

EQUIPMENT AND ACCESSORIES

Bicycle equipment does not have to be expensive or fancy; however, it does need to fit properly and be reliable and functional. Choose equipment you feel comfortable using. In addition, it is false economy to put yourself at risk by not purchasing safety equipment. If you do crash, the damage to you and your bike will cost several times what it would cost to equip yourself for safe riding.

IDENTIFICATION, MEDICAL INFORMATION and CHANGE FOR A PHONE CALL

These items should be carried with you at all times. Identification is necessary if you are stopped for a traffic violation, and if you crash, it will enable you to receive prompt medical care as well as notification of your family.

Tape a quarter under your bike seat. It is also a good idea to keep a few dollars hidden in your patch kit, inside the end of the handlebar, or elsewhere on your bicycle. You may forget your wallet, get hungry and need a snack, or you may need cash for an unexpected errand. Think ahead and be prepared.

HELMET

Seventy-five percent of all bicycle driver fatalities are a result of head injuries. The best protection against this type of injury is use of an approved bicycle helmet. Wearing a helmet can reduce the severity of brain injury in a crash by 88% and could save your life. One of the most common reasons for not owning a helmet is the perceived expense, yet it is very cost-effective. One visit to the hospital emergency room for stitches and a skull X-ray could cost ten times the price of a helmet.

TIP:

Remember, a crash can happen at any time. Wear your helmet every time you ride.

Bicycle helmets come in a variety of sizes and styles. The best helmets have a smooth plastic outer shell over a foam liner. The outer shell helps prevent sharp objects from penetrating the helmet and the foam liner protects your head by absorbing much of the force of the impact. The soft foam pads are for exact fit and comfort. The best helmet is one which the rider likes and wears on every ride.

Helmets which have several openings in the front and air channels inside allow for the best air flow, and helmets also give the bicyclist protection from the sun. Remember, a crash can happen at any time. Wear your helmet every time you ride.

Take time to select a helmet which is the right size for your head. A helmet needs to fit snugly so it will not move around on your head when riding or come off your head if you fall. Adjust the straps so they hold the helmet on securely. The helmet should be worn

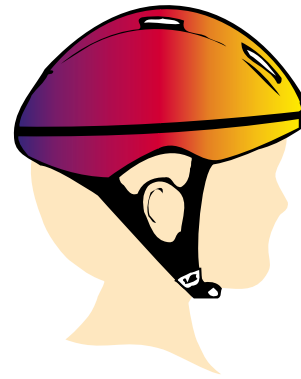
over the forehead and not tipped back. Check that the front edge of the helmet is positioned only one inch above the eyebrow. It is a good idea to have an experienced bike shop employee assist you in properly fitting your helmet.

HELMETS HAVE A LIMITED LIFE

A crash, as well as age and normal wear and tear, will cause the foam of the bicycle helmet to become less effective. The soft foam fitting pads will compress and need to be replaced from time to time to ensure a snug fit. It is time to replace your helmet when it becomes loose on your head or it is several years old.

TIP:

Always replace helmets if they have been in a crash, even if they look like new!



The Correct Fit



Wrong



Wrong

BICYCLE

The first step to getting comfortable is owning a mechanically sound bicycle - including brakes, steering, tires, and drive train. Colorado law states the bicycle must be equipped with a working brake or brakes that will enable you to stop within 25 feet from a speed of 10 miles per hour on dry, level, clean pavement.

For city riding and short distances, a mountain bike or hybrid may be more stable and comfortable than a road bike. Step-through or “mixte” bicycle frames are best for women wearing skirts or dresses while cycling, or for those who for medical or other reasons cannot swing their leg over the top tube of a diamond frame bicycle.

HOW SAFE IS YOUR BICYCLE?

No matter how safely you ride, an unsafe bicycle puts you at risk. If you acquire a secondhand bicycle, it is a good idea to take it to a bike shop for a safety check. Loose nuts and bolts make it difficult to control the bike.

If you like to do mechanical work, take a maintenance class and maintain your bicycle yourself. Maintaining your own bicycle can be very satisfying and empowering. Preventative maintenance will also increase your satisfaction with bicycle transportation.

If mechanical work is not for you, find a bike shop that caters to commuters. That means 8 hour service turn around, loaner bikes, a healthy inventory of products designed for bicycle transportation and encouragement offered for your bicycle transportation efforts.

Make regular stops at your bike shop for mechanical evaluations. Let an expert troubleshoot for you. The evaluation will be free and the mechanic can advise you on what service your bicycle needs to be safe, to prevent damage to components, or to enhance performance.

Whether you service your own bicycle or not, check regularly for:

- **Tire pressure, wear and damage**
- **Chain drive cleanliness**
- **Brake performance**
- **Head and tail lamp battery charge**

When riding in good weather, tire pressure should be maintained as written on the tire sidewall. The correct tire pressure increases the life of your tires and decreases the effort needed to pedal. For rain, snow, or ice, you may want to decrease the pressure for better traction. Check the tire tread and sidewalls for cuts and bruises.

Chain drive cleanliness reduces the destructive wear which grime causes. A clean chain drive will also protect your clothing from stains and makes your bicycle easier to pedal. Select a quality lubricant designed to reduce grime attraction. Non-aerosol lubricants can be directed only to the part of the chain which requires lubrication. Wipe the chain down after lubrication so the outside of the chain will not accumulate grime.

When you ride in the rain or snow, it is important to allow your bicycle to dry completely. If this is not possible at your destination, bring the bike into a warm place to dry at night or when you return home. This allows drying inside the bearing assemblies.

Finally, remember that all bike maintenance is cheap compared to auto repairs. Don't put yourself at risk to save a few dollars.

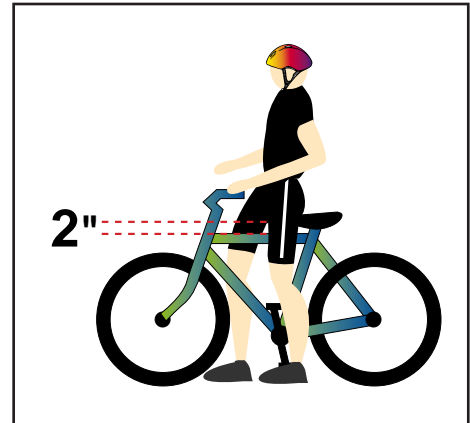


FLAT PREVENTION

To prevent flats, use tires which will work for their intended use. Ask your local bike shop which tires are appropriate for you. There are also products such as tire sealants that self-heal after a puncture and practically eliminate the need to repair a tube. Always carry a pump that fits your valve stem (Schrader or Presta). With tire sealants, you need only to refill the air lost from a puncture because the tube heals itself. In addition to these precautions, be sure to carry a patch kit, spare inner tube and pump, and know how to use them.

DOES YOUR BICYCLE FIT YOU?

It is essential that the bicycle fit its rider. Improper fit can cause discomfort and the inability to properly control the bike. The bicycle should be safe for you if you are able to straddle the top tube while standing flat footed on the ground with clearance between your crotch and the top tube. Consult your bicycle dealer to obtain a correct fit and test ride the bicycle to determine comfort and proper control.

***SEAT COMFORT & HEIGHT***

There are many factors involved in saddle comfort - saddle design and position, rider position and clothing, and riding style. If you haven't bicycled in a while, expect to be sore for a few days no matter how comfortable your seat is. After the first day, you may even need to take a day off before riding again. After that, if you are still not comfortable, you may want to get a better saddle. Gel touring saddles are a good choice. If you are still uncomfortable, consult your local bike shop about adjusting your riding position and other possible solutions.

The seat height should be adjusted so your knee is slightly bent when your foot is at the bottom of the pedal stroke with the ball of your foot over the center of the pedal.

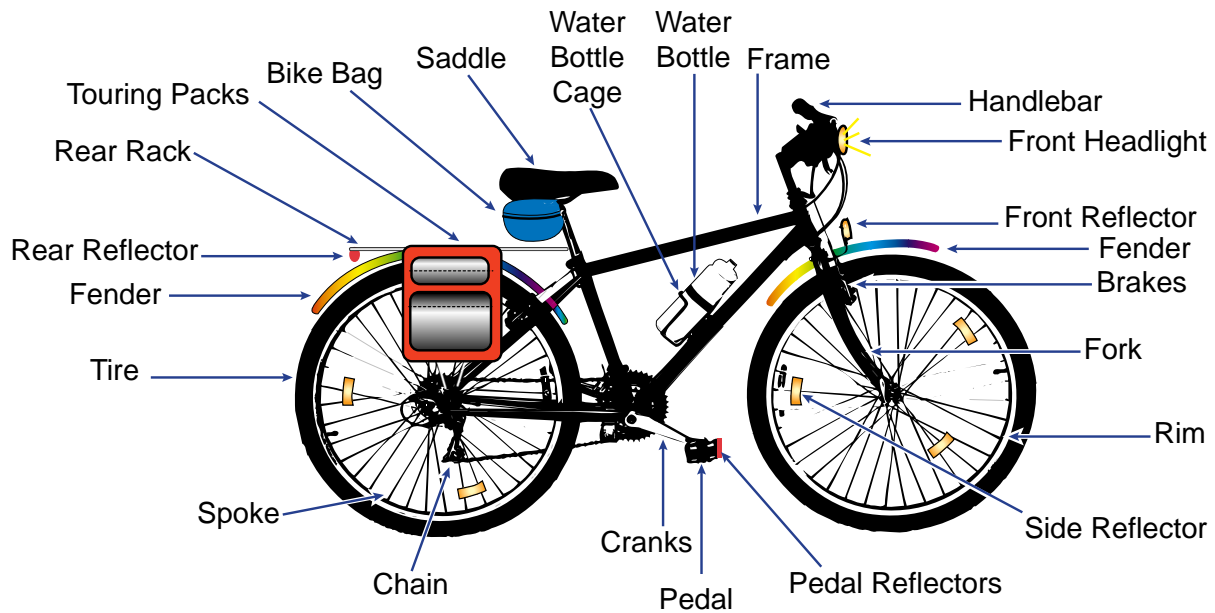
HANDLEBARS

Adjust the handlebars for comfort. Adjust the stem for height, positioning it no higher than the maximum extension mark. Rotate the handlebars to your most comfortable position.

BRAKE LEVERS

Brake levers should be positioned so there is no strain to your wrist and can be reached by the middle of the fingers.





OPTIONAL ACCESSORIES

REAR VIEW MIRROR

It is important to know what is happening behind you. As with car driving, a mirror should not be used as a substitute for looking back when changing lanes or turning. A rear view mirror allows you to look to the rear frequently. Never assume passing motorists see you.

REAR RACK

Be sure to have a good quality bike rack installed and have a bungee cord or rack strap handy to carry items such as a briefcase, shopping bag or other unexpected items.

BIKE BAGS OR TOURING PACKS

These are good general purpose choices for holding and protecting most of the things you may need to carry. Also available are suit bags, front or rear mounted packs, and briefcases which attach to the bike rack.

WATER BOTTLE & CAGE

Attach a water bottle and cage to your bicycle. In Colorado's dry climate, it is important to avoid dehydration by getting into the habit of sipping water throughout your trip, even if you are not thirsty.

FENDERS

You may occasionally be caught in sprinklers, afternoon showers or puddles, so be prepared. Fenders can save your wardrobe and relieve you from always carrying a rain suit. They also keep your bicycle cleaner. If you use your commuter bike for mountain biking, there are effective clip-on fenders which can be removed without the use of tools.

BELLS and HORNS

Colorado law says you must give an audible signal when passing pedestrians on paths, sidewalks or other facilities. A good way to do this is with a bell or horn that has a friendly pleasant sound which will not startle or anger pedestrians. Sound it or say, "Hello, passing on your left," before you pass by. If you often ride on the road, particularly in urban traffic, a loud horn may be best to capture motorists' attention.

NIGHT RIDING EQUIPMENT

There is always a chance that you might have to ride after dark, so be prepared. Colorado law states that when bicycling from sundown to sunrise or when weather or other conditions cause poor visibility, your bicycle must be equipped with a rear red reflector and reflectors on both sides that can be seen for 600 feet in a car's headlamps. You must also have a white front headlight that can be seen for at least 500 feet from the front of the bicycle.

FLASHING RED REFLECTOR LIGHT

These LED lights are more visible than a plain reflector and can be attached to you or your bicycle. Another bonus is that the AA batteries will last at least a year.


WHITE HEADLAMP

A powerful white headlight will make you visible and light your way. Battery operated headlights are available and some have rechargeable battery packs. Each have their own advantages and disadvantages. Your local bike shop can help you decide which is best for you.

REFLECTIVE MATERIALS

You cannot wear too much reflective material at night. Wear it on your helmet, shoes, arms, legs and torso. Pedal reflectors move as you pedal and will make you more visible. Reflectors and reflective materials are important even with good lighting systems because bicyclists are hard to see and motor vehicle drivers may not be looking for you at night. You need to be seen to be safe.

CLIMATE AND CLOTHING



Colorado's Climate												
	Maximum Normal Daily Temp. (F)				Minimum Normal Daily Temp. (F)				Total Precipitation (In)			
	Western Slope	Mountains	Front Range	Eastern Plains	Western Slope	Mountains	Front Range	Eastern Plains	Western Slope	Mountains	Front Range	Eastern Plains
SPRING March - May	66	44	60	86	39	18	33	53	2.3	5	5.5	5
SUMMER June - August	94	68	84	101	64	38	56	73	2	6	4.4	7.6
FALL September - November	68	51	65	91	42	24	38	58	2.9	3.5	2.7	2.8
WINTER December - February	36	30	44	59	15	14	19	24	1.7	4	1.7	1.2

It is common in Colorado to start out in the sunshine and later be met with an afternoon shower. Colorado temperatures can also change dramatically through the day. If you are going to depend on a bicycle for transportation, you will need to be prepared to deal with nature.



Always carry a compact windbreaker. In all but the summer months, keep gloves and a thin cap which fits under your helmet handy in case you misjudged the temperature or it changes. Dress in layers and shed them as you warm up. Remember, if you start out feeling comfortably dressed, you may soon find you are overdressed.

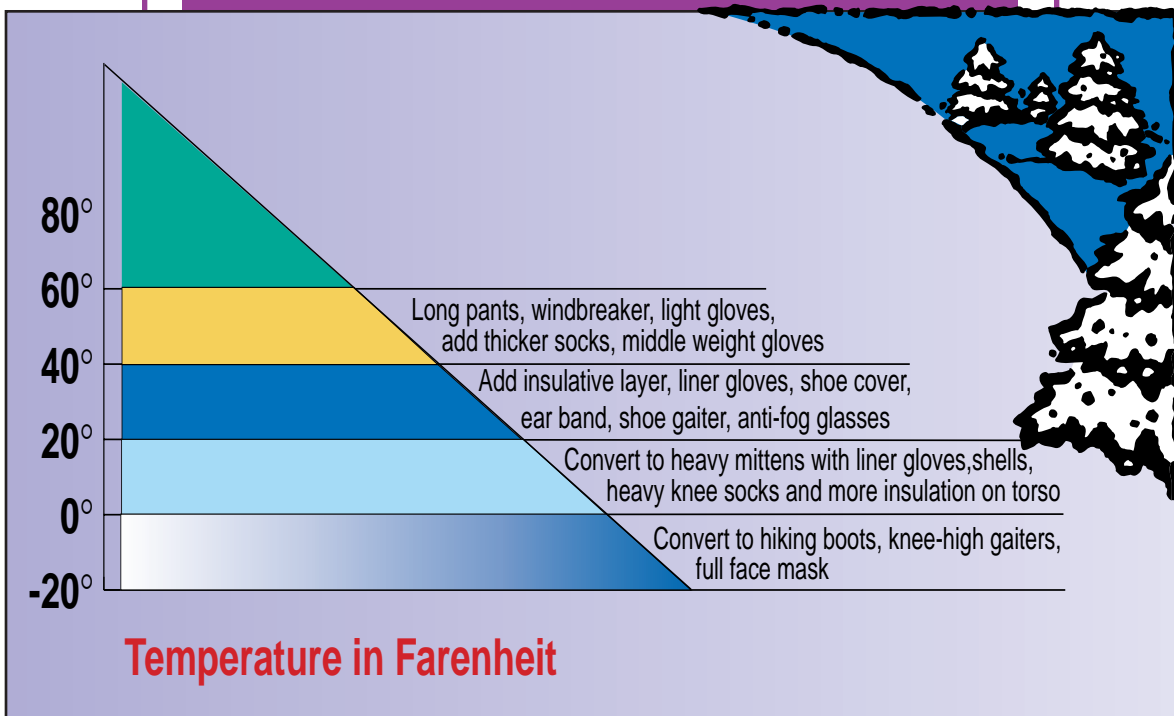
If there is even a slight chance of rain or wet weather, carry rain gear with you and enjoy the adventure. Rain suits tailored specifically for cycling are best. Quality rain gear seems like a great expense in Colorado's dry climate. However, you will find that owning effective rain gear will greatly increase the number of riding days each year and will also greatly increase your comfort when it is necessary to use it. Unfortunately, because of the road oil and grit that often sprays up your back, a rain suit can never serve as a fashion garment.

A pair of polypropylene liner gloves, rain booties and a rain cover for your helmet will add further weather protection. Avoid hooded garments. Most hoods do not move with your head so you will often find yourself looking at the inside of the hood instead of the traffic around you! Avoid ponchos, unless they are designed specifically for cycling, because the loose end can get caught in the moving bicycle parts or billow over your face.

In warm weather, wear looser clothing and ride slower. Stop in the shade and cool down if necessary. Coast whenever possible. If you feel flushed and overheated at your destination, pat your face and neck with cool water and hold your wrists under cool water for 60 seconds. You will be surprisingly comfortable!



Riding in the winter gives you a sense of freedom and keeps you fit while motorists battle cabin fever. If you take some precautions, riding at low temperatures can be enjoyable. Following is a temperature guide to appropriate clothing for bicycling in cooler weather:



Add to the suggested clothing in any temperature range if there is wind, high humidity, predominantly downhill riding, if your stamina level is low or if the ride is relaxed. Below freezing, give special attention to hands, feet and face. Also, be aware that the surface area of your legs is relatively large and allows for a fair amount of heat loss. Your knee joints work better and your feet stay warmer if you protect your legs adequately. Your torso will require careful attention to temperature regulation. Overheating can cause nausea and headache even at lower temperatures. Be sure you can open the neck of your jacket while riding. Large zipper pulls will allow you to do this even with bulky mittens.

Following is a list of features which make clothing and accessories more practical and comfortable for cycling:

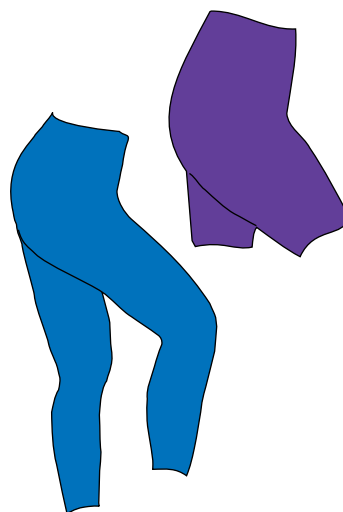
EYE PROTECTION

If you do not wear prescription glasses when cycling, you will need protection from the sun, wind, bugs and debris, even more so if you are a contact lens wearer. Sunglasses that wrap around are best. An anti-fog compound is helpful in cold weather.



PANTS

Any pant legs which are tapered, or have wide elastic cuffs or stirrups, help keep pants from getting caught in the chain. Find pants that are comfortable and don't bind. Pants with front pleats allow more room to move. When trying on pants, bend over and pull your knees up as you would when cycling to make sure the cut is comfortable for bicycling.



SHIRTS / BLOUSES / JACKETS

Look for a full cut across the back, and wider shoulders and arm holes such as those provided by raglan and drop sleeves. Wide armholes provide better ventilation and help prevent sweat spots. To make sure a top is comfortable and has ample room for cycling, put your bent elbows up and out as though you had your hands on your handlebars. Sleeves wide enough to roll up are also handy for controlling your body temperature as you ride.

SKIRTS

If you are a woman who uses a diamond frame bicycle, and also would like to ride dressed in a skirt or dress, it is important to find a skirt which is cut fully enough that it is possible to throw your leg over the top tube to mount your bicycle. Unless you have a good chain guard, it is also important that the skirt not be cut so full that it gets caught in the rear spokes. Some experimentation may be necessary to decide what works best. A practical choice for cycling on any bicycle is a split skirt or culottes. They allow the freedom of movement and dressiness without the other complications. A step-through or "mixte" bicycle frame is a better choice if you choose to wear skirts often.

UNDERWEAR

It may take some experimentation to find a pair in which the elastic legs do not cause discomfort. This, of course, is less important for short trips, for men who wear boxer shorts, and for those who don't wear underwear when wearing lycra cycling shorts.

OUTER SHELLS

Look for good ventilation. A zippered or fully adjustable front works better than a pullover for ventilation as well as convenience.

SHOES

High heels, open-toe shoes, sandals, or shoes with slick bottoms or particularly soft, flexible soles are not recommended for cycling safety or comfort. Use a completely enclosed sport or walking shoe and carry your other shoes to your destination. For long distances, cycling shoes work best.

GLOVES

In cooler weather you need gloves to keep your hands warm. In warmer weather, cycling gloves are a good idea to pad your hands for a more comfortable ride, and to protect your hands in case of a fall.

ACCESSORIES

Belts which can be loosened a notch or two while riding allow for better breathing. Collar buttons and ties should be loosened for comfort and ventilation. Long chains, beads, earrings and scarves are best packed away until you reach your destination because they tend to flap or clang against you, which may become distracting and annoying.



CLOTHING MANAGEMENT

The management of clothing, either worn while cycling or being transported, is a sizable concern for those who use their bicycles for transportation. These are some cyclist-tested suggestions:

KEEP CLOTHES OUT OF THE MOVING PARTS OF THE BICYCLE

- Use pant clips. The fluorescent retro reflective bands that attach with velcro around your ankle are a good choice because of visibility and because they are adjustable. Rubber bands also work in a pinch.
- Stuff your pants into your socks - not very fancy, but quite effective.
- Buy or make and install a chain guard.

KEEP YOUR CLOTHES FROM GETTING WRINKLED IN YOUR PACKS

Roll them instead of folding them. Roll them around tissue paper or plastic bags, and pack loosely for the least wrinkling. You may also use a garment bag that attaches to your rear rack.

HOW TO STAY COMFORTABLE IN DRESS CLOTHES WHILE BICYCLING

The best way to stay comfortable if you choose not to wear cycle clothing while bicycling is to choose regular clothing which works well for bicycling. If you have to look your best at your destination, it is a good idea to wear patterned clothing or dark colors which hide dirt and defects, or wear a jacket over light colored tops. You never know when you might have to ride on wet pavement or happen to get a bit of grease on your pants.

HOW CAN I BE ASSURED I HAVE EVERYTHING WHEN I ARRIVE AT MY DESTINATION?

If you prefer to bicycle in cycle clothing and then change at your destination, you may occasionally forget things. To avoid forgetting articles of clothing or accessories, mentally dress yourself as you pack, beginning as though you just stepped out of the shower. This way you are less likely to forget basic items, such as a comb, belt, jewelry or hosiery. If you commute to work, it's a good idea to keep a spare of some of the more forgettable items at work. Choose items which are fairly neutral and can be worn with the majority of your wardrobe.