



USER MANUAL

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ABOUT THIS GUIDE

This guide does not replace the printed manuals supplied with the bike. Please ensure that you are familiar with the operating manual and with manuals of the drive system and battery. The manuals for the drive system and the battery was also sent with the bike and are available under the [link](#)

This guide refers exclusively to the SCOR 4060 Z ST and SCOR 4060 Z LT e-bikes and has been created to ensure the safe and proper handling of your bike, so we suggest you read it carefully. The following instructions might require specific technical knowledge and skills. If you have any questions after reading this guide, please do not hesitate to contact us.

We kindly invite all riders to read at least the chapter “terms of use” found in this guide.

SCOR will not be responsible for any loss or damage of any kind incurred as a result of failure to comply with the instructions specified in this guide.

You have chosen a SCOR mountain bike, and we want to thank you for trusting us. Our frames are manufactured with great care, we use the best design, testing, manufacturing processes and technologies to deliver riders the best possible equipment.

The assembly and maintenance of SCOR bikes require some special tools and skills, so we recommend that you consult an expert mechanic in case of a doubt.

We hope that you will enjoy riding your SCOR mountain bike as much as we did enjoy creating it.

If you have any issue, feedback or simply to say hello, please contact us through the following email: info@scor-mtb.com



SYMBOLS AND WARNINGS

This guide contains different symbols that have different meanings. Most of them are meant to raise your attention to some aspects you should consider.

NOTE: This symbol indicates information that you should consider with great care



CAUTION: This symbol is a warning for you to consider with great care. Ignoring this information can lead to damaging your frame and running a risk of injury and/or death.



TIPS: This symbol indicates very helpful but not mandatory instructions and advises. Following them will make your experience with your SCOR mountain bike even more enjoyable



TERMS OF USE

Please consider and understand the intended use of your SCOR 4060 Z e-bike. Improper use can lead to injury and/or death.



Improper use of the e-bike and not following the instructions in this guide will void warranty.



The SCOR 4060 Z e-bike is designed for a maximum total system weight of 130 kg.

System weight refers to: bike + rider fully kitted + cargo = total system weight



ASTM CLASSIFICATION

The following information refers to the voluntary regulation ASTM F2043-13 Standard Classification for Bicycle Usage from ASTM International.



The SCOR 4060 Z frame is classified in category 4.



This e-bike, like every equipment, is not indestructible and has to be used with care. Abusive use will lead to potential failure, injury and/or death.

ASTM chart :

LEVEL 1

This is a set of conditions for the operation of a bicycle on a regular paved surface where the tires are intended to maintain ground contact.

LEVEL 2

This is a set of conditions for the operation of a bicycle that includes Condition 1 as well as unpaved and gravel roads and trails with moderate grades. In this set of conditions, contact with irregular terrain and loss of tire contact with the ground may occur. Drops are intended to be limited to 15cm (6") or less.

LEVEL 3

This is a set of conditions for operation of a bicycle that includes Condition 1 and Condition 2 as well as rough trails, rough unpaved roads, and rough terrain and unimproved trails that require technical skills. Jumps and drops are intended to be less than 61cm (24").

LEVEL 4

This is a set of conditions for operation of a bicycle that includes Conditions 1, 2, and 3, or downhill grades on rough trails at speeds less than 40 km/h (25 mph), or both. Jumps are intended to be less than 122cm (48").

LEVEL 5

This is a set of conditions for operation of a bicycle that includes Conditions 1, 2, 3, and 4; extreme jumping; or downhill grades on rough trails at speeds in excess of 40 km/h (25 mph); or a combination thereof.



ANGLE ADJUST HEADSET

Your SCOR 4060 Z e-bike is specified with a special headset which offers a 1.5° angle adjustment. 4060 Z LT e-bikes are originally assembled in the slacker position, 4060 Z ST e-bikes in the steeper position. You can adjust the head angle by turning the headset cups by 180°.

Please see **Fig.1** for the full assembly overview. Then pick your desired head angle and press the cups accordingly as shown in **Fig. 2&3**.



The lower cup is not round but slightly oval. This should help with cup/frame alignment, but you should be careful and start pressing in the correct position or you may damage your frame.



you can ride your SCOR 4060 Z in both head angle setting without restrictions, just remember this has consequences on the overall geometry. Please refer to the geometry chart to understand what you are getting.



Fig.1 – Angle adjust headset

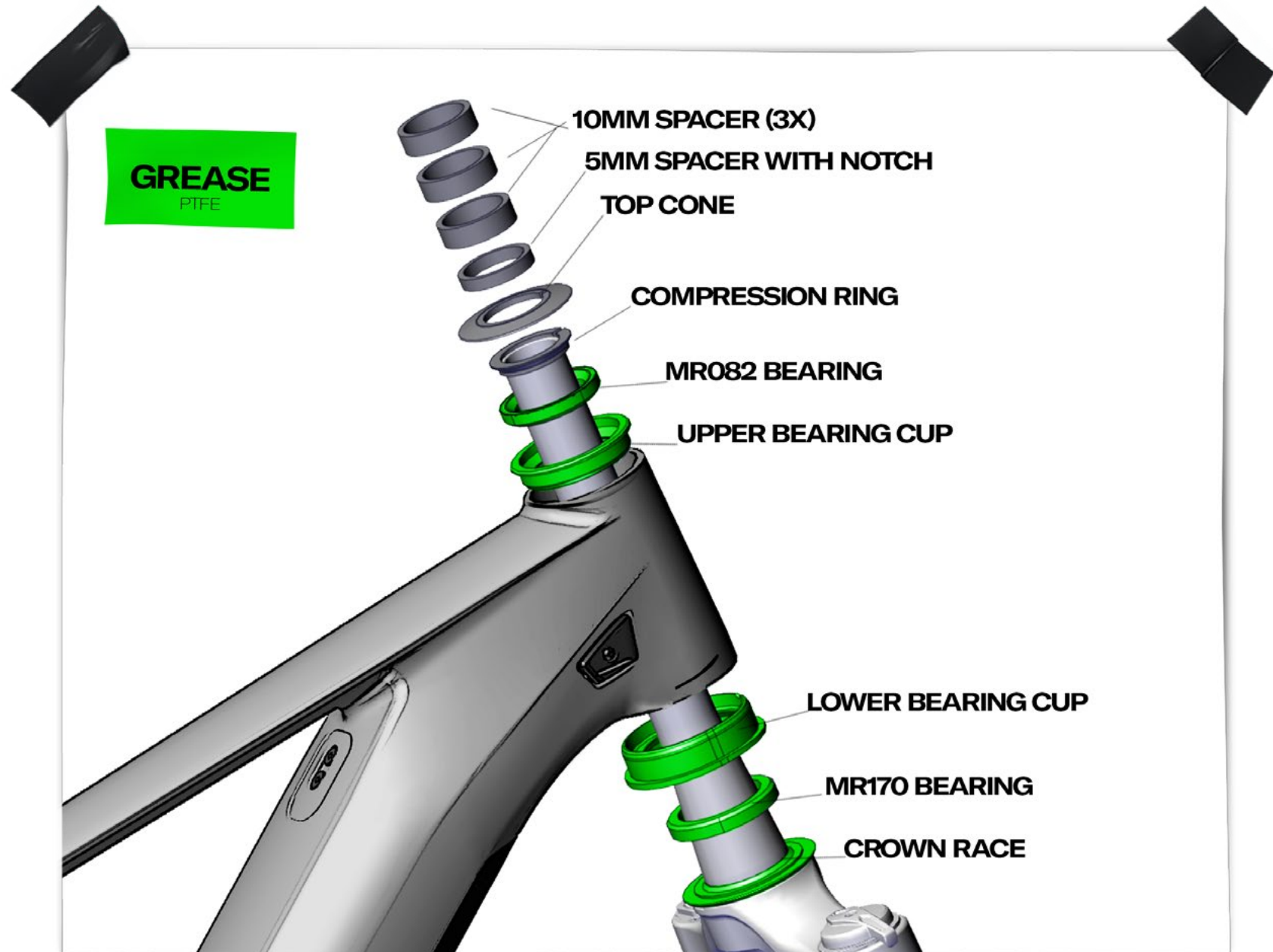


Fig.2 – Slacker head angle setup

Long Travel setting: Notch facing forward



Fig.3 – Steeper head angle setup

Short Travel setting: Notch facing backward



SADDLE CLEARANCE

Please make sure that you have 30mm of clearance between the saddle and the rear tire when the suspension is fully compressed, as shown in **Fig. 4**. If this clearance is not respected, rear tire / saddle contact can lead to damaging the aforementioned components. Not respecting this mandatory clearance will void warranty.

Fig.4 – saddle clearance at full compression



SETTING REAR SUSPENSION

The SCOR 4060 Z has been designed for optimal suspension performance with 28/30% SAG at the rear shock. Since the frame can accept either 55mm or 47.5mm stroke shocks, please make sure you setup your suspension accordingly before using it.

For your information, SAG values are the following (measured on the shock):

Shock stroke	28% SAG	30% SAG
55mm	15.4mm	16.5mm
47.5mm	13.3mm	14.3mm

Please refer to the rear shock manual for additional information about adjusting your suspension.



There is a “flip chip” located on the shock attachment to the suspension lower link mount. Please install your shock according to the [Fig.5](#) – Flip chip arrangement here below.



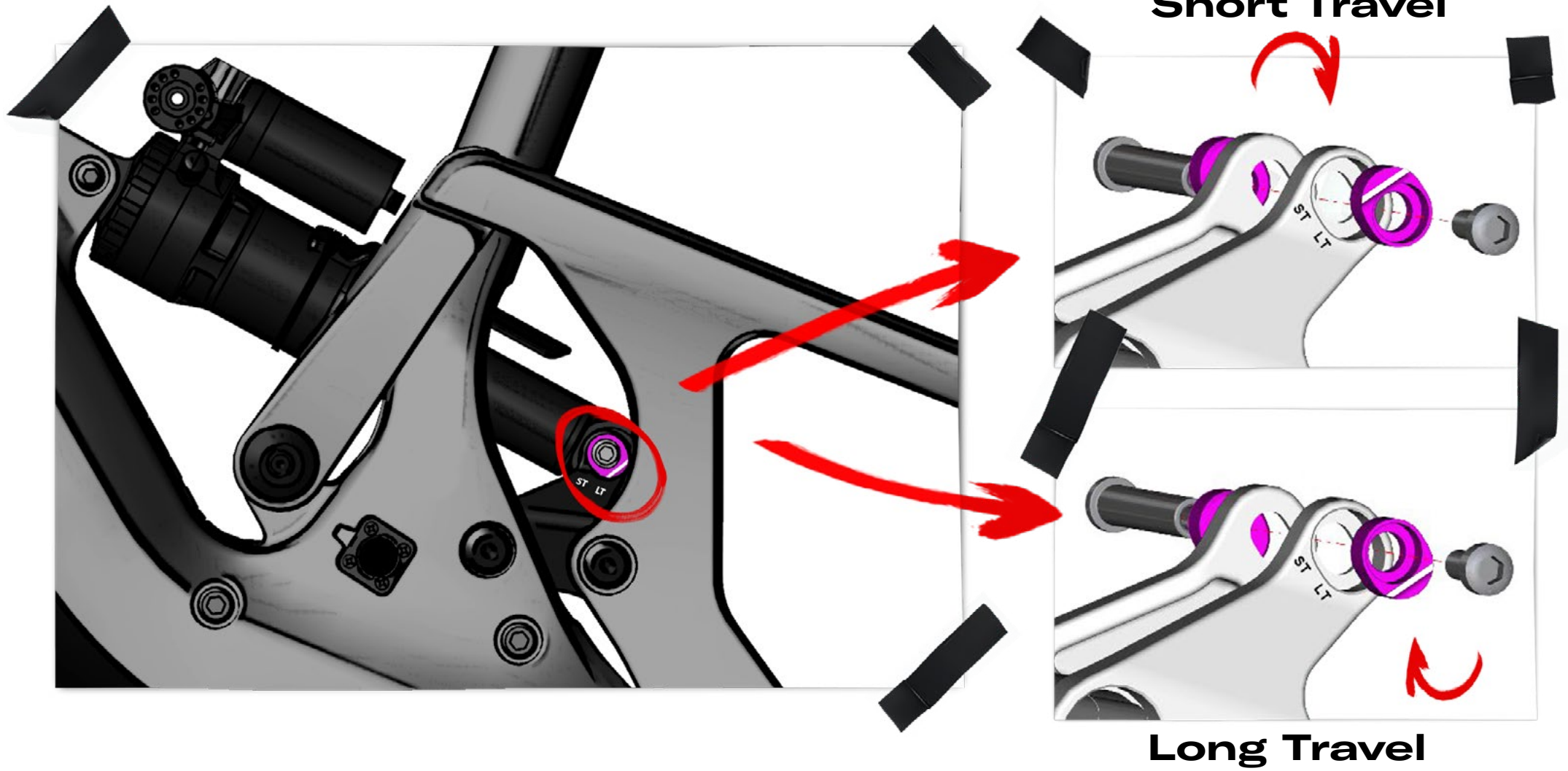
If you fail following the flip chip arrangement, you may risk some tire rub on the seat tube under full bottom out of the rear suspension. In order to prevent wrongdoings, we have designed the “huck plate” which protects the structural integrity of the seat tube. If you see evidence of tire rub onto the “huck plate”, please stop riding and :

- **check your tire dimensions & pressure**
- **replace the “huck plate” (contact us to get a replacement)**

Not respecting these mandatory instructions will disqualify any warranty claim about structural damage of your frame.

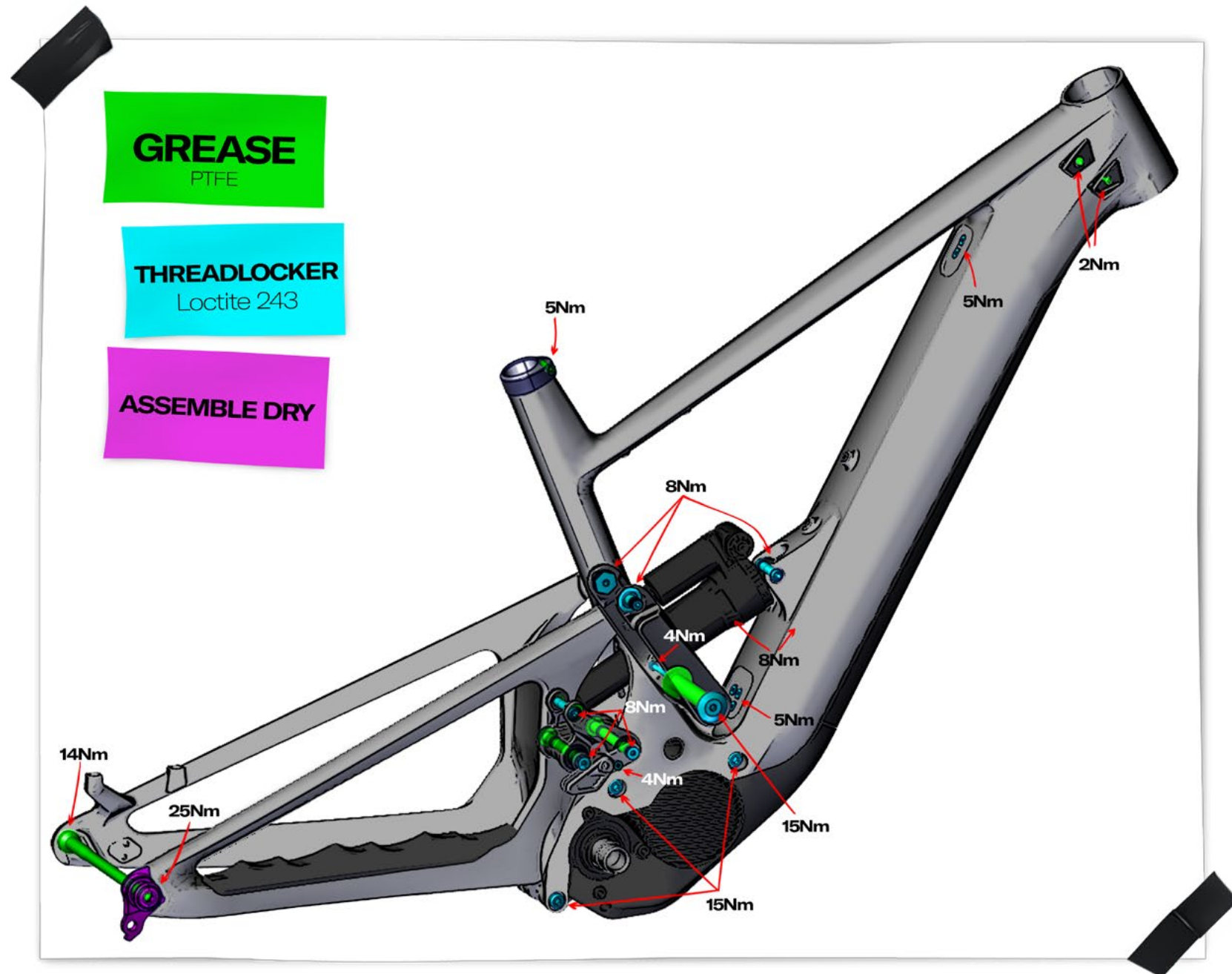


Fig.5 – Flip chip arrangement



⚠ TIGHTENING TORQUE ⚠

All frame bolts must be tightened with a properly calibrated torque wrench. Please refer to the technical manual for torque values.



BATTERY REMOVAL & INSTALLATION

Before you remove the battery please make sure that the e-bike is switched off!

The battery can be removed from the bike for charging or bike maintenance. The removal / installation procedure MUST be followed in order to avoid any damage to the battery locking mechanism.

Battery removal :

1. Use a 4mm allen key to release the battery lock.



Turn clockwise to release the locking mechanism To release or lock the battery not much torque is needed – the allen key is needed as lock key and not to tighten the screw!

2. When the battery is released, it should be retained by a small spring-loaded latch. This is to prevent the battery falling off the bike onto the ground.
3. Gently push on the spring-loaded latch to release the battery.



Keep a hand below the battery to grab it as it's now free to fall on the ground. Please remember that it weights 3.8kg, no flimsy hands allowed!

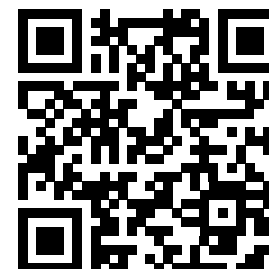
4. Grab the battery in a down, then forward movement to remove it from the bike.

Battery installation :

1. Insert the battery in the down tube by placing and aligning the contact at the lower part with the battery contacts of the e-bike.
2. Push up the upper part of the battery until you hear a distinct and audible click, meaning the battery is engaged into both latch and locking mechanism.
3. Check for a solid fixation by gently pulling down. If the battery is not fully engaged, it will come out (retained by the latch). Repeat step 2 until successful engagement.

Check the installation video :

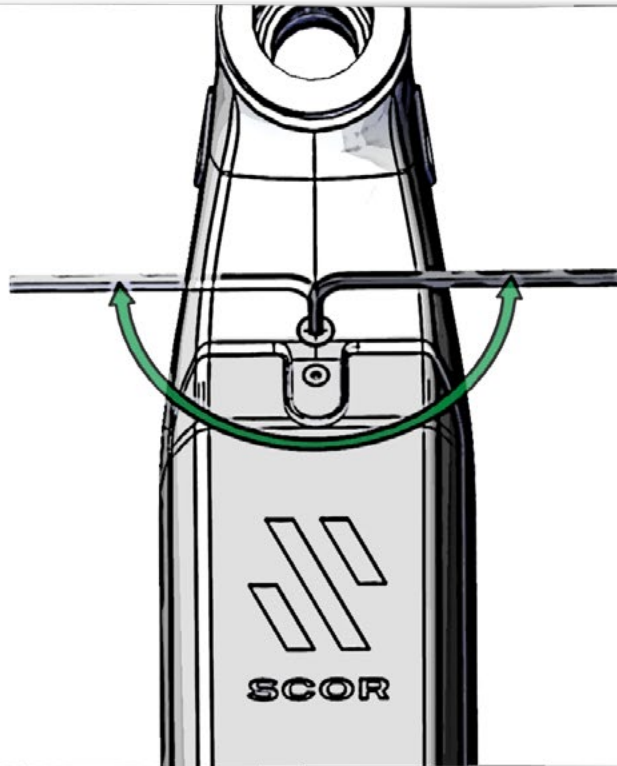
<https://youtu.be/oO1AJ6dWv54>



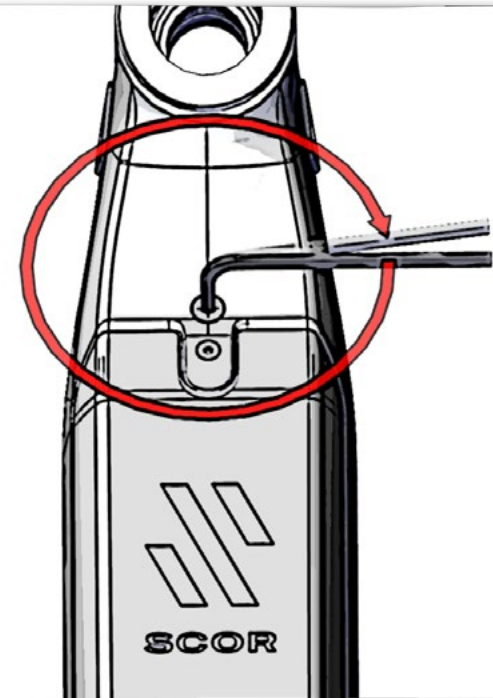
Battery lock function test

Test that the lock works as intended:

Lock must turn only 180°



If lock can be turned infinitely, the lock body is broken. It needs to be replaced



MAINTENANCE OF YOUR SCOR 4060 Z FRAME



Keep your bike clean. For proper operation, best and long-lasting performance, your bike should be clean. Use water with mild soap to carefully wash your bike, and while you are at it you can check for any damage to the frame or components.



Pressure washing

Check original operating instruction

Please avoid cleaning your bike with a pressure washer. Using a pressure washer to clean your bike will push water and dirt in areas where it's difficult to drain/dry naturally. The extensive use of pressure washer will lead to premature wear of the suspension bearings, pivot axles and the frame itself. The abuse of pressure washer will void the warranty.



Solvents and cleaning agents

Please do not use solvents or cleaning agents other than mild soap. The use of these products can lead to permanent damage to the frame finish.



Keep your bike lubed. Once your bike is clean, you should check and add appropriate lubrication to the following parts of your bike:

- Thru -axle: slight layer of PTFE based grease on the axle and threads
- Chain: a few drops of bicycle specific chain lube will keep your drivetrain running smooth.



Do not use conventional grease inside the seat tube of your SCOR carbon fiber frame. This area needs carbon assembly paste which is supplied with your frame (check the small parts box). Using conventional grease in the seat tube can lead to permanent seat post slippage.



Inspect your frame regularly, at least once every month. Look for anything that would compromise the operation of the frame like dents, cracks, bumps or loose bolts and/or components. The frame must not be used if anything preventing perfect operation is found, and this must remain the case until the appropriate repair or component replacement has been conducted. If you ride more than 3 times per week, and/or in adverse conditions such as rain/mud/snow, you should inspect your frame weekly as some parts may wear at a faster pace. In general, the components of a bike will wear at a different pace, depending on usage, weather, materials and maintenance cycles.





If you notice some surface cracking, paint cracking, abnormal surface scratches, abnormal color changing, please stop riding your frame and contact SCOR for advice a potential solution to the problem that is approved by SCOR.

After an impact or heavy crash, please inspect your frame once you have checked yourself for potential injury. Look for some surface cracking, paint cracking, abnormal surface scratches, abnormal color changing. If you find anything abnormal, please stop riding your frame and contact SCOR for advice on a potential solution to the problem that is approved by SCOR.



Frame modification

Do not try to modify any structural part of your SCOR frame, keep it as the assembly you received. Any modification listed will void the warranty and lead to potential injury and/or death :

- Frame sanding
- Frame drilling
- Frame filling
- Suspension linkage modifications
- Headset system modifications

COMPLIANCE

SCOR frames comply with the following regulations :

- ISO4210
- EN14766 Mountain bikes
- EN14761 general purpose bicycles
- EN15194 Pedelec / e-bikes
- EPAC pedal assist electric bicycles



TECHNICAL INFORMATION & COMPATIBILITY

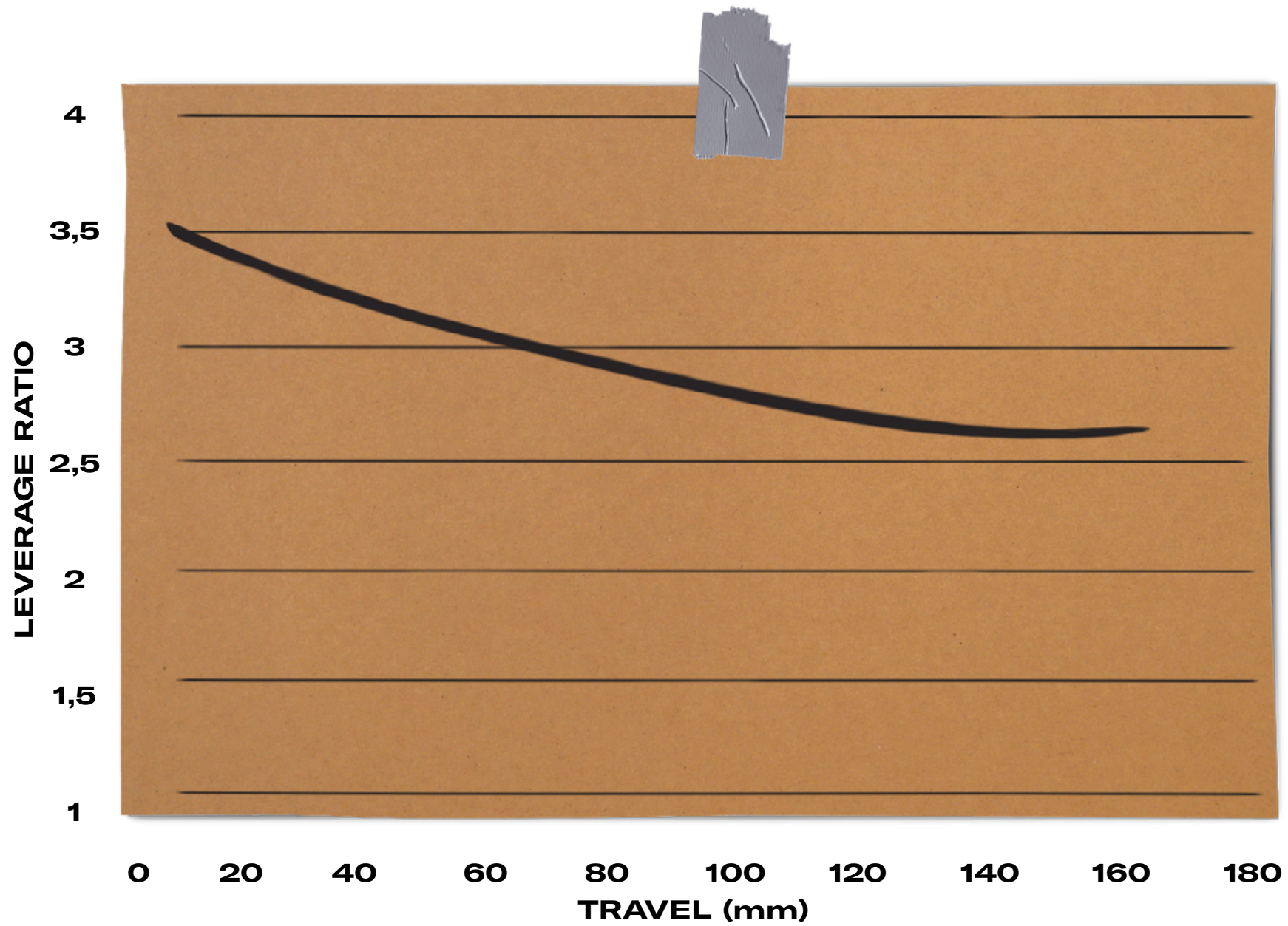
SCOR 4060 Z technical specifications	
Rear wheel spacing	148x12mm (Boost)
Thru axle lenght / diameter / thread pitch	181mm / 12mm / 1,0
Derailleur hanger	SRAM UDH
Seat post diameter	31,6mm
seat clamp diameter	34,9mm
Headset type	Custom tapered / head angle adjust
Upper headset bearing	FSA - MR168 (34x46,8x7mm, 45°angle / 45° chamfer), Also known as: MR082, MH-P17, TH-970, 160-6738
Lower headset bearing	FSA - MR170 (40x52x7mm, 45°angle / 45° chamfer)
Recommended fork crown diameter	58mm
Recommended fork lenght (Axle to Crown)	LT : 577 - 586mm / ST : 557 -561mm
Recommended fork travel	170mm / 150mm
Max fork lenght / travel	596 mm / 180mm
Recommended fork offset	42/44mm
Bottom bracket	Shimano EP8
Chainguide	SCOR proprietary

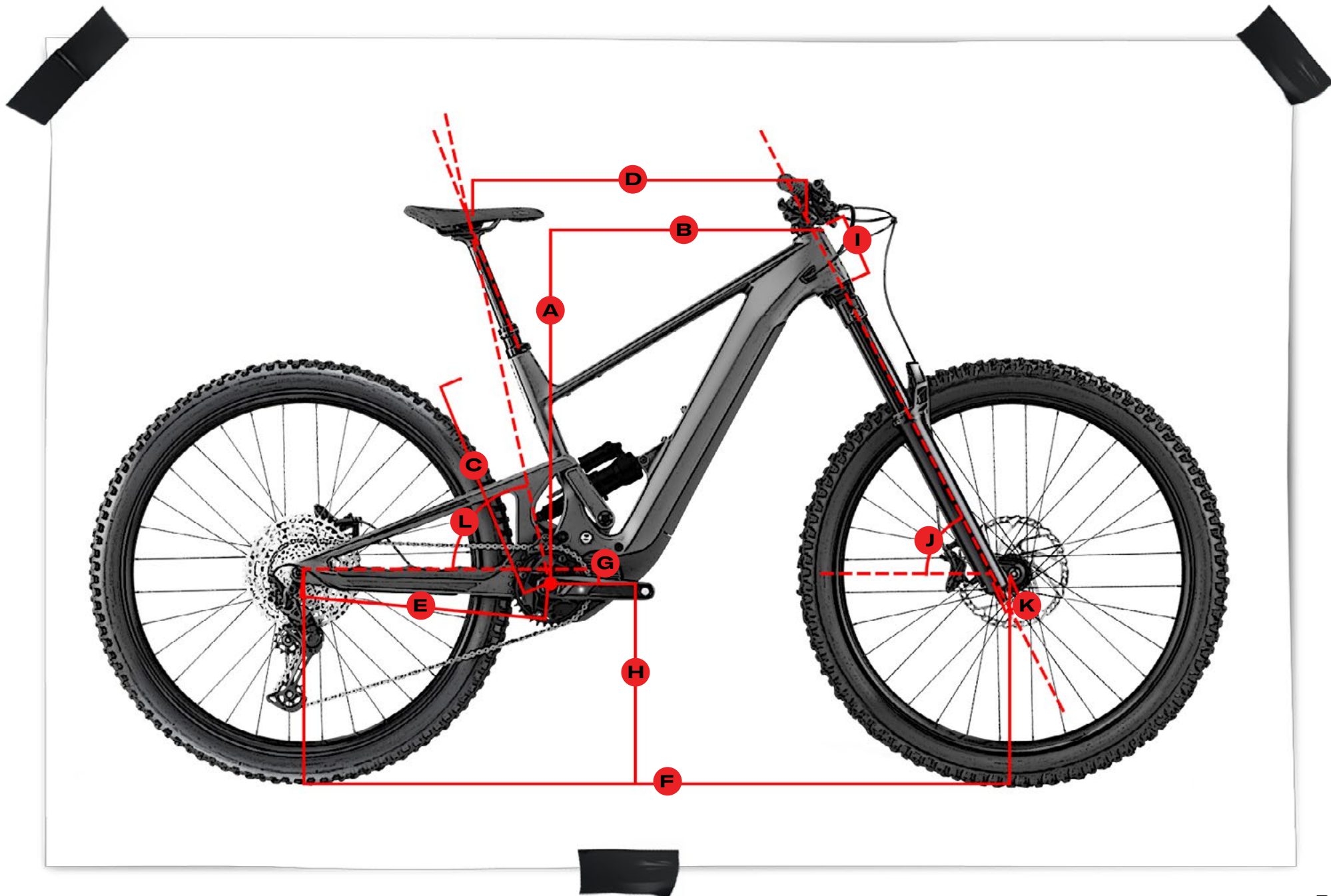


Rear brake mount	Disc PM7 (post mount 180mm)
Front derailleur mount	N/A
Shock eye-to-eye	210mm
Shock stroke	55 or 47,5mm
Shock hardware shaft eyelet	20x8mm
shock hardware body eyelet	30x8mm
shock tune Rockshox SDLX Ult RCT	Reb. rM / check rL / Comp. L / hf 320 / DB2
shock tune Fox Float X	CL / RM / Rezi CM
bottle cage mounts	1 + 1 accessory mounting point

COMPATIBILITY	
Max rear rotor size	203mm
Max rear tire size (widest point)	64mm width / 750mm diameter
Max chainring size	34 round / 32 oval
Max seatpost insertion	S - 435: 205mm / M - 459: 235mm / L - 485: 250mm / XL - 515: 295mm
Min seatpost insertion	S - 435: 80mm / M - 459: 100mm / L - 485: 100mm / XL - 515: 100mm







SCOR 4060 Z GEOMETRY 160mm	160mm							
Travel configuration								
Size	433		457		483		513	
HT setup	Slack	Steep	Slack	Steep	Slack	Steep	Slack	Steep
A. Stack	601	603	612	615	626	629	637	640
B. Reach	435	431	459	456	485	481	515	511
C. Seat Tube lenght	400	400	425	425	440	440	470	470
D. Top Tube (virtual)	562	564	590	592	621	623	655	657
E. Chainstay	435	435	435	435	435	435	435	435
F. Wheelbase	1206	1193	1230	1217	1255	1242	1285	1272
G. BB drop	19	16	19	16	19	16	19	16
H. Estimated BB height	350	353	350	353	350	353	350	353
I. Head Tube	87	87	99	99	115	115	127	127
J. HT Angle	63,8	65	63,8	65	63,8	65	63,8	65
Fork Length	580	580	580	580	580	580	580	580
Front Center	773	761	798	785	823	810	853	840
K. Fork Rake	44	44	44	44	44	44	44	44
ST Angle SCOR (750mm saddle height)	76,5	76	76,5	76	76,5	76	76,5	76
ST Angle actual	69	68,5	69	68,5	69	68,5	69	68,5
L. ST Angle effective (industry standard)	77,9	77,4	77,9	77,4	77,9	77,4	77,9	77,4
Rear travel	160	160	160	160	160	160	160	160

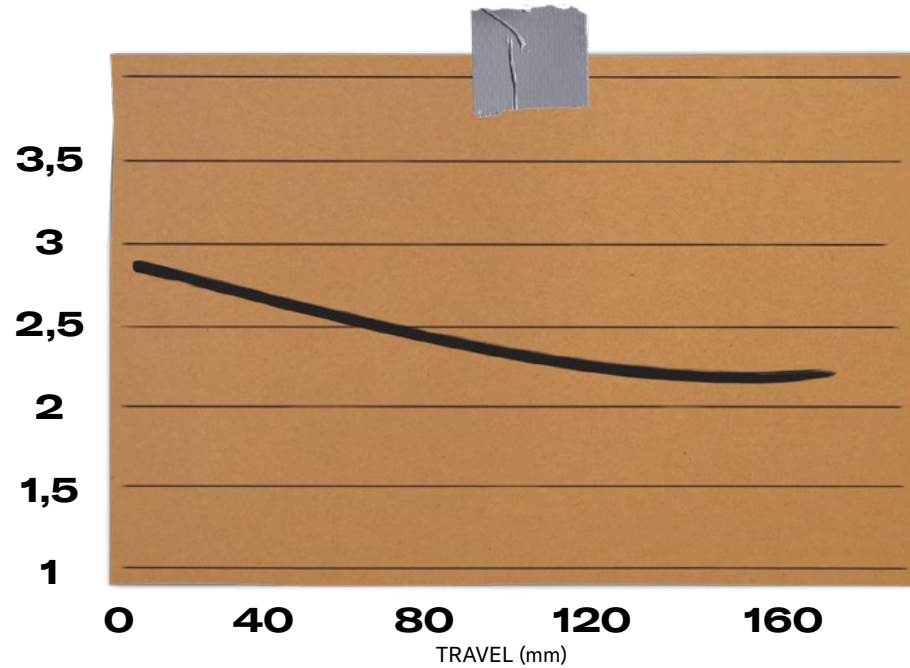


SCOR 4060 Z GEOMETRY 140mm	140mm							
Travel configuration								
Size	433		457		483		513	
HT setup	Slack	Steep	Slack	Steep	Slack	Steep	Slack	Steep
A. Stack	597	599	608	611	622	625	633	636
B. Reach	440	436	465	461	490	485	520	516
C. Seat Tube lenght	400	400	425	425	440	440	470	470
D. Top Tube (virtual)	560	561	589	590	620	621	654	655
E. Chainstay	436	436	436	436	436	436	436	436
F. Wheelbase	1198	1185	1223	1210	1248	1235	1278	1265
G. BB drop	29	27	29	27	29	27	29	27
H. Estimated BB height	340	342	340	342	340	342	340	342
I. Head Tube	87	87	99	99	115	115	127	127
J. HT Angle	64,5	65 ,5	64,5	65,5	64,5	65,5	64,5	65,5
Fork Length	560	560	560	560	560	560	560	560
Front Center	765	752	790	777	815	802	845	832
K. Fork Rake	44	44	44	44	44	44	44	44
ST Angle SCOR (750mm saddle height)	77	76,5	77	76,5	77	76,5	77	76,5
ST Angle actual	69 ,4	69	69,4	69	69,4	69	69,4	69
L. ST Angle effective (industry standard)	78,5	78	78,5	78	78,5	78	78,5	78
Rear travel	140	140	140	140	140	140	140	140



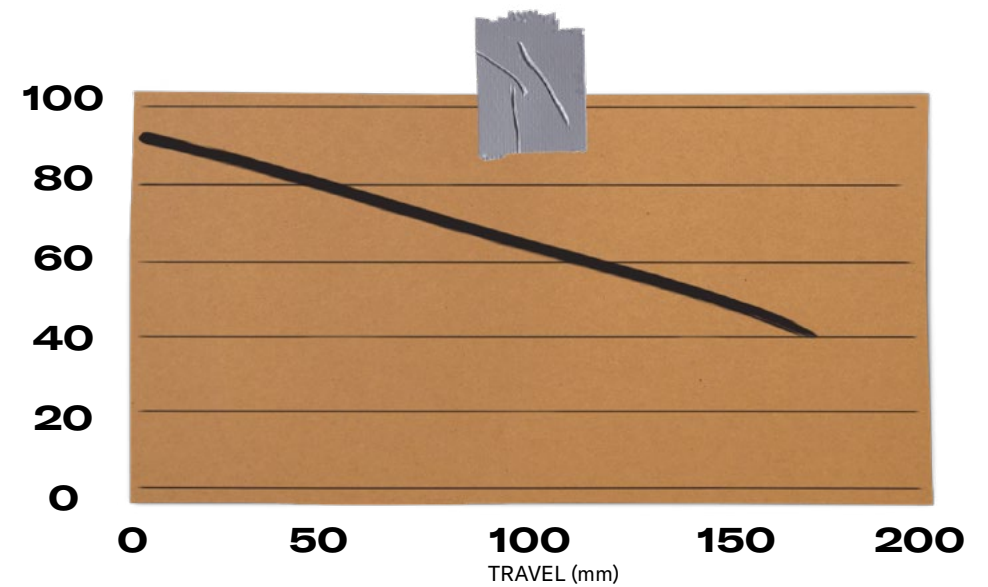
FOR THE NERDS

LEVERAGE RATIO



- 25% progressivity
- coil compatibility
- High sensivity in early travel
- Good bottom out resistance

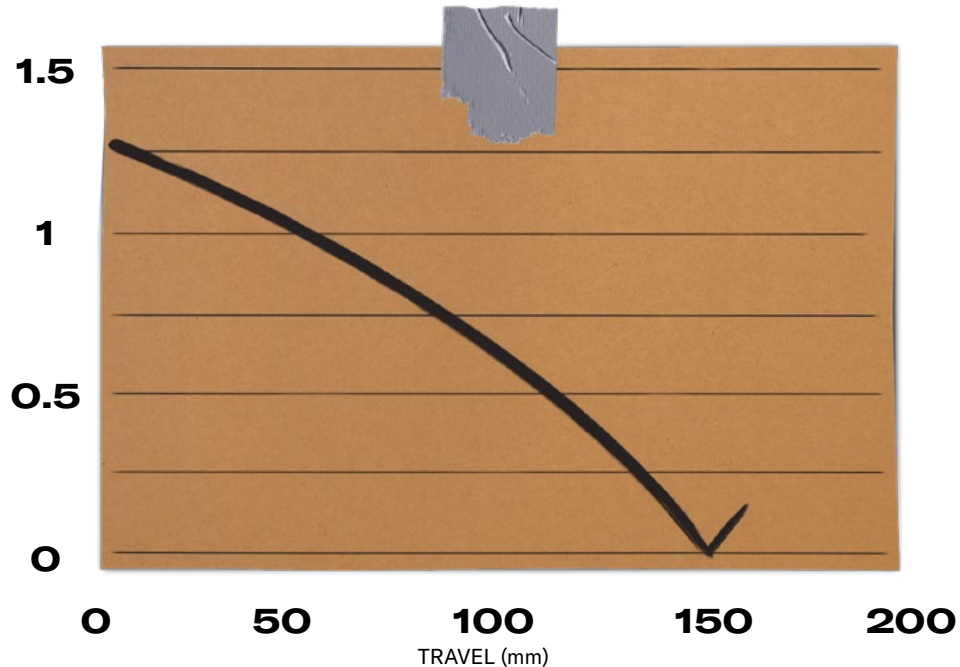
ANTI-RISE



Low anti rise for high suspension sensibility under breaking

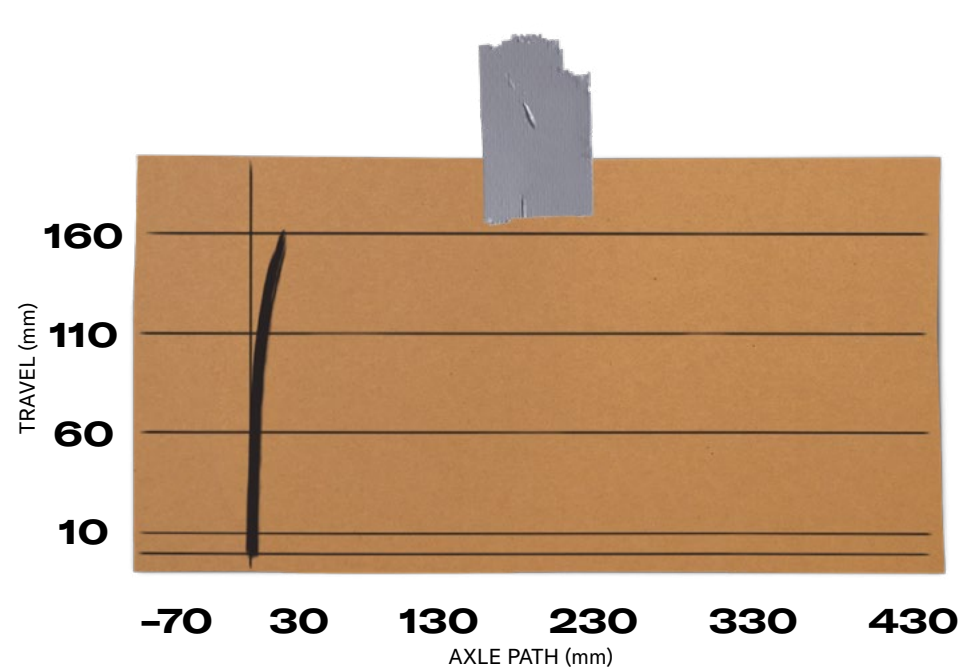


Anti-squat



- Good support in SAG area.
- Low antisquat deeper in the travel for limited chain effects on impacts

Axle path



Lower Link flip chip, what does it do?

The LL flip chip varies the BB height by 6mm. In ST position the BB is 6mm lower than in LT position.

It is no problem to ride a Short Travel bike in High BB position (LT flip chip). However, riding a Long Travel bike in low BB position (LT) may result in a touching tire against the seat tube and damage the frame. Therefore, it is not recommended (see setting rear suspension guide)

Headset angle adjustment, what does it do?

The two position headset changes the head angle by 1.5°. Notches to the front = slack, notches facing backward = steep.

Want to ride your bike in mullet setup?

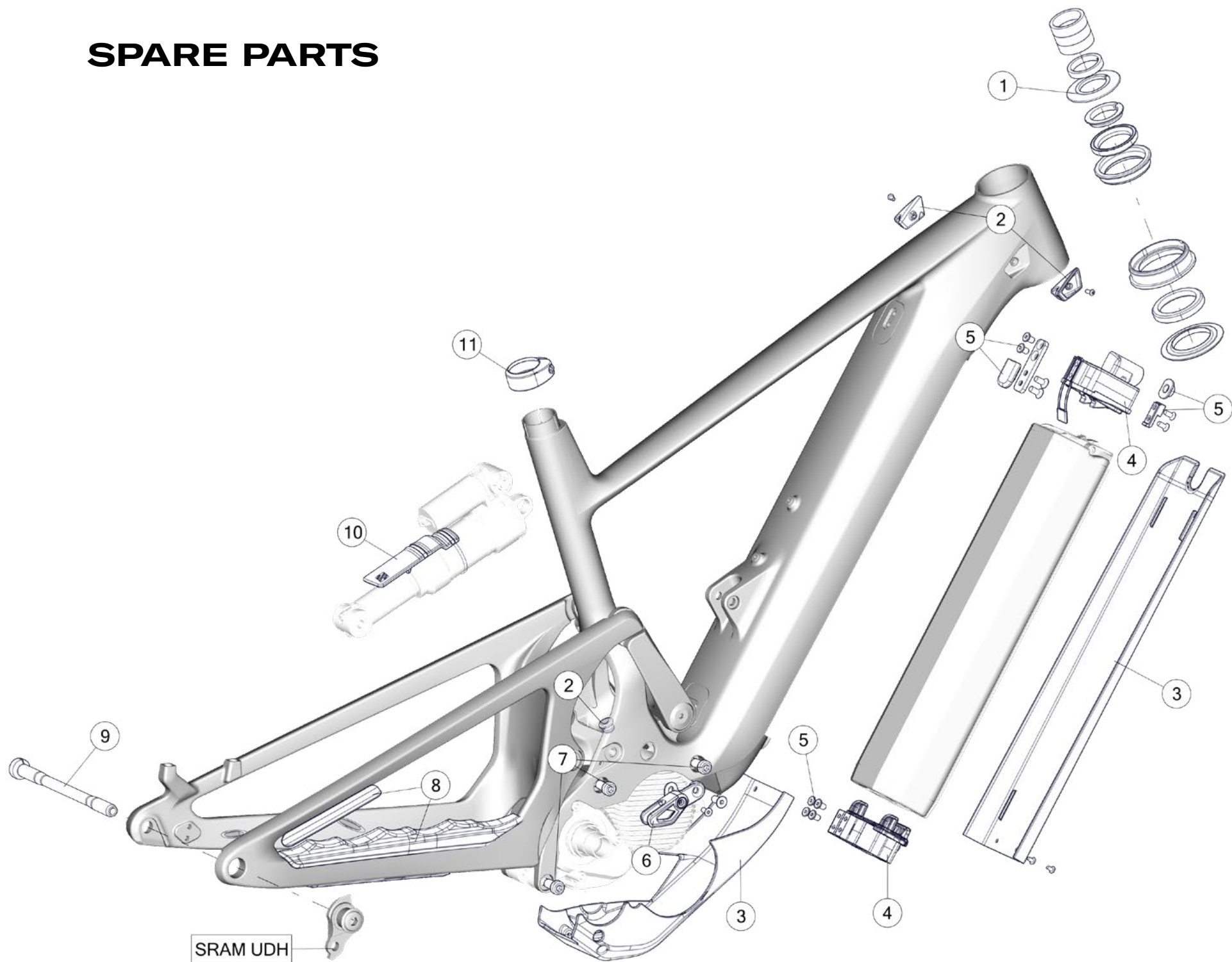
Swapping the rear wheel to 650b makes two main changes, it lowers the BB and slackens the angles of ST and head tube.

For a ST bike, these effects can be compensated by flipping the BB chip to LT so that the BB rises.

On a LT bike, the BB chip is already in high position, therefore to higher the BB, the headangle can be turned to «steep» setting (notches backward), HT° will be 64° and the BB will be raised to help ground clearance.



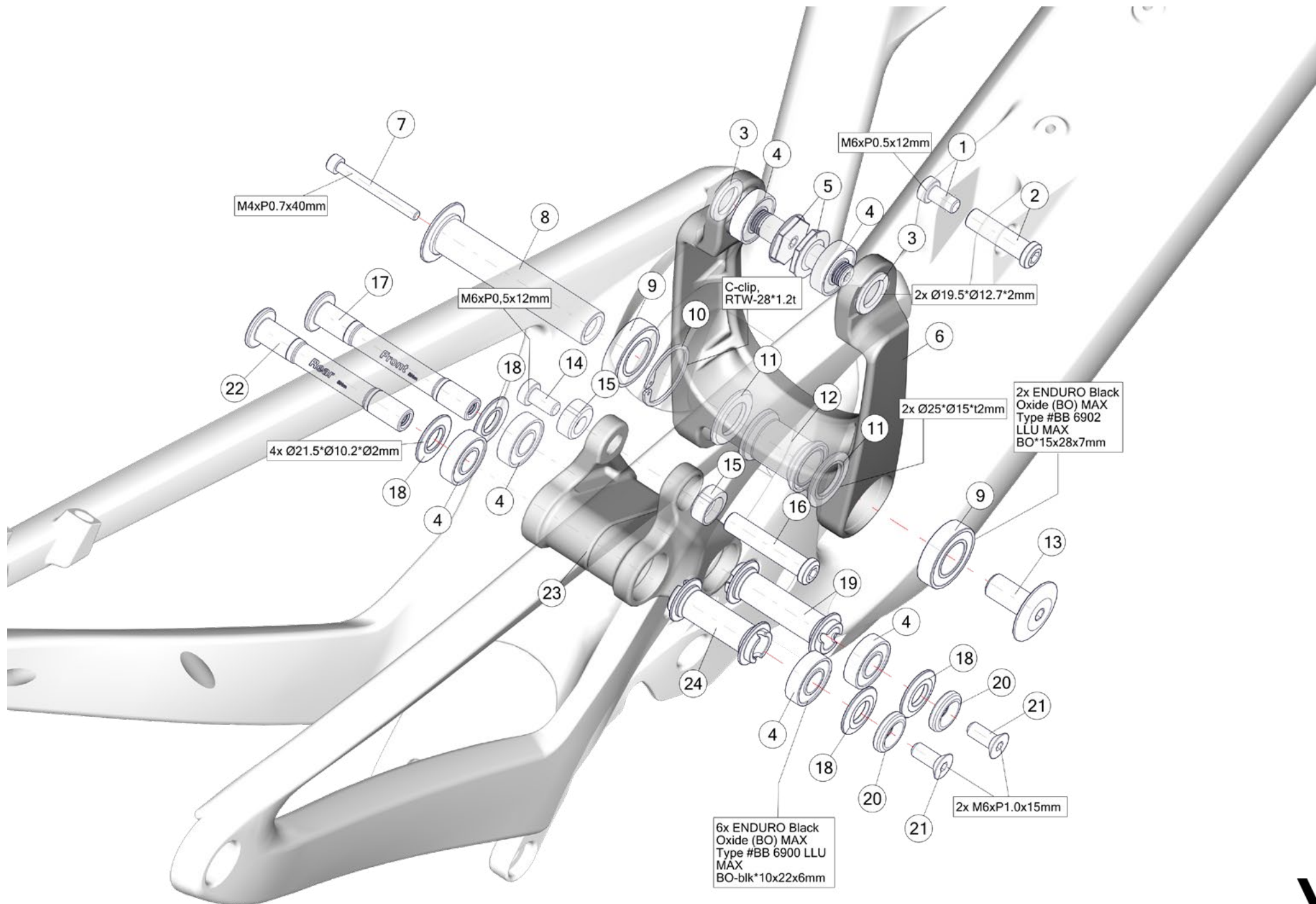
SPARE PARTS



SPARE PARTS

NUMBER ON DRAWING	PART NUMBER	DESCRIPTION
1	30001746	SCOR Headset B-18
2	30001807	SCOR Cable guide #29
3	30002027	SCOR Battery/Drive Unit Cover 4060 Z
4+5	30002091	SCOR Battery Mount Kit 4060 Z
5	30002028	SCOR E-Part Kit 4060 Z
6	30002024	SCOR Chainguide 4060 Z
7	301244	BMC SCOR Motor Bolts
8	30001745	SCOR Rear Triangle Protection Kit
9	30000706	BMC SCOR Thru Axle TS AL, 4060, 4060 Z
10	30002026	SCOR Shock Fender 4060 Z
11	30001739	SCOR Seatpost Clamp #28
-	30002028	SCOR Charger Cable Kit 4060 Z
-	30002090	SCOR Button Cable Kit 4060 Z





SPARE PARTS

NUMBER ON DRAWING	PART NUMBER	DESCRIPTION
1/2/14-16	30002022	SCOR Rear shock bolt set #6
6 / 7	30002023	SCOR Linkage Kit 4060 Z
3-5/6-13/17-24	30001744	SCOR Bolt Kit# 27



WARRANTY TERMS AND CONDITIONS

Your SCOR 4060 Z frame has been manufactured with the highest levels of care and precision. According to the law, SCOR is responsible to deliver you a frame that is faultless of anything that will prevent normal operation. Therefore, your SCOR frame will benefit from the following warranty terms:

SCOR provides a voluntary warranty of three years on every frame, and two years on SCOR components and paintwork.

By registering your new SCOR bike on the bike registration page <https://www.scor-mtb.com/bike-reg>, you can extend the warranty on the frame to five years.

You can read the warranty provisions in detail on the warranty policy page <https://www.scor-mtb.com/warranty>

If you have any question, please contact us :

info@scor-mtb.com
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c/o BMC Switzerland AG
Sportstrasse 49
2540 Grenchen
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