

# KAPĚL HÜTTO

USER MANUAL

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USER MANUAL

# KAPĚL HÜTTO



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**HOW-TO VIDEOS**  
[WWW.BLACKMOUNTAIN.BIKE](http://WWW.BLACKMOUNTAIN.BIKE)





# HELLO AND WELCOME

THANK YOU FOR PURCHASING A BLACK MOUNTAIN BICYCLE.

WE TAKE GREAT PRIDE IN WHAT WE DO AND HOPE YOU'LL BE EXTREMELY HAPPY WITH THE BIKE FOR YEARS TO COME. THIS MANUAL WILL TAKE YOU THROUGH WHAT YOU NEED TO KNOW ABOUT THE BIKE AND ITS SAFETY ESSENTIALS. IF THERE IS ANYTHING WE HAVEN'T COVERED HERE OR YOU HAVE ANY QUESTIONS PLEASE FEEL FREE TO CONTACT US.

## IMPORTANT

This manual contains important safety information and is provided as a guide. The Black Mountain KAPĚL and HÜTTO bikes feature our unique size-adjustable frame which requires mechanical adjustment to change between modes. For the safety of yourself and your child please ensure that you are mechanically confident and able to undertake the transitions between modes.

For guidance, if you can change a flat tyre on a bike then you should have no issues, but if you're not confident with the steps needed to change a tyre (i.e. removing and re-fitting a wheel, releasing the brake calipers, working with hex keys and bolts etc) then we would advise you not to try this yourself and instead seek the advice of a qualified bike mechanic. If you're unsure of anything covered in this manual there are further guides and videos available on our website.

Before riding please ensure your child familiarises themselves with the bike in a safe environment and your child should always wear a helmet.

Torque settings are provided throughout this manual and summarised on page 48. It is important that these recommendations are followed as too much torque may damage and weaken a component, and too little torque can lead to looseness, play and failure. These settings are provided as a guide for those with mechanical experience. If you do not have any 'feel' or prior experience with torque settings, then we advise that you utilise a torque-wrench or seek help from an experienced bike shop/mechanic.



**WARNING:** Our bikes are intended for leisure riding, by children, and are not intended to be used for racing, downhill, bmx, competitions, stunts, jumps or on extreme terrain. Incorrect use of the bike can expose the rider and others to harm and could result in serious injury or death.





## WARNINGS

There are warnings throughout and important safety notices for you to read. To make this easier you can just look out for these symbols.



The use of this symbol and the word WARNING indicates a potentially hazardous situation which, if not avoided, could result in serious injury or death.

The use of this symbol and the word CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury, or is an alert against unsafe practices.



This 'i' symbol is there to demonstrate things you need to be aware of during the set-up of the bike. Please adhere to safety recommendations at all times and take note of these to allow for a safe and enjoyable experience.

### PLEASE NOTE

- This manual is not intended as a comprehensive safety, use or maintenance manual but as a guide. We advise you to contact us with any questions and we would be more than happy to help.
- For advanced maintenance or set up help such as detailed brake and steering adjustment, please consult our website or seek help from a qualified mechanic.
- For how-to videos, please see our website.
- For a list of torque settings for each bolt, see the data section at the back of this manual (page 48) or drop us an email.

### CONTACT US

PHONE: +44(0)1291 639890 10AM-5PM MONDAY-FRIDAY

EMAIL: [HELP@BLACKMOUNTAIN.BIKE](mailto:HELP@BLACKMOUNTAIN.BIKE)

WEB: [WWW.BLACKMOUNTAIN.BIKE](http://WWW.BLACKMOUNTAIN.BIKE)





## ON RECEIVING YOUR BIKE

### SIZE CHECK

It is important that your bike is the correct size and is set up properly for your child.

Your child should be able to reach the ground when seated, touching the ground with the balls of both feet.

Check they are able to comfortably reach the handlebars and operate the brake levers with their fingers.

Test the fit with the child on the bike in a safe environment, with you supporting them and the bike, before you let them ride on their own. They should always wear a helmet.

If the bike does not fit, please get in touch with us immediately before riding the bike (help@blackmountain.bike or on +44(0)1291 639890 10am-5pm Mon-Friday.)

We may not accept a return of the bike once it has been ridden. Please see our returns information.



Our KAPĚL and HÜTTO bikes can both be set up in Balance Bike Mode with an optional extra Balance Bike kit. For more information on Balance Bike Mode, see [www.blackmountain.bike](http://www.blackmountain.bike) or check the QuickStart guide that comes with the Balance Bike Seat-tube.



**WARNING:** When adjusting the height of the seat, always make sure the seat post clamp is properly secured to prevent rotation of the seat. Never extend the seat beyond the point where the minimum insertion mark is visible on the post.



**WARNING:** Max Weight: Rider + Luggage + Accessories = 35kg (77lb). Overloading the bicycle may lead to frame or component fatigue or failure which could result in serious injury or death.





## ON RECEIVING YOUR BIKE

### RETURNS

For us to accept a bike as a return, the bike must be in a new and saleable condition, so we would expect the bike only to have been briefly test-ridden on a clean, dry surface for example, and returned in all of its original packaging.

Full details of our return policy and the process for making a return can be found on our website [www.blackmountain.bike](http://www.blackmountain.bike).

### QUALITY CHECK

On un-boxing your bike, please immediately check the bike for any defects or missing parts and report to us as soon as possible at [help@blackmountain.bike](mailto:help@blackmountain.bike) or on +44(0)1291 639890 10am to 5pm Monday to Friday. You must keep all original packaging should you need to make a return (see returns opposite).

**We may not accept any claim or return if the bike has been ridden prior to reporting the damage to us.**



Our Neon paint finishes really help your Black Mountain bike stand out and look great, but please bear in mind that some neon intensity may be lost when exposed to direct sunlight over a long period of time. Please minimise unnecessary UV exposure and store out of direct sunlight.



## SAFETY CHECKS

### GENERAL CHECKS

- Routinely check the bike for signs of wear especially when it comes to brakes, tyres, rims and components.
- Please ensure you check the brakes at regular intervals especially when the bike is frequently ridden. Replace brake pads if they are showing signs of wear.
- Check your frame 'Top Hat' bushings regularly (See page 18) to make sure they are in place. If you are missing any, contact us for replacement.
- Moving parts (such as the chain) will need lubricating from time to time. Never lubricate braking surfaces.
- Like any mechanical device, a bike and its components are subject to wear and stress. Different materials and mechanisms wear or fatigue from stress at different rates and have different life cycles.
- If you think there is something wrong with the bike and you don't have the tools or knowledge to fix it, please contact us or take it to your nearest bike shop.
- Before every ride it is worth checking all bolts are tight, tyre pressures are suitable for the riding conditions and the brakes are working effectively.
- When fitting the handlebars check that the brake levers are in the correct position for your child. Adjust if needed using the 5mm hex key.
- Please ensure you have followed the instructions to install, maintain or change modes on your Black Mountain bike. If you're not confident please take your bike to the nearest bike shop. Failure to undertake any work properly can result in serious injury.
- Please contact us or go to the website for further instructions on anything listed in this manual.



**In the UK, your bike is set up so that the right-hand brake lever operates the front brake. If you live in a country where they drive on the right the right-hand brake lever will operate the rear brake.**





## SAFETY CHECKS



**WARNING:** All frame bolts should be checked regularly (at least every week or every 10 hours of riding) to ensure they are tight. Especially the yoke bolt, rear-arm bolts and top-tube bolts. This is very important. Failure to do so can result in serious injury or death.

### WARNINGS FOR GENERAL SAFE USE

- Our bikes are intended for leisure riding and are not intended to be used for racing, downhill, bmx, competitions, stunts, jumps or on extreme terrain. We ask that you take care when riding in wet conditions or on rough terrain. Incorrect use of the bike can expose the rider and others to harm.
- Our bikes are not designed for riding at night or on public roads. Care must be taken when riding on pavements next to roads or approaching junctions. Please comply with local regulations regarding use of the bike on roads, pavements or at night.
- Our bikes are not suitable for the fitting of stabilisers, luggage carriers, child seats or for towing.
- Our bikes are intended for use by children only. Maximum rider weight for KAPĚL and HÜTTO = 35kg including any baggage and accessories.
- Only officially approved accessories and spares should be fitted to our bikes.
- Always ensure your child wears an approved bicycle helmet whilst cycling.
- You should check that the seat is the correct height so your child can reach the ground with at least the balls of both feet when seated and that they can reach and operate the brakes comfortably when riding.
- Bicycles have moving parts, so please do not allow your child to ride wearing long clothes or with long hair which could become entangled in the wheels or pedals. Do not let them play with the bike when it is stationary. A bicycle can present an entrapment risk to hands, feet, hair and clothes when being ridden or when being maintained/cleaned. >> continued overleaf



## SAFETY CHECKS

>> continued from previous page

- Reflectors are provided for you should you wish to use them, and can be found in the VIP box, but please comply with local regulations regarding lighting and highway use. (Supplied reflectors are suitable for use in the UK.)
- Like any sport, cycling involves risk of injury and damage. By choosing to ride you and your child assume responsibility for that risk.
- Never allow a young child to play with their bicycle unsupervised and keep very young children and pets away from children who are riding.
- If your child falls from the bike, always check the bike for damage before allowing them to remount. If in any doubt, have it checked by a qualified person.
- Be aware that braking performance and grip will be drastically reduced in wet or muddy conditions. Watch out for slippery leaves in winter and loose gravel. Teach your child to corner slowly in such conditions.
- As parent/guardian you are responsible for the activities and safety of your child and that includes making sure the bike is properly fitted to the child; that it is in a good state of repair and safe operating condition; that you and your child learn and understand the safe operation of the bike (in particular the braking system); and that you and your child learn, understand and obey local motor vehicle, bicycle and traffic laws.
- The disc brakes available on HÜTTO DISC and TRAIL are very powerful. Allow your child to gradually test the brakes on a flat surface until they become accustomed to the braking power, and teach them to moderate braking force, between front and rear brakes.



GETTING TO KNOW

# KAPÉL & HÜTTO





## GETTING TO KNOW: KAPĚL

# KAPĚL

KAPĚL  
MODE 1: SMALL



### The ultimate first geared bike for rider progression

Our 18" wheeled KAPĚL is the perfect first geared bike for a rider that has outgrown their PINTO, or who is new to riding and for whom a 20" geared bike is just too big and daunting. Like its smaller PINTO and SKØG siblings, KAPĚL features our unique EPOK growing technologies. If the rider needs to gain some balancing confidence before pedalling and learning the gears, KAPĚL can also be configured as a balance-bike using our optional Balance Bike Kit. KAPĚL is the ultimate bicycle for your child to develop their riding on, learning to change gears easily, quickly and safely.

KAPĚL gives your child the chance to gain confidence and develop their cycling skills whilst mastering gears for the first time. Then with our unique patented UP:SCALE growing frame design you can transform the bike into a larger pedal bike as your child grows.





## GETTING TO KNOW: HÜTTO

# HÜTTO

HÜTTO  
MODE 1: SMALL



The ultimate first geared bike for rider progression

Our 20" wheeled HÜTTO is perfect for a rider that has outgrown their SKØG or who is needing their first geared bike. Like its smaller PINTO, SKØG and KAPĚL siblings, HÜTTO features our unique EPOK growing technologies. If the rider needs to gain some balancing confidence before pedalling and learning the gears, HÜTTO can also be configured as a balance-bike using our optional Balance Bike Kit. HÜTTO is the ultimate bicycle for your child to develop their riding on, learning to change gears easily, quickly and safely.

HÜTTO gives your child the chance to gain confidence and develop their cycling skills whilst mastering gears for the first time. Then with our unique patented UP:SCALE growing frame design you can transform the bike into a larger pedal bike as your child grows.

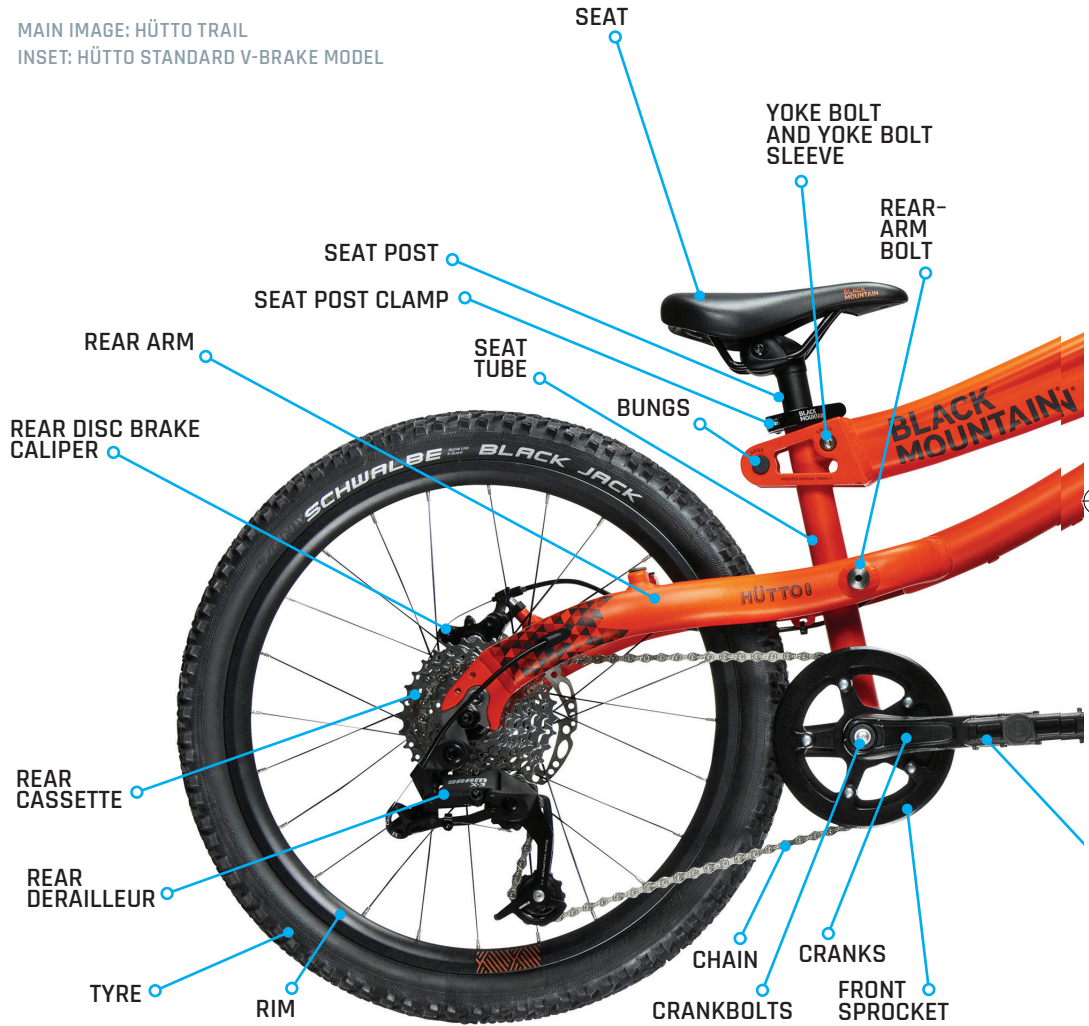






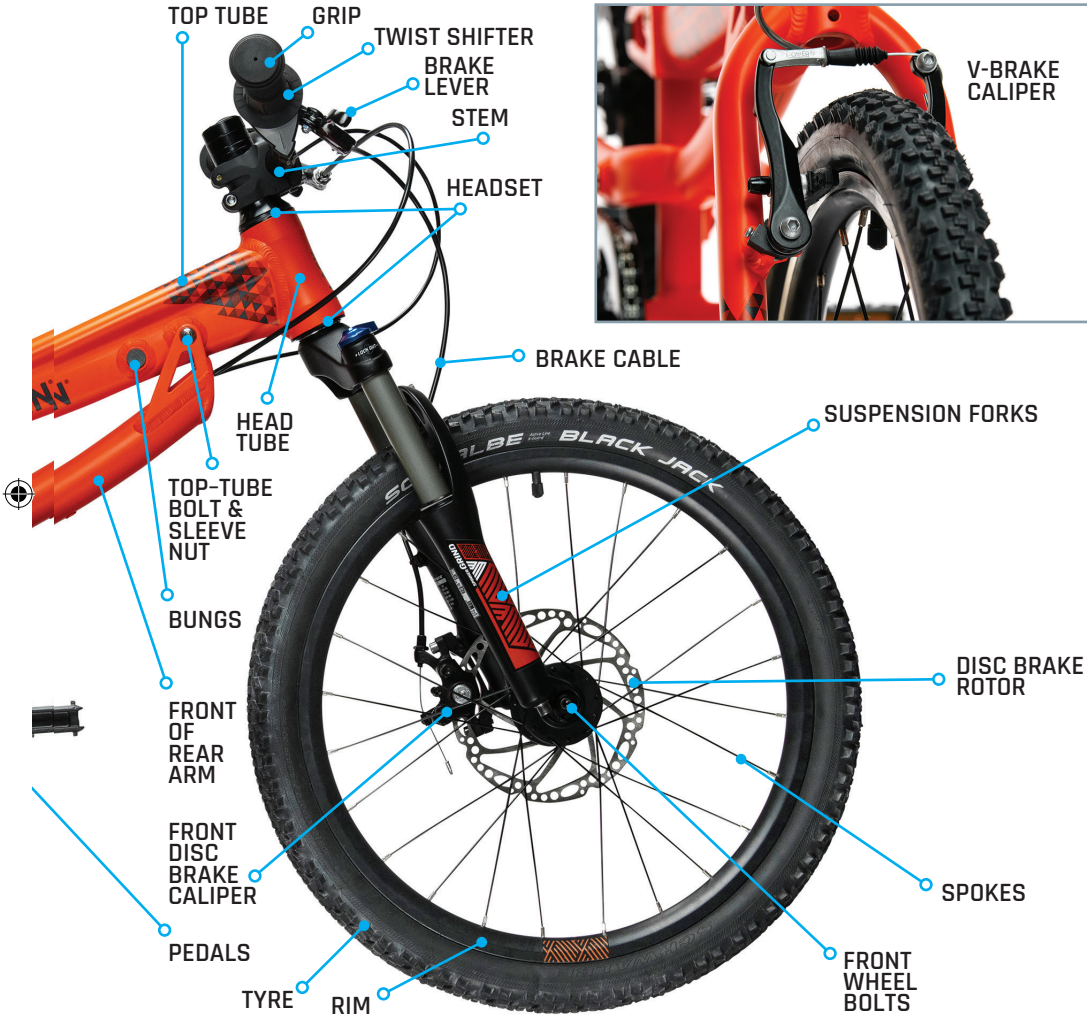
# GETTING TO KNOW: THE BIKE

MAIN IMAGE: HÜTTO TRAIL  
INSET: HÜTTO STANDARD V-BRAKE MODEL





# GETTING TO KNOW: THE BIKE





## OUR TERMS EXPLAINED





## OUR TERMS EXPLAINED



### **EPOK**

Central to our design philosophy is that as kids grow and learn to ride, they go through stages, not just in terms of getting bigger, but in developing in confidence, strength and ability. EPOK is the name of the core technologies and innovations that we have developed to address the stages and phases of the growing and learning young rider. Our unique, patented adjustable frame system is the heart and soul of our bikes, dispensing with the traditional diamond frame and bringing forward the idea of the 'growing triangle'.

### **UP:SCALE**

Our patented 'growing triangle' frame allows you to dial the bike down to fit now and then grow with your child.

### **UP:RISE**

Our 'growing' stem allows a perfect increase in reach and handlebar height when moving from Mode 1 to Mode 2, without carrying unnecessary weight and requiring only minimal effort to make the change.

### **MY:SIZE**

All of the bikes' contact points are optimised for kids. We use short-reach, easy-pull Tektro® brake levers, with skinny 19mm handlebars and custom safety grips. Our seat, narrow Q-Factor (stance width) cranks and small pedals are designed for young riders.

### **GO:LOW**

Our custom seat and inverted seat clamp allow the seat to go extra-low for even the smallest rider. You can then flip the seat clamp for extra height for the taller rider.

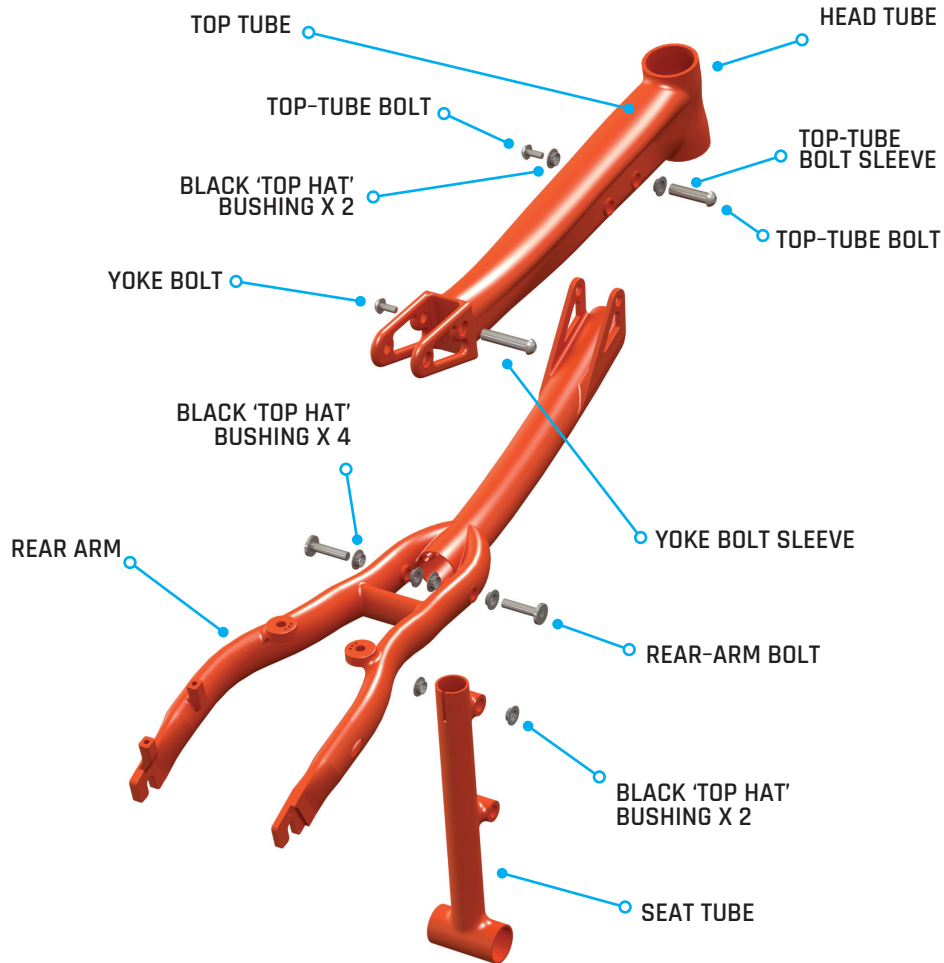
### **SAFE BRAKING**

CNC machined wheel rims and extra-long brake arms, or Tektro® disc brakes on HÜTTO DISC and HÜTTO TRAIL, ensure fast, safe stopping, even when wet.

By changing the size of the 'growing triangle' frame by adjusting two sets of bolts on the top tube, you increase the size of the bike, increasing the distance from seat to handlebars, giving more room for the growing rider and lengthening the wheelbase. Other key 'geometry' features like head angle and rear-centre are strictly controlled as the bike expands.



# EXPLODED FRAME DIAGRAM





# SETTING UP

**YOUR GUIDE TO SETTING THE  
BIKE UP OUT OF THE BOX**





## SETTING UP: WHAT'S IN THE BOX?



### IN THE BOX:

Now, you've already found the **Very Important Parts (VIP)** box because you opened it to get to this manual! But the VIP box also contains some other very important bits - some of which you'll need now:

- The **Front wheel bolts\*** - inside a small brown envelope.
- The tools you'll need - two 5mm 'hex' keys, & a 15mm spanner.
- The pedals & reflectors (BS Standard).

But please then keep this VIP box in a safe place for future use, because inside you'll also find the **UP:RISE** stem extender (to be fitted when you change the bike to **LARGE** mode.) It's a good idea to then store this manual and the tools back in the box as you'll need them again.

Finally in the main bike box, you'll find your new **KAPĚL** or **HÜTTO** bike and also a really useful QuickStart guide. (Before you start assembling, please make sure you have read about sizing and returns on page 6.)

**i** \*Some models/territories use skewers instead of wheel bolts. Refer to documentation & warnings supplied with the skewers.







## SETTING UP: FITTING THE HANDLEBARS

TO DO THIS YOU WILL NEED THE 5MM HEX KEY



Undo the four face-plate bolts on the front of the stem and remove the face (front) plate.



Insert the handlebars, making sure that they are the correct way around and that the brake and gear cables are not twisted.



**i** YOU DO NOT NEED TO TIGHTEN THE TOP-STEM CAP BOLT (see website for advanced instruction on stem and steering adjustment)

Replace the face plate, insert face-plate bolts and then evenly tighten each of them (not fully, just enough to hold the handlebars in place), making sure that the handlebars are in the correct position.



**i** TIGHTEN EVENLY  
Tighten each bolt a little at a time so that the load is evenly spread and there is an even gap between face-plate and stem.

Centralise the bars by using the guides on them and adjust the angle by rolling them slightly backwards or forwards. When you are happy with their position, tighten the 4 face-plate bolts evenly, ensuring an even gap between face plate and stem. Tighten to 7Nm (5.2ft-lb) torque.



**WARNING:** Check all four bolts are tight to the recommended torque. Be careful when tightening the bolts so that you leave an even gap between the face plate and the main stem, top and bottom, and side to side. To test, try to twist the handlebars to make sure they do not spin or slip.







## SETTING UP: FITTING THE FRONT WHEEL

TO DO THIS YOU WILL NEED THE 5MM HEX KEY



Insert the wheel bolts\* (you'll find them in the VIP box) either side of the wheel and leave enough space for the wheel to slot into the forks. For disc brakes, see the additional step 01A on the next page.



Place the front wheel between the forks, being careful to position it to rotate in the correct direction. If you look on the side of the tyre, you will see an arrow to indicate this direction. Make sure that the wheel is centered evenly in the fork.



Now using the 5mm hex key tighten up the wheel bolts\* to 8Nm (5.9ft-lb) torque on each side, checking that the wheel is evenly spaced between the forks.



**V-BRAKE MODELS ONLY.** Now reattach the brake - squeeze the brake arms together and replace the 'noodle' into the noodle holder (cable bridge).

**i** \*Some models/territories use skewers instead of wheel bolts. Refer to documentation & warnings supplied with the skewers.





## SETTING UP: FITTING THE FRONT WHEEL - DISC BRAKE

01A



Ensure that the disc rotor is lined up with the gap between the disc pads. When moving on to step 02 (previous page) ensure that the disc smoothly slots in to the caliper

You can ignore step 04 on the previous page. Instead, after the wheel bolts\* are tightened, ensure the wheel spins freely and the brake lever pulls and releases smoothly

It is not unusual to have some disc rub when the bike is new and before the pads have "bedded in."



Mountain bike disc brakes provide unrivaled stopping power in all conditions, however it's important to "bed in" new pads and discs in order to bring them up to full power. To do this, ride at a fast walking pace and brake hard a few times. You should feel the brakes improve with each attempt until the rear wheel locks and skids. Be careful when stopping hard using the front brake!



Oil or grease on the disc brake rotor or pads will greatly reduce the brake effectiveness or cause brake noise/squeal. Ensure that your hands are clean and grease-free when working with or handling disc brakes.



\*Some models/territories use bolt-on skewers or quick-release skewers instead of wheel bolts. Please see documentation supplied with the skewers for installation instructions and safety warnings.



**WARNING:** You will find the wheel bolts\* needed for the front wheel in a packet in the VIP box. Please ensure you install them on each side as shown above. Failure to do so can result in serious injury or death. More detailed information is available on our website. Please contact us with any questions.



\* **WARNING:** Some models/territories use bolt-on skewers or quick-release skewers instead of wheel bolts. Failure to properly install wheel skewers can lead to injury or death. Refer to skewer installation documentation



**WARNING:** Having re-attached the V-brakes, always test the brakes by actioning both left and right brake levers, ensuring the wheels can be fully braked. If brakes are not re-attached properly, it can lead to injury or death.





## SETTING UP: INSERTING THE SEAT



Open the quick-release seat clamp and unwind the hand-nut a couple of turns to fully release the clamp.



Insert the seatpost ensuring the saddle is at the correct height. The rider should be able to touch the ground with the balls of their feet when seated.



Once you are happy with its position, tighten the hand-nut "finger tight" and then close the quick-release lever. This should leave a slight imprint in your hand, but no more.



Check the quick-release clamp is tight enough by attempting to twist the saddle. If it is not tight enough, turn the hand-nut a quarter turn and retry.



**WARNING:** There is a minimum insertion mark on the seat post. Do not raise above this mark, it must not be visible. Also, please make sure your child can touch the ground with the balls of both feet. If not, adjust the seat height accordingly.





## SETTING UP: PUTTING ON THE PEDALS

TO DO THIS YOU WILL NEED THE 15MM SPANNER



Make sure that you have the correct pedal for each side of the bike. On the end of each pedal axle you will find either a letter R (right) or a letter L (left).

The right-hand side pedal (as you sit facing forwards on the bike) tightens as normal (i.e. clockwise) but the **left-hand pedal has a reverse thread on it, meaning that you need to turn it anti-clockwise to tighten**. Be careful not to cross-thread when first engaging with the thread in the crank.



Once you have threaded them on fully by hand, finally tighten them up to 25Nm (18.4ft-lb) torque with the supplied 15mm spanner.

Check the pedals are on tight on both sides before allowing your child to ride.





# MODES AND MODE ADJUSTMENTS

**YOUR GUIDE TO CHANGING  
BETWEEN MODES**

26



## MODE ONE: SMALL MODE

01



### MODE ONE: SMALL MODE

Our bikes are designed around the wheel size and are then proportionately "dialled down" to create Small Mode. This allows smaller riders to get on bigger-wheeled bikes earlier, ultimately allowing for better bike handling and control.

This offers the rider the chance to gain confidence and get used to the bike's wheel size, geometry, brakes and riding position earlier than a traditional bike with the same size wheel would allow.

If your child isn't ready to start pedalling, then both KAPĚL and HÜTTO are available as a balance bike with the optional Balance Bike kit. Visit [www.blackmountain.bike](http://www.blackmountain.bike) for more information.





## MODE TWO: LARGE MODE

02



### MODE TWO: LARGE PEDAL

Once your child grows in both size and confidence, you can change from Small Mode to Large Mode by simply adjusting the **UP:SCALE** frame and introducing the **UP:RISE** stem (we cover this later in the manual). This increases the frame size, reach and handlebar height, making the most of the easy rolling 18" wheels on KAPEL and 20" wheels on HÜTTO.



# MODES

## 1 >> 2

**CONVERTING YOUR BIKE FROM  
MODE ONE TO MODE TWO**







## CHANGING MODES: ONE TO TWO

01 **SMALL MODE**



02 **LARGE MODE**



### A GUIDE TO CHANGING THE BIKE FROM SMALL PEDAL MODE TO LARGE PEDAL MODE

You are now ready to go from Small Mode (Mode One) to Large Mode (Mode Two). During this 'transformation' not only does the frame grow in size but you will also be adjusting the stem, giving your child more room in the 'cockpit' of the bike.

**WHEN?** The best guide of when to make this size change is when your child either looks too 'cramped' on the bike or if they have raised the saddle more than half of its maximum height.

**WHAT?** In the first stage you will be adjusting the frame to its largest size by changing the location of 2 sets of bolts. In the second stage, you'll remove the handlebar to install the **UP:RISE** stem extender and then re-fit the handlebar (just like during the original assembly).

The whole process is a straightforward procedure if you follow the instructions.



## CHANGING MODES: ONE TO TWO

**i CAN I DO THIS?** If you can change a flat tyre on a bike then you can easily do this transition, but if you're not confident with the steps needed to change a tyre (i.e. removing and re-fitting a wheel, releasing the brake calipers, working with hex keys and bolts etc.), then we would advise you do not to try this yourself. Instead take it into a local bike shop where they can do the transition for you.

**WHAT DO I NEED?** All the tools you need are supplied in the VIP box that came with the bike. For this conversion you will need 2x 5mm hex keys and the **UP:RISE** stem extender. (You may also require use of a torque wrench.)

**i DON'T FORGET** It is important that you check that all the frame bolts are tightened, at least every week or every 10 hours of riding. The frame should not rattle or feel loose in any way when everything is tightened correctly to the recommended torque. If it does, stop and check that everything is tight.

Torque settings are provided throughout this manual and summarised on page 48. It is important that these recommendations are followed as too much torque may damage and weaken a component, and too little torque can lead to looseness, play and failure. These settings are provided as a guide for those with mechanical experience. If you do not have any 'feel' or prior experience with torque settings, then we advise that you utilise a torque-wrench or seek help from an experienced bike shop/mechanic.



**CAUTION:** Changing the mode of the bicycle requires the removal of frame bolts. The frame may want to 'collapse' as you remove these bolts. Do not allow your child to sit on or play with the bike during this process, and ensure you support frame to control its movement to avoid trapping or pinching fingers/hands.





## CHANGING MODES: ONE TO TWO



01

### LOOSEN THE YOKE BOLT

Remove the rubber bungs from the front and rear of the top tube. Keep these, as you'll be re-fitting them again later in step 06. Using the two 5mm hex keys at the same time on both sides, loosen the bolts on the rear yoke, but do not remove all the way. You'll fully remove them in step 04.

**TIP:** You may find it easier to lay the bike flat to help control the frame's movement as you make these changes.



02

### REMOVE THE FRONT TOP-TUBE BOLT

It's a good idea at this stage to protect the paintwork on the front end of the rear arm with something like a clean cloth. Using both the 5mm hex keys, loosen and then remove the top-tube bolt. Allow the front end of the rear arm to drop a little.



**CAUTION:** The frame may want to 'collapse' as you remove these bolts. Support the frame to control its movement and be careful to avoid trapping or pinching your fingers/hands.



03

### REMOVE 'TOP HAT' BUSHINGS

Important: Once the front bolt is out, carefully remove the two black plastic 'Top Hat' bushings from the frame. The bushings are important and are there to protect the frame. You will need them again in step 05 and to ensure bolts re-tighten correctly.





## CHANGING MODES: ONE TO TWO



04

### REPOSITION THE YOKE BOLT

You can do this on your own, but it is a good idea to get another pair of hands to help at this stage. With your two 5mm hex keys, fully remove both parts of the bolt assembly in the rear yoke. Firmly holding the top tube, slide it forward so that the rear set of holes in the rear end of the rear yoke line up with the holes in the seat tube (make sure the two black 'Top Hat' bushings are in place here too). Replace both parts of the rear-yoke bolt in the rear holes in the rear yoke. Don't tighten these bolts yet.



05

### REPLACE THE FRONT TOP-TUBE BOLT

Use the two 'Top Hat' bushings that you removed from the front set of bolt holes (step 03) and place them in the rear set of bolt holes in the front end of the top-tube. Reposition the rear arm so that its bolt holes line up with these and then put the front top-tube bolt in place and tighten to 7Nm (5.2ft-lb) torque with the two 5mm hex keys. You can now replace the four bungs. **You will not have needed to adjust the rear-arm bolts during this repositioning, but for safety, check those bolts for tightness (7Nm (5.2ft-lb)).**



06

### REPLACE BUNGS AND TIGHTEN YOKE BOLTS

Using the two 5mm hex keys tighten the rear-yoke bolt to 7Nm (5.2ft-lb). You can now replace the four bungs in to the empty, previously-used holes.



**WARNING:** Check that all frame bolts (the ones you have adjusted, **but also the rear-arm bolts**) are fully tightened before riding. Failure to do so can result in serious injury or death.





## CHANGING MODES: ONE TO TWO - UP:RISE



01

### REMOVE THE STEM FACE PLATE

Using a 5mm allen key undo the four face-plate bolts on the front of the stem and remove the face (front) plate. Let the bars hang gently by the cables.



02

### ATTACH THE UP:RISE STEM EXTENDER

Mate the stem extender to the original stem body with the extender 'pointing upwards' so that the stem extender raises the height of the handlebar. Insert the four new bolts included with the stem extender through the stem extender into the original stem body. It is important to thread all four bolts in loosely before you tighten them. Once all the bolts are in place tighten all four to 7Nm (5.2ft-lb).



03

### REPLACE THE HANDLEBAR

Reinsert the handlebars, making sure that they are the correct way around and the brake and gear cables are not twisted.





## CHANGING MODES: ONE TO TWO - UP:RISE



04

### REPLACE THE STEM FACE PLATE

Place the face plate onto the extender as you did on the stem body (as in step 03 of "SETTING UP: FITTING THE HANDLEBARS"). Insert the face-plate bolts through the face plate into the extender and then evenly tighten each of them (not fully, just enough to hold the handlebars in place), making sure that the handlebars are in the correct position.



05

### POSITION THE HANDLEBAR

Use the guides marked on the handlebars to centralise them, then adjust the angle by rolling them slightly backwards or forwards.

**i** **TIGHTEN EVENLY**  
Tighten each bolt a little at a time so that the load is evenly spread and there is an even gap between face-plate and stem.



06

### TIGHTEN THE STEM FACE PLATE

When you are happy with the position of the handlebar, tighten the stem face plate bolts evenly to 7Nm (5.2ft-lb). Be sure to keep the gap between the face plate and the extender the same for both top and bottom.

Now go ride in a better-fitting, confidence inspiring position... yeah!





# TROUBLESHOOTING





## TROUBLESHOOTING

### FRONT BRAKES TROUBLESHOOTING:

Please visit our website for detailed support on this topic. If the front brake rubs or catches on the wheel, please check the following:

- Make sure that you have installed the front wheel fully and evenly in the dropouts of the fork. To check this, with the bike upright, loosen the front wheel bolts\* on both sides, push down firmly on the handlebars, to drive the wheel fully into the left and right fork dropouts, then re-tighten the left and right wheel bolts\* (see page 22). Check that the ends of the wheel axle are properly seated in both left and right dropouts.
- Check that the brake-arm springs are not sticking out. They should be tucked in on the back of the brake arm in order to hold the brake arm back and to keep the pad clear of the rim (V-brake only).
- Check that the brake noodle is properly and fully seated into the noodle holder. (V-brake only).
- Inspect the brake lever, and make sure that the brake cable is properly seated into the brake lever.





## TROUBLESHOOTING

### A FEW THINGS TO LOOK OUT FOR

You may encounter a few issues when changing between modes on the bike. All of these are easily remedied but here are a few tips if you get stuck. If you need further help please feel free to contact us or check out the website for more information.

- When adjusting the frame between modes, please take care to make sure the plastic 'Top Hat' bushings are in place. On each side of the bike's rear arm where the rear-arm bolts go, there should be 2 black 'Top Hat' bushings (a plastic top-hat shaped washer). One sits between the bolt and the rear arm and one between the rear arm and the seat tube. There is also a 'Top Hat' bushing on each side of the top of the seat tube, where the rear-yoke bolt goes. These may have fallen out, so please take a minute to check that they are in place.
- The front top-tube bolt is designed to be a really snug fit and you may find that it is a little tricky to get out. If this happens, first try spinning the bolt with one of the 5mm hex keys while pushing the other side - this will often free up the bolt. If this fails, loosen all the other frame bolts and use the same method again. If this too fails, thread the bolt back into the sleeve nut approximately three turns, then gently and carefully tap the head of bolt you just threaded back in with a hammer. This should release the sleeve nut. Once the bolt is tapped against the frame, unthread it again and this will allow you to pull the sleeve nut free from the other side.
- The rear-arm bolts should not need adjusting when changing modes, but if when changing the frame size, the frame is reluctant to move, then loosen both rear-arm bolts off ½ turn, move the frame, and then re-tighten the rear-arm bolts.
- We carry a number of spares, so please contact us if you need frame bungs, bushings or any other parts.



**WARNING:** All frame bolts should be checked regularly (at least every week or every 10 hours of riding) to ensure they are tight. Especially the yoke bolt, rear-arm bolts and top-tube bolts. This is very important. Failure to do so can result in serious injury or death.





## CLEANING, ADVANCED ADJUSTMENTS & GUARANTEE

### CLEANING & STORAGE

Always aim to keep the bike clean as this will help with the longevity of the bike and its components. Use only mild detergents and no abrasive products when cleaning. Do not use a pressure-washer on the frame or components.

When you wash the bike, wipe down with a clean, dry cloth afterwards to remove any excess water and allow to dry thoroughly in an atmosphere suitable for drying.

Always store your bike in the dry and avoid storing in direct sunlight for prolonged periods, as significant UV exposure can cause paintwork and graphics to fade.

### ADVANCED ADJUSTMENTS

This manual covers the basic adjustment and assembly procedures for the bike.

It does not cover the more complex adjustments such as steering or advanced brake adjustment.

These procedures require skill and experience. Therefore we recommend that they are only performed by a qualified bike mechanic.

### GUARANTEE

Please see our website [www.blackmountain.bike](http://www.blackmountain.bike) for full terms and conditions of our warranty, including transferring the warranty to a second owner.



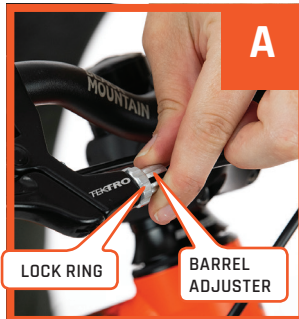
Our Neon paint finishes really help your Black Mountain bike stand out and look great, but please bear in mind that some neon intensity may be lost when exposed to direct sunlight over a long period of time. Please minimise unnecessary UV exposure and store out of direct sunlight.





## ADJUSTMENT & MAINTENANCE - BRAKES

Your Black Mountain bike will have had its brakes set before leaving our factory, and the brakes will have been tested as part of our PDI (Pre-Delivery Inspection) process, but you and your child should always test the brakes for operation and reach/actuation before riding. For the UK, the brakes are set with the right brake lever operating the front brake, and the left brake lever operating the rear brake. Please ensure the brakes are set as you expect for your country.



### V-BRAKE PAD CLEARANCE ADJUSTMENT

V-brake pads should have a clearance gap of 1-2mm from the rim. To increase the pad clearance, loosen the lock ring and turn the barrel adjuster in (clockwise). To reduce the brake pad clearance, loosen the lock ring and turn the barrel adjuster out (anti-clockwise).

After adjusting the barrel adjuster, re-tighten the lock ring to prevent the barrel adjuster from rotating. If the brake pads cannot be adjusted properly, loosen the brake cable pinch bolt on the brake caliper arm and re-attach the cable to offer a better range of adjustment on the barrel adjuster, then re-tighten the brake cable pinch bolt to 6Nm (4.4ft-lb).



### V-BRAKE PAD REPLACEMENT

The brake pads are marked with wear lines and should be replaced before they wear to this point. The pads should make contact with the rim squarely and not touch the tyre. All of the braking surface of the pad should make contact with the rim and not overhang the edge of the rim. The pad can be adjusted or replaced by loosening the brake pad bolt, then re-tightening to 6Nm (4.4ft-lb) torque.

Before you remove a brake pad, note the sequence of the washers and when replacing the pad, make sure you maintain the correct sequence of washers. If you are unsure please contact us.



**WARNING:** Our V-brake rims have an indicator dot. When this dot becomes flush with the rest of the rim or disappears, it is time to replace the wheel.





## ADJUSTMENT & MAINTENANCE - BRAKES



### DISC BRAKE PAD ADJUSTMENT

The Tektro® disc brakes allow for easy pad adjustment. Tektro recommend a 0.3mm gap between each pad and the disc.

To adjust the pad nearest to the spokes, use a 5mm hex key on the inside of the brake caliper to turn the pad adjustment bolt a quarter turn. Check clearance for a 0.3mm gap and repeat as required.

For the pad on the outside of the caliper, loosen the lock ring and turn the barrel adjuster out for less clearance or in for more clearance. Finish by re-tightening the lock ring.



### DISC BRAKE PAD REPLACEMENT

The Tektro® disc brake pads should be replaced when the total thickness is less than 2.5mm (friction material and metal plate). The pads and pad holders are held in place with a split-pin.

To remove the pads use a pair of pliers to straighten out the bent up section of the split pin then pull the split pin out of the caliper and gently push the pads out of the caliper. Ensure the pad adjusters are wound out for maximum clearance (see above) and insert the new pads and pad holder.

Then, replace split pin and use the pliers to bend up the section of the pin you previously straightened out to retain the pads, adjust as required.



**WARNING:** Brake pad adjustment requires mechanical competence and experience. Failure to correctly set or adjust brakes can result in injury or death. If you are in any doubt, seek advice from a qualified bike mechanic.



**WARNING:** Extreme care must be taken not to touch disc rotors as they can be sharp and pose serious risk of bodily injury when rotating. Disc rotors must always be allowed to cool after riding.





## ADJUSTMENT & MAINTENANCE - GEARS

### GEAR MAINTENANCE

With use and especially while the bike is new, you may find the gears lose their smoothness and can start to skip. This is a normal process as the cables and gears bed in. Below are some basic instructions to assist with tuning.



When referring to gears, a lower gear is "easier" (bigger cog on the cassette) and a higher gear is "harder" (smaller cog on the cassette). When you shift to a lower gear, the shifter adds tension to the cable, pulling the derailleur to move on to a bigger cog. When you shift in to a higher gear, the shifter releases cable tension and the derailleur spring contracts, moving it in to a position for a higher gear (smaller cog) and the chain follows.



### GEAR TENSION ADJUSTMENT

If the gears are struggling to "climb" in to a lower gear (bigger cog) after changing gear on the shifter, then turn the barrel adjuster anti-clockwise, out from the derailleur or shifter. Try half a turn at a time and re-test. (This situation is more common when the bike is new!)

If the gears are struggling to "drop down" in to a higher gear (smaller cog) after changing gear on the shifter, then turn the barrel adjuster clockwise, in to the derailleur or shifter. Try half a turn at a time and re-test.

For further gear tuning tips, check our website or contact us.



## ADJUSTMENT & MAINTENANCE - GEARS



### CHAIN MAINTENANCE

We recommend cleaning and lubricating the chain after each ride, rain or shine.

This can simply be done by back-peddalling the chain through an old wet rag to remove the old oil and dirt collected. Four to five complete cycles of the chain should be enough. Once done, apply some WD40 or similar water-disperser to keep the chain rust free until your next ride.

Before your next ride, we recommend applying a good dry or wet lube depending on the conditions.



**WARNING:** Only back-pedal slowly, and avoid trapping hands or fingers in the rotating parts. Extreme care must be taken not to touch disc rotors as they can be sharp and pose serious risk of bodily injury when rotating. Disc rotors must always be allowed to cool after riding



**WARNING:** NEVER let your child pedal or back-pedal the bike unless they are riding it. The rotating wheels, chain, disc rotors and pedals can cause serious bodily injury including cuts, pinches, entrapments or severing of fingers or hands.





## ADJUSTMENT & MAINTENANCE - SUSPENSION



The Spinner GRIND fork comes fitted as standard with HÜTTO TRAIL. It is also available separately as an upgrade option for other models. See our website for further details.

### SUSPENSION FORK USE AND MAINTENANCE

Please visit our website for detailed support on this topic.

- The lockout feature should be used when pedalling on smooth surfaces, or on difficult climbs. This is so that the rider's effort of stamping on the pedals is transmitted to the drivetrain propelling the rider, rather than wasted in bouncing the suspension fork.
- Remember to turn the lockout off on bumpy terrain or before any descents. This allows the suspension to activate, maximising traction and, therefore, rider confidence.
- The fork uses an air spring to provide smooth, adjustable bump absorption across a variety of rider weights.
- You can adjust the air pressure using a shock pump to fine tune the "sag" level to the rider's weight (see below).
- Check that you have the correct air pressure for the rider using the weight table below. The fork should "sag" (compress) by 1-1.5cm when the rider is standing on the pedals with weight through their arms.

The pressures below are suggested pressures only. The aim is to achieve 1-1.5cm sag when the rider is standing on the pedals with weight through their arms. Adjust to suit.

<b>RIDER WEIGHT (KG)</b>	17.5	20.0	22.5	25.0	27.5	30.0	32.5	35.0
<b>FORK PRESSURE (PSI)</b>	19.5	22.0	25.0	27.5	20.5	33.0	36.0	38.5





## ADJUSTMENT & MAINTENANCE - SUSPENSION

### SUSPENSION FORK USE AND MAINTENANCE

We recommend purchasing a shock pump for your Spinner Grind fork to ensure it's operating optimally as your child grows.



#### **01 REMOVE THE TOP CAP & ATTACH THE SHOCK PUMP**

Unscrew the valve cover on the top of the left fork leg. This shouldn't be too tight and should be possible by hand.

Now the valve is exposed, screw the shock pump on to the valve all the way. This only needs to be finger tight, like the tyre valve.



#### **02 SET THE PRESSURE AND GO!**

Use the pressure gauge on your shock pump to set the pressure as recommended on the previous page.

When you unscrew the pump from the fork, a small amount of air will release, but this is from the pump, not the fork. The fork pressure will be left as you set it.

Re-fit the top cap and go ride!







## GENERAL ADVICE & RIDING TIPS



**WARNING:** Our V-brake rims have an indicator dot. When this dot becomes flush with the rest of the rim or disappears, it is time to replace the wheel.

### GENERAL ADVICE

- Routinely check the bicycle, especially frame bolts, brakes, tyres, rims and all components. Please follow the maintenance schedule on the next page.
- Always check your frame bolts to make sure they are tight and that 'Top Hat' bushings are in place. If you are missing any, contact us for replacement.
- Moving parts will need lubricating from time to time and it's worth lightly greasing the seat post every few rides to prevent seizure. Never oil or grease the braking surface on the rim, brake pads or disc rotors.
- Please ensure you check the brakes at regular intervals, especially when the bike is frequently ridden. Replace brake pads if they are showing signs of wear towards the marked wear line on V-brakes or towards the metal backing plate on disc brake pads.
- Like any mechanical device, a bicycle and its components are subject to wear and stress. Different materials and mechanisms wear or fatigue from stress at different rates and have different life cycles. If you think there is something wrong with the bike and you don't have the tools or knowledge to fix it, please contact us or take it to your nearest bike shop.
- Check your tyre pressures regularly with a pressure gauge (most 'track pumps' have one fitted). The recommended minimum and maximum pressure is printed on the sidewall of the tyre. It is important not to over-inflate or let your tyres drop below the minimum.



# MAINTENANCE

SOME OF THE FOLLOWING CHECKS MAY REQUIRE MORE ADVANCED MAINTENANCE OR REPAIR NOT COVERED IN THIS MANUAL. IF IN ANY DOUBT, PLEASE SEEK HELP FROM A QUALIFIED BIKE MECHANIC.

EVERY RIDE CHECK...	WEEKLY CHECK...	MONTHLY CHECK...	EACH 6 MONTHS CHECK...
TYRE PRESSURES	ALL 'EVERY RIDE' CHECKS PLUS:	ALL 'WEEKLY' CHECKS PLUS:	ALL 'MONTHLY' CHECKS PLUS:
BRAKES WORK WELL AND STOP THE BIKE EFFECTIVELY	HEADSET IS TIGHT AND TURNS FREELY AND SMOOTHLY	BRAKE PAD WEAR, CONDITION & ALIGNMENT	BRAKE CABLES & THEIR HOUSINGS FOR FRAYING, BREAKS, CORROSION. REPLACE IF NECESSARY
WHEELS SPIN FREELY AND SMOOTHLY	ALL FRAME BOLTS ARE TIGHT	BIKE FITMENT AS CHILD GROWS	REAR CASSETTE IS TIGHT AND SPINS FREELY
FRONT AND REAR WHEEL BOLTS OR SKEWERS ARE TIGHT	TYRE TREAD SUFFICIENT FOR GOOD GRIP	WHEEL RIMS FOR SIGN OF WEAR	BRAKE ARM BOLTS, LEVERS AND BRAKE CABLE PINCH BOLT
STEM AND HANDLEBARS ARE TIGHT	GRIPS WELL FITTING AND HANDLEBAR ENDS ARE NOT EXPOSED.	CRANKS ROTATE FREELY AND SMOOTHLY	CRANK BOLTS AND PEDALS ARE TIGHT
SEAT IS TIGHT	CLEAN AND LUBRICATE BIKE	REAR CASSETTE FREE WHEELS CORRECTLY	FRAME AND COMPONENTS FOR ANY SIGN OF WEAR, FATIGUE OR CRACKING.
FOR ANY DAMAGE TO FRAME OR BIKE		BRAKE LEVERS ARE TIGHT AND DO NOT ROTATE ON HANDLEBARS	
		CHAIN FOR RUST OR SIGNS OF DAMAGE	
		SUSPENSION FORK AIR PRESSURE AND SAG LEVEL	



**WARNING:** Only ever use genuine replacement parts for safety critical components including frame bolts, wheels and braking systems.





## DATA

### TORQUE SETTINGS

Frame Bolts **7Nm** (5.2ft-lb)  
Handlebar stem & face bolts **7Nm** (5.2ft-lb)  
Seatpost bolt **8Nm** (5.9ft-lb)  
Crank bolts & Pedals **25Nm** (18.4ft-lb)  
Wheel bolts\* **8Nm** (5.9ft-lb)  
Brake pads **6Nm** (4.4ft-lb)  
Brake cable pinch bolt **6Nm** (4.4ft-lb)  
Brake arm bolts **8Nm** (5.9ft-lb)

Nm (Newton metre) or ft-lb (foot-pounds) are units of torque used when tightening bolts, etc. Please use a Torque Meter to measure settings correctly.

### MAX WEIGHT FOR HUTTO AND KAPEL

Max Rider + Luggage  
+ Accessories = **35kg** (77lb)

KAPEL and HUTTO are designed to ISO4210 (Young Adult) in accordance with the maximum rider weight stated above.

\*Some models/territories use skewers instead of wheel bolts. Refer to documentation & warnings supplied with the skewers.



**WARNING:** Correct tightening torque on nuts, bolts and screws is very important. Too little torque and these fixings may become undone. With too much torque the fixing can strip threads, stretch, deform or break. Either way, incorrect tightening torque can result in component failure, which can cause the rider to lose control and fall.

These settings are provided as a guide for those with mechanical experience. If you do not have any 'feel' or prior experience with torque settings, then we advise that you utilise a torque-wrench or seek help from an experienced bike shop/mechanic.

It's good practice to test and listen for anything that may be loose. Do this by lifting the front wheel off the ground by 6 inches, then let it bounce on the ground. Does anything sound, feel or look loose? Do a visual and tactile inspection of the whole bike. Are there any loose parts or accessories? If so, secure them. If you're not sure, contact us or seek help from a qualified bike mechanic.

### DISCLAIMER

**WARNING:** As with any mechanical device, a bicycle and its components are subject 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 colouring in highly stressed areas indicate that the life of the component has been reached and should be replaced.



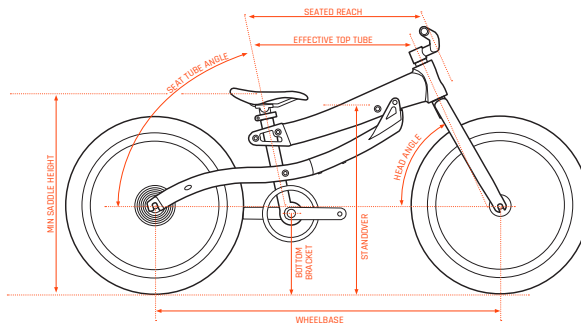


# GEOMETRY CHARTS

## BLACK MOUNTAIN™

### KAPEL 18" GEOMETRY

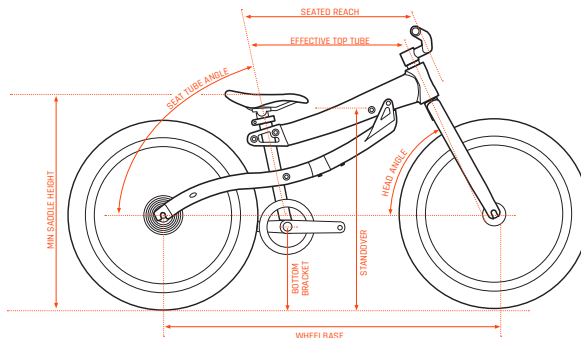
	SMALL	LARGE
HEAD ANGLE	65.5°	66°
EFFECTIVE TOP TUBE LENGTH	407mm	484mm
SEATED REACH	420mm	530mm**
SEAT TUBE ANGLE	78°	73°
STAND OVER	471mm	471mm
BB HEIGHT	187mm	187mm
WHEELBASE	844mm	890mm
MIN SADDLE HEIGHT	510mm	510mm
REACH	324mm	360mm
STACK	367mm	374mm



## BLACK MOUNTAIN™

### HÜTTO 20" GEOMETRY

	SMALL	LARGE
HEAD ANGLE	65°	65.5°
EFFECTIVE TOP TUBE LENGTH *	427mm	504mm
SEATED REACH	440mm	550mm**
SEAT TUBE ANGLE	78°	74°
STAND OVER	525mm	525mm
BB HEIGHT	210mm	210mm
WHEELBASE	846mm	892mm
MIN SADDLE HEIGHT	544mm	544mm
REACH	324mm	361mm
STACK	408mm	417mm



\* INCLUSIVE OF 20MM SEAT POST LAYBACK \*\* INCLUDES STEM EXTENDER



**WARNING:** Max Weight: Rider + Luggage + Accessories = 35kg (77lb).  
Overloading the bicycle may lead to frame or component fatigue or failure which could result in serious injury or death.



