	002.1006	SPACER 18x15x3	4
5	002.2048	SHOCK LOWER MOUNT PIVOT MM	1
6	007.1011	ROCKER MOUNT CABLE TIE BLOCK	1
7	002.2037	ANTI-CRUSH SPACER 15x1.5x44.75	1
8	013.1002	M4x8 BUTTON HEAD SOCKET SCREW	1
9	013.1003	M8 THIN HEX NUT	1
10	002.2045	SEAT TUBE PIVOT FEMALE (MM)	2
11	002.2040	ISCG 05 MOUNT - S RANGE	1
12	115.5002	LOWER LINK	1
13	002.2038	ANTI-CRUSH SPACER 15x1.5x50	1
14	002.2046	SHOCK UPPER MOUNT PIVOT MM	2
15	013.1052	6900 LLU MAX BEARING	2
16	002.1007	SPACER 13x10x3	2
17	115.5001	ROCKER	1
18	013.1004	M6x70 SOCKET HEAD CAP SCREW	1
19	002.2011	SEAT TUBE PIVOT MALE	1
20	002.2012	SEAT TUBE PIVOT FEMALE	1
21	002.2035	DOUBLE SHEAR THROUGH AXLE	1

Ref.	Part No.	Description	Qty.
22	013.1005	M6x16 LOW SOCKET HEAD CAP SCREW	1
23	013.1006	M6x16 SOCKET HEAD CAP SCREW	2
24	115.1009	180mm P-P BRAKE MOUNT ADAPTER	1
25	00.4318.050.001	SRAM AM AX MAXLE STLTH AXLE	1
26		UDH REAR DERAILLEUR HANGER	1
27	00.7918.093.000	UDH FRAME WASHER	1
28		UDH BOLT	1
29	002.2047	39MM MACHINED SEAT CLAMP	1
30	013.1007	M6x18 SOCKET HEAD CAP SCREW	1
31	013.1008	M5 BARREL NUT	1

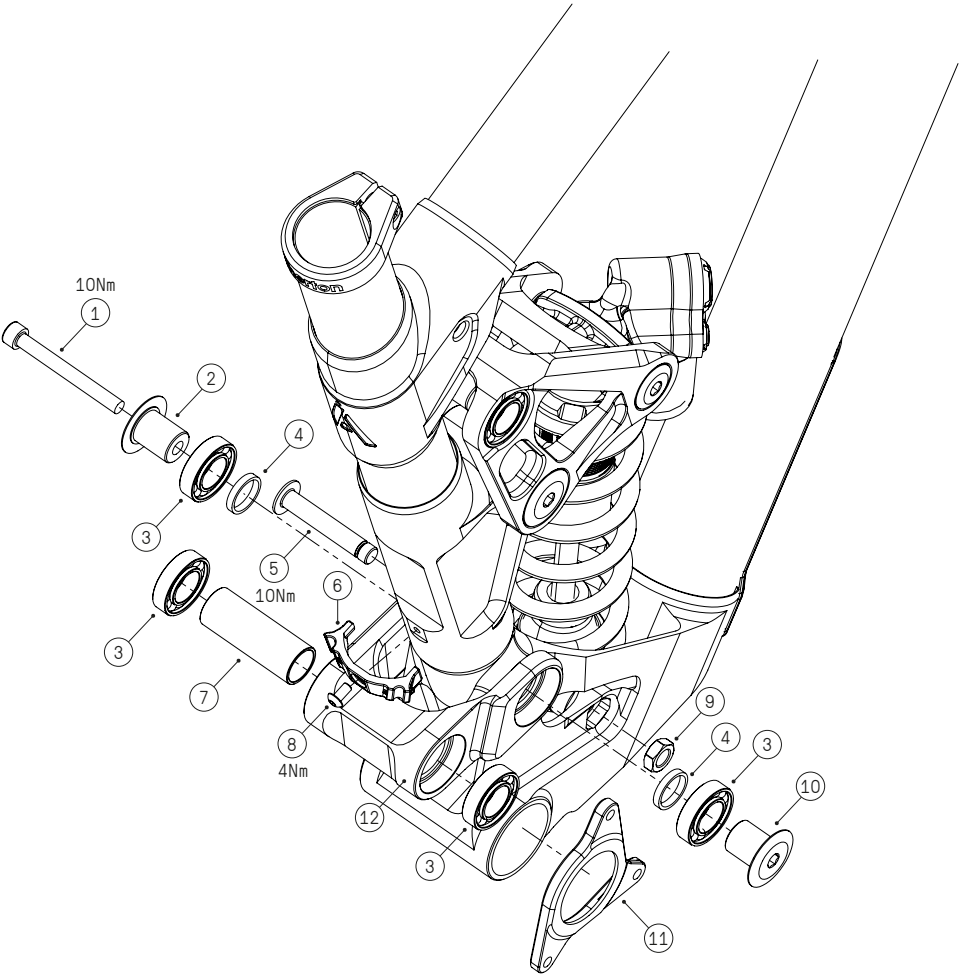
Additional Information:

- Loctite 241 thread lock to be applied to threaded sections of all bolts (excluding seat clamp, BB shell and wheel axle).
- Multi-purpose grease to be applied to all pivot shafts, the rear axle shaft and the bearing housings.
- Torque values are location specific (see exploded diagrams). If using the bottle cage mounting threads, bolts should be torqued to 3Nm.





LOWER LINKAGE ASSEMBLY

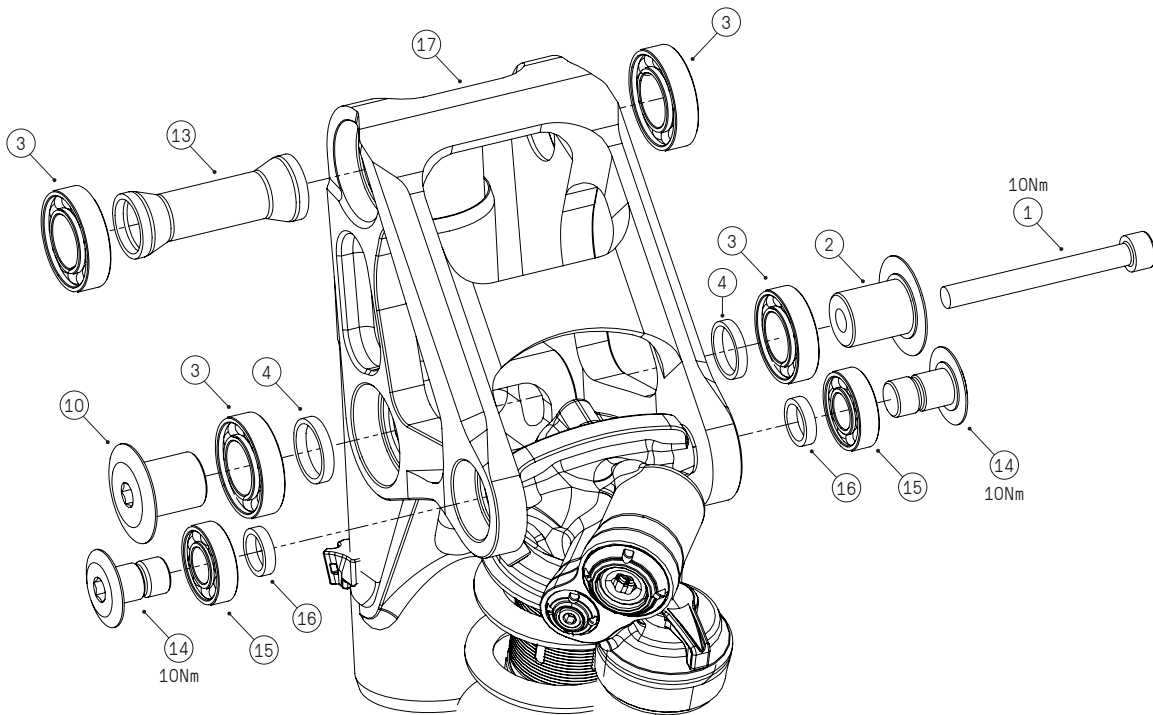


Ref.	Part No.	Description	Qty.
1	013.1001	M6x55 SOCKET HEAD CAP SCREW	1
2	002.2045	SEAT TUBE PIVOT MALE (MM)	1
3	013.1051	6902 LLU MAX BEARING	4
4	002.1006	SPACER 18x15x3	2
5	002.2048	SHOCK LOWER MOUNT PIVOT MM	1
6	007.1011	ROCKER MOUNT CABLE TIE BLOCK	1
7	002.2037	ANTI-CRUSH SPACER 15x1.5x44.75	1
8	013.1002	M4x8 BUTTON HEAD SOCKET SCREW	1
9	013.1003	M8 HEX NUT	1
10	002.2045	SEAT TUBE PIVOT FEMALE (MM)	1
11	002.2040	ISCG 05 MOUNT - S RANGE	1
12	115.5002	LOWER LINK	1



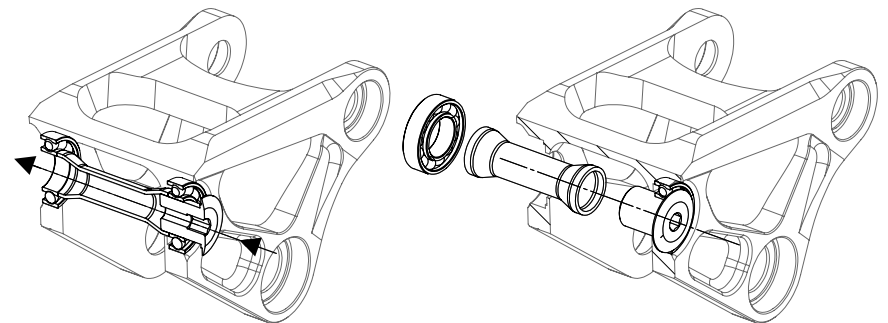


ROCKER LINKAGE ASSEMBLY



Ref.	Part No.	Description	Qty.
1	013.1001	M6x55 SOCKET HEAD CAP SCREW	1
2	002.2045	SEAT TUBE PIVOT MALE (MM)	1
3	013.1051	6902 LLU MAX BEARING	4
4	002.1006	SPACER 18x15x3	2
10	002.2045	SEAT TUBE PIVOT FEMALE (MM)	1
13	002.2038	ANTI-CRUSH SPACER 15x1.5x50	1
14	002.2046	SHOCK UPPER MOUNT PIVOT MM	2
15	013.1052	6900 LLU MAX BEARING	2
16	002.1007	SPACER 13x10x3	2
17	115.5001	ROCKER	1

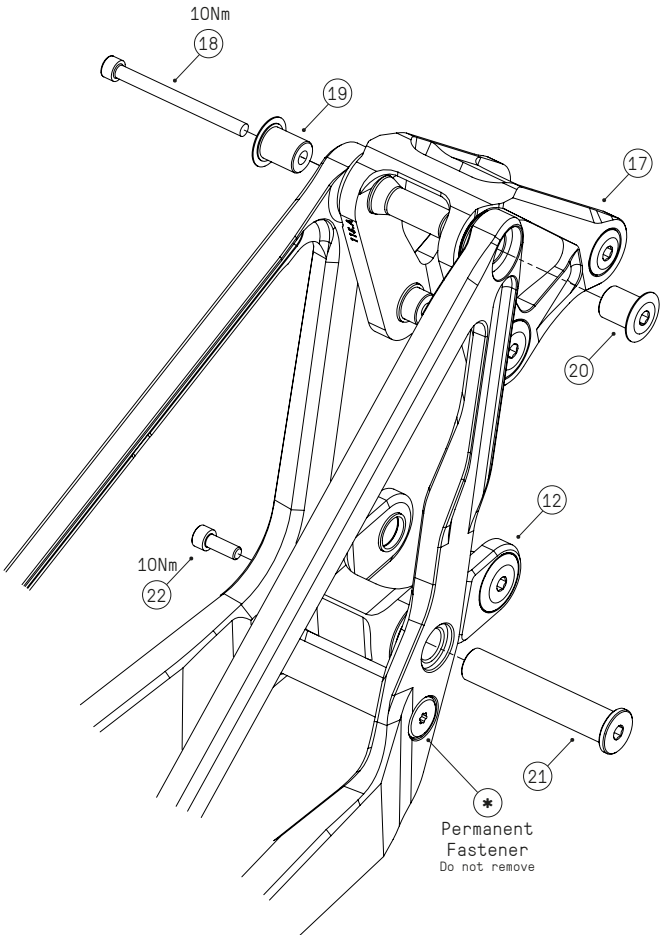
Rocker Rear Bearing Removal



With the rocker removed from the frame, use its mounting hardware (002.2012) and a soft mallet to knock the bearings and anti-crush spacer out of the rocker.



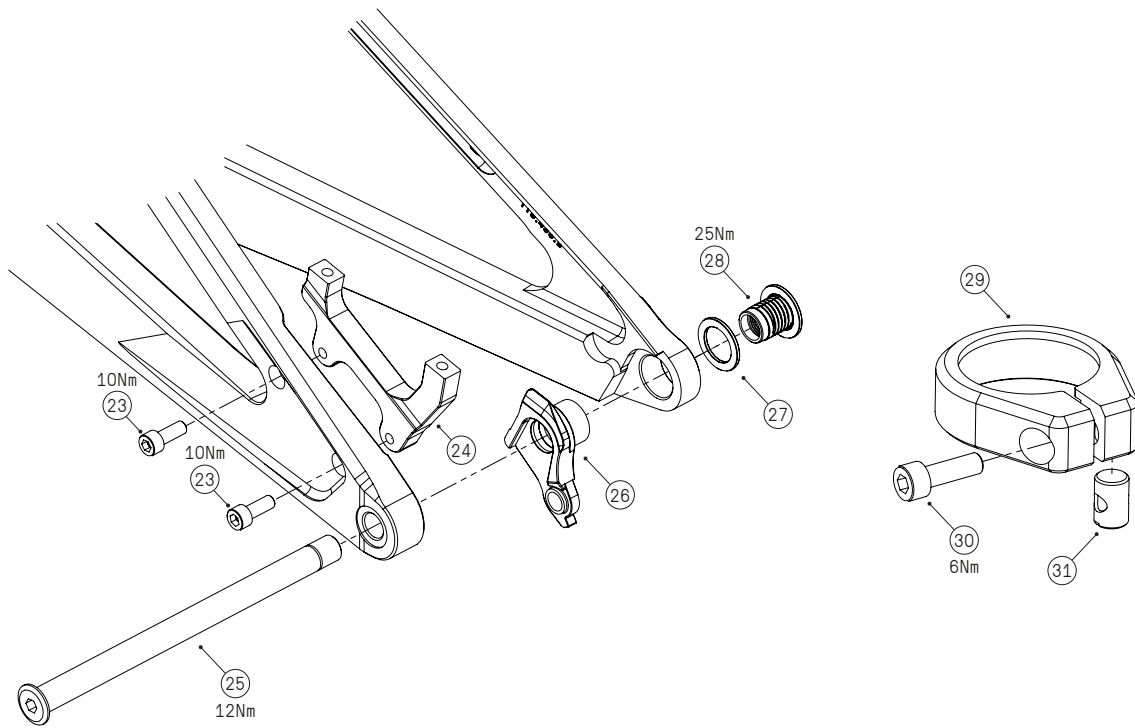
SWINGARM LINKAGE ASSEMBLY



Ref.	Part No.	Description	Qty.
12	115.5002	LOWER LINK	1
17	115.5001	ROCKER	1
18	013.1004	M6x70 SOCKET HEAD CAP SCREW	1
19	002.2011	SEAT TUBE PIVOT MALE	1
20	002.2012	SEAT TUBE PIVOT FEMALE	1
21	002.2035	DOUBLE SHEAR THROUGH AXLE	1
22	013.1005	M6x16 LOW SOCKET HEAD CAP SCREW	1



REAR ASSEMBLY



Ref.	Part No.	Description	Qty.
23	013.1006	M6x16 SOCKET HEAD CAP SCREW	2
24	115.1009	180mm P-P BRAKE MOUNT ADAPTER	1
25	00.4318.050.001	SRAM AM AX MAXLE STLTH AXLE	1
26		UDH REAR DERAILLEUR HANGER	1
27	00.7918.093.000	UDH FRAME WASHER	1
28		UDH BOLT	1
29	002.2047	39MM MACHINED SEAT CLAMP	1
30	013.1007	M5x18 SOCKET HEAD CAP SCREW	1
31	013.1008	M5 BARREL NUT	1



ASSEMBLY INSTRUCTIONS



When you receive your new Atherton Bike there are just a few simple steps to getting your bike out of its box and out on to the trails.

To make sure all your components are working perfectly, every Atherton Bike is assembled and checked by our team of expert mechanics before being sent to you.

To make sure that your new ride is secure in transit, we then remove some components and pack them securely in the box.

Assembling your bike couldn't be easier with our step-by-step assembly instruction guide. If you need any extra assistance, please don't hesitate to get in touch with one of the team, we'd be more than happy to help.

Grab your tools, make a brew, and get building!



FROM BOX TO BIKE



Step 1: Handlebars

Attach the stem to the steerer tube, preload the top cap and tighten the clamp bolts (ensuring that the stem is aligned correctly).



Step 2: Wheels

Inflate the tyres (as per manufacturer recommendations) and install the front wheel onto the bike. Ensure the axle is torqued as per the provided values.



Step 3: Pedals

Fit the pedals of your choosing. The non-driveside pedal has a left-hand thread, so take care to install these correctly.



Step 4: Saddle Height

Set the saddle height, feeding the dropper post cable through the headtube port. Ensure that the minimum insertion mark is no longer visible whilst maintaining 25mm (min) clearance to the tyre at bottom out.



SUSPENSION SETUP



Fork and rear shock suspension set up is essential to getting the most out of your Atherton Bikes DW4 suspension system.

Learn how to set sag, air spring pressure, compression adjustments, rebound adjust, additional tuning options and more in the tuning guides below.

The recommended settings in the tuning guides attached are designed to be a starting point so that you can get out on your first ride as soon as possible! If you would like further assistance tuning your suspension to get the most out of your bike, please drop us an email, we'd love to help.

Fox X2 Rear Shock



Fox DHX2 Rear Shock



Fox 38 Fork



Rockshox Suspension



SERVICE & MAINTENANCE



Item.	Task	After Every Ride	After 500miles / 1month	After 2000miles / 6months	After 4000miles / 1year
Chain	Clean and lubricate	X			
Brakes	Check function	X			
Tyres	Inspect sidewalls and tread, check air pressure	X			
General	Fully clean bike	X			
Frame Pivots	Check torque settings	X			
Brakes	Check brake pads, replace as necessary		X		
Headset	Check adjustment		X		
Spokes	Check tension, inspect		X		
Shock & Fork	Inspect and check air pressure		X		
Gear Cables	Inspect and lubricate			X	
Seat post	Remove, clean and re-grease			X	
Frame Pivots	Remove pivot bolts and check bearings for wear			X	
Headset	Disassemble stem, headset and fork, check bearings for wear			X	
Hubs	Remove wheels and check bearings for wear			X	
Bottom Bracket	Remove cranks and check bearings for wear			X	
Chain	Check for stretch, inspect for damage			X	
General	Full service				X
Shock & Fork	Full service	As per manufacturers recommendations			



PART COMPATIBILITY



PARTS WE RECOMMEND

We work closely with a range of brands to design and spec' our builds. We love these products and guarantee that they will work flawlessly on your Atherton bike.

Whilst our bikes are design to work alongside the majority of components, some parts may not fit, for example those that occupy a larger envelop than most (see the below limitations). Regardless of the parts in question, test fits must be carried out prior to use, to ensure sufficient clearance and proper function is achieved.



COMPONENT	LIMITATIONS
Cranks	- Max length = 175mm
Tyres	- Max width = *2.5" (*measured width, dictated by tyre & rim combination)
Chainring	- Max 36T
Brake Rotor (Rear)	- Max diameter = 223mm
Chain Guide	- Compatible chain guides include: MRP 1x and Amg, E-thirteen TRS Range, One-Up & Hope (full range) and similar models from other brands.
Transmission	- SRAM UDH: T-Type compatible

STILL UNSURE?

If you would like more information on part compatibility, we are only an email away (sales@athertonbikes.com), we'd be more than happy to answer any questions that you might have.



TESTING AND STANDARDS

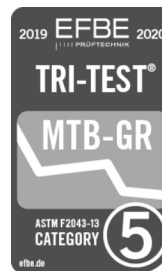
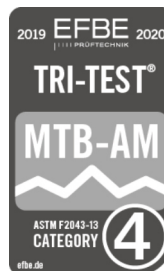


Before we launch any Atherton Bike we put our frames through the most rigorous testing imaginable both on the trails here in Dyfi and at EFBE in Germany, the world's leading laboratory for mechanical tests on bikes.

From dawn till dark our team of World Cup racers, local free-riders and novices worked in shifts to put in 40 laps a day on the most brutal combinations of tracks we could devise! We rode it all, from race-pace laps to braking bumps, huge jumps, flat landings and a lot of cases!

Once we were fully confident in our frame's strength we subjected it to EFBE's TRI-TEST® which includes fatigue tests, maximum load tests and overload tests. It goes way beyond established international standards and reflects the specific challenges faced by modern bikes.

All of our bikes have passed Category 5 (downhill) AND Category 4 Enduro to ensure that wherever you ride your Atherton S170 will be more than up to the job.



ADDITIONAL INFORMATION



COMPONENTS & MAINTENANCE

- The bike's brake lever orientation will correspond to the standard within the country of purchase (unless stated otherwise).
- This bike must be used in a safe manner checking components regularly (including but not limited to tyres, wheels and steering components).
- This bike is not suitable for use alongside; panniers, trailers or child seats.
- All specified torque values must be adhered to, both for this frame (torques included in this document) and specific to the fitted parts.
- Gears are adjusted prior to shipping however, further adjustments may need to be made as the cable stretches and parts settle. Further adjustments can be made as required using the associated barrel adjuster (located on the gear shifter).
- All wearing components must be checked regularly and genuine replacement parts should be fitted when required.
- The maximum pressure for the wheel & tyre combination must not be exceeded. If not stated on both the rim and tyre, please consult the corresponding manufacturer/s.

As with all mechanical components, the bicycle is subject to wear and high stresses. Different materials and components might react to wear and stress fatigue in different ways. If the design life of a component has been exceeded, it may suddenly fail, possibly causing injuries to the rider. Any form of crack, scratches, or change of colouring in highly stressed areas indicate that the life of the component has been reached and it should be replaced.

For composite components, impact damage may not be visible to the user. Consequences of this damage can be severe and in the event of an impact the manufacturer must be contacted to advice further actions.

SAFETY & LEGAL

- A helmet must be worn throughout use and additional protective equipment is highly recommended.
- During both use and maintenance, there is risk of injury (for example, through entrapment) and the user must take appropriate safety precautions.
- If the bike is being used on public roads all national legal requirements must be adhered to.
- Riders should be aware of the effect that changing conditions and terrain have on handling and braking distances.

RIDER WEIGHT

- Permissible weight of the rider (and luggage) is limited to 120kg (as per EFBE TRI-TEST Standards).



WARRANTY

PARTIES

"we/us/our" - Atherton Bikes Limited

"you/your" - The Customer

THE WARRANTY

The warranty applies to all bicycle frames, including made to measure or bespoke frames, purchased from us. We guarantee that all frames will be free from defects in the materials or workmanship for the lifetime of the product. Where the frame develops a fault which is due to a defect in the materials used or the workmanship we will repair the frame free of charge. If we cannot repair it we will inform you of this and offer a like for like replacement.

The warranty does not cover damage to paint or anodizing damage.

The warranty also does not cover any items purchased other than bicycle frames and does not include the consumable components of the bike. Consumable components are those components which have are typically expected to need replacing within a 12 month period of being fitted to the bike. Consumable components include:

- Tyres;
- Chain
- Cassette;
- Grips;
- Chainring;
- Brakepads;
- Cables

This list is not exhaustive and if you are not sure whether a component is covered by the warranty please contact us to discuss it further.

All other original parts or components which are not covered by this warranty may be covered by a warranty from the original manufacturer.





WARRANTY CONT.

We are only able to offer the warranty where:

1. the frame has been maintained according to the care and maintenance instructions which were provided to you at the point of sale; and
2. the bicycle has been used only according to the description in the product manual.

REPAIRS WHICH ARE NOT COVERED BY THE WARRANTY:

The following damage is not covered by the warranty:

- Normal wear and tear;
- Crash damage, including impact to carbon fibre elements or other overloading;
- Improper assembly;
- Corrosion;
- Modifications to the frame;
- Damage as a result of not adhering to the minimum inserts of depth of seat post;
- Damage caused by excessive load outside of what is expected in normal riding;
- Impact damage (for example caused by collisions);
- Damage caused as a result of transportation of the bike, including transport where the bike was attached to a vehicle or a lift.
- Damage which we (in our sole discretion) assess to be the result of a lack of care and maintenance, or maintenance which is not in line with the maintenance instructions which have been provided to you.
- Damage caused by the use of non-compatible components with the bike frame. A full list of components which are compatible with the bike frame are set out in the product manual.



WARRANTY CONT.



HOW TO MAKE A CLAIM:

To make a claim you should contact us by phone or email. You will need to provide your name, details of your frame, a copy of your original purchase order and the date of the original purchase.

We will ask for a description of the fault and photographs or a video showing the fault. We will carry out an assessment based on the images provided and make a decision on whether the fault is covered by the warranty and inform you of our decision. Where necessary we will request further information from you. In some circumstances we may need to carry out a physical inspection of the frame before we can make a decision and if this is the case we will require that the bike is returned to our workshop. You can either bring the bike back to our workshop or alternatively we can arrange to collect it from you.

If the damage or fault is covered by the warranty we will arrange a date for you to bring the bike to our workshop, or for us to collect the bike, so that we can repair it (provided that you have not already brought the bike to our workshop so that we may assess the damage).

All decisions about whether the damage or fault is covered by the warranty will be made at our sole discretion.

TIMEFRAME:

We aim to complete the repair within 90 days of you returning the bike to us. If there is a delay in carrying out the repair we will write to you to inform you of this.

If we need to replace your bicycle frame we will aim to do this within 90 days of informing you that we will replace the bike. Where we need to replace the frame it will be a like for like replacement, or if the same frame is not available, we will replace it with a frame of an equivalent standard.

We will return your repaired bike, or replacement bicycle frame, to you free of charge. Alternatively you can collect the bike from our premises.

WARRANTY CONT.



IF YOU ARE NOT THE ORIGINAL OWNER

This warranty is personal to the person who purchased the bike frame from us and we are only able to offer the warranty to such person.

OTHER CLAIMS

The repair or replacement offered through this warranty is your sole remedy for a defective bicycle frame.

We will not be liable for any direct, indirect or consequential losses arising from the purchase, use or ownership of the bicycle by you, including for personal injury, property damage or economic loss (except where it would be unlawful to do so, including where death or personal injury is as a result of our negligence).



CONTACT

Email: sales@athertonbikes.com

Web: www.athertonbikes.com

Atherton
bikes