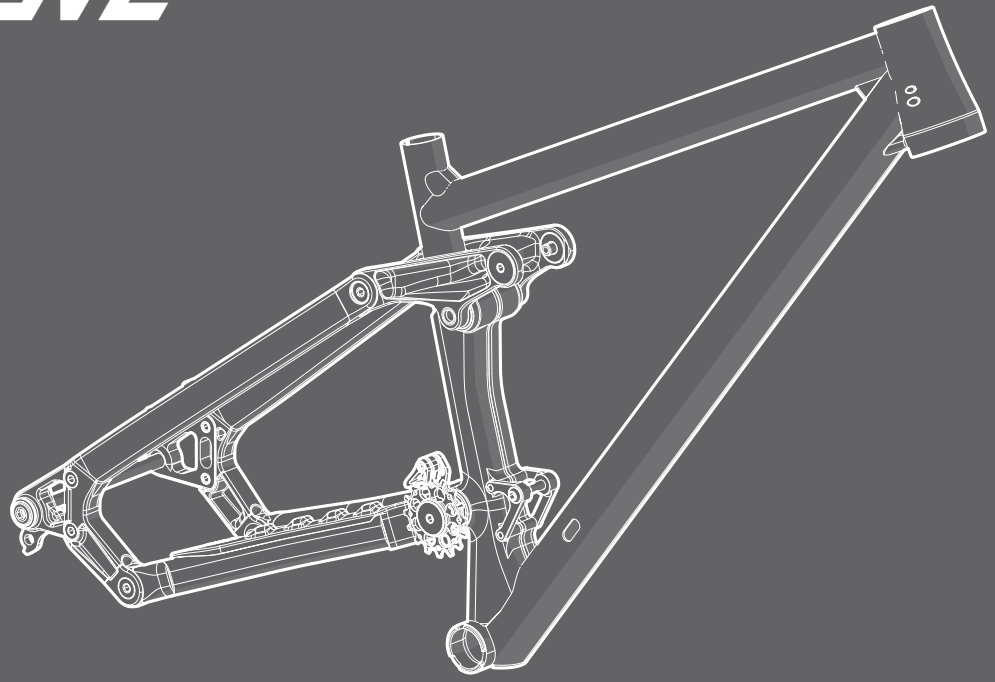
KASVENZ



VHP

USER INFORMATION & TECHNICAL DATA

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The KAVENZ VHP was developed to make you faster and you will experience a completely new level of riding. The kinematics are designed in such a way that you will exceed your own performance or at least be safer on the trails.

But before you get started, we would like to thank you for the trust you have placed in our up-and-coming brand and ask you to read these instructions carefully.

Please do not hesitate to contact us if you have any questions.

Yours sincerely,

Giacomo Grossehagenbrock (KAVENZ)

P.S. We are always happy to receive feedback on how we can improve our products.

1. GENERAL INFORMATION

This user manual is the most important element to prevent any damages and risks during the use and servicing of your frame. It is provided to give you the most important information on your bike frame and to give you helpful tips over the entire life of your frame. If you have any doubts or uncertainties regarding the work on your frame, you should always consult a qualified bicycle mechanic or the Kavenz service.

Please read this manual carefully before taking the first ride with your new frame and make sure you understand everything. Ensure that third-party users are also informed about the contents of these instructions and that they understand and observe the contents.

Keep this manual for future reference. If you sell or give away your frame, please also include this user manual.

This user manual is also available at www.kavenz.com.

1.1 EXPLANATION OF SYMBOLS USED

DANGER

...indicates a hazard with a high degree of risk that will result in death or serious injury if not avoided.

1.2 TARGET GROUP

This manual is intended for you, the owner of the KAVENZ VHP16 frame.

Basic knowledge of bicycle technology is a prerequisite for the assembly and maintenance of the bicycle. If in doubt, consult a qualified bicycle mechanic. Incorrect assembly or incorrect maintenance of your bike can lead to serious accidents with fatal consequences!

1.3 TOOLS

Work on the frame may only be carried out with suitable tools. Screw connections must be tightened to a defined torque using a torque wrench.

Correct assembly and disassembly of the components can only be guaranteed if the tools are in perfect working order and undamaged.

1.4 SELECTION OF COMPONENTS

The components must be selected taking into account the interfaces (see „4. Frame interfaces" on page 7), the intended use (see „3. Intended use" on page 6) and the maximum system weight (see „1.6 Maximum system weight" on page 4).

No child seats, child trailers or rear racks may be mounted on the frame.

1.5 WARRANTY AND GUARANTEE

For all information on warranty and guarantee see www.kavenz.com.

1.6 MAXIMUM SYSTEM WEIGHT

The KAVENZ VHP frame is designed for a maximum system weight of 130 kg. The system weight is the sum of rider, bike, equipment (helmet, backpack, shoes, clothes) and luggage.

If components with a lower maximum system weight are mounted, the maximum system weight of the entire system is reduced to the value of the component with the lowest value.

1.7 WEAR PARTS

The bearings of the rear triangle, idler pulley and shock are wearing parts and should be checked regularly and replaced or serviced as required.

1.8 DISCLAIMER

The activities listed in this manual must be carried out by persons with sufficient specialist knowledge.

The user is liable for damage caused by:

- Misuse or any other use beyond the range of the intended use (see „3. Intended use" on page 6)
- Non-compliance with safety regulations
- Improper installation, repair and maintenance
- Use of unauthorized spare parts and accessories

If you are unsure or if problems occur, always consult the KAVENZ Service or a trained bicycle mechanic!

2. SAFETY

DANGER

RISK OF ACCIDENT DUE TO IMPROPERLY INSTALLED COMPONENTS OR INCOMPATIBLE COMPONENTS!

Improperly installed or incompatible components can become loose or break during the ride!

- Installation must be carried out in accordance with these instructions or the component manufacturer's specifications.
- The components must be selected taking into account the interfaces, the intended use and the maximum system weight.

DANGER

RISK OF ACCIDENT DUE TO SUDDEN FAILURE OF PRE-DAMAGED COMPONENTS!

A crash or unplanned riding manoeuvres can pre-damage your frame or components of your bike unnoticed. Pre-damaged components can be deformed or break while riding.

- Check your components regularly and after a crash or accident for damage and malfunctions.
- Components that are subject to high stress must be regularly replaced and checked by a qualified bicycle mechanic.
- Damaged components must be replaced immediately.

DANGER

DANGER OF ACCIDENT DUE TO IMPROPER HANDLING!

If the bicycle or components are handled improperly, parts of the bicycle may suddenly fail.

- All maintenance intervals and activities must be observed and adhered to - including those of the assembled components.
- The max. system weight of your bike and it`s components must not be exceeded (see „1.6 Maximum system weight" on page 4).
- The bicycle and its components may only be used within the scope of the respective intended use.
- The regulations of the component manufacturers must be observed in addition to the regulations listed here.

Following the instructions specified in this manual does not absolve the riders from their duty of care to ensure that their bike is always in good condition. If there are any questions consult a qualified bicycle mechanic or the KAVENZ Service.
As it is impossible to foresee all situations or circumstances that may occur during riding, this user information does not guarantee the safe use of the bike under all conditions. There are risks associated with the use of bikes that cannot be predicted or avoided and are the sole responsibility of the rider.

If you are unsure or if problems occur, always consult the KAVENZ service or a trained bicycle mechanic!

3. INTENDED USE

The intended use of Bikes is divided into five different categories – ranging from the use on paved roads through to downhill or freeride use. The bicycles are to be used exclusively in accordance with their intended use. Otherwise, the user assumes responsibility.

The KAVENZ VHP12, VHP14, VHP15, VHP16 and VHP18 frame is approved for CATEGORY 5.

If the bike is to be used in accordance with the regulations of category 5, all components must also be approved for this category!

CATEGORY 1: USE ONLY ON PAVED ROADS

Category 1 includes all bikes and components that should only be used on paved roads.

The wheels are always in contact with the ground.

CATEGORY 2: FOR USE ON AND OFF THE ROAD AND FOR DROPS OF UP TO 15 CM

Category 2 includes all bikes and components that can be used in conditions described under category 1, as well as on gravel roads and moderate trails. The wheels may not always be in contact with the ground. Drops are intended to be limited to 15 cm or less.

CATEGORY 3: FOR USE IN ROUGH TERRAIN AND FOR JUMPS OF UP TO 61 CM

Category 3 includes all bikes and components that can be used in conditions described under category 1 and 2, as well as on rough trails and rough and unpaved roads that require good cycling skills. Jumps and drops should not be higher than 61 cm.

CATEGORY 4: FOR USE IN ROUGH TERRAIN AND FOR JUMPS OF UP TO 122 CM

Category 3 includes all bikes and components that can be used in conditions described under categories 1, 2 and 3 as well as in very rough and partially blocked terrain with steep gradients and the associated higher speeds. Regular, moderate jumps by experienced riders are no problem for these bikes. However, regular and permanent use of the bikes on North Shore trails and in bike parks should be ruled out. These bikes should be checked for possible damage after every ride due to the heavier loads. Full-suspension bikes with medium suspension travel are typical for this category.

CATEGORY 5: EXTREME BIKING (DOWNHILL, FREERIDE, DIRT)

Category 5 includes all bikes and components that can be used in conditions described under categories 1, 2, 3 and 4 as well as in demanding, heavily blocked and extremely steep terrain, which can only be mastered by technically experienced and very well trained riders. In this category, big jumps are to be expected as well as intensive use in bike parks or on downhill tracks. With these bikes, it is essential that an intensive check for possible damage is carried out after every ride. Pre-damage can lead to failure at significantly lower further stresses. A regular replacement of safety-relevant components should also be considered. Wearing special protectors is strongly recommended.

4. FRAME INTERFACES

REAR SHOCK VHP12: Trunnion 185x47.5 mm
VHP14: Trunnion 205x57.5 mm
VHP15: Trunnion 205x60 mm
VHP16: Trunnion 205x65 mm
VHP18: Trunnion 225x75 mm
Mounting hardware: 22x8 mm / 22.2x8 mm
Recommended spring rate for coil shocks:

Spring rate	Rider weight
300 lbs/inch	65 kg
325 lbs/inch	70 kg
350 lbs/inch	75 kg
375 lbs/inch	80 kg
400 lbs/inch	85 kg
425 lbs/inch	90 kg
450 lbs/inch	95 kg
475 lbs/inch	100 kg
500 lbs/inch	105 kg
525 lbs/inch	110 kg
550 lbs/inch	115 kg

FORK VHP12: 130-140 mm travel
VHP14: 150-160 mm travel
VHP15: 160-170 mm travel
VHP16: 160-180 mm travel
VHP18: 180-200 mm travel

HEAD TUBE ZS 44/56 (110 mm or 125 mm)

HEADSET ZS44/28.6 | ZS56/40 (for tapered steerer tube)

REAR BRAKE IS 2000

REAR WHEEL AXLE 148 mm (Boost)

BOTTOM BRACKET 73 mm BSA

CHAIN GUIDE Guide for idler pulley enclosed
ISCG 05 adapter available separately

CHAIN LINE 50 - 53.5 mm (factory setting 53.5 mm)

WHEEL SIZE: VHP12/VHP15: 29" front wheel / 29" rear wheel
VHP14/VHP16: 29" front wheel and 29" or 27.5" rear wheel (adjustment via special shock mount)
VHP18: 29" front wheel / 27.5" rear wheel

TYRE WIDTH 2.6" (tyre clearance 81 mm)

SEAT TUBE Ø31.6 mm with internal cable guiding
maximum insertion depth:
400 mm seat tube: 240 mm
420 mm seat tube: 260 mm
450 mm seat tube: 290 mm
480 mm seat tube: 320 mm
minimum insertion depth: 100 mm

WATER BOTTLE Maximum 750 ml (only in conjunction with bottle holder for side removal)

IDLER PULLEY 16T N/W

BALL BEARING Ø15 / 28 x 7 mm (S6902 LLU MAX)

5. SETUP

5.1 SAG SETTING

The SAG is the amount by which the suspension deflects due to the rider's own weight. Below you will find the SAG values we recommend:

Model	Rear shock		SAG on the shock [mm]	SAG on the shock [Percentage]	Rear wheel travel [mm]
	Installation width [mm]	Shock stroke [mm]			
VHP 12 29	185	47.5	13.5	28%	121
VHP 14 MX	205	57.5	15.5	27%	144
VHP 14 29	205	57.5	15.5	27%	144
VHP 15 29	205	60	16.5	28%	149
VHP 16 29	205	65	18	28%	160
VHP 16 MX	205	65	18	28%	160
VHP 18 MX	225	75	20,5	27%	183
VHP 18 29	225	75	20,5	27%	184

5.2 CHAIN LENGTHS

When using a SRAM Transmission drivetrain, the required chain length can be determined via the SRAM AXS app or at https://axs.sram.com/guides/chain/calculator. Our lower chain guide is required for use with the SRAM Transmission shift system on all models except the VHP12.

For all gearbox frames, we recommend using an 11-speed chain with the following length:

Gearbox model	Dropout	Chain length (number of chain links)
EFFIGEAR (26T/30T)	+0	106
	+10	108
	+20	110
	+20 VHP18 - 29"	110
PINION (26T/26T)	+0	104
	+10	106
	+20	108
	+20 VHP18 - 29"	108

6. MAINTENANCE

DANGER

RISK OF ACCIDENT DUE TO OVERDUE MAINTENANCE AND SERVICE!

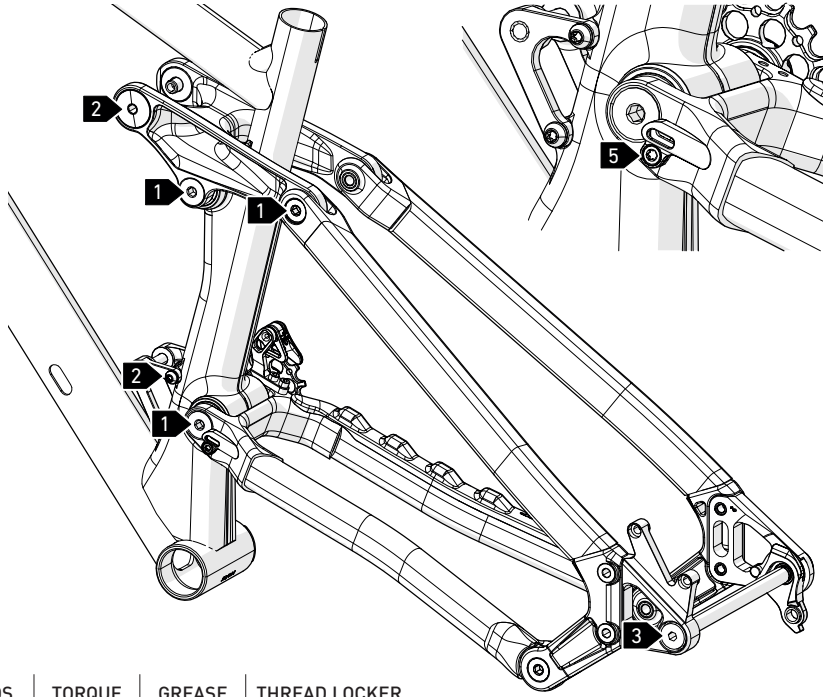
When neglecting inspection and servicing, worn components may cause accidents.

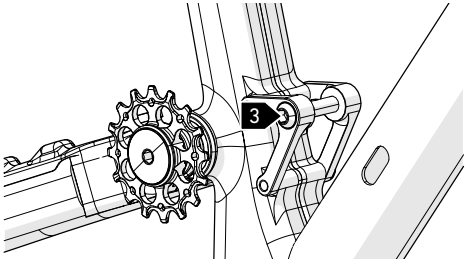
- The service works and intervals mentioned in this manual must be observed.
- Also note the maintenance intervals of the installed components.
- Compliance with the maintenance and inspection activities and intervals is a prerequisite for maintaining the warranty claims.
- In case of damage, do not continue to use the frame or the affected component.

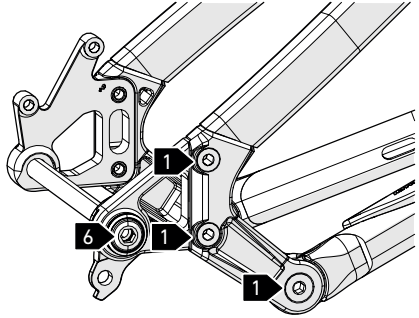
Regular maintenance and care is the only way to ensure that all parts of the bike function perfectly. The required maintenance and inspection activities must be carried out by a person with the necessary qualifications.

COMPONENTS	TASK	INTERVAL
Frames	Check the torques of the screw connections. Torque values, see „7. Torques" on page 10.	first time after 100 km then every 200 km
	Visually inspect the frame for damage such as cracks or deformation, especially in the area of the weld seams. If you are unsure or if problems occur, always consult the KAVENZ service or a skilled bicycle mechanic! If damage is discovered, the frame must not be used any further. Contact the KAVENZ service immediately!	after each ride and after a crash
	Frame with raw finish: In winter or near the sea, lightly oil surfaces.	as required
Pinion Gearbox	Change oil	10 000 km
	Check the rollers of the chain tensioner for smooth running and wear	
	Open the switch box and clean and grease the pulley, sliding surfaces, switch box interior, planetary gears etc.	500 km
	Check chain tension	
	Check chainrings for wear	
	Check shift cables for tension and ease of movement	
	Check all screw connections (except gearbox housing screws)	
Effigear Gearbox	Oil change	first time after 500 km subsequently annually
Components	The maintenance activities and intervals of the components must also be carried out according to the specifications of the respective manufacturer!	

7. TORQUES







POS.	TORQUE	GREASE	THREAD LOCKER
1	24 Nm	no	Loctite 241 / 243
2	12 Nm	no	Loctite 241 / 243
3	10 Nm	yes	no
4	8 Nm	yes	no
5	2 - 3 Nm	yes	no
6	25 Nm	no	no

All nuts and bolts must be tightened with an appropriate torque wrench. Proper use prevents overtightening and breaking of the bolts.

Observe the respective manufacturer's specifications for the torques of the gear box.

You can find more information on the setup and installation of the accessories on the Kavenz website.

Click on the QR code or scan the code with your smartphone.

TECHNICAL EDITING:

ANY QUESTIONS?

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