

Your Own Mountain Bike!

INDEX

Introduction to Mountain Biking	3
The History of Mountain Biking	4
Mountain Bike Anatomy	5
Sizing Mountain bikes	7
Mountain Bike Designs	9
Mountain Biking Safety Tips	12
Beginner Mountain Bike Skills	13
Buying A Mountain Bike	14
Clothes For Winter Riding	16
Cross Country Mountain Biking	17
Different Types of Mountain Bikes	18
Disc Brakes Or Rim Brakes	19
Framing Materials	20
How Mountain Bike Gears Work	22
How To Lube Your Mountain Bike	23
How To Use A Chain Tool	25
Mountain Biking Vacation	26
Setting Your Tire Pressure	27
Spring Tune Up Tips	28
Technical Down Hill Mountain Biking	30
The Bunny Hop	31
Things To Take With You	32
Types Of Mountain Biking	33
Wheel Truing	34

Introduction to Mountain Biking

Mountain biking is a great way to explore the outdoors, stay in shape, or just have fun. Racing down the side of a mountain is a lot of fun indeed, although it can also be quite dangerous. Even though it's dangerous, if you ride with caution, it can be enjoyed by the entire family.

Styles of mountain biking

Mountain biking can best be characterized into three different styles - downhill, free riding, and cross country. Even though the different styles are similar in some ways, they still require different skills. The style that you pick will determine the type of bike you get.

Locations for mountain biking

The sport can best be thought of as biking on an unpaved surface. Many areas throughout North America have specific locations designed for mountain biking. Before you decide to go down a trail, you should always check with your local park to get the routes, regulations, and any rules that they may have.

You can also find groups that have mountain bike rides and competitions. You can look on the internet or even in a local paper and see exactly what's available in your area. You may be able to find groups for the more advanced riders as well as beginners.

Becoming a great biker

Endurance and stamina are a must for a great mountain biker. It will also take ambition and practice to succeed as well as conquer the course. Like all other sports, it takes time and practice. Those just beginning will have to get past the bumps and bruises from falling off the bike.

Selecting your mountain bike

The bike you select is more of a personal choice, and a big determining factor on the type of riding you will be doing. Bikes come in all styles, shapes, and prices, which will make selecting one for yourself very difficult indeed.

You should use the internet to help you shop for a bike,

even do some price comparisons online as well before you make a purchase. Before you buy a bike, always ask to try it out first. A great mountain biker will become one with his or her own bike. When buying, make sure you check for comfort, how it fits, even how it is geared.

Staying safe when riding

Mountain bike riding on unpaved roads can be very dangerous, as mentioned earlier. Anytime you are riding, you should wear a helmet, along with knee and elbow pads. If you are following a group or riding in the woods you should strongly consider a pair of goggles as well. Safety should be your top priority and never taken lightly anytime you are mountain biking.

The History of Mountain Biking

There is a lot of history and information out there in regards to the history and origins of mountain biking, with some being recognized and some that depends on who has the best firm of public relations.

Some say that mountain biking began with the Buffalo Soldiers, which was a turn of the century infantry who customized bikes to carry gear over the rough and tough terrain. They began in August of 1896, over the course of 800 miles. Their mission was simple - to test bikes for military use in the toughest of terrain.

Others say it was the Velo Cross Club of France that started mountain biking. The club was comprised of 20 young bikers from Paris, who between 1951 and 1956 developed a sport that resembles present day mountain biking.

It could have also been John Finley Scott, who was the first mountain biker in the U.S. In 1953 he constructed what he called a "Woodsie Bike", using a diamond frame, balloon tires, flat handle bars, and cantilever brakes. He was more than 20 years ahead of his time. Even though he remained an off road enthusiast, there were many at that time who didn't share that same passion.

Today, we believe that the history of the mountain bike is most apparent in Northern California. There

are a few areas that claim to be the first community for mountain biking, although each and every history book will tell you Marin County.

The sport of mountain biking has taken many twists and turns over the last several hundred years. Even though there are many that say different things about the history and the beginning, we know one thing for sure - one thing has led to another and the sport of mountain biking was born.

Mountain Bike Anatomy

A mountain bike is the one thing you need before you go mountain biking. A mountain bike contains many parts, which will be covered below:

1. Bottom bracket - This attaches the crankset to the body of a bike.
2. Brake cable - This is the cable that connects the brake lever to the brake mechanism.
3. Brake lever - The lever on the handlebar to activate the brakes. The left side is the front brake and the right side is the rear brake.
4. Chain - The circular set of links that transfer power from the chain ring to the cogs.
5. Chain ring - The toothed rings that attach to the crank to hold the chain.
6. Crank - The lever that extends from the bottom bracket to the pedal, transferring the power to the chain rings.
7. Derailleur - The mechanism for moving the chain from one cog to another.
8. Down tube - The section of frame that extends downward from the stem to the bottom bracket.
9. Front shock - The shock absorber on the front fork.
10. Handlebar - The horizontal bar attached to the

stem with handgrips on the end.

11. Headset - The mechanism in front of the frame that connects the front fork to the stem and handlebars.

12. Hub - The center part of the wheel that the spokes are attached to.

13. Idler pulley - The bottom pulley of the rear derailleur that provides spring tension to keep the chain tight.

14. Nipple - A threaded receptacle that holds the end of the spoke to the rim.

15. Pedal - The platform to pedal on; attaches to the crank.

16. Rear shock - The shock absorber for the rear tire on dual suspension type bikes.

17. Rim - The metal ring that holds the spokes on the inside and the tire to the outside.

18. Saddle - The seat.

19. Seat post - Offers support for the seat.

20. Skewer - The metal rod that goes through the hub, attaching the wheel to the dropouts of the frame.

21. Spindle - The free rotating axle that the crank arms attach to; also a part of the bottom bracket.

22. Spokes - The thick wires that join the hub to the rim.

23. Stem - A piece that attaches the handlebar to the steering tube.

24. Wheel hub - The center of the wheel that the spokes are attached to.

Sizing Mountain bikes

Along with giving you a better selection and expert advice, bike shop personnel can help you get fitted to the right size bike. You can get the bike either too big or too small, which will cause your enjoyment to suffer. Follow the tips below, and you'll have the perfect fit for your mountain bike.

Standover height

When you check the fitting yourself, the first thing you want to check is the inseam clearance, or the standover height. You want to have plenty of room between yourself and the top tube when you come to a stop. There should be around four to six inches of clearance from the top of your inseam to the top of the top tube.

Leg and feet position

There's a nifty formula for determining the leg position for riding a mountain bike. When riding a mountain bike, the terrain constantly changes, raising you off the seat constantly, sometimes just slightly, other times completely off.

Therefore, you'll need to sit your saddle slightly lower than you would on any other type of bike. Be sure you take this slightly lower seat height position into effect when you factor the size of the frame.

Riding compartment

The next thing you'll want to check is the rider compartment layout (the distance between the saddle and the handlebars). Once the proper leg extension has been determined, be sure the handlebar is one to two inches below the height of the saddle. You should never have the handlebars higher than the seat, unless there is some type of upper body problem.

Dual suspension bikes

With suspension being at both ends, you'll want your weight more in the middle of the bike so that your weight is distributed evenly between the front and rear suspension units, thus allowing the front and rear suspension to work as a unit.

This can be done quite easily by using either a

higher or shorter stem to raise the hand height, which will in turn move the upper body up and the weight towards the rear. The increase in rise shouldn't be no more than two inches, then the decrease in reach shouldn't be any more than two inches.

Test ride

Once you have taken all of these steps into account, go out and test drive the bike. Make sure you wear a helmet, even if you are going to be testing for a brief period of time. Be sure that the tires are set to the right pressure, and the shop has adjusted the bike for you properly.

You should have a shop employee observe your body position and ride height while riding, to determine if any further adjustments need to be made. Ride the bike around for a bit to get used to its handling and new equipment. Start off slowly, then give the bike a bit of time to present its personality.

After a few minutes, you might notice that something isn't working correctly or just doesn't feel right in general. If this happens, go back to the shop and have the problem corrected before you rule out the bike.

The more you ride bikes, the easier it will be to tell the difference in the ride types. Keep in mind, it may take months and even years to appreciate the way a bike handles. Talk to those who ride, and ask them if they ride the bikes they sell. This way, you'll learn more about the mountain bikes you love so much!

Mountain Bike Designs

The designs for mountain bikes can be classified in three categories based on suspension:

1. Hardtail - A frame with no rear suspension, often containing a front suspension fork.
2. Fully rigid - This is a sub type of hardtail, with a rigid fork.
3. Dual or full suspension - These bikes offer a front suspension fork and a rear suspension that are integrated into the frame.
4. Soft tail - Offers a frame with a small amount of rear suspension, normally less than a full suspension frame.

The different designs of bikes in mountain biking will offer you what you need for your unique style of riding. You'll want a different bike for different terrain, such as cross country or downhill. As the terrain changes, you'll want to make sure you have the right bike for the job.

Mountain biking is different than any other sport, offering you plenty of excitement and thrills. If you are new to mountain biking, you'll find the different designs to be very enticing yet very challenging at the same time. Each design serves a purpose with mountain biking, even some that excel on the trails.

There are also several other designs which reflect on the many challenging disciplines in the sport of mountain biking. No matter what type of mountain biking you like to do, there are bikes for that specific discipline.

If you are new to mountain biking, you'll want to check out the many designs and types of biking before you purchase a bike. Mountain biking can be a lot of fun and excitement, although it can also be very dangerous if you don't have the right bike for the terrain. Before you decide to buy a bike and hit the trails, make sure you have the right design of mountain bike for the riding you are planning on doing.

Mountain Biking Accessories

When you first start out with mountain biking, it can be a bit overwhelming when you walk into a bike store to buy your first mountain bike and see all of the available accessories you'll need when you first start riding.

There are several mountain biking accessories and related products that you can purchase. Although the sales staff will try to sell you anything they can, the real question for those on a budget isn't what's cool, but what accessories you need to make your rides more safe and enjoyable. By starting with these accessories, you'll be just fine when you hit the trails.

Bike helmet

The bike helmet is the most important mountain biking accessory that you can buy. No one should ever be on a bike without a helmet. There have been many people who have experienced serious head injury, when it could have prevented by wearing a helmet. All mountain bike helmets are comfortable and stylish and everyone who rides on the trails wears one.

Mountain bike gloves

No matter what season you ride in, your hands can take a beating. Beginners will normally keep a death grip on the handle bars, which can be very brutal for their hands. When you crash, your hands will be the first thing to hit the ground - and everyone crashes at some point. Mountain bike gloves are a must have accessory, as they will take the beating for you.

Mountain bike shorts

After the first few mountain bike rides you take, you'll notice that your rear end will be quite uncomfortable. Even though your body will adjust, bike shorts are great to have as they will help keep it at a bare minimum. You can get shorts that are very comfortable, making them a great addition to your mountain bike ride.

Mountain bike shoes

Depending on the type of pedals you have and the type of riding you do, you'll want to pick your mountain bike shoes accordingly. If your bike has clipless type pedals, you'll want to get shoes to accept the special cleat for your pedals. Good mountain bike shoes are durable, comfortable, and also a stiff sole for better

efficiency when pedaling. Also, you should make sure to get the right shoe for the terrain you'll be riding in as well.

Eye protection

If you get something in your eye, you can run off the trail in a matter of seconds. Sunglasses or clear lensed glasses can help keep your eyes safe from debris, as well as protect them from the wind. When you buy your glasses, make sure they are non-breakable.

Hydration system

Bringing a water bottle or hydration backpack with you is always a great idea. It's very easy to get dehydrated so you should always bring water with you and drink it on the trail to ensure that your body stays properly hydrated at all times.

Trail repair kit

It's easy to get stuck in the woods or on the trail if you don't bring the proper repair kit for your bike. To be on the safe side, bring a multi-tool designed for bike repair, tire levers, and a patch kit for fixing flat tires.

Mountain Biking Safety Tips

There are numerous ways that you can improve your mountain bike safety. Many riders will tell you that wearing a helmet is the most important step to staying safe. The second most important step is that you should always ride in control of your mountain bike.

By riding in control you'll not only prevent crashes, but keep others on the trail safe as well. When riding out of control you lose the ability to adjust to the terrain as you ride over it. This can and usually does result in serious injury to yourself and others.

Follow these helpful guidelines and you'll remain safe when riding your mountain bike.

Gear

Always make sure that you wear a helmet and other necessary safety gear for the conditions that you plan to ride in.

Never ride beyond your control

There is never any shame in walking the areas of the trail that you don't feel comfortable in riding and you should never let anyone else tell you that there is.

Keep your speed under control

Always make sure you keep your speed at a level where you can quickly adjust to any obstacles or change in the trail.

Knowing your trail

You should never push the limits on trails that you aren't familiar with. You should take trails you aren't familiar with at slow speeds until you learn them better.

Slow down around blind corners

If you can't see past a corner you should always slow down, as you never know who or what is around it.

Start small then go big

Work your way up to stunts or obstacles. Practice in less difficult or dangerous situations before you move up to something more dangerous.

Playing it smart

If you start to question what your doing, you probably shouldn't be doing. Always think about what you are doing and go with your instincts.

Beginner Mountain Bike Skills

Mountain biking is an exciting sport that can be enjoyed by anyone who knows how to ride a bike. Compared to the average bike ride, it does present some danger. Therefore, you should master these basic skills before you hit the trails or the dirt.

You can practice these beginning skills at a local park, school, bike path, or simply around your house. If you can, try to find a location with a steep hill.

Get a feel for your pedals

Practice moving your foot away from the pedal, first while sitting on your bike with one foot on the ground. Next, move on to releasing and replacing your foot while pedaling around for a bit. Those with toe clip and clipless type foot pedals will want to spend a bit more time practicing.

Sit and spin for position

Simply sit on your bike and pedal around. You should keep your arms slightly bent. You should also adjust your seat height so your leg is 70 to 90 percent extended at the bottom of every stroke on the pedal. Keep your body relaxed, as there will never be a position where you should have either your knees or your elbows locked.

Shifting gears

Get a feel for shifting gears with your bike. The higher gears are harder to pedal and will go faster while the lower gears are easier to pedal and will help you ascend hills. As you get to steeper hills, its best to shift before you get to the hill rather than while your on it.

Coasting

You should spend a bit of time coasting while standing on your pedals, without actually sitting on the seat. Keep your arms bent but don't lock your knees. Now, try experimenting with shifting your body towards the rear end of the bike.

Pedal while standing

You should get as comfortable as you can with pedaling while standing on your bike. Try lifting yourself off the seat while standing on the pedals, then crank them around. You should try this in higher gears on flat ground then again in lower gears while on a hill.

Dropping down a curb

Try finding a curb where you can easily get to the upper portion of it. Practice at a moderate speed, standing and coasting right off the curb from the upper level to the lower level. Try this at different speeds until it becomes second nature.

Once you practice these techniques and get the hang of them, you'll be able to hit the trails feeling comfortable on your mountain bike. Even though it may take some getting used to, it'll become second nature before you know it.

Buying A Mountain Bike

It can be a bit frustrating as well as time consuming when you buy a mountain bike. Below, you'll find some tips and things to be aware of before you lay down the cash and buy a mountain bike.

Determining your price

There is really no limit as to how much money you can spend on a new mountain bike. To help you keep your spending under control, you should figure out what your price range is and how much your willing to pay for a new bike. When you buy, you shouldn't buy from mass merchant stores such as Wal-Mart. You should instead support your local bike shop and get a much better bike and much better service.

Finding your style

All mountain bikes are designed with several different riding styles and terrain types in mind. You'll need to figure out what type of riding you will be doing

the most. Smooth riding, cross country racing, mountain cruising, or lift accessed downhill is something you need to figure out. Make sure that the bike you select fits your personal style and not that of the sale's staff.

Full suspension or hard tail

If you can afford it, a full suspension mountain bike is always worth the purchase. A hard tail, without rear suspension, is much lighter weight and pedal more efficiently, although full suspensions offer more comfort and overall better control. You'll want to make that decision based on your price range, riding style, and the type of terrain you'll be riding on the most.

Finding your favorites

Comparing mountain bikes component to component is nearly impossible, as there are far too many combinations available. The best way to go about doing this is finding a few components that are the most important to you and making sure the rest or the minimums fall within your price range. You can start with the fork then look at the wheels and rear derailleur.

Sales and seasons

During the year, the prices of mountain bikes can fluctuate quite a bit. Spring through summer is the main buying season. If you can wait until the right price pops up, normally in the fall and winter, you can save a couple hundred dollars. Many bike shops will also offer discounts or other accessories if you buy from them.

Finding a good dealer

Finding a good bike dealer is more important than finding the best price. You should always find a dealer that cares more about selling you a great bike than selling you a high priced one. A great dealer will have a clean repair shop and give you the impression that you can really trust them.

Test ride

You should test ride as many bikes as you can within your price range and riding style. You'll find that some bikes will feel right, while others won't. The more bikes you can test drive, you better you'll understand what works and what doesn't.

Doing the research

Product reviews and bike reviews are some of the best ways to find out about a mountain bikes reliability and overall performance. You should always look at what other owners and reviews think about a bike before you make that final purchase.

Clothes For Winter Riding

Mountain biking in cold weather has always been a challenge. The problem is that you'll start out cold then warm up and break a sweat, making yourself wet. Then, when you travel downhill, the combination of wet skin and windchill will be quite chilling.

Below, you'll find a list of the cold weather clothing that will make winter riding less of a bone chilling experience.

Booties

In cold temperatures, your feet are the most vulnerable part of your anatomy. Pressure from pedaling will tend to cut off the circulation to your toes, which can put you at a risk of frostbite. In cold conditions, neoprene booties are a must have. They will zip over your shoes and even have a pattern in the sole where you can cut out a piece for cleats.

Gloves

There are several manufacturers that make "lobster gloves", a hybrid glove that separates your index finger and thumb from the rest of your hand. These gloves are warmer than regular gloves, and the distinct index finger will allow you to operate your shifting and brake levers.

In case your hands get cold, you should carry a pair of lightweight glove liners will you as well. If you have to stop to take care of a problem, the liners will protect your hands from the cold.

Glasses

Glasses that wraparound and provide maximum protection from the wind are best to wear in the winter. You can protect yourself from debris, as well as the cold.

Socks

You should wear heavy socks although not too heavy. A sock that is overly heavy will make your shoes tight, cut off circulation, even make your feet cold. You should try lightweight socks, as they will keep your feet warm without bulk. If you need an extra layer, try silk ski socks as they are very warm and also extra lightweight.

Underwear

Polypropylene is the best material here, as it is lightweight and best for colder temperatures.

Wind protection

Moving air is the biggest cause for losing body heat. By having good wind protection you'll be able to vent perspiration while also protecting yourself from windchill. You should choose pants and a jacket based on durability, breathing, and price as these types of clothing can get very expensive.

Helmet and liners

Your head is very important, as you lose 50% of your body heat through your head. A helmet is designed to keep you cool in the summer, not warm in the winter. A fleece liner inside your helmet will keep your head and ears warm during winter riding.

Cross Country Mountain Biking

Cross country mountain biking is cross country at its finest. Where free riders and downhill bikers use four wheel bikes and ski lifts to get them to their destination, cross country bikers get to the top of the mountain by the ride. Though free riding is very popular, the life vein of the sport has always been cross country biking.

Just as cross country riders are a different breed, the bikes they ride are as well. The cross country bike is completely different in many ways from other types of mountain riding bikes. The premise for cross country riders is speed. Everything about their bikes revolve with the idea of making the bikes faster and faster.

Bikes used in cross country mountain biking can be fully rigid frame, hardtails, or even full

suspension frames. Through the years, the cross over to full suspension has become very popular.

The weight difference between free ride bikes and cross country bikes are considerable. You'll be extremely hard pressed to find a bike that weighs more than 24 pounds, and even that weight can be heavy. Free ride bikes weigh close to 40 pounds, which makes the difference in weight pretty close.

If you've never tried cross country mountain biking, you'll probably find it to be a break from the ordinary. Even though this type of biking involves trails, it's normally the type of terrain that beginners wouldn't want to ride. Involving hills and rough terrain, cross country biking offers quite the rush.

For mountain bikers everywhere, cross country is the way to go. It offers you a new assortment of bikes, new areas to bike, and a new twist to mountain biking as you know it. If you've been looking for a mountain biking rush, cross country mountain biking is what you need to be experiencing.

Different Types of Mountain Bikes

With mountain biking being a very popular sport, there are many bikes to choose from. Depending on what type of riding you like, the style of bikes you can choose from will vary. Below, you'll find tips on the different types of bikes available.

1. Cross country

Almost all mountain bikes will fit into this category. Cross country mountain bikes are light weight, making them easy to ride over most terrains, even up and down hills. This is the most common mountain bike and it can be used with ease for riding on the path or even commuting.

2. Downhill

These types of bikes are for serious bikers who crave the ultimate adventure. Downhill bikes have front and rear suspension, strong parts, and disc brakes. Rarely available off the shelf, most riders like to custom build their own.

3. Trials

Trail mountain biking involves a great degree of skill and is classified as the precision riding of the sport. Similiar to downhill bikes, trial riders will often build their own bikes rather than purchase one off a shelf. Generally very light and very strong, these bikes require a lot of discipline.

4. Jump and slalom

Slalom and jump bikes are very strong and designed for jumping, street racing, and slalom. They offer a front suspension and use very strong components dedicated to what they do. These bikes are very popular with the sport of mountain biking.

Even if you are new to mountain biking, the sport can be a lot of fun. There are several bikes to choose from, all of which depend on your style. If you are still looking for the best style for you, all you have to do is try out several bikes and see which one suites you the best.

Disc Brakes Or Rim Brakes

This can be a very important decision when you are buying a mountain bike. There are actually two answers to the question of disc brakes or rim brakes.

If you want better, more consistent brake performance in all conditions, disc brakes are what you should be choosing. On the other hand, if you want the lightest set up you can have and you are willing to accept small variances in brake performance, or you want the lowest price possible, rim brakes are what you should be choosing.

Over the years, mountain bikes have gone through many design changes. They started out with the original cantilever brakes, then went through the U Brake years, and are now with V Brakes. In most conditions, the V Brakes seem to work well.

In wet or muddy conditions, rim brakes will perform poorly. Over time, they can wear right through the side of your rim, causing the side of the rim to

blow right off.

Disc brakes on the other hand have been around for a long time in cars but weren't used on bikes much until the late 1990's. There were some issues in the earlier models, although the cable actuated or hydraulic brakes of today seem to work quite well.

In terms of performance, disc brakes seem to work better than rim brakes, especially in wet or muddy areas. Disc brakes normally require less force to apply and aren't effected by the rim or wheel condition.

Cost is an issue, as disk brake systems tend to be more expensive than rim brakes. Mechanical or cable actuated brakes are a closer match, although they will still cost more. Hydraulic brakes on the other hand cost a lot more.

When you make that final choice, weight out the above options then make your decision. Some riders prefer disc brakes, while others prefer rim brakes - making it a matter of opinion.

Framing Materials

The cost of a mountain bike frame is proportionate to its material, as well as the treatment that material has received. Currently, there are five types of material used in mountain bikes - high tensile steel, chromoly steel, aluminum, titanium, and carbon fiber. Oversized diameters, heat treating, and butting are tubing material treatments that will increase the cost of a frame as well.

High tensile steel

This is a very durable alloy that's found in lower priced mountain bikes. It offers a high carbon content which makes it less stiff than chromoly steel, so more materials are needed to make it stiff enough for bicycle frames, which will in turn make it that much heavier.

Relatively inexpensive to produce, you'll find this material in trail bikes, city bikes, and even entry

level mountain bikes. There are some bikes that come with a chromoly seat tube, while the rest is high tensile steel.

Chromoly steel

Short for steel alloy, chromoly is best described by its major additives - chromium and molybdenum. This is probably the most refined framing material, giving over 100 years of dependable service.

Depending on the type of heat treating and butting, you can find this material in bikes as low as 400 dollars all the way up to 1,500 and beyond. The chromoly steel material offers very good durability and a compliant ride characteristic.

Aluminum

For the past 15 years, aluminum has been refined in pretty much the same way as chromoly. There have been various alloys developed, as well as heat treatment, oversizing, and butting. With dual suspension bikes, aluminum is the preferred material as it's the stiffest and most cost effective.

Aluminum is stiffer than chromoly, and therefore it will crack before chromoly. Of course, this depends on how you ride and how much abuse you give the frame. The advantages of aluminum is that the frame is very light and very stiff through oversizing or butting.

Titanium

Even though it's somewhat exotic, the prices for this material have come down over the last few years. Frames made of titanium remain expensive because it takes longer to weld the tubes to the frame.

Titanium is considered an alloy, normally mixed with small amounts of vanadium and aluminum to give it better weldability and ride characteristics. More compliant than chromoly, it offers better fatigue and corrosion properties.

The material you choose for your bike, all depends on where you ride and what style you use. Almost all materials will last you for years, as long as you take care of your bike and treat the frame with some respect.

How Mountain Bike Gears Work

The gears in mountain bikes just keep getting more and more intricate. The bikes of today have as many as 27 gear ratios. A mountain bike will use a combination of three different sized sprockets in front and nine in the back to produce gear ratios.

The idea behind all these gears is to allow the rider to crank the pedals at a constant pace no matter what kind of slope the bike is on. You can understand this better by picturing a bike with just a single gear. Each time you rotate the pedals one turn, the rear wheel would rotate one turn as well (1:1 gear ratio).

If the rear wheel is 26 inches in diameter, then with 1:1 gearing, one full twist on the pedals would result in the wheel covering 81.6 inches of ground. If you are pedaling at a speed of 50 RPM, this means that the bike can cover over 340 feet of ground per minute. This is only 3.8 MPH, which is the equivalence of walking speed. This is ideal for climbing a steep hill, although bad for ground or going downhill.

To go faster you'll need a different ratio. To ride downhill at 25 MPH with a 50 RPM cadence at the pedals, you'll need a 5.6:1 gear ratio. A bike with a lot of gears will give you a large number of increments between a 1:1 gear ratio and a 6.5:1 gear ratio so that you can always pedal at 50 RPM, no matter how fast you are actually going.

On a normal 27 speed mountain bike, six of the gear ratios are so close to each other that you can't notice any difference between them.

With actual use, bike riders tend to choose a front sprocket suitable for the slope they are riding on and stick with it, although the front sprocket can be difficult to shift under heavy load. It's much easier to shift between the gears on the rear.

If you are cranking up a hill, it's best to choose the smallest sprocket on the front then shift between the nine gears available on the rear. The more speeds you have on the back sprocket, the

bigger advantage you'll have.

All in all, gears are very important to mountain bikes as they dictate your overall speed. Without gears you wouldn't be able to build speed nor would you be able to pound pedals. The gears will move the pedals and help you build up speed.

There are all types of gears available in mountain bikes, all of which will help you build up a lot of momentum if you use them the right way.

How To Lube Your Mountain Bike

A mountain bike is a lot of fun although it does require some maintenance. You should always lube your bike 15 hours or so before riding, as quick jobs right before you take off normally doesn't get everything lubed. Some lube jobs will last for more rides, although if things get loud or shifting gets sticky, it's time to lube.

Here is how to lube your bike:

1. The chain

Apply a generous amount of mountain bike lube to your chain as you move the pedals around backwards. It also helps to find a spot to steady your hand such as the frame while you move the pedals around and around. Make sure you watch out for the cranks and chain rings as they move around.

2. Front Deraileur

On the front defaileur, lube the pivots. Use a spot of lube everywhere you can see movement when you move the shift lever.

3. Rear deraileur

Just like the front deraileur, lube the pivots.

4. Pedals

There are some types of clipless pedals that will need to have the release mechanism lubed. You should only lube this mechanism if you have this type of pedal.

5. Everything into motion

Pedal around, shift your gears, and bounce your bike around. If you hear anything squeak, there's a moving part there are it should be lubed immediately.

6. Wipe it all clean

Once you've lubed everything and wiped it all around, simply wipe it all back off. Use a rag to wipe away all the lube you used, including all the lube off the chain. Wiping it away will leave the lube in between the parts but clean it away from everywhere it isn't needed. This will keep your bike from collecting dirt while you ride.

How To Use A Chain Tool

Once your mountain bike chain becomes damaged, you should immediately replace it with a new one. It is possible however, to repair a broken chain using a chain tool. For this very reason, most mountain bikers travel with a chain tool.

Your chain has three basic components - the metal side plates, the rollers between the side plates, and the rivets, or pins which go through the rollers and help to hold the plates together. These pins allow the rollers to freely turn as the chain moves around the cogs.

If your chain happens to break, you'll need to remove the broken link and replace it with a spare link. To do this, simply reattach the two ends of the broken chain and ride on a shorter chain until you can get it replaced.

To remove a broken link of chain, place it in the chain tool. Now, turn the tool counter clockwise until the rivet pin of the chain tool touches the chain rivet. Continue to turn the tool until the pin pushes out of the roller. Be very careful, as you want to stop turning when the pin is right at the edge of the roller, before it moves through the outer side plate.

Now, turn the tool in the other direction, and back it out of the roller. Set the tool to the side, then work the chain very gently from side to side and extract the inner side plates and roller.

Now is the time to re-route the chain through the bike. You may want to have a chain retaining tool or some to help you hold the chain in the right spot as you route and repair it.

Now that the broken link has been removed and you've re-routed the chain, you're ready to insert a new link or simply connect the links that were beside the broken one. The process here is the same - align the two ends so that the link with the inner side plates will fit inside the link with the pin and outer side plates. Now, use the chain tool to push the pin inward until it's positioned evenly between the side plates.

The easiest way to learn how to do this or feel comfortable doing it is to have someone show you, then actually practice with a chain and a chain tool. You'll have no trouble at all making a temporary repair in a mountain bike chain once you've seen it done by a professional and practiced it yourself a few times.

Mountain Biking Vacation

Taking a mountain biking vacation is an excellent way to unwind and explore America. There are several companies that offer mountain biking tours that go through scenic routes, and they often arrange any accommodations for travelers as well. For athletic couples, these types of vacations offer the perfect way to relax and enjoy some exercise together.

Each and every region in the United States has some truly awesome mountain biking trails. It's not just the major mountain ranges that offer these trails, as any hilly, scenic, rough trail can provide riders with the adventure they seek. Some of the best areas to mountain bike ride in the United States are the Pacific Northwest, Southwest, and Southeast states such as North Carolina.

Even though the entire American West area is great for a mountain biking vacation, the Southwest area is rapidly becoming a popular area for the sport as well. In the Southwest, some of the best trails include Pinery Canyon Road in Arizona, South Boundary Trail in New Mexico, and Flume Trail in Nevada.

Each and every trail deserves its reputation as a tough ride. Each one of these trails is over 20 miles in length, with Pinery Canyon being the longest, at over 50 miles! Keep in mind though, just because you go to a trail it doesn't mean you have to ride the entire length.

The Pacific Northwest is also a great place for a mountain biking vacation. The three best trails in the entire region are Surveyor's Ridge in Oregon, Mount Tamalpais in California, and the Methow Trial System in Washington.

A mountain biking vacation is perfect for athletic people who have the desire to explore regions at their own pace. These trips are much less expensive than other trips, yet they can easily be the adventure of a lifetime.

Setting Your Tire Pressure

Riding your mountain bike with the appropriate amount of tire pressure can make a huge difference in how much control you have over your bike.

Setting your tire pressure too high will make for poor contact with the ground and also make your bike less controllable. Setting your tire pressure too low will make your tires unpredictable and also make them susceptible to pinch flats.

The appropriate amount of tire pressure in a mountain bike will vary between rider to rider and tire setup to tire setup. The conditions of your trail and the type of terrain your riding will also greatly impact what tire pressure you should be using in your tires.

The trick here is to find out exactly what mountain bike tire pressure works for you and your setup during normal conditions. After doing this, you can learn to adjust your pressure for different trails and types of terrain as needed.

You should start by finding a reliable pressure gauge or a pump with a pressure gauge. Then, use this same gauge or pump anytime you are making adjustments. A gauge can be very inaccurate, so if you switch around it you can make things much more difficult.

You should start with a higher pressure of around 40 - 50 psi. If you have a tubeless system, you should start lower, 30 - 40 psi. The more you weigh, the higher pressure you should start with. Try this pressure for a while and get a feel for how the tires take corners and loose dirt.

Drop the pressure by 5 psi in each tire and get a feel for how this new setup rides and how it compares to your previous setting. You should notice some improvement

in stability, and if you don't, drop the pressure by another 5 psi.

You want to find the lowest pressure you can ride with without sacrificing pinch flat resistance. A pinch flat occurs when your tire rolls over an object then compresses to the point where the tire and the tube get pinched between the object and the rim on the wheel.

With tubeless tire systems, you can run much lower air pressure, as you don't have to worry about getting pinch flats. If you start to dent your rims, burp air out along the bead, or feel the tire roll under the rim during hard cornering, you've taken the pressure much too low.

Once you've found a comfortable setting for your tire pressure, learn what your tire feels like when you squeeze it with your hands. Once you know what your tires feel like you can always get the right air pressure - with any pump.

Spring Tune Up Tips

If you don't ride in the winter, you've probably spent the winter months on the couch eating chips and watching television. Before you know it, spring will be here and a new season of mountain biking will begin. Even though your body may not be in shape, these tips will ensure that your bike is.

Before you take your bike out, check the wear and tear on your components and adjust them if its necessary. Start off with your chain. If you haven't replaced it in a year or more, it's time to do so. Over time, the individual parts in the chain will get worn out, increasing its effective length.

As this happens, the chain is no longer able to conform to the cog and the teeth of the chain ring, so it wears those teeth out to fit the profile of the chain. If you can replace the chain before it stretches too much you'll save yourself from having to replace high priced cogs and chain rings.

Now, check the bearing surfaces. These include your bottom bracket, hubs, and the headset. Each of these should turn without a problem with no play in the system. Before checking the bottom bracket, make sure each cranking arm is snugged tight. Next, hold on to the crank arm (not the pedal) and wobble it back and forth. If you hear any clicking or if the crank arm binds, the bottom bracket needs to be adjusted.

Do the exact same thing with your hubs. Take the wheels off the bike, spin the hub axles, then feel for any free play or binding. If you feel play or binding, you need to make an adjustment. To check the headset, start off by putting the newly adjusted wheels back on the bike.

Now, grab the front brake and pull and push the handle bars back and forth. There shouldn't be any play. If you lift the front end off the ground, the fork should turn very smoothly. If it feels rough, it needs to be either adjusted or replaced.

While your looking, check the condition of your cables and housing. The cables should be rust free and the housing shouldn't be cracked or kinked. If you see any of this you should replace the offending device, as if you don't your shifting and braking will be sluggish.

Last, you should inspect your brake pads. Most pads will have ridges or indicator marks that will let you know when they need to be replaced. Brake pads that are worn out will compromise both safety and braking efficiency.

Once you've got the tune ups out of the way, it's time to go for a ride. With your mountain bike running better than ever, all you have to do now is have fun!

Technical Down Hill Mountain Biking

The key to down hilling is relaxing your upper body. The steeper and rockier the hill is, the more tightly the rider tends to put a death grip on the handle bars. Most riders tend to slow down as they approach obstacles such as rocks, then apply both brakes.

If you don't apply your brakes, the rock will stop your wheel. This isn't good, as the rock can throw you off balance and completely kill any type of momentum you have.

Relaxed riders won't slow down as much. The combination of extra momentum, no front braking at crucial moments will allow the wheel to bump over the rock and continue onward with little effort.

If you are going slow, it's essential to release your brakes as much as possible when you approach an obstacle. This may entail going a bit faster, although the result is much less painful. On steep hills, going really slow will always make things much more difficult.

One exception to this is a very tight turn. If a hop is out of the question, you'll need to slow down to allow the smallest radius of turning circle. This kind of thing takes practice, although track standing is a great way to improve on your balance.

Although down hilling is one of the most extreme methods of mountain biking, it can also be one of the most dangerous. If you're new to mountain biking you shouldn't start out with down hilling, as it takes a lot of practice.

With a bit of practice and knowing the right techniques, technical down hilling is something you'll find fun. It can provide quite a rush and a lot of excitement for those who seek adventure.

The Bunny Hop

In mountain biking and even BMX riding, the bunny hop is a bike trick that involved the rider lifting the bike up and over an obstacle while remaining in motion on the bike. Experienced bikers can lift their bikes in excess of a meter or one and a half feet. The world record for the bunny hop stands at 4 feet.

The bunny hop is executed by approaching an obstacle with speed, lifting the front of the bike then leveling the pedals. If the bike has full or front suspension, pre-load the shocks by pressing down on the bike just before you reach the obstacle.

Once the shocks have been pre-loaded, the rider will spring upwards, pulling up with the hands and feet at the same time. Toe straps or clipless pedals help with this, although if plain platform pedals are used, it's still possible. As the biker lifts, the hands will roll through twisting the throttle. After the object is cleared, push down on the bike then absorb the impact with the arms and the legs.

It's often times a misconception that a bunny hop without toe clips is achieved by rotating forward on the handlebars. Lifting up on a mountain bike while standing next to it is quite difficult to hold on to the handle bars.

The bunny hop is very popular with mountain biking, as experienced riders can make it look a lot easier than it actually is. New mountain bikers should practice a lot before they actually attempt the hop, as doing it on a bigger obstacle can easily be quite dangerous.

With proper practice, the bunny hop can be achieved, even for beginners. All you have to do is give it some time and effort, and you'll be pulling off the bunny hop just like the pro's do it.

Things To Take With You

When you decide to go mountain biking on a long days ride, there are several things that you should take with you. Below, you'll find the essentials that you should have with you.

1. Back pack - a camelback or mule is a good idea here.
2. Waterproof - the type that packs down very small is the best to have.
3. Water - you need at least 2 liters for a long ride.
4. Food - sandwiches and energy bars are the best to have with you to eat.
5. Pump - take a good one with you, as the small mini pumps are a waste of time and money.
6. Tire levers if you need them.
7. Two small inner tubes.
8. A piece of medium emery paper about 3 inches long and an inch wide.
9. A cut up tube of Crest for pinch punctures or to use as a tire boot.
10. A carpet needle.
11. A card of linen thread to repair torn tires.
12. A good chain splitter
13. At least two black pins. You should tape these to the inside lid of your puncture repair kit.
14. A set of allen wrenches. The penknife style is the best to get.
15. A small screwdriver.
16. A first aid kit that includes an elastic bandage.
17. A Spokekey spoke key.
18. A felt tip pen that will show on inner tubes.
19. Some lunch and phone money.

If you take the above with you, you should have no problems with long mountain bike rides. Everything on the above list will serve a purpose, all you have to do is give them a chance. If you've ever been mountain biking and ran into problems in the past, you should know first hand just how important the proper supplies can actually be.

Types Of Mountain Biking

As a sport or a hobby, mountain biking can be split into 9 different categories. These categories are very versed in what they offer. They are:

1. BMX

BMX is a style where the bikes offer 20 inch wheels. These bikes are commonly used at skate parks or with dirt jumps. Because of their smaller wheels and shorter wheel bases, BMX bikes are much easier to perform tricks and stunts with.

2. Cross country

This type of mountain biking involves riding your bike up and down hills. Although it's the least extreme form of mountain biking, most cross country riders are very fit and go on long rides.

3. Cyclo cross

This is a cross between road and mountain biking. These riders have to go over obstacles, cross through rivers, and race on and off the course.

4. Dirt jumping

Dirt jumping involves jumping the bike over large man made dirt jumps then doing tricks while they are in the air. These jumps are normally close together so riders can go over six or more jumps in one run, gaining a flow to give them more speed for bigger jumps.

5. Downhill

Downhill mountain biking involves racing downhill as fast as possible. This type of riding is very intense and extreme, offering riders the chance for ultimate thrills and excitement.

6. Freeride

Free riding involves finding the perfect line down the mountain using all of the terrain to express yourself. These competitions are very popular, as riders can express themselves any way they see fit.

7. Single speed

No to be confused with fixed gears, this is a form of cross country biking that's done using a bike with only one gear and fewer components. The idea

with single speed is simplicity. The straight chain line will provide efficient pedaling, and the lack of components mean less mechanical problems and a lighter bike.

8. Street and urban

This type of riding involves riding in urban areas, ledges, and other types of man made obstacles. Riders of street and urban biking will do tricks as well, such as stalls and grinds.

9. Trails

Trials are considered an aspect of mountain biking, although the bikes used look nothing like mountain bikes. They use 20 or 26 inch wheels and sport small, low frames. Trail riders will hop and jump their bikes over obstacles, which requires an extreme amount of balance and concentration.

Wheel Truing

Wheel truing is actually something that is very easy to do. Even if you have no experience with mountain biking or truing a wheel, it doesn't take a rocket scientist to accomplish it.

The first thing to do is make sure that none of your spokes are loose. To check, grab each spoke in turn and try to shake it back and forth. If the spoke wobbles, or makes pinging and grating noises, it's loose. If it's loose, add tension to the spoke by turning the spoke anti-clockwise with your finger and thumb pressure.

Keep turning and shaking until the noise is gone and the spoke doesn't wobble or move. Move on to the next spoke until you've gone all the way around the wheel and checked them all.

Now, it's time to see just how true the wheel actually is. Turn your bike upside down then spin the wheel to see where it comes closest to rubbing on the brake.

You may need to rotate the wheel backwards then forwards to locate the middle of the bulge on the wheel. Tighten the spokes which run on to the other side of the rim. If those spokes are already

tight, you'll need to loosen a few of the spokes which run to the bulge side of the hub.

Truing a wheel is easier than you may think, although it can be a little tough with some wheels. If you need to loosen spokes, be very careful that you don't break them. They can be very tough to loosen on older mountain bikes.