
DARTMOOR
HARDTAILS MANUAL
FREERIDE - ENDURO - TRAIL - FUNBIKE - DIRT

TABLE OF CONTENTS

1. INTRODUCTION – IMPORTANT INFORMATION AND WARNINGS

CAUTION: Please read this manual carefully. It contains important safety information.

WARNING: Extreme bicycle ride is a dangerous sport and requires an amazing amount of skills. By engaging in that type of activity user accepts the risk of injury or even death. Even the best bicycle will not help to drop perfectly if the user does not have sufficient skills. Also, the best protection equipment does not guarantee a hundred percent safety. Please note that in this kind of riding, a user can only trust his abilities and must accept the inherent risk. While riding a user can reach significant speeds and therefore face significant hazards and risks. Inspect a bicycle and equipment carefully and be sure that it is in perfect condition before each ride.

If possible consult with bike-park personnel, expert riders, and race officials on conditions and equipment advisable. Always wear appropriate safety gear, including an approved fullface helmet, full finger gloves, body armor, bright and visible clothing that is not so loose, that it can be tangled in the bicycle or objects at the side of the road or trail, shoes that will stay on your feet and will grip the pedals (make sure that shoe laces cannot get into moving parts, and never ride barefoot or in sandals). Always use protective eyewear to protect against dirt, dust, and bugs.

WARNING: Some of the service procedures require specialist tools and good mechanical skills. Therefore, to minimize the risk of serious or even fatal accidents, maintenance and assembly work on your bike should be carried out by an authorized bicycle workshop.

WARNING: Failure to maintain, check and properly adjust the suspension system may cause suspension malfunction, in a result of which a user may lose control and fall.

WARNING: Introducing changes in the suspension adjustment can alter the handling and braking characteristics of your bicycle. It is forbidden to change the suspension adjustment unless a user is thoroughly familiar with the suspension system manufacturer's instructions and recommendations. Users should always check for changes in the handling and braking characteristics of the bicycle after the suspension has been adjusted by taking a careful test ride in a safe area.

WARNING: As with all mechanical components, the frame is subjected to wear and high stresses. Different materials and components may react to wear or 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 color in highly stressed areas indicates that the life of the component has been reached and it should be replaced.

IMPORTANT NOTICE: This manual is not intended as a comprehensive use, service, repair, or maintenance manual. Please consult your dealer for advice and your dealer may also be able to refer you to classes, clinics, or books on bicycle use, service, repair, or maintenance.

2. GENERAL RIDING INFORMATION

Riding a bicycle can be dangerous. Keep this in mind and be cautious at all times. See and be seen. Use lights and reflective clothing in low light conditions. Wearing a helmet when riding can protect the head and save a life.

Always conduct a pre-ride check (detailed information can be found further in this manual).

Never ride the bicycle if you observe any technical problems or have any doubts about the proper functioning of any elements in the bicycle.

Keep the bike clean and well maintained.

It is strongly recommended to carry a pump, spare inner tube, patch kit, and a basic tool kit.

It could be required in case of a flat tire or other common mechanical problem. If any doubts or questions ask a bicycle dealer for advice on that issue.

If the bicycle is equipped with gears and user can choose a gear combination that is the most comfortable for riding conditions. Gears will allow a rider to maintain a constant rate of pedalling. Use lower gears for going uphill and higher gears for going downhill. Ease up on your pedalling pressure when you shift gears. Ask a bicycle dealer to give more advice on that issue if needed.

Pay attention to the brakes - they can be powerful and if activated too aggressively, may cause a crash. You should spend some time to get a better feel of the brakes on a side road or empty parking lot before the first ride. Avoid riding too fast, especially downhill. It is easy to lose control of the bicycle and crash at high speeds, and also you will find it very difficult to slow down especially if the hill is steep.

If a bike has been equipped with suspension, the increased speed a rider may develop will also increase the risk of injury. For example, the front of the bike may dive on the suspension fork while hard braking. A Rider can easily lose control and fall if he is not prepared for this.

Please, learn how to operate your suspension system safely. Thanks to the suspension the wheels can follow the terrain better, which improves control and comfort.

This improved capacity may provide an opportunity for riding faster, but riders should be careful, not to mistake the enhanced capabilities of the bicycle for their riding skills. Improving skills takes time and practice.

It is highly recommended to use locks to protect a bicycle from theft. Even if you are planning to be away from a bicycle for just a few minutes never leave your bike unlocked while unattended.

3. DARTMOOR HARDTAILS: FREERIDE, ENDURO, TRAIL, FUNBIKE, DIRT

FREERIDE

HORNET PRO

ENDURO

HORNET

FUNBIKE

HORNET 26

STREETFIGHTER

TRAIL

PRIMAL

SPARROW MULLET

A reliable and functional solution(system) could be simple. Based on an opinion that comes from rider's feedback, Dartmoor enhances the ideas and provides new solutions which make every minute on trails full of fun and happiness.

A bicycle is a simple machine with massive potential. That is why designing frames from 100mm to 160mm of travel, Dartmoor chose simplicity and functionality.

Without any doubt, Enduro is a sport that requires maximum versatility from a bicycle.Long climbs, descents in the most difficult conditions, jumps, and drops - these are the standard challenges that the equipment has to face.

DIRT/PUMPTRACK

TWO6PLAYER PRO PIKE

TWO6PLAYER PRO BOMBER

TWO6PLAYER EVO

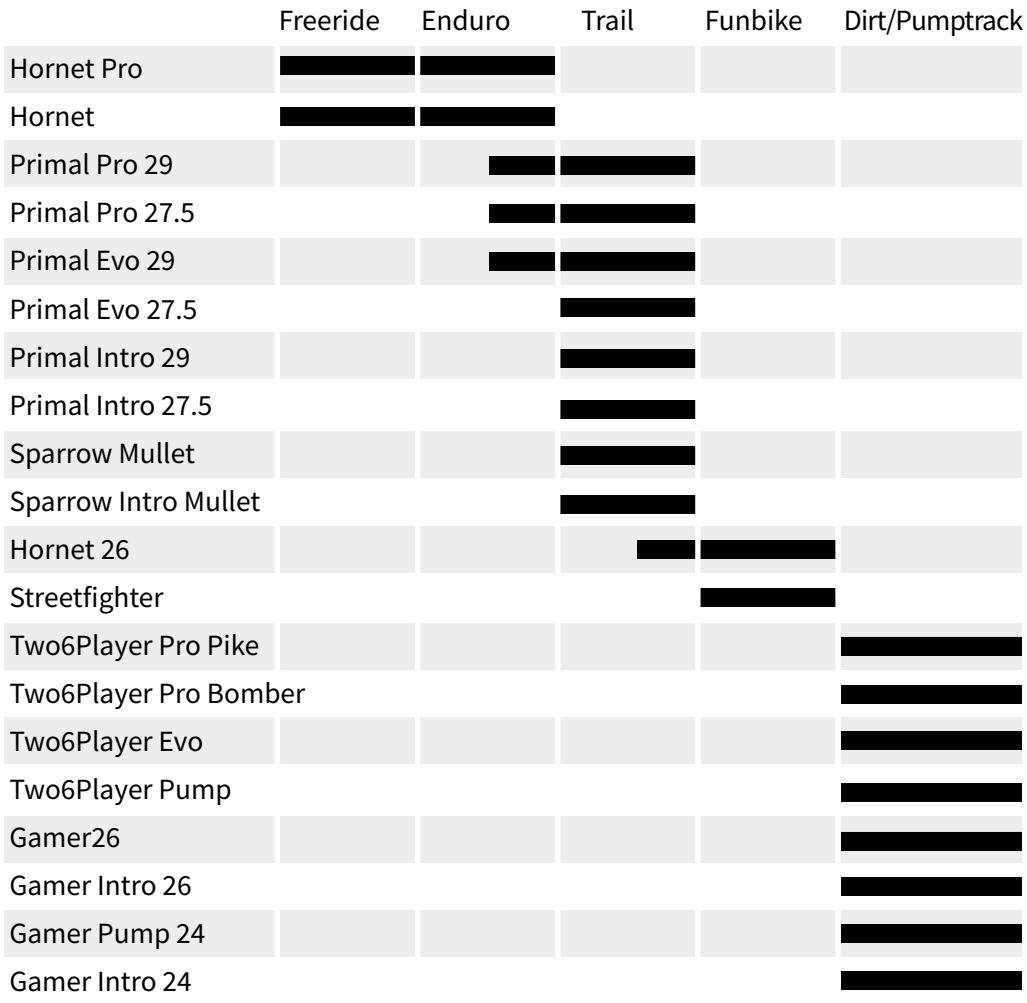
TWO6PLAYER PUMP

GAMER 26

GAMER INTRO 26

GAMER PUMP 24

BIKES & FRAMES RIDING STYLE CHART:



FREERIDE

Freeride bikes are downhill bikes tailored to the needs of ordinary people. Minimum stroke of the shock absorber 170 mm, solid frame, wide handlebars. All this is within the limits that can be mastered by intermediate riders. When driving fast, wide tires and sensitive hydraulic brakes are essential. The high position of the handlebars in relation to the saddle and the position of the rider shifted backwards ensure comfort when riding downhill. It is also possible to overcome flat sections. The weight of around 18 kg makes the climb very difficult, which is why freeriders use the lifts most often. It is definitely a bike for fans of extreme experiences.

ENDURO

Enduro bikes were created for long mountain trips in difficult terrain, riding in the mountains, and often unpaved routes. These bikes are more versatile and also allow a rider to ride uphill, although it is not the most pleasant. The travel of shock absorption is smaller than that of downhill bikes. The most common are full-suspension bikes with 160mm of travel, but there are also hardtails. They have a fairly short stiff frame, an adjustable seat post, and hydraulic brakes with large discs. Sometimes there is a front derailleur. Some models even allow you to quickly change the geometry of the frame, i.e. adapt the bike to the climb or descent. Weight approx. 12-16 kg. In enduro, the ability to efficiently overcome not only winding paths, trails full of unevenness, sharp descents, and demanding climbs will be useful. It is up to the rider which route he will take because he has full freedom in this matter. There are no inaccessible places for enduro bikes, and the more diverse the better. You can go crazy and bounce a bit off the ground. It is not the results or the quick time that counts, only having fun. This is the essence of a real enduro. A bicycle should be free, reliable, and its user should be able to use its full potential. In enduro, a rider chooses his path.

TRAIL

Trail bikes allow riders comfortable uphills on long mountain trails, combining the features of enduro and cross country. They are available in full-suspension or hardtail versions. Shock absorption at a level between 130 mm - 150 mm, will allow a rider to easily deal with unevenness and obstacles, such as steep climbs. They allow for more aggressive driving than cross country but are less dynamic. Compared to the enduro, they are a bit lighter and allow for a more pleasant ride uphill. The manoeuvrability of these bikes is influenced by the wide handlebars, adjustable seatposts, and the weighting of the front wheel during the descent. Wheels Are usually 29 inches, although trail bikes with a combination of 29 „front and 27.5" rear wheels (the so-called Mullet) are also popular, as well as with both 27.5 „wheels. The use of wide tires makes it easier to overcome obstacles in the field. Based on the emerging bike parks, a group of trail bike enthusiasts has emerged. If someone would like to go on a long trip on singletrack and not the most difficult mountain paths for pleasure, he should opt for a comfortable trail bike rather than the enduro.

FUNBIKE

Funbike is a bike built to deliver maximum fun and driving pleasure. Once called dual - truly versatile a bicycle, designed with a wide range in mind driving styles.

Regardless of whether you feel like it for a ride on forest paths, racing on trails, or a teaser for jumping on dirt and pumping on pumptracks - funbike provides stable and comfortable driving, anywhere you will go. It will definitely enable you to learn quick first tricks and more advanced tricks.

Provides amazing versatility thanks to forks with a stroke of 100 mm to 160 mm, and agility thanks to 26-inch wheels!

Do you need a rear derailleur? No worries! This is the perfect choice for a rider who is missing from a typical dirt bike gear, a front brake, and a little more pitch in a fork. Each of our funbikes is equipped with a Microshift derailleur with a clutch with a large spread of gears, which ensures comfortable climbs and movement between places, as well as choosing the right gear ratios during evolution requiring speed control. For this reason, we focused on durable hydraulic brakes - reliable when driving off-road and with adequate traction control.

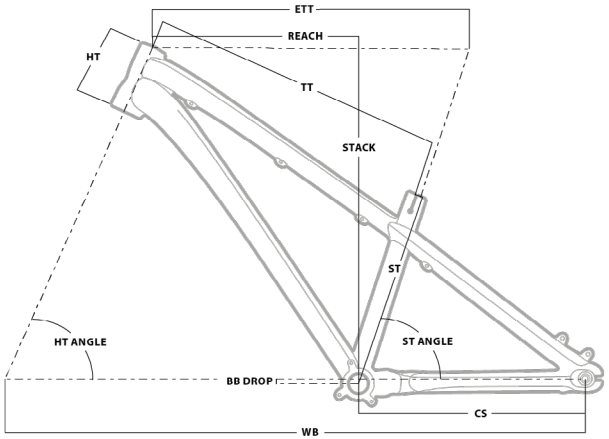
DIRT/PUMPTRACK

DIRT bikes are a combination of a MTB and a BMX. They are mainly used to perform evolutions, jumps on jumps, pumptracks / skateparks, riding over city obstacles, using walls, stairs, etc.

The frames without rear suspension are made of 6061-T aluminum.

The small size, low-sloping top tube, and large angle of the head tube make this geometry good for running the bike on a flat surface and performing acrobatics in the air. Singlespeed drive. The wheels are 26 inches (Two6Player Pro Bomber, Two6Player Evo, Two6player Pump, Gamer 26, Gamer Intro 26) and 24 inches (Gamer Pump 24, Gamer Intro 24). The tires are usually 2.3 inches and 2.1 inches wide with a fairly gentle tread.

4. GEOMETRY



Reach: horizontal distance from BB center to HT center
Stack: vertical distance from BB center to HT center
ST: seat tube lenght (BB center to ST top)
TT: top tube length (actual)
ETT: top tube lenght (effective)
CS: chain stay length
HT: head tube length
HT angle: head tube angle
EST angle: seat tube angle (effective)
BB drop: bottom bracket height (BB center to WB)
WB: wheel base

FREERIDE

HORNET PRO

Check

Size	Medium	Large	XLarge
reach	430	460	480
stack	606	606	606
ST	410	440	455
eTT	616	645	665
CS	420	420	420
HT	110	110	110
HT angle	64	64	64
eST angle	73	73	73
BB drop	35	35	35
WB	1174	1204	1224
standover	756	756	756

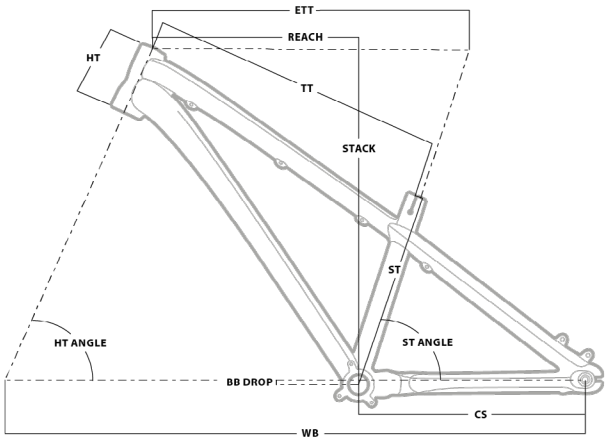
ENDURO

HORNET

››› *Check*

Size	Small	Medium	Large	XLarge
reach	405	430	460	480
stack	625	625	625	625
ST	380	410	440	455
eTT	596	620	650	672
CS	425	425	425	425
HT	120	120	120	120
HT angle	64	64	64	64
eST angle	73	73	73	73
BB drop	35	35	35	35
WB	1158	1183	1213	1233
standover	805	805	805	805

TRAIL



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CS: chain stay length
HT: head tube length
HT angle: head tube angle
EST angle: seat tube angle (effective)
BB drop: bottom bracket height (BB center to WB)
WB: wheel base

PRIMAL PRO 29”

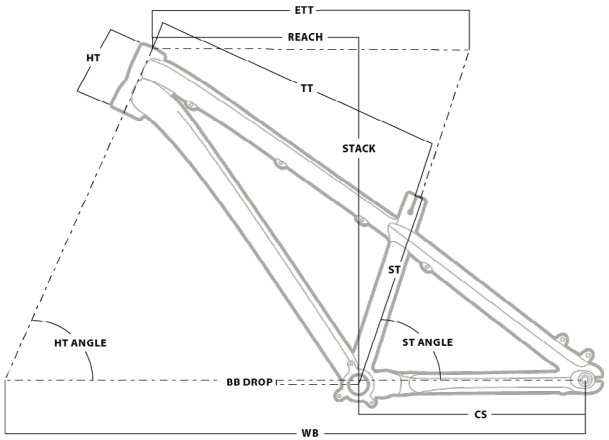
››› *Check*

Size	Medium	Large	XLarge
reach	445	470	495
stack	652	652	652
ST	435	465	465
eTT	632	657	685
CS	432	432	432
HT	120	120	120
HT angle	65	65	65
eST angle	72	72	72
BB drop	62	62	62
WB	1194	1219	1248
standover	790	800	800

PRIMAL EVO 29”

››› *Check*

Size	Small	Medium	Large	XLarge
reach	420	445	470	495
stack	652	652	652	652
ST	390	435	465	465
eTT	604	632	657	685
CS	432	432	432	432
HT	110	120	120	130
HT angle	65	65	65	65
eST angle	72	72	72	72
BB drop	62	62	62	62
WB	1165	1194	1219	1248
standover	790	790	800	800



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CS:	chain stay length
HT:	head tube length
HT angle:	head tube angle
EST angle:	seat tube angle (effective)
BB drop:	bottom bracket height (BB center to WB)
WB:	wheel base

PRIMAL INTRO 29”

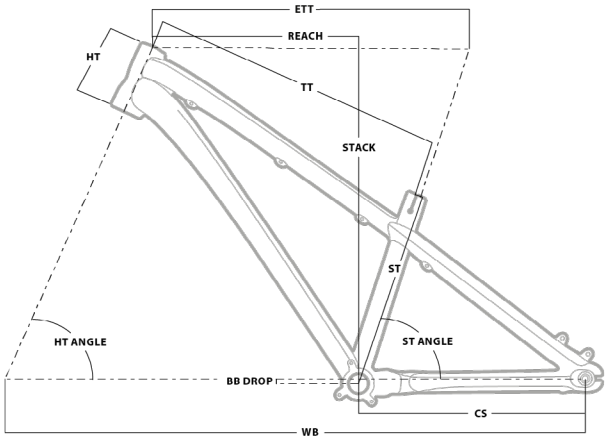
››› *Check*

Size	Small	Medium	Large	XLarge
reach	420	445	470	495
stack	652	652	652	652
ST	390	435	465	465
eTT	604	632	657	685
CS	432	432	432	432
HT	110	120	120	130
HT angle	65	65	65	65
eST angle	72	72	72	72
BB drop	62	62	62	62
WB	1165	1194	1219	1248
standover	790	790	800	800

PRIMAL PRO 27.5”

››› *Check*

Size	Small	Medium	Large
reach	415	445	470
stack	622	622	622
ST	410	430	460
eTT	589	621	646
CS	418	418	418
HT	110	120	120
HT angle	65	65	65
eST angle	72	72	72
BB drop	47	47	47
WB	1134	1169	1194
standover	774	774	781



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CS:	chain stay length
HT:	head tube length
HT angle:	head tube angle
EST angle:	seat tube angle (effective)
BB drop:	bottom bracket height (BB center to WB)
WB:	wheel base

PRIMAL EVO 27.5”

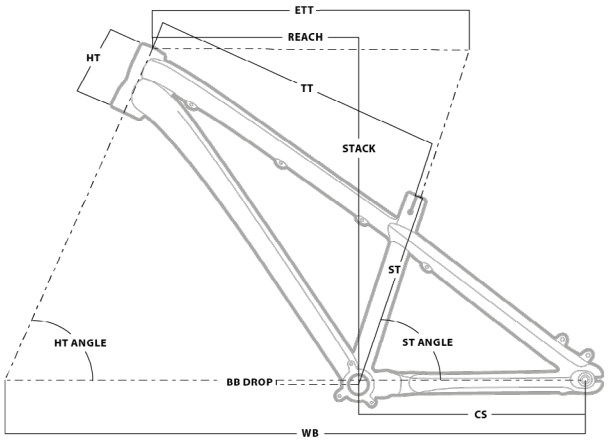
››› *Check*

Size	Small	Medium	Large	XLarge
reach	415	445	470	495
stack	622	622	622	622
ST	410	430	460	460
eTT	589	621	646	675
CS	418	418	418	418
HT	110	120	120	130
HT angle	65	65	65	65
eST angle	72	72	72	72
BB drop	47	47	47	47
WB	1134	1169	1194	1223
standover	774	774	781	781

PRIMAL INTRO 27.5”

››› *Check*

Size	Small	Medium	Large	XLarge
reach	415	445	470	495
stack	622	622	622	622
ST	410	430	460	460
eTT	589	621	646	675
CS	418	418	418	418
HT	110	120	120	130
HT angle	65	65	65	65
eST angle	72	72	72	72
BB drop	47	47	47	47
WB	1134	1169	1194	1223
standover	774	774	781	781



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HT angle:	head tube angle
EST angle:	seat tube angle (effective)
BB drop:	bottom bracket height (BB center to WB)
WB:	wheel base

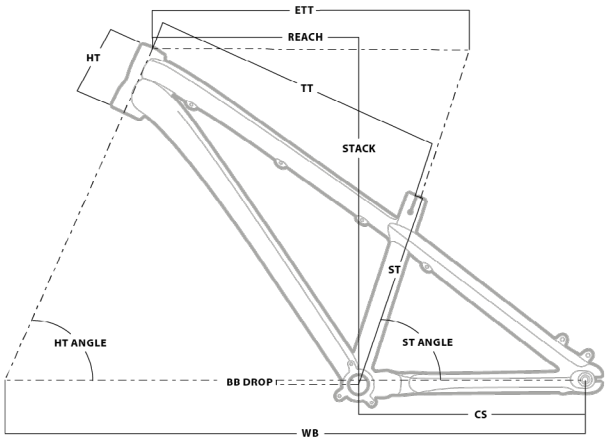
››› *Check*

Size	**Medium**	**Large**
reach	440	470
stack	630	630
ST	430	450
eTT	609	639
CS	427	427
HT	110	110
HT angle	66	66
eST angle	75	75
BB drop	66	66
WB	1172	1202
standover	782	793

››› *Check*

Size	**Medium**	**Large**
reach	440	470
stack	630	630
ST	430	450
eTT	609	639
CS	427	427
HT	110	110
HT angle	66	66
eST angle	75	75
BB drop	66	66
WB	1172	1202
standover	782	793

FUNBIKE



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HT angle: head tube angle
EST angle: seat tube angle (effective)
BB drop: bottom bracket height (BB center to WB)
WB: wheel base

HORNET 26”

››› *Check*

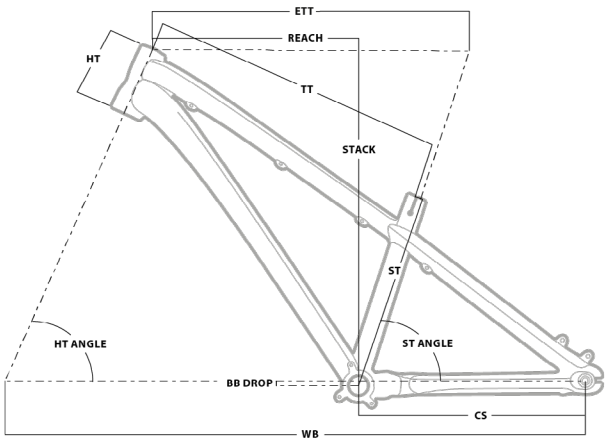
Size	One Size
reach	420
stack	565
ST	330
eTT	603
CS	400
HT	100
HT angle	68
eST angle	70
BB drop	30
WB	1078

STREETFIGHTER

››› *Check*

Size	One Size
reach	425
stack	560
ST	335
eTT	570
CS	395
HT	100
HT angle	70
eST angle	75
BB drop	25
WB	1061

DIRT/PUMPTRACK



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HT: head tube length
HT angle: head tube angle
EST angle: seat tube angle (effective)
BB drop: bottom bracket height (BB center to WB)
WB: wheel base

TWO6PLAYER PRO PIKE

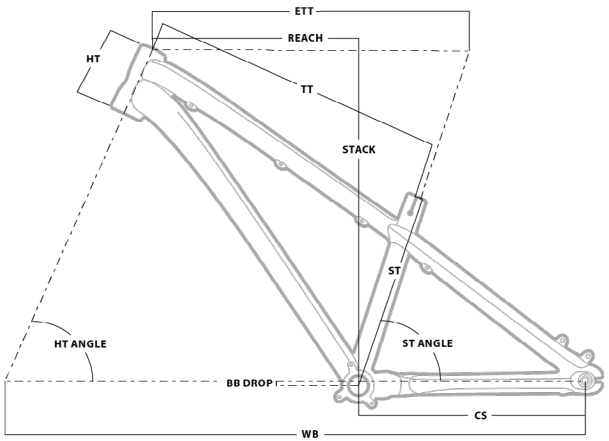
››› Check

Size	Medium	Long
reach	410	470
stack	571	652
ST	337	465
TT	552	570
CS	385	385
HT	120	120
HT angle	69	69
eST angle	74	74
BB drop	25	25
WB	1052	1072

TWO6PLAYER PRO BOMBER

››› Check

Size	Medium	Long
reach	410	430
stack	571	571
ST	337	337
TT	552	570
CS	385	385
HT	120	120
HT angle	69	69
eST angle	74	74
BB drop	25	25
WB	1052	1072



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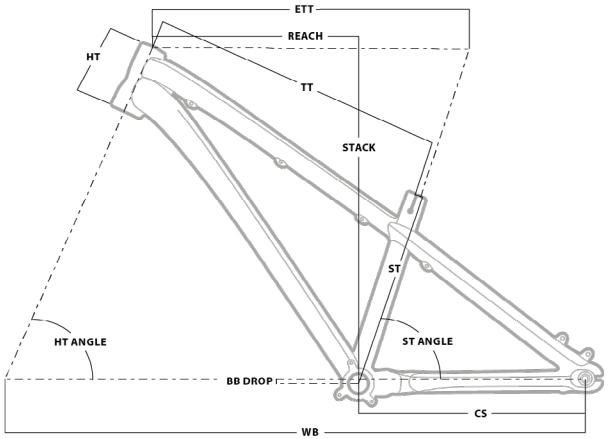
HT: head tube length
HT angle: head tube angle
EST angle: seat tube angle (effective)
BB drop: bottom bracket height (BB center to WB)
WB: wheel base

››› Check

Size	Short	Long
reach	410	470
stack	571	652
ST	337	465
TT	552	570
CS	385	385
HT	120	120
HT angle	69	69
eST angle	74	74
BB drop	25	25
WB	1052	1072

››› Check

Size	Short	Long
reach	410	470
stack	571	652
ST	337	465
TT	552	570
CS	385	385
HT	120	120
HT angle	69	69
eST angle	74	74
BB drop	25	25
WB	1052	1072



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HT angle:	head tube angle
EST angle:	seat tube angle (effective)
BB drop:	bottom bracket height (BB center to WB)
WB:	wheel base

GAMER 26”

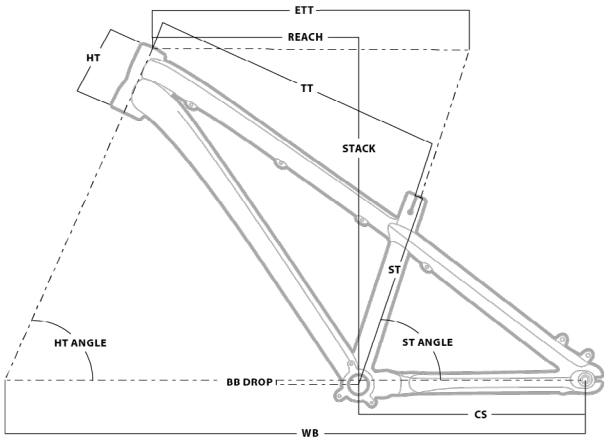
››› *Check*

Size	One Size
reach	410
stack	580
ST	332
TT	575
CS	385
HT	110
HT angle	69
eST angle	74
BB drop	20
WB	1071

GAMER INTRO 26”

››› *Check*

Size	One Size
reach	410
stack	580
ST	332
TT	575
CS	385
HT	110
HT angle	69
eST angle	74
BB drop	20
WB	1071



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HT:	head tube length
HT angle:	head tube angle
EST angle:	seat tube angle (effective)
BB drop:	bottom bracket height (BB center to WB)
WB:	wheel base

GAMER PUMP 24”

››› *Check*

Size	**One Size**
reach	365
stack	544
ST	325
TT	516
CS	370
HT	90
HT angle	69
eST angle	75
BB drop	3
WB	986

GAMER INTRO 24”

››› *Check*

Size	**One Size**
reach	365
stack	544
ST	325
TT	516
CS	370
HT	90
HT angle	69
eST angle	75
BB drop	3
WB	986

SELECTION OF THE APPROPRIATE SIZE OF THE FRAME TO THE USER'S HEIGHT

FREERIDE

HORNET PRO

size [cm]	M	L	XL
165	■		
170	■		
175	■	■	
180		■	
185		■	■
190			■
195			■
200			■

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ENDURO

HORNET

size [cm]	S	M	L	XL
160	■			
165	■			
170	■	■		
175		■		
180		■	■	
185			■	
190			■	■
195				■
200				■

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TRAIL

PRIMAL PRO 29

size [cm]	M	L	XL
160			
165			
170			
175			
180			
185			
190			
195			
200			

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PRIMAL EVO 29

size [cm]	S	M	L	XL
160				
165				
170				
175				
180				
185				
190				
195				
200				

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PRIMAL INTRO 29

size [cm]	S	M	L	XL
160				
165				
170				
175				
180				
185				
190				
195				
200				

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SPARROW MULLET

size [cm]	M	L
160		
165		
170		
175		
180		
185		
190		
195		
200		

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PRIMAL PRO 27.5

size [cm]	S	M	L
160			
165			
170			
175			
180			
185			
190			
195			
200			

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PRIMAL EVO 27.5

size [cm]	S	M	L	XL
160				
165				
170				
175				
180				
185				
190				
195				
200				

PDF ››› *Open the document*

PRIMAL INTRO 27.5

size [cm]	S	M	L	XL
160				
165				
170				
175				
180				
185				
190				
195				
200				

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SPARROW INTRO MULLET

size [cm]	M	L
160		
165		
170		
175		
180		
185		
190		
195		
200		

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FUNBIKE

HORNET 26”

size [cm]	One size
160	
165	
170	
175	
180	
185	
190	
195	
200	

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STREETFIGHTER

size [cm]	One size
160	
165	
170	
175	
180	
185	
190	
195	
200	

5. SERVICE PARTS

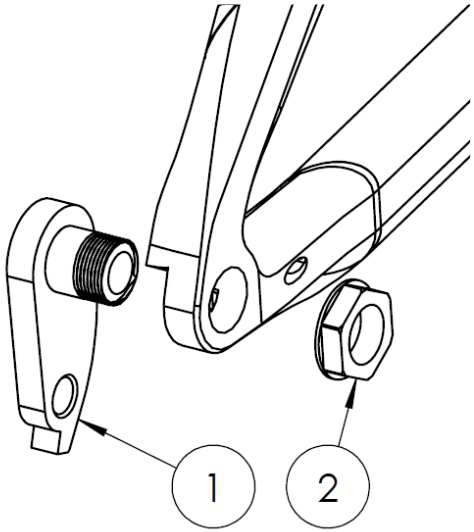
Hornet, Hornet26, Hornet Pro
– derailleur hanger UDH

An instructional video showing how to install derailleur hanger to the frame **YT** ››› *Watch the video*

An instructional video showing how to assemble a suspension bike **YT** ››› *Watch the video*

Derailleur hanger:

1. Derailleur hanger
2. Derailleur hanger nut



Axle frame M12x1.75 with a lever for the hub spacing 142x12 mm or 148x12 mm. The frameset includes an axle without a lever. An option with a lever can be purchased separately.

Currently, the most commonly used hub size standard is Boost (technology) - 148x12 mm for the rear hub, and 110x15 mm for the front hub. It is a relatively new solution in which the wider track increases the stiffness of the wheel, maneuverability, and dynamics of the bicycle.

Other, slightly older standards for hub sizes are 142x12 mm and 135x10mm for the rear hub, as well as 100x15 mm, 110x20 mm, and 100x9 mm for the front hub.

Sparrow Mullet and Sparrow Intro Mullet – hub size 110x15mm (front) 135x10mm (rear).

Streetfighter – hub size 100x15mm (front) 135x10mm (tył).

Hornet Pro, Hornet, Primal Pro 29, Primal Evo 29, Primal Intro 29, Primal Pro 27.5, Primal Evo 27.5, Primal Intro 27.5, Hornet 26 – hub size 110x15mm (front) 148x12mm (rear).

Gamer Intro 24 - 9mm, bearing, 32H (front), 135x10mm, bearing, 32H, freehub 14T (rear).

Two6Player Pump - Dartmoor Reel Pro 100x15mm, 32H (front), Dartmoor Reel Singlespeed 13T, 32H (rear).

Gamer Intro 26, Gamer Intro 24, Gamer Pump 24 - 9mm, bearing, 32H (front), 135x10mm, bearing, 32H, freehub 14T (rear).

Two6Player Pro Bomber -Dartmoor Reel Pro 110x20mm, 32H (front), Dartmoor Reel Pro Singlespeed 10T, 32H (rear).

Two6Player Pro EVO - Dartmoor Reel Pro 100x15mm, 32H (front), Dartmoor Reel Singlespeed 10T, 32H (rear).

6. SUSPENNSION SETTINGS

INITIAL SAG

Suspension settings are a matter of personal preference. Some riders prefer a soft setup, others a hard setup. Depending on the riding style, skills, and conditions on the route. The suspension on a trail/ enduro bike works fine with approximately 20% -30% initial sag. For the front shock, the value of 20-25% should be assumed.

Before starting work, set the return damping to the fully open position.

To measure the SAG, follow the instructions/indications below: Move the O-ring on the stanchion so it touches the fork seal, the same for the rear shock

- Stand on the pedals with your full body weight with full equipment: protective armor, helmet, neck protector, water bottle or water bag, etc. It is important that the equipment and clothing reflect the real riding conditions to give the most accurate results. While standing on the bike, bend the suspension several times, then push the O-ring against the shock seals again. It is best to have someone to help, but you can deal with it yourself, for example by leaning against the wall of the building.
- Get off the bike carefully and measure the SAG with a ruler or tape measure printed on the stanchion, or ask someone to read the value on the scale when standing on the bike in a neutral position (slightly bent knees and hands in elbows). Inflate or deflate the damper until the desired deflection of the shock is achieved.

It is best to set the front shock return damping as follows:

- Start by unscrewing the damper to the extreme position as it was in the case of the damper. Stand next to the bicycle, depress the shock as far as possible, and release it vigorously. Observe that the front wheel is clear of the ground. Increase the damping by two clicks by using the adjuster on the bottom of the right shock leg, turning towards the „turtle” symbol („+”; „slow”).
- Repeat this process until the wheel stops springing off the ground. The basic setting obtained in this way can be corrected on the trail depending on the driving conditions and individual preferences.
- Finally, get on the bike and on a straight road, vigorously bending the suspension and check that the front and rear work evenly. By pressing the suspension in this way, bend it in the range of 80-90%, if it is difficult, it may turn out that the shock or damper needs to be adjusted in terms of the air chamber capacity. To do this, contact an experienced service provider who will adjust the size of the chamber with the help of tokens.

COMPRESSION – SPEED OF COMPRESSION (DEFLECTION)

Most air shocks have a compression speed damping adjustment implemented by a single knob. It enables smooth or gradual regulation until the shock is blocked.

This adjustment is most often used while driving, adapting the shock to the type of route. The fully open position is most often used when descending on uneven terrain when we want the best traction. Slowing down the compression speed to about half of the range is used in normal riding on flat sections and in the case of riding on flow routes so that the suspension does not absorb the user’s speed while riding on moguls. This setting is the most used and the most universal, also for people who

like to jump on a bike. The shock absorbs energy when hitting a punch, so some riders prefer to increase compression damping. The extreme setting is the least used, most often when climbing steep climbs.

More advanced designs of the shock, mount a damper with two regulators, fast and slow compression. Slow compression damping acts on the first half of the shock travel, mainly when braking, negotiating steep descents, rides, or moguls. Increasing it improves the efficiency of pedalling, prevents „swinging" and reduces the collapse of the suspension when overcoming the above-mentioned elements. Similar to the case when you have only one compression knob. Therefore, the adjustment is made in the same way.

High-speed compression damping affects the second half of the stroke of the shock from the middle of the deflection to the moment of compression. Typically, less experienced riders do not use this adjustment and it remains in the open position. Users who like to ride more aggressively, forcing the suspension to work quickly, after hitting a large obstacle will feel that the suspension dives too quickly to the end of the stroke, they can counteract this phenomenon by increasing the damping of quick compression.

7. REAR WHEEL ASSEMBLY

To properly install the rear wheel you need to:

- make sure that the wheel is axially aligned and that the brake disc is properly seated in the brake caliper
- put the wheel in the hooks with the chain correctly positioned on the cassette
- insert the axle 12 mm and tighten with a torque wrench to 20 Nm.

8. GENERAL INFORMATION

FORK

FREERIDE: Hornet Pro is designed to work with forks with a single crown and 150 mm travel.

ENDURO: Hornet is designed to work with forks with a single crown and 150 mm travel.

TRAIL: PRIMAL PRO 29, PRIMAL EVO 29, PRIMAL INTRO 29, PRIMAL PRO 27.5, PRIMAL EVO 27.5, PRIMAL INTRO 27.5, SPARROW MULLET, SPARROW INTRO MULLET are designed to work with forks with a single crown and 130 - 140mm travel. Using other types of forks may damage the frame, rider injury or even death.

FUNBIKES: bikes are compatible with tires, with a maximum size of 2,5" for 26".

DIRT: 80mm travel Gamer Pump and 100mm travel Gamer Intro 24, Gamer Intro 26, Gamer 26, Two6Player Pump, Two6Player Evo, Two6Player Pro Bomber.

HEADSET

Hardtail frames feature a tapered headstock for the IS42 / IS52 headset (bottom: 52mm inner diameter/ top: 42mm inner diameter). The frame will fit forks with standard 1-1 / 8 "steerer tubes or 1.5 - 1-1 / 8" tapered steerer tubes.

Importantly, you should not cut the steerer too low. The process of assembling the rudders in the frame should be performed by a qualified mechanic.

BOTTOM BRACKET

The frames are designed to work with a BSA / ISO73 bottom bracket only and accept conventional threaded outer bottom brackets such as SRAM GXP, Shimano BB73, or FSA MegaExo. Before installing, make sure the bottom bracket shell is clean, lightly greased, and free from dirt and paint. The installation process should be carried out according to the instructions of the cartridge manufacturer.

TIRES

FREERIDE and ENDURO: Hornet Pro and Hornet are compatible with tires, with a maximum size of 27, 5 x 2,8".

TRAIL: bikes are compatible with tires, with a maximum size of 2,4" for 29" and 2,8" for27,5". Note that these numbers are indicative as the size and shape of the tires may vary depending on the manufacturer and the width of the rim on which it will be mounted.

FUNBIKES (TBC): bikes are compatible with tires, with a maximum size of 2,5" for 26".

DIRT: maximum 2,35" thick for 26" wheel i 2.30"thick for 24"wheel.

SPROCKET SIZES

The frames are designed to work with the 30/32T sprockets. The maximum size of the sprocket is indicative only. May vary by manufacturer, model, cranks, and bottom bracket used.

Dirt bike sprockets depend on models 25/28/32T.

BRAKE COMPATIBILITY

Hardtail Freeride/ Enduro/Trail/Funbike/Dirt brake mounts are Post Mount 160 compatible. The maximum brake disc size is 203mm for 29" and 27.5". Hornet 26 and Streetfighter are 180mm 29" and 27.5" frame brake mounts are IS compatible. The maximum brake disc size for them is 180mm

Dirt bikes the maximum brake disc size is 160mm.

SEATPOST AND SEATPOST CLAMP

The frame works with 30.9mm seatposts. Internal armor routing for dropper posts is available. Do not extend the seat post above the minimum extension mark. The diameter of the clamp on the seat tube is 34.9 mm.

WARNING: It is important to make sure the rear tire does not touch the saddle when the suspension is at its maximum travel. To check this, you must fully deflect the rear suspension without the spring mounted on the rear shock absorber.

FUNBIKES: 130mm travel for Hornet 26 and 100mm travel for Streetfighter.

DIRT: 80mm travel for Gamer Pump and 100mm travel for Gamer Intro 24, Gamer Intro 26, Gamer 26, Two6Player Pump, Two6Player Evo, Two6Palyer Pro Bomber.

9. TIGHTENING TORQUE

Correct tightening of the bicycle fasteners, nuts, and bolts is essential. Too little force and the fastener may not hold securely. Too much force and the fastener may tear, stretch, distort or break the thread. Either way, incorrect torque can damage the component, which can cause you to lose control and fall. In case of doubt or problems found during your test ride, seek immediate advice from a professional bicycle mechanic.

See the instructions of the suppliers of the suspension fork and other parts that come with this frame. Do not use the bicycle until all problems have been resolved. Riding a bicycle with any defects may be dangerous to health and life. If you are not a qualified bicycle mechanic, do not make any of these adjustments yourself and seek advice from your local bicycle dealer.

Tightening torques (Nm) for individual points on the frame:

- rear wheel axle: 20 Nm
- rear brake mounting: 10 Nm
- derailleur hanger: 20 Nm
- seat post clamp: 6 Nm

Remaining tightening torques:
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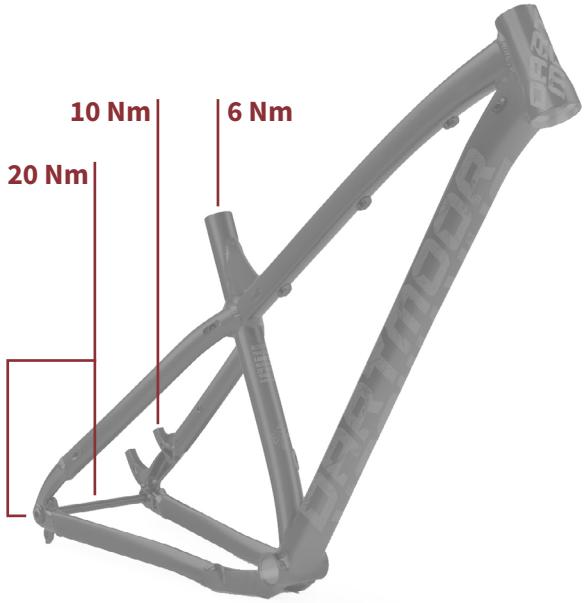


ACCESSORIES:

The rocker arm neoprene tube protector should be wrapped together with the rear derailleur cable to protect the rocker arm from chain impacts.

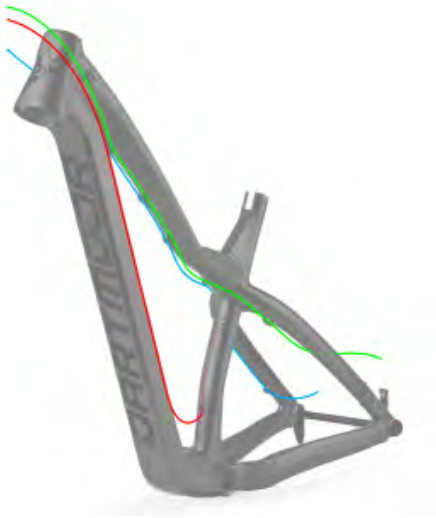
TBC

A self-adhesive set of protective films can be used for additional protection of the downtube.

Before applying the protective film to the frame, degrease and clean its Surface.

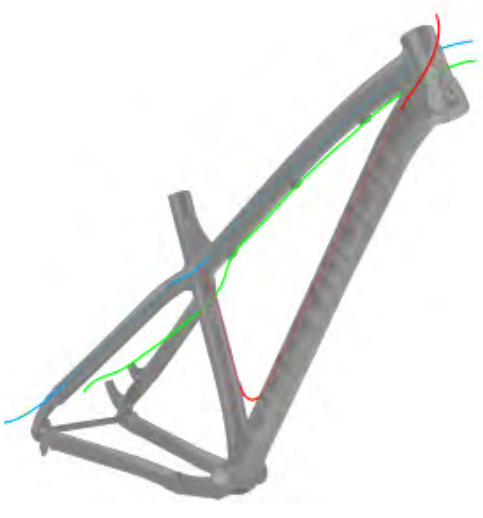
10. EXTERNAL AND INTERNAL CABLE ROUTING

Cable Installation Tips:



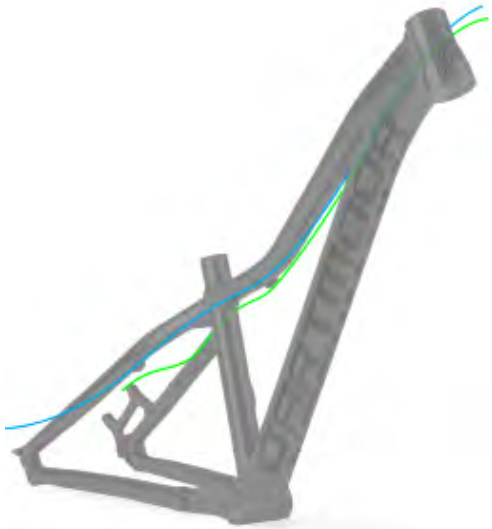
HORNET, HORNET PRO

- Rear brake hose: Secure the outer casing with the zip ties to the bottom of the top tube. The brake hose runs along the inside of the left chainstay (opposite to the drive) to the brake caliper.
- Rear derailleur cable: lead outside the frame. Secure the outer casing with the zip ties to the bottom of the top tube (parallel to the rear brake hose). The shifting cable continues along the inside of the right tube the chainstay (drive side) to the derailleur hanger.
- Dropper post cord: run to the outside of the frame. The armor should be fastened with clamps in the upper part of the lower frame tube. The routing ends near the bottom bracket, then runs outwards upwards and goes through the grommet to the inside of the seat tube towards the saddle.



PRIMAL

- Rear brake hose: Secure the outer casing with the zip ties to the bottom of the top tube. The rear brake cable runs along the inside of the left chainstay (opposite the drive side) to the brake calliper.
- Rear derailleur cable: it is routed inside the frame. On the left there is a grommet for inserting the rear derailleur casing. The lead ends near the seat tube, continues outside and passes through the grommet on the right inward and along the right tube (drive side) of the chainstay to the derailleur hanger.
- Dropper post cord: run inside the frame. On the right there is a grommet for the dropper post casing. The routing ends near the bottom bracket, then runs outwards upwards and goes through the grommet to the inside of the seat tube towards the saddle.



SPARROW

- **Rear brake hose**: Secure the outer casing with the zip ties to the bottom of the top tube. The brake hose runs along the inside of the left chainstay (opposite to the drive) to the brake calliper.
- **Rear derailleur cable:** lead outside the frame. Secure the outer casing with the zip ties to the bottom of the top tube (parallel to the rear brake hose). The shifting cable continues along the inside of the right tube the chainstay (drive side) to the derailleur hanger.

STREETFIGHTER

- **Rear brake hose**: Secure the outer casing with the zip ties to the bottom of the top tube. The brake hose runs along the inside of the left chainstay (opposite to the drive) to the brake calliper.
- **Rear derailleur cable:** lead outside the frame. The armor should be fastened with cable ties in the lower part of the top tube (parallel to the rear brake hose). Wire the derailleur continues along the inside of the right tube the chainstay (drive side) to the derailleur hanger.

11. MAINTENANCE & SAFETY CONTROLS

Do not ride the bike if any defect is noticed.

It is recommended that the user take care of the frame of his bike, which will allow him to enjoy it for a longer period. Before each ride, the bicycle should always be inspected, which should include the following points:

- Clean the frame - remember that high-pressure washing may damage some parts of the bike, so avoid it.
- Carefully inspect for signs of potential failure including cracks, corrosion, dents, paint peeling, and any other signs of potential problems and misuse.
- If you find anything suspicious, contact your local bicycle dealer for a proper checkup. These are very important safety checks to prevent accidents, injuries and shorten the life of the product.

Points/things to check before each ride:

- That all frame bolts are properly tightened - see ***#tightenning torque.***
- Connecting the wheels to the frame and fork – is crucial for the user's safety.
- If axles are bolted, they must be properly tightened to the manufacturer's specifications.
- If there is a quick releaser, ensure that it is in the CLOSED position with the appropriate resistance level.
- The steering system includes handlebars, stems, headsets, and a fork. All elements should be properly twisted to ensure safety while riding. If the user wants to make any changes, be careful as incorrect settings can be very dangerous. It is always best to seek professional advice in this regard. Check that there is play in the rudders, the connection of the stem to the handlebars and the connection of the stem to the steerer tube, the connection between the handlebars and the stem, try to lift the handlebars up and down - there should be no movement between the two. Check that there is no additional slack in the controls (stand next to the bike, tighten the front brake and push the bike back and forth. There should be no play between the frame, and the fork). If there is any play, contact your local bike shop. Do not make any adjustments yourself, unless you are sure of your abilities. Adjust the steering according to the instructions from the manufacturer of the headset. All parts of the sternum should be regularly checked for damage or cracks. If a user finds anything suspicious, they should immediately contact an experienced bicycle mechanic. A damaged steering system can cause serious injury or even death.
- Connecting the bottom bracket to the frame. There should be no play between the frame and the carriage.
- The connection between cranks and the bottom bracket.
- Connecting the pedals to the cranks. Points/things to check before each ride:
- Linkage of the derailleur to the frame - make sure that it functions properly before each ride.
- Attach the brake calliper to the frame and fork.
- The general condition of the front and rear shock (pay particular attention to any cracks, or deformation).
- Air Shock pressure (in the case of air forks). See #suspension settings and manufacturer's manual. Make sure the SAG does not exceed a reasonable limit. Make sure the air pressure does not exceed the limits provided by the damper / fork manufacturer.
- Clean the tubes of the rear shock and fork.
- Brake cables and their housing for kinks, rust, brokenbands, or frayed ends. If any damage is noticed, the cables should be replaced immediately. Damaged cables can seriously affect braking performance.
- Be sure to follow the manufacturer's instructions for servicing the shock absorber and other parts. Instructions for the use of additional parts are provided in the box.

12. LIST OF COMPONENTS

- set of cable inserts
- technical instruction
- frame
- axle

DARTMOOR

#RIDEYOUR**WAY**

Producent: **VELO Sp. z o.o.**
ul. Pszczyńska 305 / 44-100 Gliwice
Poland