MARIN®

MARIN MOUNTAIN BIKES 84 GALLI DRIVE NOVATO, CA 94949 USA 415-382-6000 800-222-7557 WWW.MARINBIKES.COM

MADE IN TAIWAN


MARIN®
OWNER'S MANUAL

IMPORTANT WARNING INFORMATION!! READ THIS!!

LIGHTWEIGHT COMPONENTS

Depending on how heavy the usage, ultra lightweight handlebars and other components, as come equipped on some Marin models, need to be inspected and replaced periodically.

CRACKS OR BENDS

In general, if you notice at any time a crack or bend in the frame, stem or bars of your bicycle, stop riding it immediately. Take it to the dealer where you purchased the bicycle and have them inspect it for possible damage.

NIGHT RIDING

Your Marin bicycle does not come equipped with lights for night riding. If you are planning to ride at night, we strongly recommend that you use a lighting system. The reflectors that come on each bicycle are not adequate for night time visibility.

TOE CLIPS & STRAPS OR CLIPLESS PEDALS

Bicycles equipped with pedals with toe clips and straps or clipless pedals may increase your risk on injury. If you are not sure of your abilities to ride a bicycle equipped with either of these types of pedals you should either take the toe clips and straps off, or install a pair of pedals for use without toe clips and straps.

Argentina
GENOA BICYCLES
543514815829

Australia
REX IMPORT
61352482712

Austria
MARIN EUROPE
499119612340

Benelux
ATB SALES
441424753566

Canada
Marin USA
4153826000

Canary Island
A. SUANZES
34928226812

Colombia
B.T.T.
5726612456

Costa Rica
XCESSO
5062903382

Croatia
SPECTRAL
3854550981

Cypress
GOODTONES
3572351617

Czech Rep
KOMERSIA PRAHA
420240225234

Denmark
CYKEL KLUBBEN
ROLSTED A/S
4598167577

Ecuador
MOTOHOT
5937846811

Finland
& Estonia
VELOSPORT
35897571377

France
MARIN EUROPE
499119612340

Germany
MARIN EUROPE
499119612340

Greece
PROACTIVE
8954875

Israel
ROSEN & MEENTS
97249829333

Italy
FREEWHEELING
390544461525

Japan
FUN FANCY CO.LTD.
8169071141

Korea
BUMIL TRADING
COMPANY
8225516992

Mexico
OUTDOOR LIFE
5283781577

N. New Zealand
BIKE BARN
6496315336

Poland
BIKERSHOP
48124233262

Portugal
AVALANCHE
35114864636

Russia
ALPINDUSTRIA
70951659481

Singapore
TREKNOLOGY BIKES 3
654662673

Slovenia
CS TRADE
38664380200

South Africa
B. SLOTAR
3341106789

S. New Zealand
PENNY FARTHING
6433791520

Spain
DIRT RACING
34916637125

Sweden
MARIN EUROPE
499119612340

Switzerland
MARIN EUROPE
499119612340

Thailand
HAH HONG
TRADING
6622250485

Trinidad
LET RIDE INSTEAD
8686362277

United Arab Emirates
PASCALS
9714664926

United Kingdom
ATB SALES
441424753566

Venezuela
LATIN BIKE
5822860285

CONGRATULATIONS!

You've just bought one of the finest bicycles in the world; a Marin! Since our beginning in 1986, we've been developing and refining the quality of our bicycles. We have often been the leader of the industry, working with top name suppliers to identify the best new materials and latest developments. All of these improvements are the result of feedback from the following areas:

First: We race the bicycles on the toughest trails and roads in the world through our national and international race teams in North America and Europe.

Second: We ride and refine the bicycles ourselves. We're mountain bike enthusiasts and have been ever since the sport was born right here in Marin County. We ride our Marin bikes daily to test and re-test our race-proven frames and well-balanced component package. The result is creating a collection of durable, high performance, light-weight bikes we're sure you'll be proud to own and ride.

We are extremely proud of the products we offer, and the service offered by our staff and our distributors. We have been recognized year after year, and in 40 countries around the world, for our superior designs and unique performance characteristics. We are certain our hard work will be evident every time you go for a ride. So here's wishing you many years of enjoyment!

Thanks for investing in a Marin,

Marin Mountain Bikes

HOW TO USE THIS OWNER'S MANUAL

This Marin Bicycle is meant to be sold and assembled by a professional dealer or mechanic only! These bicycles are sophisticated instruments and need to be assembled and maintained by experienced professionals.

This manual is designed so that Part 1 will provide you with all the important information you will need to know before you ride.

Part 2 contains direction on operation of your bike as well as important information on inspection and maintenance.

It is important that you fully understand the operation of the Quick Release Mechanism. You should read and practice the operation of the Quick Release Mechanism, especially if the salesperson who sold you the bicycle has not already done so!

A WARRANTY CARD is included with this Owner's Manual which you must fill out immediately and return to the Marin Mountain Bikes distributor in your country. The address of the distributor in the country in which you bought the bicycle is listed at the front of the Manual.

Warranty policies vary depending on the country of purchase. Please check with your Marin Dealer for the warranty policy covering your purchase.

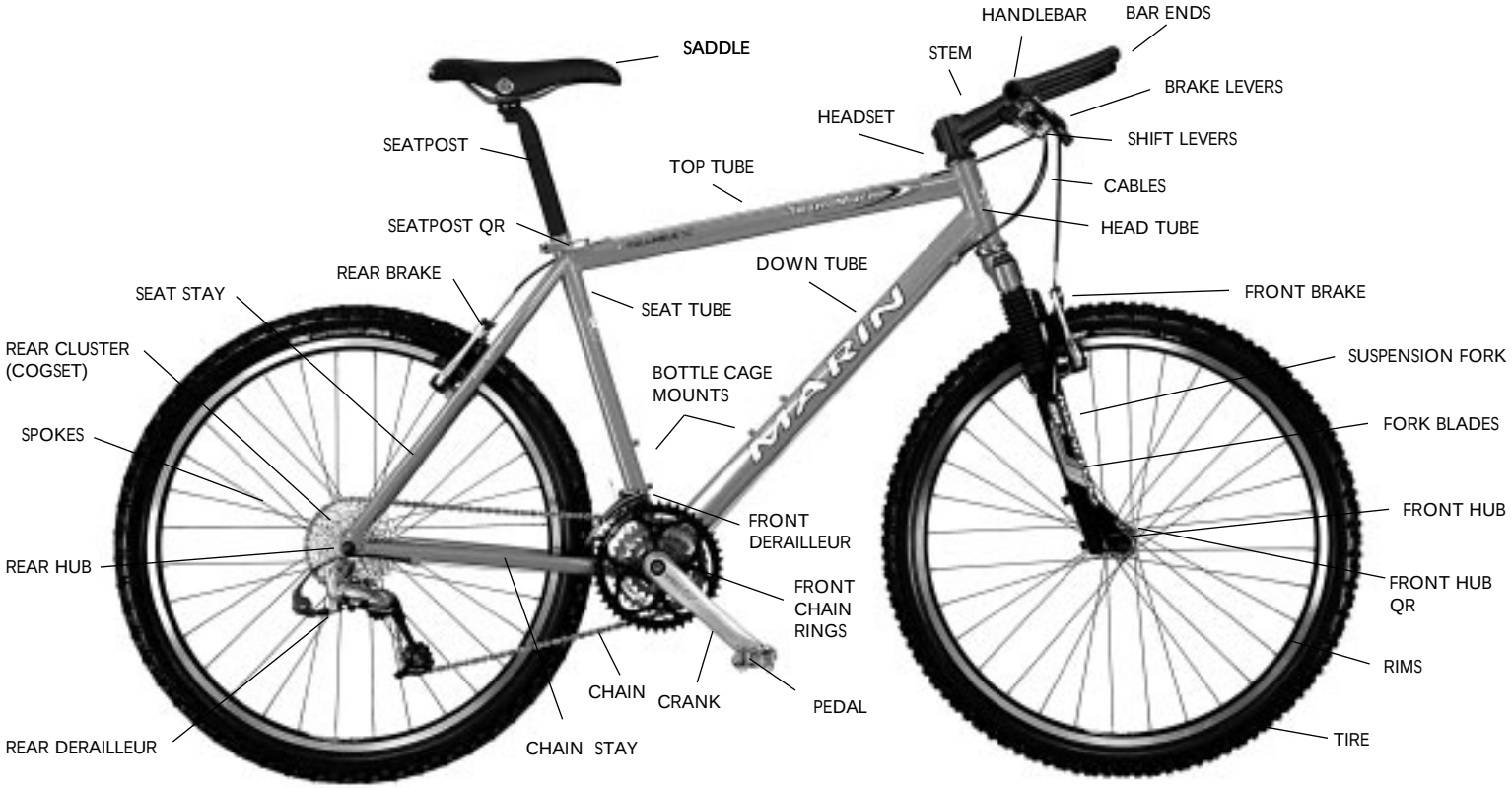
Special thanks to Shimano, Gripshift, and Fox for technical drawings.

TABLE OF CONTENTS

PART 1:
IMPORTANT INFORMATION YOU NEED TO KNOW BEFORE YOU RIDE!

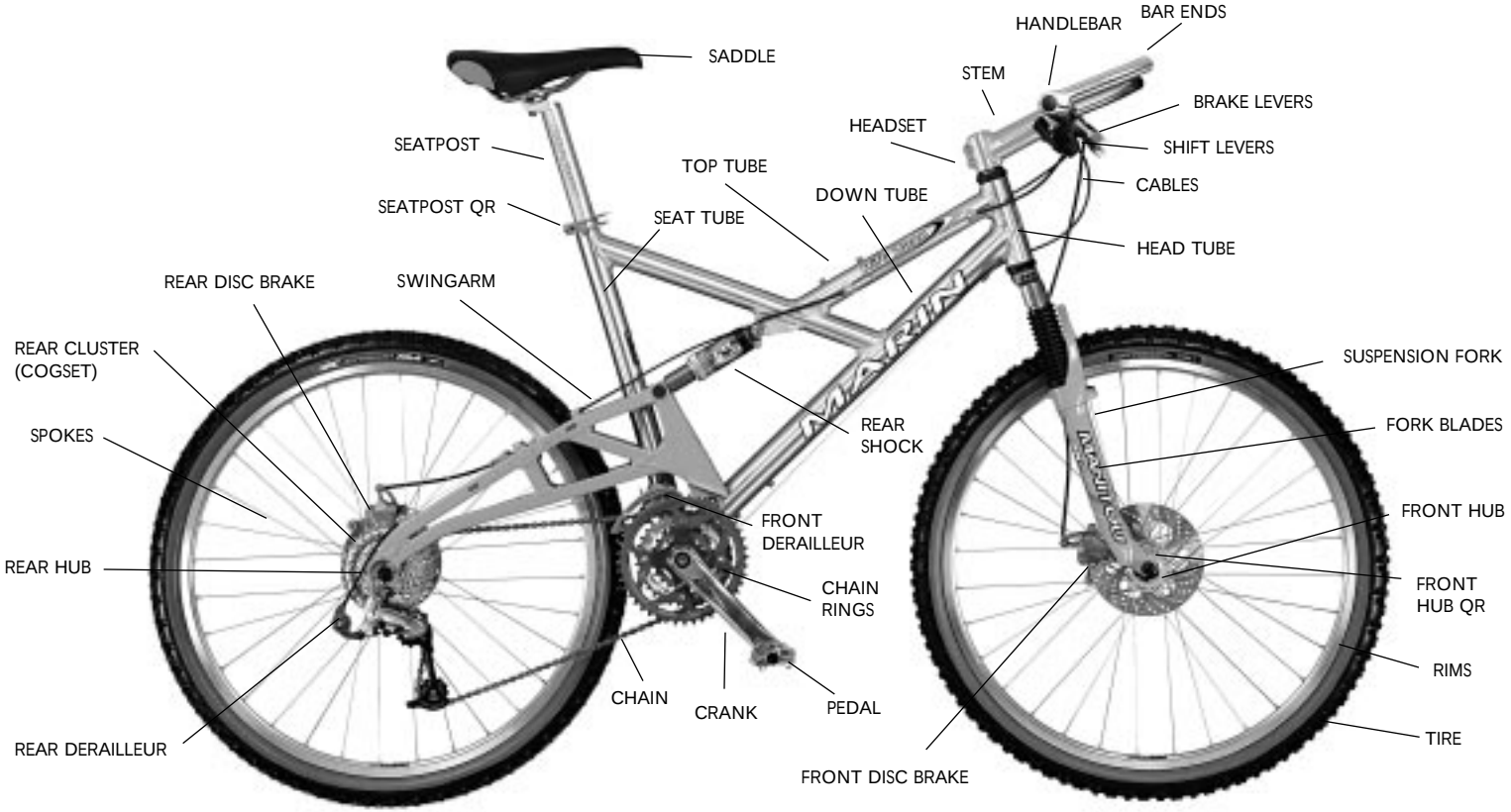
FRONT SUSPENSION HARDTAIL MOUNTAIN BIKE

Marin designs bikes that are geared for the recreational cyclist to the professional racer. Each category of mountain bike is designed with distinctive geometry that is suited for its intended use. Everything about a mountain bike is built with off road use in mind. Strong wheels, wider tires, a frame with more stand over clearance, higher bottom brackets, 18 speeds or more and a rider position that sits the rider more upright than a road bike.



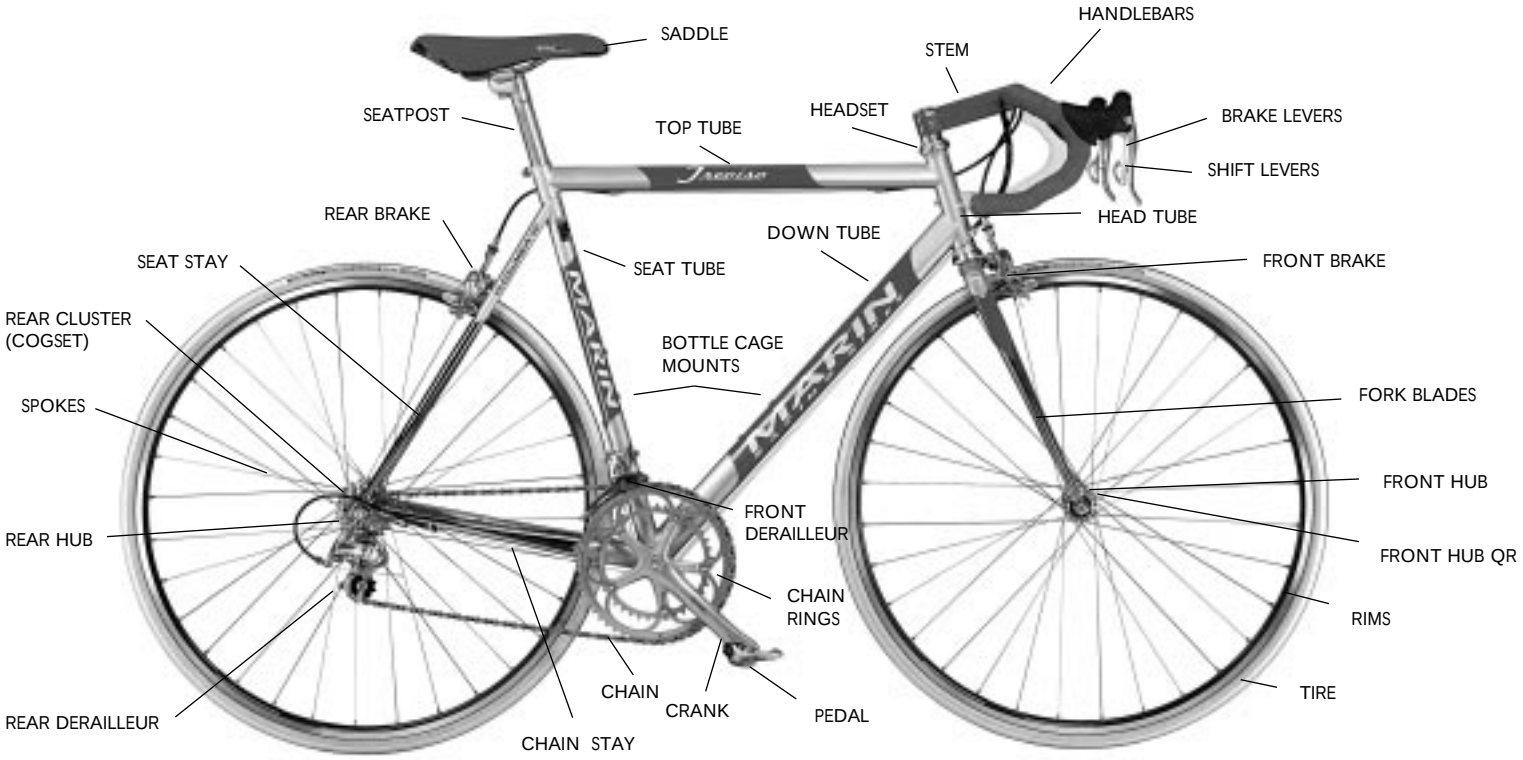
FULL SUSPENSION MOUNTAIN BIKE

Our line of bikes includes models with suspension front and rear. This allows the rider better overall control, because the wheels remain on the ground longer. Our full suspension bikes have attained a perfect mix of performance with comfort and are super lightweight yet very durable. Our full suspension bikes can go from winning national championship races, to the trails in your backyard and everything in between. We have several versions from cross-country racers to full blown down hill racing rigs.



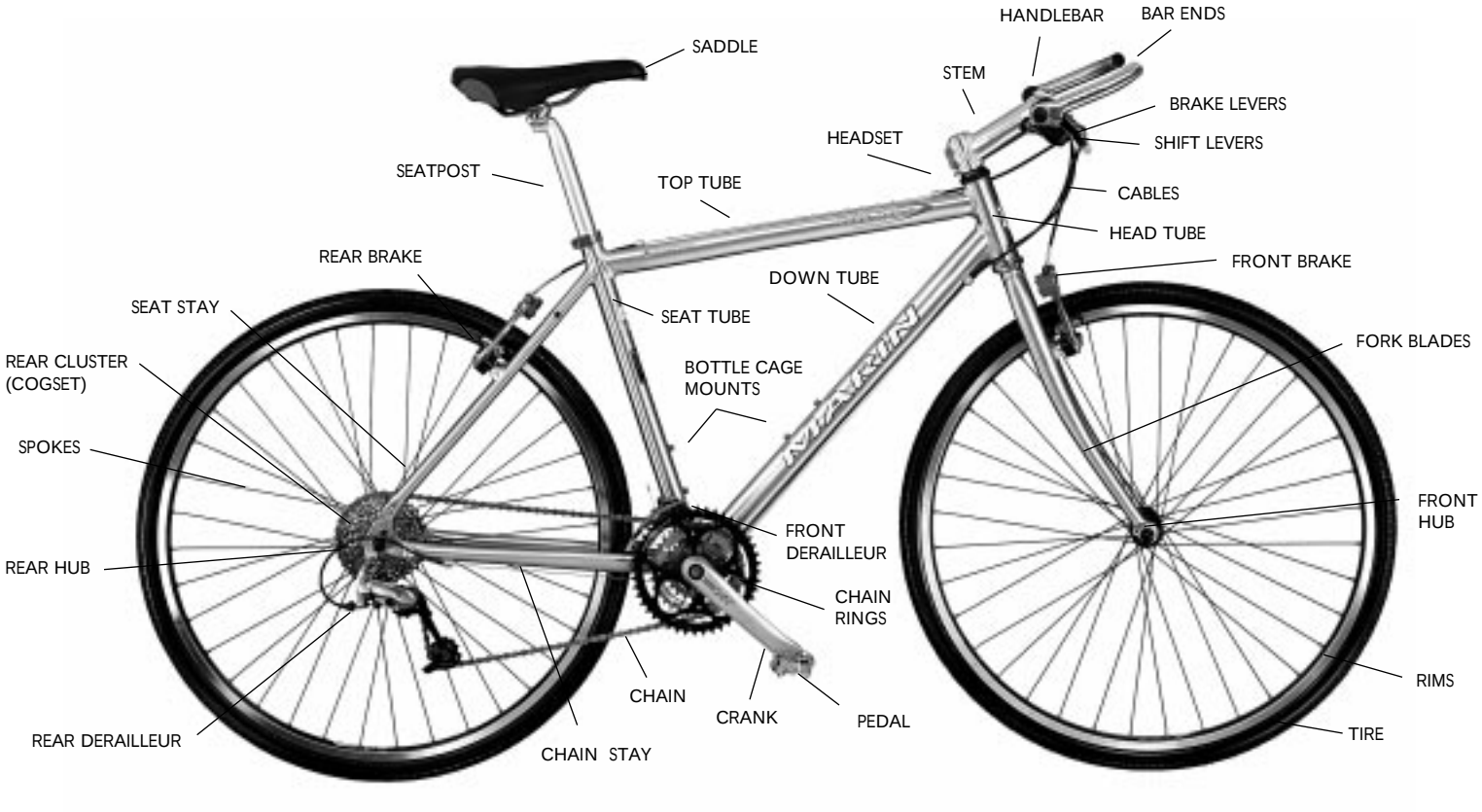
ROAD BIKE

The lightest and fastest in our line-up, these bikes include models that can be used for racing, long distance touring, or just riding with your friends. This style of bike is designed for maximum speed and efficiency by including light but stiff frames, drop handlebars, lightweight wheels and high-pressure tires for minimum rolling resistance.



CITY BIKE

Our city bikes combine the best features from both our mountain and road bikes. This combination has evolved into a bicycle with many uses. Equipped with triple chain rings, light wheels, and a more upright riding position these bikes are ideal for the messenger, commuters, casual riders, or the rider that just wants to be more comfortable. Designed with road and bike path to light duty off road riding in mind. These bikes are the perfect choice for the all-a-round rider.



CHAPTER 1
ESSENTIALS OF BIKE FIT AND SET-UP

FRAME:

By the time you read this Manual you will have already selected the proper frame size with the assistance of the dealer who sold you this bicycle. The general rule for frame size is that, as you stand straddling the bicycle with both feet on the floor, there should be approximately 3 inches of clearance between your crotch and the top tube. This is especially true for mountain biking. (The rule for road bicycles or city bicycles is 1 inch, mountain biking requires more clearance because of the rough conditions and the need to be on and off the bicycle frequently.) Larger riders will sometimes have more than 3" of clearance over the top tube. The correct frame size is necessary for safe and comfortable riding as well as for efficient riding.

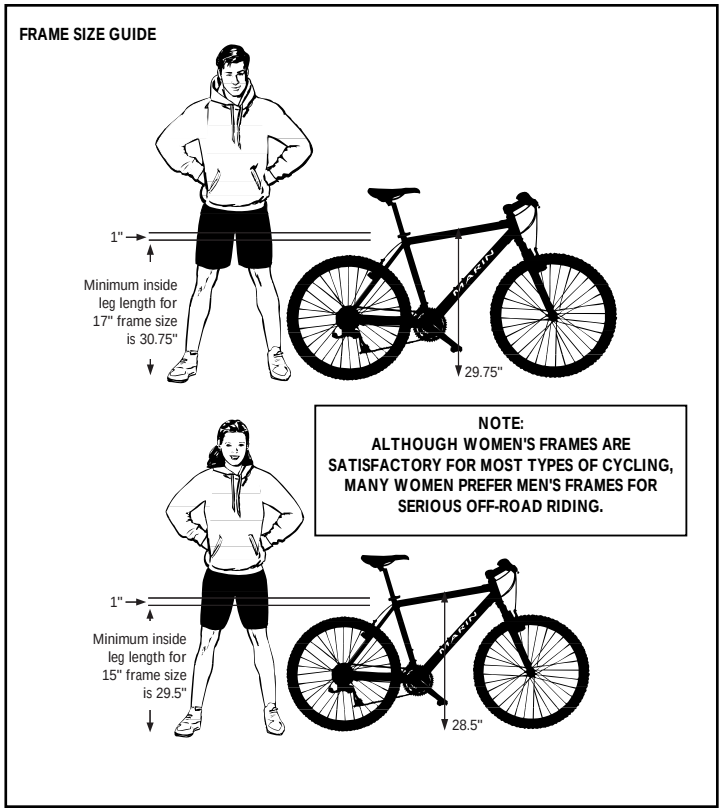
If there is less than 3 inches of clearance between the crotch and the top tube then the bicycle is too large for the rider and a smaller model should be used. Ask your dealer for assistance in choosing the correct size bicycle.

SADDLE AND SEATPOST:

You can adjust the seat in three ways: height, fore/aft and angle. The dealer from whom you bought your Marin bicycle probably adjusted the saddle and seatpost for you, but if you need to make further adjustments, follow these guidelines.

SADDLE HEIGHT:

With the rider sitting on the saddle with both feet on the pedals, the rider should pedal backwards several times stopping with the cranks perpendicular to the ground (pedals in the 12 and 6 o'clock positions). Ensuring that the ball of each foot is centered on the pedal, the rider should have a slight bend in their knee for the lower pedal.



If the saddle is too low, the rider's leg will be bent too much causing undue strain on the knee. If the seat is too high, the rider's legs are over extended, causing strain on the legs as well as the hips.

To move the seat up and down on the frame, open the quick release mechanism or loosen the binder bolt near the top of the frame, move

the seat to the desired height and then close the Quick Release Mechanism. If the seat moves or wobbles, you may need to adjust the Quick Release Mechanism or Binder Bolt.

Caution: There is a maximum height to which you can extend your seatpost. This maximum height is marked on the seatpost. Do not extend the seatpost beyond this line.

FORE AND AFT ADJUSTMENT:

After adjusting the height of your saddle, you may wish to adjust the fore/aft positioning of your saddle. First loosen the bolt that secures the saddle to the seatpost and then slide the seat forward or backward. Re-tighten the bolt to the appropriate torque.

As a general rule, your saddle should be adjusted fore or aft to assure that your knee is centered over the pedal axle when it is in the 3 o'clock position.

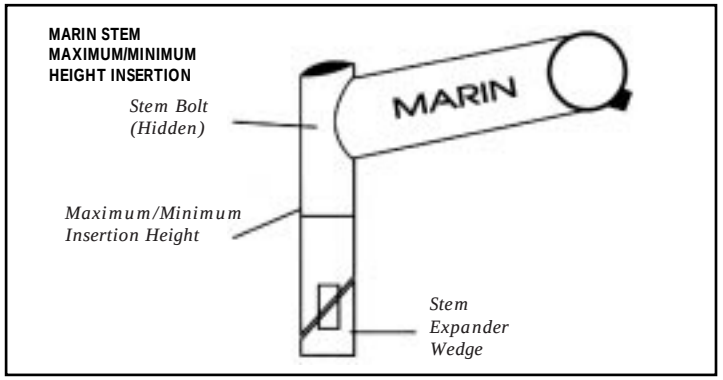
SEAT ANGLE ADJUSTMENT:

The best way to determine seat angle is to start with the seat parallel to the ground. Work from this position to determine if you need to angle the seat up or down depending on your riding style. We suggest that you do not put too much of an angle on the saddle as you may experience discomfort in the crotch or place strain on the hands and elbows. Seat angle set-up is based some what on personal preference. Play with some different angles. This will help determine what is best for you.

HANDLEBAR HEIGHT AND ANGLE:

The height and angle of the handlebars should be adjusted to suit your height and body dimensions and reflect the individual rider's preference.

Marin uses two different types of handlebar stems, quill type stems and threadless type stems. Before you attempt to make any adjustments it is important that you understand which type of handlebar stem your bicycle has.



Quill type stems insert in to the fork's steerer tube. These stems use an expander type bolt/wedge assembly to secure them to your fork's steerer tube. Typically a 6mm bolt on the top of the stem tightens and loosens the stem.

Note that quill type stems all have a "Maximum Height/Minimum Insertion" line. Do not raise the stem above this line.

Note: Sometimes the stem remains locked even when you have loosened the Stem Expander Bolt. In this circumstance it may be necessary to tap down on the Stem Expander Bolt with a mallet.

Threadless type stems are fitted over your fork's steerer tube and are tightened to the outside of this steerer tube. Typically it is not possible to raise the height of a threadless stem. If your bicycle is equipped with a threadless stem and you desire a higher handlebar height you will need to select either a handlebar or stem with a higher rise.

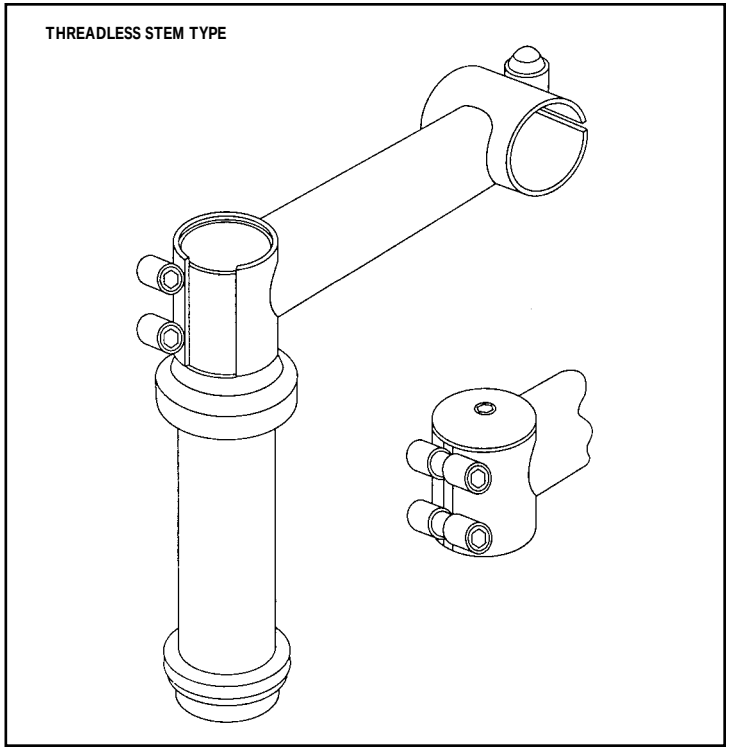
Before riding you should always inspect your bicycle to ensure that the stem is inserted far enough into the steering tube. Also, inspect both stem and handlebar for fatigue. The stem wedge and bolt should be lubricated every six months.

If you are unsure about adjusting your handlebar or stem, visit your local bicycle dealer and have your bicycle adjusted by a professional.

A WORD ABOUT REAR CARRIERS/RACKS:

Attempting to carry objects or packages in your hand while riding your bicycle can be very dangerous as it can easily lead to loss of control. Some mountain bikers use backpacks to carry light loads but may opt for the solution of a rear carrier (which can be installed by your local bicycle retailer). Sometimes, riders who need to transport large loads or children will use specially designed bicycle trailers.

THREADLESS STEM TYPE



In all these cases, it is important to remember that the frame of your Marin bicycle is designed primarily to bear the weight of the rider and you should be aware of the potentially excessive strain this may put on your bicycle's frame. This may cause problems not covered under your warranty.

CHAPTER 2
SAFETY CHECK:
PRE RIDE/POST RIDE

MARIN FRAME AND COMPONENTS LIFE

All Marin frames and components have a limited and finite user lifetime. The length of time a frame or part will last is dependent on the construction and materials used in that frame and or component as well as the maintenance and care a frame or part is subjected to over its lifetime. When purchasing bikes or parts that are designed for lightweight, a trade-off is made that slightly favors performance over extended durability. When running these high performance frames/parts frequent inspection should become a routine. This way subtle breakdowns can be detected in advance. Proper inspections can help eliminate catastrophic failure by finding small problems before they become big ones. Marin does not cover bikes or parts that are subjected to racing, jumping, trick riding, bikes exposed to the elements, riding with heavy loads, bikes set up with child carriers, extreme riding and any non-standard use. You are solely responsible for any damage to yourself or your bike caused from riding your bike in a dangerous manner or terrain. Our bikes are designed for off-road use. However, we cannot be responsible for rider errors, which could lead to severe injury or death. You are responsible for checking your equipment before each ride to make sure that the frame or parts attached are not cracked or damaged. Parts and frames don't just fail, they are designed to show signs of wear or damage leaving the user responsible for checking the user's equipment before each ride to determine if something is cracked or broken. If you choose to ignore such inspection requirements and breakage or failure occurs, responsibility of this will be yours and not the company of Marin Mountain Bikes or the dealer you purchased the bike from. Be safe. Check your equipment before and after each ride.

WARNING

Your Marin bicycle does not come equipped with lights. If you are planning to ride at night, we strongly recommend that you use a lighting system. The reflectors that come on each bike are not adequate for night time visibility or recognition.

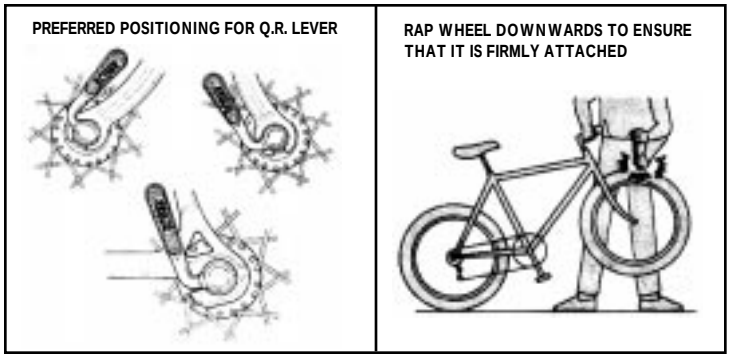
IMPORTANT!

BEFORE YOU RIDE YOUR BIKE:

Get into the habit of taking a few moments to quickly inspect your bike before every ride; you'll want to do even more thorough inspections on a regular basis (see Part 2 for more details on adjustments & maintenance). Do a quick "drop test" by picking up your bike up about two or three inches from the ground and dropping it: check to see that all parts and nuts are securely fastened-that there are no loose parts. Then do the following quick inspection:

WHEELS AND TIRES:

Check to see that wheels are aligned (centered), that there are no missing or loose spokes and ensure that the wheels do not wobble when spun. Ensure that both front and real wheels are securely fastened by the Quick Release Mechanism.



Be sure and check the wheel Quick Release every time you ride, even if you've only been off the bike for a short time! Improper adjustment of Quick Releases can lead to serious injury! Strike the wheel to make sure it is properly installed. Check to make sure that tire pressure is adequate and that the tire tread is not too worn. Replace worn tires as necessary.

BRAKES:

Check and adjust your brakes as needed. Roll your bicycle forward and squeeze the brake levers. The brake pads should grip but the levers should not touch the handlebar. Check to see which lever controls front or rear brakes, as this varies from country to country. Inspect the brake cables for fraying or kinks. Brake cables stretch with use so adjustment may be necessary. Keep brake pads positioned properly. Replace worn or age-hardened brake pads.

SHIFT MECHANISM AND CHAIN:

A good shifting technique is to reduce the amount of pressure on your pedals allowing the chain to move smoothly between gears thus reducing the chance of bending the chain and lowering the stress on the derailleurs. Watch for symptoms of shifting problems such as excessive noise in shifting, difficult shifting, frequently shifting off of chain rings, etc. Make sure that derailleurs are aligned correctly and inspect the derailleur cables for fraying or kinks. Derailleur cables also stretch with use so adjustment may be needed.

Inspect the chain often for wear and damage or tight links which could lead to future trouble. Keep the chain lubricated. Of course, chains stretch with time and use, and periodically need replacement. A worn or damaged chain ring may cause damage to the chain or difficult shifting and may cause the chain to come off.

CRANK & PEDALS:

Keep the crank arms tight on the spindle. The crank assembly should turn freely without side to side play in either direction.

The pedals should be tightened to the crank arms and lubricated. Always check that your toe clips and straps are securely fastened to the pedals. Replace damaged or worn pedals.

HEADSET:

Bearings must be kept adjusted, although this should have been done for you initially by the dealer from whom you bought your Marin bicycle. Check headset for any looseness or wobble. The handlebar should turn freely and smoothly without binding or play.

FRAME:

Immediately replace a cracked or bent frame. Do not attempt to straighten or mend it yourself. Take it to the dealer from whom you bought your Marin bicycle! Severe frame damage can cause a crash and lead to injury! All Marin bicycle frames, components and parts have a finite, limited life. The life of these items will vary in length based on the materials used, construction methods, maintenance, care and the amount and type of use the items are subjected to.

SEATPOST:
Make sure that the seatpost is inserted deep enough into the seat tube so that the “Maximum Height/Minimum Insertion” line on the seatpost is not showing. Always ensure that the seat is tightly fastened by the Seatpost Quick Release or seat post binder bolt. This is critical. Failure to follow this guideline can lead to seatpost failure and cause serious injury.

REFLECTORS:
Keep all reflectors clean and properly positioned. Replace them if they get cracked or broken.

Use common sense. If you have any concerns, be sure to take your Marin bicycle to a dealer should it need any major repairs or adjustments.

CHAPTER 3
PRINCIPLES & RULES OF SAFE CYCLING

All cyclists must obey the usual traffic rules when riding on streets and off road riders need to be aware of special safety rules for the trail. At all times, a cyclist needs to ride defensively, stay alert to all developments and use common sense.

ALWAYS WEAR A HELMET!
The vast majority of serious bicycle injuries are caused by accidents which involve the head! Buy a helmet that meets the most current safety standards. The helmet should fit you snugly but shouldn’t be constricting. Your local bicycle retailer can assist you in choosing a helmet that meets your fit and performance requirements.

A WORD ABOUT CLOTHING:
Riding with the correct clothing will improve your cycling experience It’s a good idea to wear gloves. During the day wear clothing that is brightly colored and functional. For night riding, use light colored clothing that contains at least some reflective material. Layer your clothing so you can add or remove it, depending upon how much you exert yourself.

Be careful about wearing loose clothing, especially pants that might tangle in the chain. Use pant clips or bands to protect loose-fitting pants from the chain. Never ride your bicycle with bare feet. Do not wear headphones while riding a bicycle as they muffle the noise around you. This practice is against the law in many places.

RULES FOR RIDING IN TRAFFIC:
The basic rule is that bicycle riders must behave like motorists and follow the same traffic rules as if they were driving a car. In most jurisdictions, bicycles are recognized as legal vehicles and are subject to the same rules and laws as automobiles.

Important traffic rules to bear in mind are:

- Ride with the flow of traffic, not against it.
- Obey traffic signs (stop signs) and signals.
- Be careful when passing automobiles. Motorists are not used to looking for bicycle traffic and sometimes don't signal correctly.
- Use hand signals about 50 feet before turning or stopping. Indicate the direction you're turning using proper hand signals.
- Ride in a straight line and don't weave in and out of traffic or between parked cars.
- In slow traffic, ride in the middle of the lane: get into the middle of the lane at busy intersections or whenever you are moving at the same speed as the traffic. When traffic is going faster, be courteous and drive as far to the side of the road as you safely can.
- Be careful at intersections; at a particularly busy intersection you may need to get off your bicycle and walk it across the intersection like a pedestrian.
- Don't ride on sidewalks. If you absolutely must, be careful of pedestrians and call out your approach if necessary.

The above rules are meant only as guidelines. You are solely responsible for knowing and following the legal requirements for safe cycling in your community.

COMMON SENSE PRINCIPLES OF SAFETY:

Please remember that bicycles are human powered vehicles that are light in weight. Bicycles do not have a protective structure or a restraint system to protect you as a car would. Bicycles are not designed to be crash worthy. Bicycles do not have any systems in place to protect you in the event of an accident.

While you need to obey all standard traffic rules, it's a good idea to observe the following safety guidelines as well:

- A bell can be a very effective accessory to make your cycling experience more enjoyable.
- Your Marin bicycle is not designed to carry more than one person.
- Always assume that motorists don't see you. Try to make eye contact. Be particularly careful in situations where you are entering traffic or where cars are pulling out into traffic (as in and out of driveways).
- Watch out for chasing dogs. Try ignoring them or, if that doesn't work, use a firm "NO!" If this doesn't help, dismount with the bicycle between you and the dog!
- Avoid road hazards. There's a long list of these: potholes, drain gratings and manhole covers, railroad tracks, etc. Stay alert.
- If you are uncertain, check with local authorities to ensure you understand all rules that apply to cyclists

NIGHT RIDING:

Your Marin bicycle does not come equipped with lights for night riding. If you are planning to ride at night, you will need to use a lighting system. The reflectors that come on each bicycle are not adequate for night time visibility.

Night riding can be more dangerous than riding during the day. Only experienced riders should ride when necessary at night. For this reason, children should never ride at night.

When riding in traffic at night, you must be even more on your guard and assume that motorists probably don't see you. Of course, you are wearing light-colored, reflective clothing (especially a reflective vest) and your Marin bicycle is equipped with reflectors (which should never be removed and which you should keep clean at all times).

IMPORTANCE OF EXTERNAL LIGHTS:

Reflectors by themselves are not enough for night riding. For maximum visibility cyclists should install an auxiliary headlight and minimally a flashing tail light.

If you are uncertain, contact your local bicycle retailer for advice on the appropriate gear for night riding.

Other important safety measures to bear in mind when riding at night include:

- Go slower for safety.
- Use streets with street lights whenever possible.

RIDING IN BAD WEATHER:

When it is wet or raining, remember that your brakes will be less effective, so it is important to brake sooner and give yourself more time to stop. Take special care on curves. Watch out for road hazards with metal or painted surfaces (e.g., grates, manhole covers, train tracks) which are much more slippery.

Fenders, and a visor on your helmet can improve your cycling experience in wet weather by keeping rain, water and grit out of your face and eyes.

A WORD ABOUT CHILDREN:

Marin Mountain Bikes reminds parents that children on bicycles require special attention and education. The following situations can sometimes be particularly dangerous for kids:

- Children must wear a helmet at all times when operating a bicycle.
- Riding out of driveways (or just in and around driveways in general) can be particularly unsafe for children. Teach your how to ride safely out of the driveway.
- Children will run through stop signs or traffic signals more than their adult counterparts who usually have experience as motorists.
- Children also have a tendency to turn without warning. Teach your child to give proper hand signals and to look behind for traffic before turning.
- Children should not ride at night.

RULES OF THE MOUNTAIN TRAIL:
In addition to the National Off-Road Bicycle Associations Code presented in Chapter 4, the following safety and etiquette rules are especially important to mountain cyclists.

When riding downhill, especially over bumpy terrain, keep your speed under control using the rear brakes first, and then the front brakes to slow down. Only apply front brakes while going straight; do not apply front brakes while turning. You may sometimes need to sit well back on the seat and distribute your weight for maximum steering control. While descending, it's a good idea to be in a slightly standing position with your pedals parallel to the ground while pinching the nose of the saddle with your thighs or knees. Always yield at trail intersections and call out to make your approach known. Approach corners and blind spots carefully.

Make sure that you are riding on approved and open trails. Some parks and recreation areas restrict mountain bike riding.

If you're riding in the wilderness, always ride with someone or leave word of your destination and proposed route with a friend. Be ready to make emergency bicycle repairs. You should also know some basic rules of wilderness survival: map-reading, emergency signals, first aid and other survival skills. Do not disturb the animals. Startling wild animals or livestock can be dangerous for both the animals and you. Stay well away from animals. Give them plenty of time to adjust to your presence. Pass horseback riders with care and courtesy. It is generally suggested that you dismount from your bicycle and walk past equestrians.

All Marin bicycles adhere to Consumer Product Safety Commission regulations and standards.

CHAPTER 4
BIKE ETIQUETTE AND THE RULES OF THE TRAIL

Marin Mountain Bikes supports the National Off-Road Bicycle Association and encourages all Marin riders to ride responsibly by adhering to the following NORBA Code:

NATIONAL OFF-ROAD BICYCLING ASSOCIATION (NORBA) OFF-ROAD CYCLIST CODE

Off-pavement bicycling can open new horizons for you. In order to maximize the benefit of your adventure and maintain the quality of the experience for those who will follow you, we urge you to adopt this code as your own.

1. I will yield the right-of-way to other non-motorized recreationalists. I realize that people judge all cyclists by my actions.

2. I will slow down and use caution when approaching or overtaking another, and will make my presence known well in advance.

3. I will maintain control of my speed at all times, and will approach turns in anticipation of someone around the bend.

4. I will stay on designated trails to avoid trampling native vegetation and minimize potential erosion to trails by not using muddy trails or short cutting switchbacks.

5. I will not disturb wildlife or livestock.

6. I will not litter. I will pack out what I pack in, and pack out more than my share whenever possible.

7. I will respect public and private property, including trail-use signs and no-trespassing signs and will leave gates as I found them.

8. I will always be self-sufficient and my destination objective and travel speed will be determined by my ability, my equipment, the terrain and present and potential weather conditions.

9. I will not travel solo when bicycle packing in remote areas. I will leave word of my destination and when I plan to return.

10. I will observe the practice of minimum-impact bicycle packing by taking only pictures and memories, leaving only waffle prints.

11. I will always wear a helmet whenever I ride.

CHAPTER 5
RIDING TECHNIQUES

It's a good idea to first practice riding your Marin bicycle on flat roads in a relatively safe area in order to get the feel of your bicycle and to practice shifting and braking. Then you can graduate to more challenging terrain to practice climbing/descending, cornering and dealing with obstacles. After your first ride, you'll need to check out both your brakes and your derailleurs to see if they need any adjustment.

SHIFTING:

There are two shift levers on your handlebar: the one on the right controls the rear derailleur and the one on the left the front derailleur. The rear derailleur guides (or "derails") the chain up and down the rear set of cogs. The front derailleur moves the chain from one chainwheel to another. As the chain is guided from a large chain ring to a small, the tension roller on the rear derailleur keeps the chain taut. Do not attempt to shift when not pedaling;-the pedals must be moving forward for either derailleur to function properly.

Shift to a bigger rear cog and on to a smaller chainring when you feel strain or before you begin a climb. In easy riding situations or when riding downhill, shift the chain on to the smallest rear cog and the largest chainring. Avoid using extreme combinations such as the large chainring with the largest cog as these combinations cause excessive wear.

BRAKING:

The right lever operates the rear brake and the left lever controls the front brake (except in some countries such as the UK). When you first get your Marin bike, you must practice braking in a controlled environment. You will need this controlled practice to become accustomed to the feel, modulation and power of the brakes. The brakes equipped on your bicycle are very powerful; use them with care and caution.

Always control your speed so that you will be able to stop under a variety of situations. Apply the brakes gradually to avoid skidding. You don't want your wheels to lock up as your bicycle is meant to be controlled with both wheels turning. Don't apply the brakes too abruptly or you may lose control or be thrown from the bicycle.

Use the front and rear brakes equally with a bit more pressure applied to the front brakes. The front brake accounts for nearly 85% of your stopping power.

Avoid braking while riding through corners. Attempt to control your speed before going into the turn. Lean your bicycle in the direction of the turn but keep your body upright.

It's best to anticipate when you'll need to brake. Wet weather requires longer stopping distances because when the brake pads and wheel rims get wet, braking is less effective. Also, loaded bicycles take longer to stop.

CLIMBING/DESCENDING:

Before you start uphill, shift into a very low gear. Always anticipate your shifts and downshift before it's necessary. When climbing, try to stay seated as much as possible for optimal traction and control. On a very steep incline, move forward in the saddle to improve traction.

Before beginning a steep descent, you may wish to consider using the seatpost Quick Release Mechanism to lower the seat by about 1 to 2 inches in order to gain greater stability by lowering your center of gravity. Stand on the pedals as you descend, keeping your weight back over the rear wheel. Use your brakes to control speed going downhill, being careful not to apply too much front brake-don't let it get to the point where stopping is difficult.

Riding a mountain bike downhill can lead to serious accidents. Make sure your bicycle is always in excellent condition. When riding downhill, make sure you wear the proper safety gear. Even with the current state-of-the-art protective safety equipment and gear, serious injury or death can occur.

If your bike is equipped with suspension you may be able to descend with greater speed than without suspension. This greater speed equals greater risk. Please remember this and keep your bicycle in control and within reasonable speed limits at all times

Your bicycle was not made for jumping! You shouldn't ride in a way that will make you airborne on your bicycle. Landing after jumping can damage your forks and frame, and may lead to loss of control and personal injury. Damage to your bicycle due to jumping is not covered under warranty.

OBSTACLES:

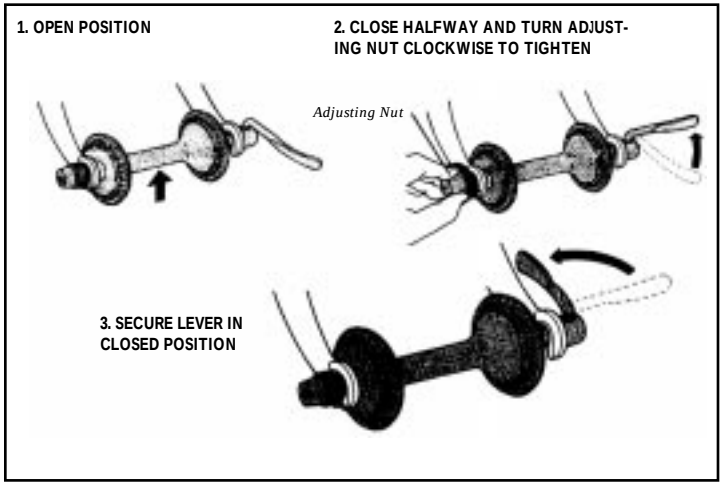
Don't ride over bumps and obstacles that can damage your bicycle or cause you to lose control. You can usually ride safely over obstacles smaller than 4 inches. If the obstacle is any larger, it's best to dismount and walk around. When you're about to hit a bump, lift yourself off the seat while keeping your knees and arms bent so they can flex with the bump and absorb the shock. Watch for ruts in the road and make sure your wheels don't get stuck in them.

PART 2:
REGULAR MAINTENANCE OF BICYCLE SYSTEMS & OPERATION

CHAPTER 6
OPERATING THE QUICK RELEASE MECHANISM

REMOVING & INSTALLING FRONT AND REAR WHEELS

Note: It is important that you thoroughly understand the use of the Quick Release Mechanism to remove and attach both your front and rear wheels. Failure to ensure that the wheels are properly attached before every ride could result in the wheels coming off the bike or in loss of control which could cause serious injury. The dealer from whom you bought your Marin bicycle should have already demonstrated the use of the Quick Release Mechanism to you. But you must take responsibility to make sure you fully understand how to operate the Quick Release. If you are not certain, it is your responsibility to make sure your dealer teaches you.

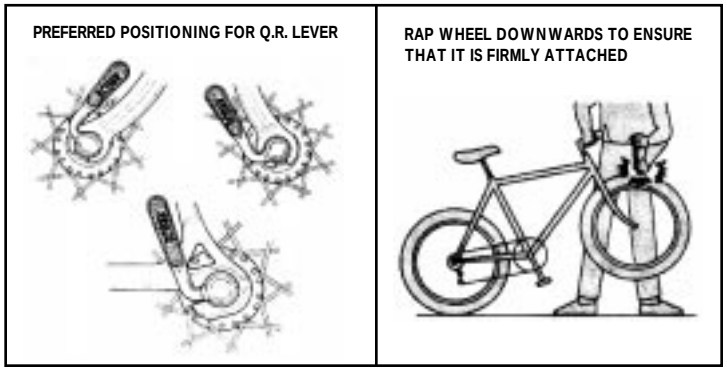


THE PRINCIPLE OF THE QUICK RELEASE MECHANISM:

"Quick Release" means the ability to remove your wheel easily and rapidly without having to use tools. The Quick Release basically passes a skewer through the hub of the wheel and allows it to be loosened or tightened by means of a lever on one side of the bike and an adjusting nut on the other side. Remember: the Quick Release Lever is a cam-action device that tightens when the lever is swung on its pivot 180 degrees. Don't try to tighten it as if it were a regular wing nut-type bolt. Never use a wrench or pliers to adjust the Quick Release.

USING AND ADJUSTING THE QUICK RELEASE:

Push the Quick Release Lever into the Open position so that it faces the front of the bike. Move the lever so that it is pointing away from the center of the hub with one hand while tightening the Adjusting Nut on the other side of the bike with your other hand. Tighten the nut as far as it will go by hand only. Close the Quick Release Lever towards the rear of the bicycle 180 degrees; you will meet increasing resistance as you push. You'll need to use the full force of the palm of your hand to push the lever all the way to the Closed position facing the rear of the bike. The front Quick Release should be positioned in a way that will not interfere with the functions of other bicycle parts and so that it cannot be easily snagged.

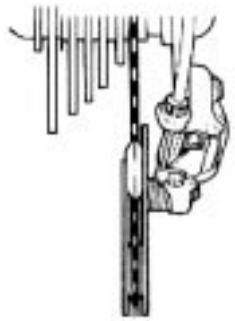


The important point here is that when the Quick Release is tightened properly it will “scar” or “emboss” (that is, slightly cut into) both the inside and outside surfaces of the fork ends. You should always double-check your Quick Release adjustments. This can be done by picking up one end of the bike and spinning the wheel to see that it turns freely. Strike the wheel downward with your hand to ensure that it is firmly attached.

REMOVING THE FRONT & REAR WHEELS:

Before removing either the front or rear wheel, you must first disengage the brakes. This will allow you to spread the brake shoes apart far enough so that the tire can come out past the brake pads. Push the brake shoes on both sides towards the rim in order to lessen cable tension and then unhook the brake cable noodle (see pg 22). Both brake shoes will spring away from the rim providing tire clearance for removal.

CHAIN ON SMALLEST COG



The brake release on road bicycles using Campagnolo equipment are located on the brake lever. Simply push the small button on the side of the brake lever and this will open the brakes making it easier to remove the wheel. Push the same button from the other side of the lever in order to re-set the brakes.

REMOVING THE FRONT WHEEL:

Pull the quick Release Lever to the Open position; you will then need to turn the opposite Adjusting Nut counterclockwise about 2 turns to fully release the wheel from the forks. The wheel will now be loose in the fork tips and you can remove it by pulling it out of the fork or lifting the bike and allowing it to drop. You may need to tap it gently with your hand to disengage it.

REMOVING THE REAR WHEEL:

You’ll make this task much easier by putting the chain onto the smallest cog (smallest gear; see drawing on this page) in the rear. Open the Quick Release Mechanism. While standing on the left side of the bike, lean over the rear wheel and grab the right seat stay at about midpoint with your left hand and lift the bike about three inches off the ground with your left hand. As you lift, pull the rear derailleur towards the rear with your right hand and push the wheel free from the derailleur and the dropouts on the frame, guiding the wheel out past the chain.

INSTALLING THE FRONT WHEEL:

With the Quick Release Mechanism open (it should be on the left side of the bike), place the wheel on the ground and place the front fork tips on the wheel axle. Ensure that the axle is inserted all the way to the top of the fork slots and that the wheel is centered in the fork. Close the Quick Release Lever.

All of the cautions mentioned above about proper use of the Quick Release Mechanism apply here: You should need to use the palm of your hand to close the Quick Release Lever. Do not ride your bike until the Quick Release is properly adjusted and the wheel is securely fastened! Check the security of the wheel by rapping down on it with your hand to confirm that it is attached and will not dislodge. Spin the wheel to make sure that it is centered and turns freely.

Reattach the brake cable and noodle. Test the brakes to make sure that they are working properly and that the pads are not touching the tire.

INSTALLING THE REAR WHEEL:

Roll the rear wheel in underneath and in between the rear stays and rear dropouts. Lower the bike onto the wheel, ensuring that the upper length of the chain seats on the small cog and the lower length of the chain hangs freely. Make sure that the wheel axle is at the very top of the dropout slots and the wheel is centered properly before adjusting the Quick Release Mechanism. Close the Quick Release Mechanism. Again, you should need to use the palm of your hand to firmly close the Lever. Do not ride until the Quick Release Mechanism is securely fastened and the wheel is securely attached. Rap the wheel with your hand to ensure that it is attached. Spin the wheel to make sure that it is centered and spins freely.

Reattach the brake cable and noodle and make sure that the brakes are working and that the pads do not touch the tire. Test the derailleurs to ensure that they work properly.

CHAPTER 7
BRAKING SYSTEM

Warning: Inspect your brake system and test your brakes before every ride. If brakes are not working properly or if any parts are damaged or worn, do not ride until they have been fixed.

Every rider should be able to make minor, “fine-tuning” adjustments to the brakes. Eventually your brakes will require major adjustments that involve adjustments to the brake cables and/or replacement of the brake pads. These major adjustments are difficult and should only be done by an experienced and well trained bicycle mechanic. If you are uncertain of your ability to adjust your brakes properly, have your Marin dealer adjust them for you. If you have done major adjustments to your brakes yourself, it is probably a good idea to have your dealer inspect your work. Remember: for your safety and the safety of others it is important for you to be able to stop your bicycle under any circumstance you may encounter. The braking system must be functioning properly during every ride.

WHY YOU NEED TO ADJUST YOUR BRAKES:

There are two reasons why you need to adjust your brakes occasionally: (1.) brake cables stretch with use and, since brake cable length determines the distance from the brake pad to the rim of the wheel, the brake pads will move farther away from the rim. You’ll need to remove cable slack to keep the brake pads at the proper distance from the rim to ensure optimal stopping power. (2.) Brake pads eventually wear down or harden. When the braking surface wears off, the brake pads should be replaced.

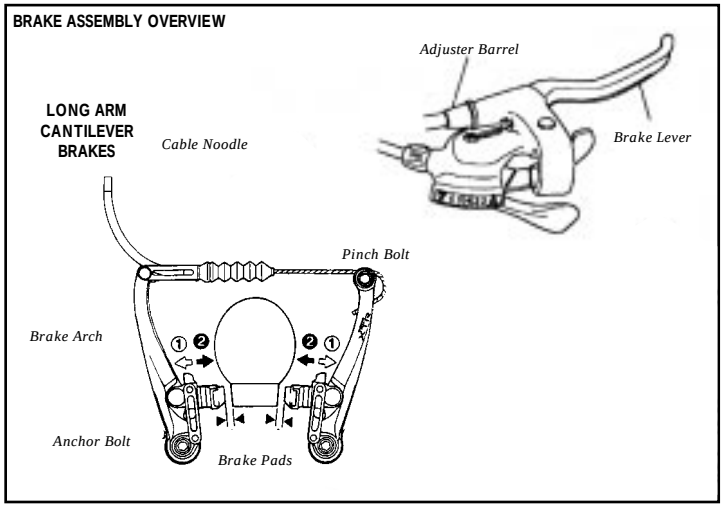
A NOTE ON “TRUE” WHEELS:

Your braking system depends on wheels that are in good condition. If your wheels are wobbling or your brake pads are rubbing against the wheels, you’ll need to have your wheels “trued” (i.e. made consistently round and aligned) by your dealer.

Occasional inspection of rims should also be performed by yourself or a professional bicycle mechanic to assure that braking surfaces have not worn excessively.

OVERVIEW OF THE BRAKING SYSTEM:

The Braking System consists of the brake levers, the brake calipers and the brake cables. Marin bicycles use several different types of brakes. Linear pull brakes, disk brakes and dual pivot side pull brakes. Before making any adjustments it is important that you understand what type of brakes your bicycle is equipped with and that type of brake’s appropriate setting requirements



DISK BRAKES

With the increase in technology over the years, we are seeing advances in braking technology that now include disk brakes. Some Marin models have disks as a standard feature and other Marin models will have mounts if you want to install disk brakes in the future. Marin uses hydraulic as well as cable actuated designs.

HYDRAULIC DISK BRAKES:

Hydraulic Brakes should specifically have the following items checked.

1. Check brake lever action. If lever feels mushy, air bubbles have made their way into the brake lines and the system will need to be bled. Have a trained mechanic perform this job.
2. Inspect brake lines for cracks, kinks or leakage. If poor function is occurring the faulty brake line may need to be replaced. Special tools and procedures will be needed for this job, so take bicycle to a trained mechanic.

CABLE ACTUATED DISK BRAKES:

Cable Actuated Disk Brakes require the following specific items to be checked.

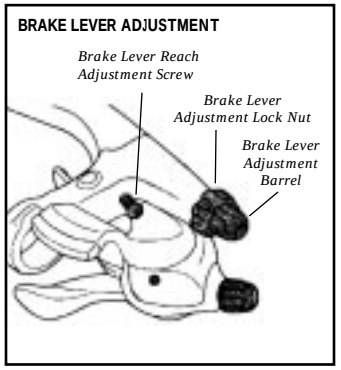
1. The cable actuated disk brake systems will need additional break-in attention before giving maximum performance. See the following for proper instructions.
2. Make sure cables have no kinks and brake levers do not touch handle bars when fully activated.

All disk brake systems require the following additional items to be checked.

1. All brake systems need to be adequately broken-in before giving maximum performance. When you first take delivery of your bike or replace brake pads, ride the bike on a flat surface, in a safe location devoid of traffic, and apply brakes 20-30 times. Increase the force of the braking effort as you do this. Begin with light breaking pressure and increase slightly each time, ending with strong breaking pressure.
2. Discs should be inspected and kept clean at all times. If oil or grease has contaminated the rotors and pads a thorough cleaning will need to be performed. This will include removing and either cleaning or replacing brake pads as well as cleaning rotors with isopropyl alcohol or an automotive brake cleaner. A trained mechanic should perform this job.
3. Check for deep scoring, grooving or damage to the surface of the brake disk. Replace disk as needed.
4. Check that the brake pads are not vitrified (made smooth or glass-like from heat), chipped, or imbedded with debris. Confirm that the pads are worn uniformly and that they move in and out smoothly. Replace pads as needed.
5. Make sure the disks are running in the center of the brake pads. If the disk is hitting the brake pads you will need to loosen the caliper fixing bolts, squeeze brake lever lightly, and then re-tighten caliper fixing bolts.
6. Check spoke tension and condition. If spokes are loose, bent or missing, immediately take bicycle to a Marin dealer for proper maintenance.

If any of the above problems are detected, DO NOT ride bicycle. As mentioned above, special tools and procedures need to be followed when working on disk brakes. If you are not trained in these types of repairs, taking your bike to a trained mechanic is mandatory. When properly set up and maintained, these brakes will offer many miles of service and performance!

BRAKE LEVERS



The brake lever should always be tightly attached to the handlebars in an easy to reach position. When squeezed, the brake levers should never contact the handlebar (i.e. “Bottom out” on the handlebar); if this happens, you need to tighten the brake cable.

You can adjust the brake lever angle by loosening the brake lever clamp bolt, adjusting the angle and re-tightening the bolt. To fit your hand size and preference, many Marin models offer you the ability to adjust the brake lever reach, (i.e. the distance from handlebar grip to the brake lever). To do this, turn the reach adjustment screw and squeeze the brake lever until you reach the position most comfortable for you. The brake cable will need to be re-adjusted after this adjustment.

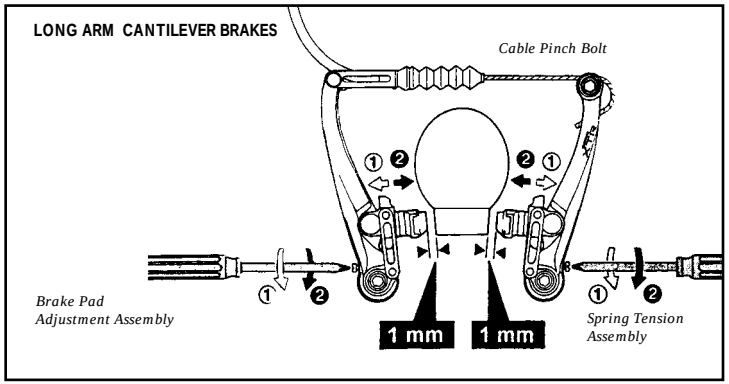
LONG ARM CANTILEVER BRAKES:

The brake arms should be attached securely to the appropriate frame or fork bosses. Frequently inspect the brakes to assure they are correctly centered. If you find the brakes are out of center you or a professional mechanic should do the following:

1. Check the wheel to assure it is installed in the frame or fork correctly.

OR

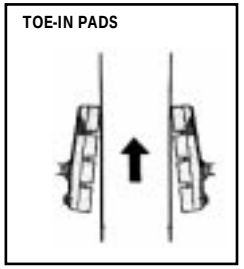
2. Use the spring adjustment screws located on the side of the brake arms. Tighten or loosen these screws to center the brake.



REMOVING MINOR CABLE STRETCH:

If the brake pads are more than 1/8" from the wheel rim, cables have stretched (or brake pads have worn) and adjustment is necessary. To remove minor brake cable stretch, you can use the brake lever adjuster barrel. Clamp the brake pads against the wheel rim with a "third hand" tool or a toe strap until the brake pads are 3/32" from the rim. Turn the lock nut counterclockwise one-half turn and then turn the adjuster barrel itself counterclockwise until cable slack is removed. Re tighten the adjuster barrel lock nut. If more adjustment is necessary, (i.e. if your brakes are still too tight or too loose), you will need to make the major cable length adjustments. Cable length adjustment is a critical adjustment and recommended for experienced bicycle mechanics only.

"TOE-ING IN" BRAKE PADS:



If you are experiencing squealing brakes, you may need to adjust the "toe-in" on your brakes. As a general rule, the leading edge of the brake pad should contact the rim before the trailing edge of the brake pad. If you are experiencing squealing brakes, it is likely this adjustment is not correct. Toed-in brake pads should have no more than 1mm deviation from one end to the other.

Brake pad adjustment is a critical adjustment and recommended for experienced bicycle mechanics only.

BRAKE PAD REPLACEMENT:

Brake pads should be replaced before the grooves in the surface of the pad are worn away. Also, brake pads can become age-hardened and require replacement. To ensure even braking, it's a good idea to replace all four pads at once rather than just one or two at a time.

BRAKE CABLES

Inspect brake cables for wear before every ride, checking for kinks, broken strands and frayed ends. Inspect the cable housing for wear. If you find a problem with your brake cables, do not ride your bicycle until the problem is repaired.

A NOTE ON HANDLEBARS:

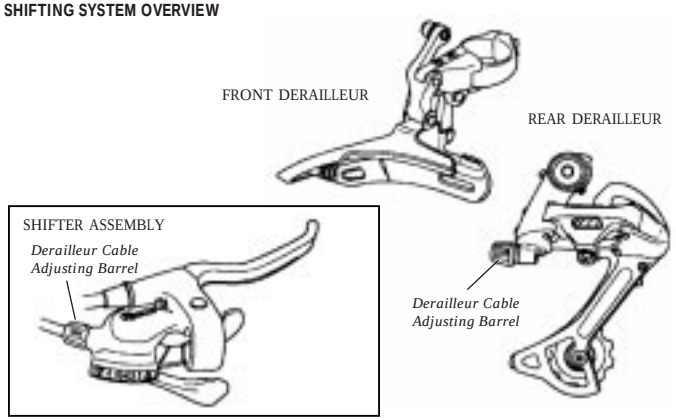
Raising or lowering the handlebars using stem adjustment can affect the adjustment of your bicycle's brakes. Make sure after you adjust the handlebar height that you check the brakes for proper operation.

CHAPTER 8
DRIVE TRAIN AND SHIFTING SYSTEM

OVERVIEW OF THE SHIFTING SYSTEM:

The shifting system consists of the components that allow you to shift gears: the front and rear derailleurs, the shift levers, the shift cables and the chain. Both front and rear derailleurs are spring-loaded. The spring pushes the derailleur cage to the smallest gear while the derailleur cable pulls the cage to the largest gear. When you push the right shift lever closest to you forward, the rear derailleur shifts the chain from a smaller to a larger cog. When you pull the smaller right lever in front of the handlebars back, it shifts the chain from a larger to a smaller cog. Shimano XTR and Nexage model components offer shifting that has the same function but moves the derailleurs in the opposite direction of standard.

SHIFTING SYSTEM OVERVIEW



Shift gears only when pedaling forward: never attempt to shift gears when the bicycle is stationary or while moving backwards. Don't force the gear levers. The chain should move easily between chain rings or adjustment is required. It's a good idea to practicing shifting in a flat, safe area in order to get the feel for your Marin bicycle.

> Warning: While you can make adjustments to your Marin's shifting system yourself, major maintenance and repairs should be performed only by a professional mechanic. Replacing the cable and chain and other major maintenance activities are beyond the scope of this manual. If, after you have done adjustments yourself, you continue to experience difficulties with your shifting system, take it to your dealer before you ride.

Never lay your bicycle on its right side as this can damage the derailleurs.

NEED FOR DRIVE TRAIN ADJUSTMENT:

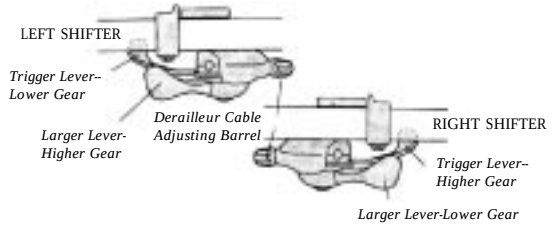
The derailleur cables stretch with use and occasional adjustments will be necessary to ensure accurate and easy shifting. If you experience sluggish or difficult shifting, if you hear a rubbing or grinding noise when you shift or if the chain rubs any part of the bicycle or falls off during or after a shift, you'll need to adjust the derailleurs. The rear derailleur should be checked and adjusted first since the front derailleur can't be aligned if the rear derailleur is not adjusted properly.

You can perform fine-tuning adjustments to the shift cables by using the cable adjusting barrel on the shift levers. (In addition, the rear derailleur has a cable adjusting barrel.) Major adjustments require that you loosen the cable fixing bolt and pull the cable taut. It will also be necessary to align the position of the components of your shifting system. This will be covered in depth in the following derailleur sections.

SHIMANO SHIFT LEVERS

The right lever shifter controls chain movement on the rear cluster. It consists of two different levers. Push the larger lever (the lever that is closest to you) forward with your thumb in order to move the chain from the smaller cogs (higher gear) to larger cogs (lower gears). Pulling the small, “trigger-like” lever with your fore-finger accomplishes the opposite; it moves the chain from the bigger to the smaller cogs.

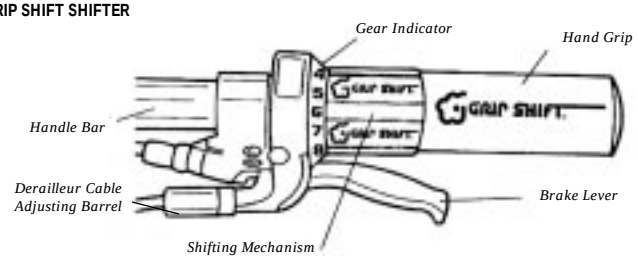
RIGHT AND LEFT SHIFT LEVERS



The left lever controls chain movement on the three front chain rings. Pushing the larger lever that is closer to you forward moves the chain from the smaller (lower gear) chain ring to the larger. Pulling the smaller, “trigger-like” lever with your fore-finger will move the chain from large to small rings.

Shimano XTR and Nexave shifters found on some models use the same push & pull “trigger-like” system as above, except shifting has the opposite effect. Pushing on the larger lever moves to a smaller cog and pulling on the smaller trigger lever moves the chain from the smaller to the bigger cogs.

GRIP SHIFT SHIFTER



GRIP SHIFT OR SHIMANO REVO SHIFTERS:

The Grip Shift and Shimano Revo shifters found on some Marin bicycles operate differently than the trigger shifters described earlier. The right shifter still controls the rear derailleur. Twisting the control towards you shifts to an easier gear (larger rear cog). Twisting the control away from you shifts to a harder gear (smaller rear cog).

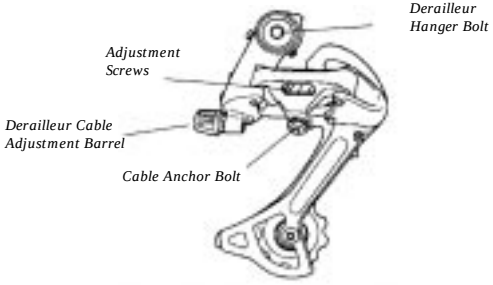
Similarly, the left shifter controls the front derailleur. By twisting towards you, the chain shifts to a harder gear (larger chain ring). Twisting the control away from you shifts to an easier gear (smaller chain ring).

REAR DERAILLEUR

First shift your bicycle so the chain is in the smallest rear cog. Stand to the rear of the bicycle and make sure that the small cog, the two derailleur pulleys and chain are all in line. If they are not, the rear derailleur or your frame’s derailleur mounting tab may need adjustment/alignment.

You can take up minor slack in the shifting cables by using the adjustment barrel on the shift lever. Turn the adjustment barrel on the shift lever or at rear derailleur counter clockwise as necessary. If this is not enough, you can adjust cable length where the cable bolt clamps.

REAR DERAILLEUR



Shift the chain to the smallest cog (see drawing on pg. 28). Loosen the cable anchor bolt on the derailleur and pull the cable tight with pliers. Re-tighten the cable anchor bolt.

Note that there are two screws placed one above the other on the rear derailleur body. One is for making high gear adjustments, the other for making low gear adjustments. Set the high gear adjusting screw first by spinning the pedals and slowly shifting the chain onto the smallest rear cog and largest chainring. Loosen the cable clamp bolt on the rear derailleur and free the cable. Turn the rear derailleur's high gear adjustment screw until the outer side of the small cog, the two derailleur pulleys and the chains are all in alignment.

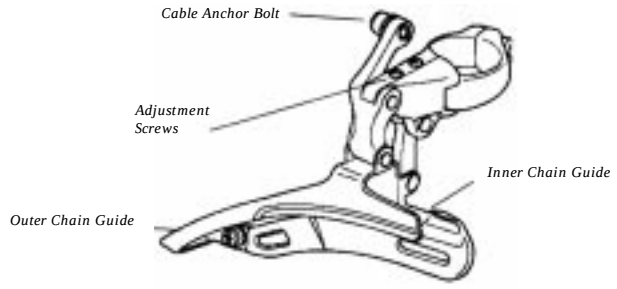
To set the low gear adjusting screw, shift the chain to the largest rear cog. Stand at the back of the bicycle and adjust the low gear adjusting screw to make sure that the large cog, the two derailleur pulleys and the chain are in alignment. You may need to turn the rear derailleur's adjusting barrel until they are in line. Re-tighten the low gear adjusting screw until it meets resistance. Please note, care must be taken so as not to adjust the adjustment screw so that the rear derailleur can shift into the spokes of the rear wheel.

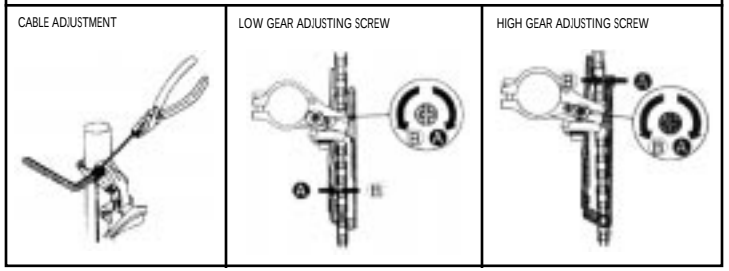
FRONT DERAILLEUR

Check the alignment of the front derailleur system: the outer plate of the front derailleur should be almost parallel to the large chainwheel. The lower edge of the outer plate should be 1mm to 3mm (1/16 to 1/8 inch) above the teeth on the large chainwheel when it is directly above.

Shift the chain so that it is on the largest cog in the back and the smallest chain ring on the front. Turn the low gear adjusting screw until the chain is about 1mm-1.5mm from the inner chain guide, i.e. until it just clears the inner cage of the derailleur.

FRONT DERAILLEUR





To adjust the high gear adjusting screw, shift the chain so that it is on the smallest rear cog and the largest chain ring on the front. Turn the high gear adjusting screw so that the chain just clears the outer derailleur cage.

SHIFTING SYSTEM CABLES

Derailleur cables should be inspected for wear before each ride, checking for kinks, broken strands or frayed ends. You should also check the cable housing for wear. If you find a problem, do not ride your bicycle until cable has been repaired or replaced.

CHAIN

The chain transmits your pedaling power to the rear wheel, and moves from sprocket to sprocket as you change gears. You need to clean and lubricate your chain frequently as it is the most exposed component on your bicycle. You should spray the chain with a good cleaner (such as “Simple Green”), and then wash off the cleaner before applying a high quality chain lubricant.

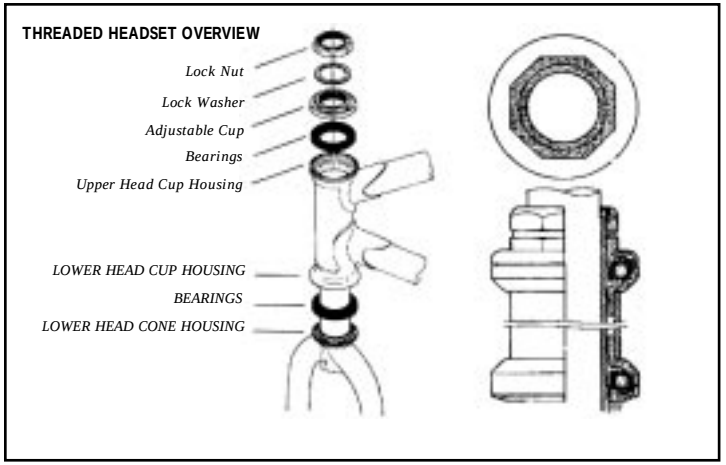
Proper maintenance and annual replacement of your chain will greatly increase the life of your cog set and drive train.

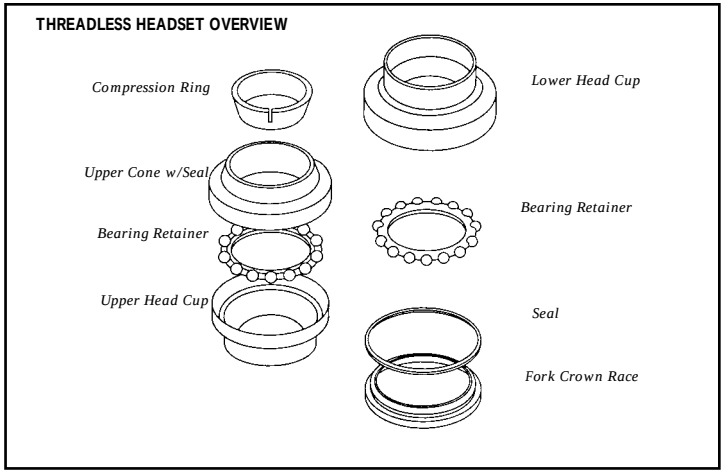
When you’re finished adjusting your shifting system, you should check your work by shifting through all of the front and rear gear combinations, checking to ensure that the chain does not rub against the derailleur guides. Remember: if you have any doubts about your work or if your bicycle maintenance is not covered by this manual you should take it to your Marin dealer or a qualified mechanic.

CHAPTER 9
HEADSET, HANDLEBAR, STEM SADDLE AND SEATPOST

HEADSET:
Marin bicycles use both threaded and threadless headsets. It is important that you understand which type of headset your bicycle is equipped with prior to attempting any adjustments.

Threaded headsets consists of bearings, cups, cones, lock nuts and seals. It is located in the head tube and, is the group of bearings that allow the handlebars, stem and fork to turn within the frame. It is a major part of your bicycle's steering system. The headset should be disassembled, cleaned, lubricated and reassembled at least once a year, more frequently if you ride often. Headsets may become loose over time due to vibrations from riding, causing wobble and loss of control.





To check headset adjustment, squeeze the front brake lever tightly and rock the bicycle front to back. If you feel any looseness in the fork or hear metallic or clicking sounds as you rock back and forth, your headset needs adjustment and/or maintenance. You can perform the following minor adjustment yourself:

Loosen the top nut on the headset, then tighten the adjusting cup but do so only in small increments. Re-tighten the lock nut. Check the headset adjustment again. Do not over tighten the adjusting cup of the headset. Lift the front wheel off of the ground and make sure the handlebars turn smoothly.

Threadless headsets are used on many Marin bike models as well as selected road and city bike models. Threadless headsets are very similar to a standard threaded headset. The key difference is that threaded headsets rely on a threaded top nut to adjust the bearings. Threadless headsets are held together based on the placement of the

handlebar stem. Both systems offer their own advantages. However, threadless systems can be easier to adjust.

In order to adjust a threadless headset, first loosen the two bolts at the back of the handlebar stem (see pg. 9). Next, turn the bolt on top of the steerer tube clockwise to tighten the headset or counter clockwise to loosen the headset.

Finally re-align the handlebar stem to assure it's straight and re-tighten the two bolts on the back of the stem.

Always make sure the stem is tightened to the correct torque. It is this clamping mechanism that is holding your fork and handlebar.

Warning: THREADLESS HEADSETS - The top nut on the top of the steerer tube is in place for the sole purpose of making headset adjustments.

Do not ride your bicycle if your headset is either too loose or too tight. Take it to your Marin dealer for adjustment.

Headset maintenance requires special tools and extensive mechanical experience. You should have your headset serviced by the dealer from whom you bought your Marin bicycle.

HANDLEBAR AND STEM:

Handlebar and stem inspection and adjustment are described in Chapter 1.

Before riding you should always inspect your bicycle to ensure that the stem is inserted far enough into the steering tube. Also, inspect both stem and handlebar for fatigue. The stem wedge and bolt should be lubricated every six months.

If you are unsure about adjusting your handlebar or stem, visit your local bicycle dealer and have your bicycle adjusted by a professional.

SADDLE AND SEATPOST:

Saddle and seatpost inspection and adjustment for height, fore/aft and angle are described in Chapter 1. Remember: Never ride with the seatpost raised beyond the maximum height line on the seatpost.

CHAPTER 10
WHEELS/TIRES, PEDALS, HUBS & BOTTOM BRACKET

WHEELS/TIRES

(See Chapter 2 “Removing and Installing Front and Rear Wheels” first.)

TIRE CARE:

Tire neglect is often the cause of the greatest headaches in bicycle maintenance. It is normal for inner tubes to lose air over time. Tires are subject to wear.

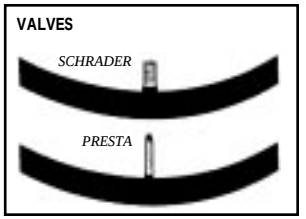
INFLATION:

Check tire inflation by pinching the tire between thumb and forefinger. It should feel firm. The shape of the tire should change very little as you get off your bicycle. Every now and then use a tire gauge to validate your assessment of tire inflation.

Avoid using service station high pressure air hoses. They easily overfill bicycle tires and can cause serious damage to the inner tube. You should use a bicycle pump when ever possible. Proper air pressure ranges for any type of tire are listed on the side wall of the tire. If two air pressures are listed, the higher is for on-road and lower is for off-road riding.

A NOTE ON TIRE VALVES:

There are two types of valves used on the inner tubes on Marin bicycle, one of which is similar to that found on automobiles called the “Schraeder” or “American valve.” The other type is known as the “Presta” or “French valve.” Presta valves are slender metal valves and are most commonly used on bikes with narrow rims.



Learn what type of valves your bicycle has. It will be the first question the bike shop asks you when you go to buy an extra tube. Most quality bicycle pumps come equipped to fit either type of valve. Read the instructions with your pump so you can effectively use it on either type of valve.

WHEEL INSPECTION:

Inspect the rims of your bicycle’s wheels before every ride, especially checking for dents. A rim with major dents or any cracks must be replaced. Also check for wheel “trueness”: Spin each wheel and make sure that it spins straight and true, without wobble. Periodically check for any broken spokes. Have your Marin dealer re-adjust loose spokes and replace broken ones.

Or course, you should periodically check your tires for weather checking or any imbedded foreign objects such as thorns, pebbles, glass or nails.

FLATS:

Flats can occur at any time. From the first mile you ride on your new Marin bicycle, you are at risk of a flat. Flats are considered part of normal wear and tear and are not covered under warranty by Marin Mountain Bikes or your dealer. Please be responsible for yourself and carry appropriate materials to fix a flat and learn how to make this simple repair yourself.

HOW TO FIX A FLAT:

After removing the wheel from the bicycle, remove one side of the tire from the rim. You may be able to do this with your hands but, if tools are required, use tire levers, do not use screwdrivers or other sharp objects as these can further damage the inner tube. Pull the tire completely off the rim, pulling the inner tube out completely but

being careful not to damage the valve. If only minor damage has been done to the inner tube, you should be able to patch it, following instructions on the patch kit. Many bicyclists carry a spare inner tube so that they can do patchwork at home rather than during a ride. This is also a good time to examine the tread of the tire. Any major punctures require that you replace the inner tube completely. If you must replace the inner tube, please take the damaged inner tube away with you and dispose of it properly.

Check inside and outside of tire for thorns, glass or other objects that may have caused the puncture. Remove offending object before reinstalling tire.

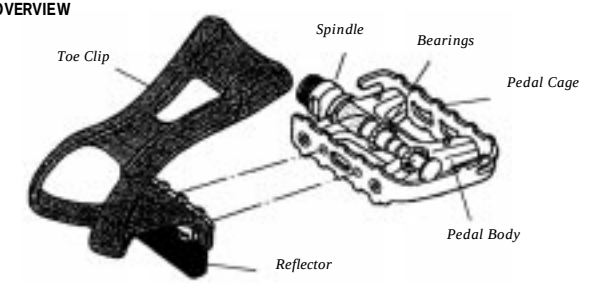
Put the tire back onto the rim, pushing the tire back at the valve hole and putting the valve stem through the hole. Push the inner tube inside the tire, ensuring the valve is straight. Pump a little air into the tube and deflate it again to release any kinks. Inflate the tire completely and install the wheel back onto the frame. Most cyclists carry repair kits with them containing a pump, patch kit, tire levers and a spare inner tube. This is a strongly recommended practice!

PEDALS

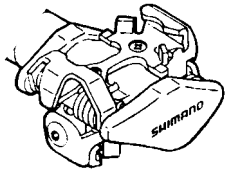
Pedals consist of the spindle, cone, lock nut, tongued washer, bearings and the pedal body. Inspect your pedals frequently for looseness if when moved from side to side or rotated, roughness or grinding occurs. This could be caused by a bent pedal spindle.

The right and left pedals have different threading directions and, for this reason, it is important that the correct pedal be reinstalled into the correct crank arm if ever it is necessary to remove them. They are usually marked “L” and “R” on the spindles, denoting left and right. Major pedal overhaul requires an expertise beyond the scope of this manual and should be performed only by your Marin dealer.

PEDAL OVERVIEW



SHIMANO SPD CLIPLESS PEDAL

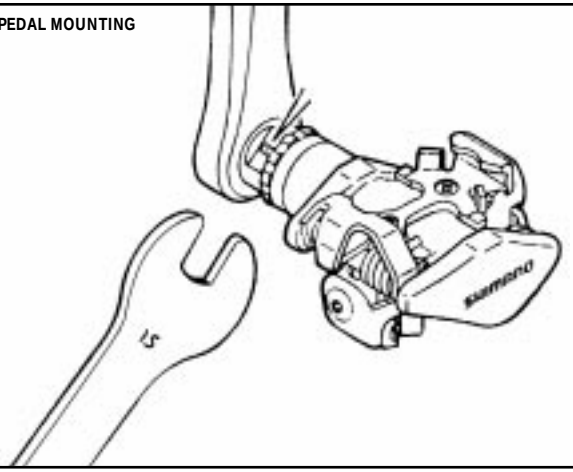


SHIMANO SPD CLIPLESS ROAD PEDAL

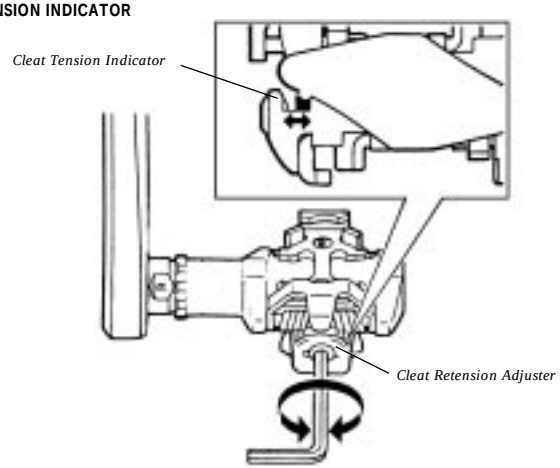
Bicycles equipped with clipless pedals require additional maintenance. Clipless pedals should be kept clean, free from dirt or mud build up and should be kept lubricated. This type of maintenance will result in prolonged high performance.

Warning: Only use the cleats supplied with your pedals. Using other brands of cleats could result in less than optimal performance and/or injury.

PEDAL MOUNTING



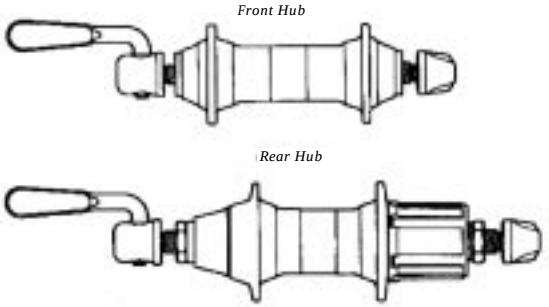
TENSION INDICATOR



CLIPLESS PEDAL TENSION ADJUSTMENT

Clipless pedal tension is the force required to step into or click out of a clipless pedal. This force can be adjusted with a small hex wrench. Turn the cleat retension adjuster screw clock-wise to make it harder to release your cleat from the pedal. Turn the cleat retension adjuster screw counterclockwise to make it easier to release your cleat from the pedal. Take care not to turn adjuster past its limit; doing so will render your pedals inoperable. There are two cleat tension adjusters on most clipless pedals. One for each side of the 2-sided pedal. There is also a tension indicator that shows how much force is applied to the spring in the pedal, and how much tension will be needed to release your cleat.

HUBS

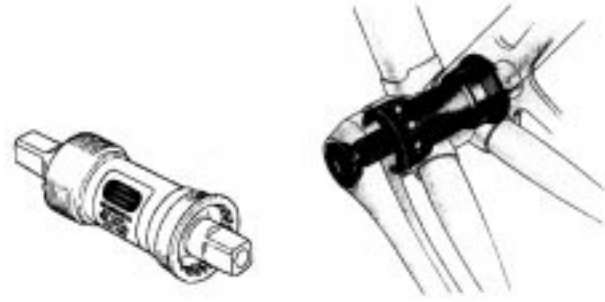


HUBS

You should check for loose hub bearings before every ride. You should not hear any looseness in the hub bearings as you try to move the rim from side to side. If there is movement between the axle and the hub or if you hear a grinding noise when spinning the wheel, your hub bearings need adjustment.

Note: Hub maintenance requires special tools and expertise. For this reason, it should always be performed by your Marin dealer or a professional bicycle mechanic.

CARTRIDGE BOTTOM BRACKET



BOTTOM BRACKET

All Marin bicycles come equipped with cartridge sealed bottom brackets. The bottom bracket assembly consists of the axle and the sealed bearings to which the cranks for the pedals are attached. Your bottom bracket may need replacement if you hear noise or feel roughness or if the cranks do not turn smoothly.

Note: The bottom bracket assembly requires special tools and expertise to be serviced. This work should be done by your Marin dealer of by an experienced bicycle mechanic.

CHAPTER 11
FRONT SUSPENSION
FULL SUSPENSION

SUSPENSION FORKS

Most Marin Mountain Bikes models have front suspension forks that do everything from taking the edge off the bumps, to delivering top rate performance that keeps your tires hooked up and on the ground for better control. The suspension fork equipped with your bicycle is set up for medium size riders weighing approximately 140 to 180 pounds. Riders new to front suspension often believe the fork on their bicycle is adjusted too soft. Remember that the fork is designed to be plush and absorb shock from the trail. You should only consider a firmer ride if you bottom-out the fork several times per ride. If you do not fit into the weight range mentioned above, more extensive tuning may need to be performed with the help of your local Marin dealer.

Making a front shock firmer or softer involves changing some internal fork parts. These parts might need to be ordered and are not covered by the purchase price of your bike. All Marin models have gone through geometry changes to keep the front end of your bike steering and handling at it's optimum performance. Some models of forks will have pre-load adjustments as well as rebound damping. What these adjustments allow you to do, is tune the forks performance to your specific riding style and rider weight. Ask your dealer or refer to manual specific to your fork for a demonstration of these features and how they relate to the ride.

Suspension forks used on some models have a break in period of three to four hours of use. The fork action may seem stiff on the show room floor but within a small amount of break in time the fork will then move smoothly. The most important part of keeping your fork working properly will be making sure the slider legs are lubed. Newer style Manitou forks come with grease ports mounted on the outside of the

fork legs. This enables you to lube the fork with the aid of a grease gun. Refer to the owner's manual supplied by the fork manufacturer or check with a Marin dealer for the type of grease that is most recommended. With other style forks, lift the boots, clean the legs, with a clean rag and put a light coating of grease on the legs. Next, lower the boots and make sure they are secure to keep unwanted elements out. This will help ensure smooth fork action. If further maintenance is needed either refer to your specific fork manual or take your bike to an authorized dealer.

WARNING: Bikes equipped with front suspension will compress and dive under heavy braking. This tendency can throw a rider off the bike. Take the time to get used to the handling characteristics before trying any downhill or high speed decents.

REAR SUSPENSION BICYCLES

Marin full suspension bicycles are designed to offer the rider the maximum in performance and fun. Ease of service has also been engineered into our full suspension design to assure years of low maintenance enjoyment.

While much of the service and routine maintenance is exactly the same as that of a hardtail bicycle, you will need to take extra care to assure that both the front and rear suspension mechanisms are functioning properly.

REAR SUSPENSION DISCUSSION

Marin full suspension bicycles use two types of rear shocks, "Coil over" and "Air Spring shocks". Both types of shocks offer different types of advantages. It is important to understand which type of shock your bicycle is equipped with before making any adjustments.

The first type of shock to be discussed is called a "coil over" shock. This type of shock relies on a coil spring to support the weight of the rider and absorb shock from the trail. Coil over shocks use a hydraulic rebound damper to control the rebound action of the shock.

While the coil spring is very simple and easy to adjust or replace, it is important to understand that the hydraulic rebound damper is nitrogen charged and should only be serviced by the factory.

The second type of rear shock is called an "air spring shock". This lightweight type of shock relies only on air pressure to support the rider's weight.

For this reason, it is essential that proper air pressure is maintained. Before every ride you should check the air pressure to assure it is correct. You will need to consult the owner's manual supplied by the rear shock manufacturer or your Marin dealer to determine the correct air pressure for a rider of your size.

It is important to understand that air shocks use a very small volume of air, but the air they do carry is at a very high pressure. For this reason, you should either have a professional bicycle mechanic add air to your shock or purchase a special shock pump as recommended by the rear shock manufacturer.

Air spring shocks can lose pressure over time and may require inflation depending on riding conditions and rider.

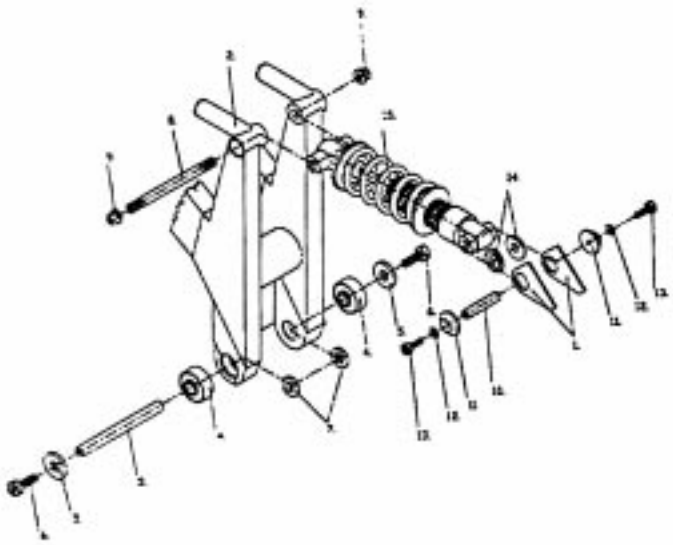
REAR SUSPENSION:

This group includes many models with the same basic principle of suspension, but are different in how much rear wheel travel the model has. Our line of full suspension bikes are designed to offer the rider the maximum in performance, lightweight, durability, and comfort.

While much of the service and routine maintenance is exactly the same as that of a hardtail bicycle, some extra attention to the suspension shock action should become part of your regular bike inspections. As mentioned in the front suspension section, quite often riders will set the rear suspension much firmer than is optimal. Our engineers designed the bikes to efficiently absorb shock from the trail and maintain traction in the toughest circumstances. Because of the way the Marin full suspension bicycle is designed, the firmness of the rear shock actually has little to do with the bikes pedaling efficiency or action of the rear end. Inherent in the bikes design and pivot placement, there is a point when the suspension "flattens out" using the chain tension to hold the swing arm firm while climbing, yet active when going over rough terrain. This tendency is most noticeable when using your small chain ring in the front and the three larger cogs in the rear. For this reason a lock out device is not necessary nor recommended. A lock out device may put extra stress on the frame in a way that could cause possible damage not covered by warranty. Working on a smooth pedal spin will ultimately be your best tool in getting you up the hill efficiently.

It is very important to achieve a balance between front and rear suspension action. As with front suspension, you have the ability to tune the shocks action to rider weight, ride characteristics, or major terrain changes. These adjustments are made with pre-load adjustment, rebound damping control and compression adjustment which is available on some shocks.

SWINGARM PIVOT ASSEMBLY - EXPLODED VIEW



1	*Front Main frame*	9	*Aircraft Nut, Self Locking M8*
2	*Rear Swingarm*	10	*Shaft Shock Damper - Static End*
3	*Pivot Axle*	11	*Collar Shock Damper Mount*
4	*Pivot Bearing*	12	*Washer*
5	*Shield Washer*	13	*Screw Socket Head*
6	*Screw Socket Head*	14	*Bush - Top Hat*
7	*Pivot Spacer*	15	*Shock*
8	*Stud Damper, Rear*		

REAR SUSPENSION SET-UP - PRELOAD

The suspension load from the rear wheels is taken by the steel coil spring which is around the shock body (or air pressure on some shocks). At the end of the spring you will find the pre-load adjustment nut which is threaded on to the shock body.

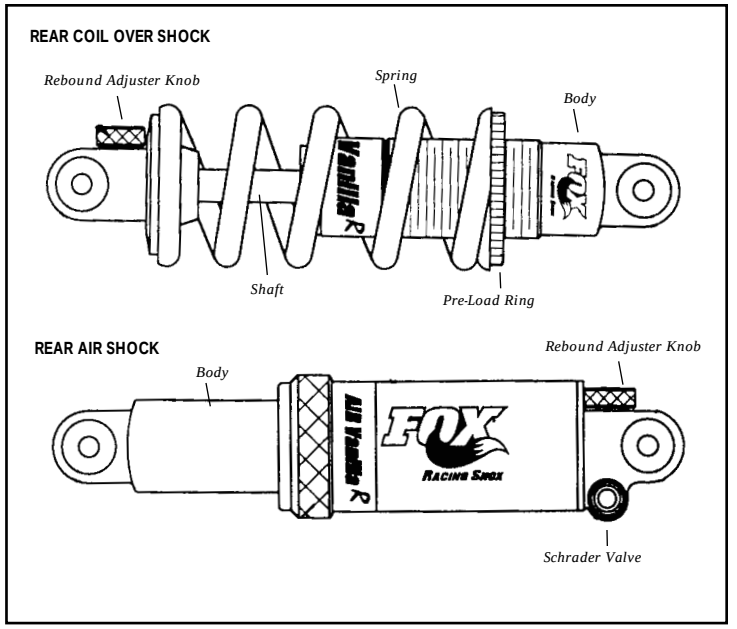
Pre-load is the amount of force placed on the spring. Pre-load raises or lowers the initial pressure required to compress the shock. Pre-load is used to control how much the shock is compressed when the rider sits on the bicycle. The amount that the shock compresses when the rider is sitting on the bike is called shock sag or sag. In order to achieve maximum traction and performance, we recommend that it is best to run a small amount of initial sag front and rear. Sag allows the bike to soak up not only bumps but also dips keeping your wheels connected for that “maximum traction”. The range of sag needed ranges between 15-30% of overall shock travel. The sag range covers all types of riding from cross-country at a range of 15-25%, to down hill riding which usually is more in the 25% range. To make this process easy, we have designed sag cards so you can quickly set the rear end up for maximum performance and rider weight . If you did not receive a sag card ask your dealer for one.

SETTING THE CORRECT SAG FOR YOUR FULL SUSPENSION

With no weight on the rear wheel, un-screw the pre-load nut. This will release any pre-load on the spring. Now turn the screw 2 turns to slightly compress the spring.

With no weight on the bike, check that the damper is fully extended.

Sit on the bike. For our 4" travel lightweight FRS line, the shock should be compressed by 10mm. For our line of 5" travel bikes, the shock should be compressed by about 12mm. For the long travel models, the shock should be compressed to 15mm. Check this using the included set-up card template. If the shock unit is too short, wind the pre-load nut to further compress the spring until the correct length is obtained. If the shock unit is too long, loosen the spring until the correct length is obtained. On the models with an air sprung shock, lower or raise the air pressure accordingly.



The standard spring fitted to all bikes is ideal for riders weights between 125lbs (57kg) and 190lbs. (86kg.). Harder or softer springs are available separately from your dealer.

REAR SUSPENSION SET-UP - REBOUND DAMPING

The second part of tuning is rebound damping. Rebound damping controls how fast or slow the shock returns to its full length after being compressed. If the shock returns too fast, it will make the bike feel bouncy like a pogo stick. To slow, and it will feel like you have no rear suspension. Some shocks equipped on Marin bikes have rebound damping control built into them so you will only be able to work on setting up the pre-load as discussed above. If you have a

shock with rebound damping adjustment, we recommend only slowing the return a little bit at a time, as too much rebound damping will not allow the shock to return fast enough for the next bump it encounters. The ideal adjustment is to find a balance between the rear shock running out of travel because of repeated impacts (sometimes called “packing down”) and the shock returning to full length too quickly. Too little rebound control and your bike will feel like a pogo stick.

COMPRESSION CONTROL

The third adjustment is compression control which is only available on some shocks. This adjustment allows the rider to tune the speed of how fast the shock compresses. This works in the same manner as rebound control. If used other than sparingly, the shock will not perform at it’s optimum.

Once set up, little if anything will need to be done for many different terrain conditions.

GENERAL MAINTENANCE

Periodically check all pivot points on your Marin full suspension bicycle. Make sure the pivot points at the rear shock and main pivots are all properly torqued to the correct torque values (see pg. 40).

Little if any maintenance will be needed with our full suspension frame as the design is designed to be as durable as a hardtail frame. The swing arm pivots on a set of aircraft certified, full compliment bearings that are specifically designed for the loads your bike will experience. While these bearings are double sealed and may last the lifetime of the bicycle, it may become necessary to replace them. This work should be performed by an authorized Marin Dealer as it requires special tools.

CHAPTER 12
CLEANING, LUBRICATION AND STORAGE

CLEANING:

Mountain bicycles, by their very nature, pick up a lot of dirt! Keeping your bicycle clean is an important part of its regular maintenance. Dirt and grit are particularly damaging to the bicycle’s moving parts which includes chain, rims, gears and derailleurs. If you ride in a lot muddy terrain, you’ll probably need to clean your bicycle after every ride.

Don’t take your bicycle to a coin-operated car wash as the high pressure spray will get into sealed bearings and will remove or contaminate the grease. It’s always best to clean your bicycle by hand. Never wipe down a dirty bicycle without first gently rinsing off the dirt with water. Otherwise the dirt will act as an abrasive and ruin your bicycle’s finish.

Here are a couple of tips on cleaning your bicycle:

- To get dirt and mud off your bicycle lightly wash off most of the loose dirt or mud with a hose. Next, use a soft brush with warm soapy water and clean off the rest of the bicycle. Lightly rinse. Avoid using a high pressure spray to clean your bicycle. This can result in contaminated bearings.

- To clean greasy and dirty chains and drive train components. First, spray on or apply a degreaser like Simple Green or Finish Line Ecotech. Let it sit for 10 minutes or so. Next, take an old brush or Park™ gear brush and scrub any dirty areas. Last, lightly spray off residue with a hose. Allow bike to dry out before re-lubricating chain and drive train parts.

Cleaning your bicycle is an ideal time to do an overall inspection. Use

this opportunity to check your break and gear shifting systems of your bicycle and to make sure all nuts and bolts are properly tightened.

LUBRICATION:

Pay attention to the moving parts of your bicycle, in particular the chain, and lubricate according to the schedule suggested in Chapter 12 or more frequently if you ride your bicycle through challenging or wet terrain. Use high performance lubricants specifically designed for bicycles. Lubricants designed for automobiles or motorcycles are not recommended.

When lubricating the chain, the important thing is to get the lubricant into the internal parts of the chain, the roller, the pins and the hollow bushings. Evening is a great time to lubricate your chain. This allows the lubricant to soak into the chain overnight. In the morning wipe off any excess. This technique offers great lubrication and avoids excess lubricant which will attract unwanted dirt.

When lubricating the derailleurs, it's important to not over-oil them since excess grease attracts grime. Periodically put a drop of oil on all pivot points.

Don't oil the brake calipers. Be sure to keep lubricants off of the tires, rims and brake pads. However, an occasional drop of oil to the pivot of the brake lever is recommended.

In order to lubricate the cables for the shifting and braking systems you must remove the cables from their housings and grease them. It is therefore recommended that you have your Marin dealer perform this type of service. The same is true for the hubs, headset, bottom bracket and pedals. In order to lubricate them they must be disassembled, cleaned and then reassembled and adjusted. You should have your Marin dealer do this maintenance for you.

TOOLS YOU WILL NEED:

The following is a list of tools you may require for basic home bicycle repair. More complicated repairs entail the use of more advanced bicycle tools which the average cyclist probably does not want to purchase. You will need to have your Marin dealer do this type of maintenance for you.

You'll probably want to have:
A torque wrench with inch per pound graduations
Open-end hex wrenches: 9mm, 10mm
14 mm socket hex wrench
15 mm open-end pedal wrench
Allen wrenches: 4mm, 5mm, 6mm
#2 Phillips-head screwdriver
Third-hand tool or toe strap (for brake adjustment)
Bicycle inner tube patch kit
Tire Levers
Bicycle tire pump and gauge

A WORD ABOUT TORQUE:

How tight the nuts and bolts on your Marin bicycle should be is described in terms of "torque", a word which describes the measure of rotational force around an axis, i.e. when you tighten a bolt. Torque values (expressed in inches per pound) are listed in the table on the following page. It is important to keep in mind that you can over tighten as well as under tighten nuts and bolts. You need to tighten and adjust all the nuts and bolts on your bicycle at least once a year or more frequently if you ride often.

TORQUE VALUES:

If you break a bolt, it is because you have exceeded the torque recommendation. It is therefore suggested that you pay close attention to the following values:

Brake lever clamp bolts	25-40 in/lb
Brake lever pivot bolts	25-35 in/lb
Brake arch pivot bolts	30-50 in/lb
Brake pad bolts	70-80 in/lb
Straddle cable bolts	40-60 in/lb
Cable carrier bolts	35-40 in/lb
Brake cable anchor bolts	50-70 in/lb
Cable carrier bolts	35-40 in/lb
Derailleur cable anchor bolts	35-50 in/lb
Front derailleur clamp bolt	20-35 in/lb
Rear derailleur fixing bolt	60-75 in/lb
Shift lever clamp bolts	25-40 in/lb
Shift lever pivot fixing bolts	22-30 in/lb
Handlebar clamp bolt	80-100 in/lb
Handlebar stem expander bolt	175-200 in/lb
Crank fixing bolts	200-240 in/lb
Pedals	350 in/lb
Toe clip screws	25-30 in/lb
Chainwheel bolts	70-95 in/lb
Saddle fixing bolt	140-175 in/lb

FRS TORQUE VALUES

Rear Shock Mounting Nuts	
Aircraft Nut, Self Locking M8 (#9)	180 in/lb
Static Shock End Mounting Screws	
Screw Socket Head (#13)	60 in/lb
Main Pivot Screws	
Screw Socket Head (#6)	120 in/lb

STORAGE:

Don't store your bicycle outdoors. It should be protected from rain and snow as well as from the sun. If you're going to store your bicycle long-term, it should be suspended so the weight of the bicycle doesn't rest on the tires or the air should be let out of the tires.

If you live in a coastal, salty air location understand that you will need to take extra care to keep you're bicycle free from corrosion and oxidation.

While not riding, do not leave your bicycle resting on its right side as this can damage the derailleurs.

Please note: If you do not understand any part of this Manual, please see your dealer.

CHAPTER 13
MAINTENANCE SCHEDULE & RECORDS

After acquiring your Marin Mountain Bike and riding it for about a month, you should have it serviced by your Marin dealer to ensure that all of its components are functioning properly. The following schedule of maintenance is suggested. If you ride your bicycle frequently or often take it through muddy and challenging terrain, you'll want to adjust this schedule accordingly.

TIME PERIOD NECESSARY SERVICING

EVERY RIDE
Spot check quick release and brake adjustments

EVERY WEEK
Check tire inflation with gauge
Lubricate chain

EVERY MONTH
Wash & dry bicycle, inspecting carefully
Oil brake lever pivots
Oil brake pivots
Oil front & rear derailleur pivots
Oil control cables at cable housing points
Check seatpost quick release or bolt adjustment

EVERY 3 MONTHS
Check torque values of nuts & bolts
Re-lubricate seatpost

EVERY 6 MONTHS
Dealer should service bicycle
Wheels should be trued by dealer
Brake cables greased and adjusted by dealer
Replace brake pads as needed
Grease and adjust derailleur cables (by dealer)
Re-grease hub bearings (dealer)
Re-grease brake arch pivots
Re-grease handlebar stem
Re-grease headset bearings
Re-grease crank bearings
Re-grease crank arm spindle
Replace chain (if necessary)
(When chain is replaced, you may need to replace the chain rings and cogs/freewheels.)

EVERY YEAR
Re-grease pedal bearings

INFORMATION ABOUT MARIN'S LIMITED FRAME & PARTS WARRANTY

All Marin frames and components have a limited and finite user lifetime. The length of time a frame or part will last is dependent on the construction and materials used in that frame and or component as well as the maintenance and care a frame or part is subjected to over its lifetime. When purchasing bikes or parts that are designed for maximum light weight a trade off is involved favoring performance over extended durability. When running these high performance frames/parts frequent inspection should become routine as subtle break downs can be detected possibly saving you from catastrophic failure. Marin does not cover bikes or parts that are subjected to race situations, jumping, trick riding, bikes exposed to the elements, riding with heavy loads, bikes set up with child carriers, extreme riding and any non-standard use.

You are solely responsible for any damaged caused by riding your bike in a fashion that puts yourself in danger. Even though our bikes are designed for off-road use, we cannot be responsible for pilot errors which could lead to severe injury or death.

You are responsible for checking your equipment before each ride to make sure that the frame or parts attached are not cracked or damaged. Parts and frames do not just fail, they are designed to show signs of wear or damage leaving the user responsible for checking their equipment before each ride to determine if something is cracked or broken. If you choose to ignore such inspection and breakage or failure occurs, responsibility will be solely yours.

Be safe, check your equipment before and after each ride.

LIMITED WARRANTY

Subject to the terms, conditions and limitations set forth below, Marin Mountain Bikes, Inc. (a California Corporation) located in Novato, California warrants to the original owner of each new Marin bicycle that this bicycle is free from defects in workmanship and materials provided it is purchased from an authorized Marin Bicycle Dealer.

This Limited Warranty covers frames and rigid forks of Marin Bicycles and shall be for the lifetime of the bicycle while with its original owner.

Marin likewise warrants all original parts including paint and decals for one year from the date of purchase.

Suspension forks shall be covered under the stated warranty of the original manufacturers.

All Shimano parts are warrantied for one year from date of purchase through Shimano or an authorized Shimano Warranty Center.

This warranty is expressly limited to the repair or replacement of a defective frame, fork, or defective part and is the sole remedy of the warranty.

This warranty applies only to the original owner and is not transferable. Claims under this warranty are to be made through an authorized Marin dealer. Proof of purchase is required.

A warranty registration card must be completed and received by Marin Mountain Bikes before a warranty claim may be processed. Please include the bicycle serial number on the warranty registration card.

The warranty does not cover normal wear and tear, improper assembly, follow-up maintenance, or installation of parts & accessories not originally intended or compatible with the bicycle as sold.

This warranty does not apply to damage or failure due to accident, abuse or neglect.

Marin shall not be responsible for incidental or consequential damages.

Labor charges for parts change overs or incidental costs such as transportation to and from an authorized dealer for repair or replacement of any defective part or accessory are not covered in the warranty.

The user assumes the risk of any personal injury or damage to the bicycle or other losses if the bicycle is used at any time for stunt riding, jumping, acrobatics, dirt biking or similar activities, competitive riding, with power or motor assistance of any kind, or anything other than normal use. This warranty gives you specific legal rights, and your rights may vary from state to state.

Marin does not authorize or permit anyone else, including it's dealers, to make any other warranties, expressed or implied, for Marin.

This warranty applies only for those bicycles purchased in the USA. If purchasing a Marin Bicycle outside the USA ask your dealer for the specific warranty in your country.