

1: FITTING & EQUIPPING YOUR BIKE

HOW TO GET A GOOD FIT

Your bike's most important safety feature is you: If you're not comfortable, you're more likely to ride badly and hit something. Getting exactly the right fit depends on many things—including your height, weight, and riding style. You should contact your neighborhood bicycle store to help you find the right fit. Consider these points.

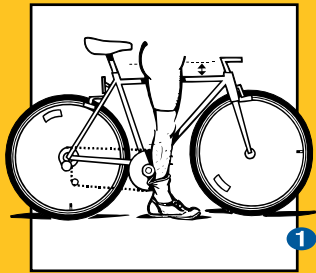
Frame Size: If your bike's frame is too tall, too short, or too long, it's very hard to adjust other things to make you comfortable—so you might need a new bike.

To Check the Height: On a men's bike, stand with the bike between your legs, just in front of the seat. Measure the space between the top tube and your crotch. **1** For road or street riding, a one-inch to three-inch space is safest. (Off-road riding might require a bigger space.) For women's frames, ask your bicycle store's staff to size you.

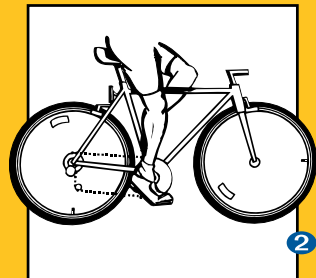
Frame Length: If, when you ride, you feel overly stretched or have pain in your neck, shoulders, or back, your frame might be too long. Try moving the seat and handlebars closer together (see page 3). Also, some people—including many women—have torsos shorter than what most bikes are made for. If you're one of them, look into a shorter handlebar stem extension, a taller stem, different handlebars, or a custom-made bike made for people with smaller torsos.

Seat Height: A seat that's too low will strain your knees, while a seat that's too high will make it hard for you to pedal and to put your foot onto the ground. Here are some ways to get the right seat height for most riding:

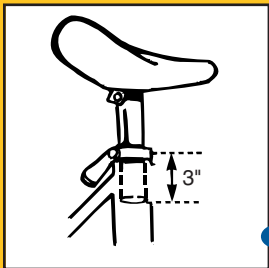
- ▶ Sit on your bike and push one pedal all the way down. **2** Put the ball of your foot on the pedal. If your seat's high enough, your knee should be slightly bent.
- ▶ If your hips rock from side to side when you pedal, your seat's too high.
- ▶ Don't raise your seat so high that less than three inches of your seat post extends into the frame. **3** (Most seat posts have a limit mark showing how high you can raise them.) If you have to raise your seat higher, consider getting a longer seat post, or a larger bicycle.



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Handlebar: After you've set your seat height, set your handlebar so you feel comfortable. Some things to guide you:

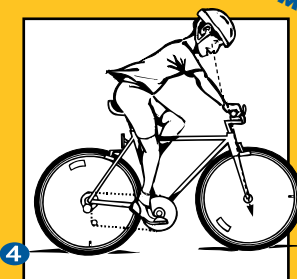
- ▶ Start by raising or lowering your handlebar so it blocks your view of the front axle when you're sitting on your bike with your hands on the handlebar. **4** In this position, your elbows should be slightly bent (not locked).
- ▶ Lower-back pain often means the handlebar is too far away, while upper-arm or shoulder fatigue often means the handlebar is too close to you. Try raising or lowering the handlebar, or moving your seat forward or backward. **5** You can also try a shorter or longer handlebar stem.
- ▶ Don't raise your handlebar so high that less than two and a half inches of your handlebar stem extends into the frame. **6** (Most stems have a limit mark showing how high you can raise them.) If you have to raise your handlebar higher than the safe limit, get a longer stem quill or stem extender.
- ▶ Rotate your handlebar so that it puts even pressure across the palms of your hands without bending your wrists in an unnatural way. **7**

Seat Tilt: Lastly, adjust your seat tilt for comfort: Many cyclists keep their seats level. Many women, however, tilt them slightly nose-down, and many men tilt them slightly nose-up. Try different angles until you find a comfortable one.

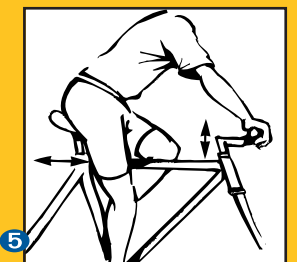
Saddle Soreness: If you haven't bicycled in a while, expect to experience soreness at first; chafing or soreness should get better with time. If it doesn't, the first thing to check is the seat adjustment; see "Seat Tilt" above, and "Seat Height" on page 2. If adjustment doesn't help, try a gel-filled saddle or saddle pad; a wider or differently-shaped saddle; one with springs; or one with a center cut or groove. Many bicycle stores will exchange saddles if they're not damaged, so try alternatives until you're comfortable. Also, many cyclists like padded and/or seamless shorts for long rides.

FOR MORE INFORMATION

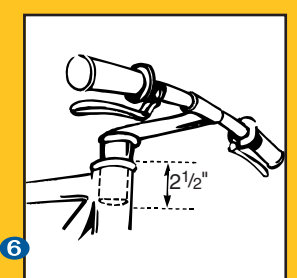
For help on fitting a bike:
See *Urban Bikers' Tricks & Tips*, by Dave Glowacz (Mr. Bike). Available at book stores, by calling 800/888-4741, or on-line at www.mrbike.com.



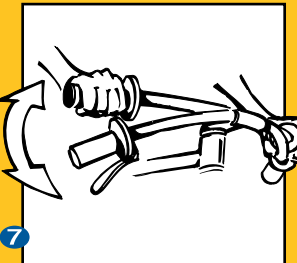
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BASIC EQUIPMENT

Here's some equipment that experienced cyclists recommend to make biking a lot safer—and easier.

Helmet: Required throughout King County per Board of Health Title 9. More on helmets on page 9.

To Prevent Flats: **1** Keep your tires at maximum air pressure; they lose a little air every day. Skinnier tires lose air more quickly. Many cyclists use puncture-proof tire liners (like Mr. Tuffy), Kevlar-belted tires, thorn-resistant tubes, or tube sealants. Heavy-set or rough-surface riders should try wider tires. **To fix flats:** Always carry a spare inner tube or a patch kit, and tools to get your tube out. Use plastic tire levers; a wrench if you don't have quick-release hubs; an old sock or rag to cover your hand when you grab your chain; and a hand pump or quarters to pay for a gas-station pump. (Beware: high-pressure pumps can burst your tire!)

Carrying Rack: Make your bike carry your things! **2** Use bungee cords to tie things to your carrying rack. Attach a milk crate as a carrying case. If you carry things often you should invest in panniers, or the many varieties of bike bags available.

Instead of a rear rack or front basket, you can use a backpack. However, a backpack can strain your shoulders and make balancing harder. And carrying stuff in your arm is unsafe; it's harder to steer and brake.

Toe Clips & Clipless Pedals: Toe clips and clipless pedals give your pedaling more power. But if not adjusted right, they can lock your feet to your pedals so you can't put a foot down when you lose your balance. When using toe clips or clipless pedals, make sure you can get your feet out fast.

Ankle Strap: Getting your pants caught in your chain can make you lose control and ruin your pants. If your bike doesn't have a chain guard, use a clip or Velcro strap **3** around your pants cuff to keep it from hitting your chain and frame.

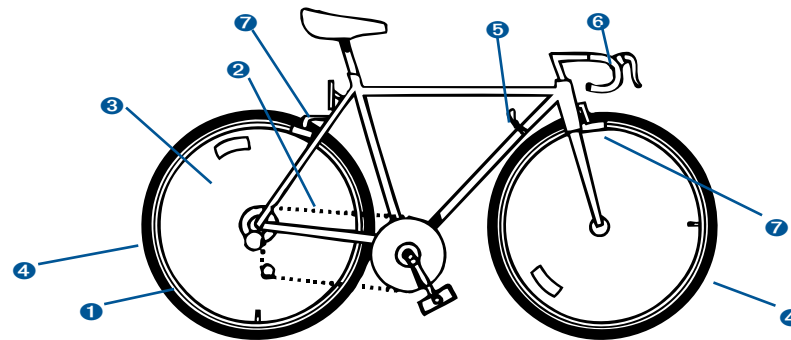
Protective Eyewear: To protect your eyes from bugs and airborne debris, wear sunglasses or regular glasses. Yellow glasses are good for winter or the dark. For an inexpensive alternative try safety glasses, especially with contacts. Wrap-around glasses are best.

Mirror: **4** Use a mirror to know what's behind you before you move left or right. A mirror, however, is *not* a substitute for looking back.

Night and Foul Weather Gear: If you ride at night or in bad weather you need lights, reflectors, and more. See pages 29-32 for details.

2: QUICK MAINTENANCE CHECKS

Safety starts with your bike. Whether you use your bike a lot or you're dusting off an old bike, this page gives you a few simple things to check for a safe ride. While these checks help you find problems, we don't have room to tell you how to fix them all. If you need help, go to your bike owner's manual, a bike maintenance book, or a bike shop.



1 Air: Tires lose a little air every day. If your gauge says a tire is more than five pounds under the needed pressure (printed on the side of the tire), add air. No gauge? Push each tire hard against a curb. If you can flatten it, add air.

2 Chain: A dry chain can skip, lock up, or break suddenly. If your chain squeaks or hangs up, lubricate it. Oil will do, but it attracts dirt; a bicycle chain lubricant is best. To lube:

a. Grab the bottom of the chain loosely with a lint-free rag. With the other hand turn the pedals backward, sliding the chain through the rag. Pedal the chain around twice to remove grime.

b. With one hand squeeze or spray lubricant onto the chain, and with the other hand pedal the chain backward so it goes completely around once (twice if really rusty). Take care not to get lubricant on the wheel rim or tire.

c. Repeat step (a) to get the excess lubricant off the chain. Extra lube can attract dirt.

3 Wheel Spin: Lift each wheel and spin it slowly. (Spin the back wheel forward so the pedals don't move.) Check that it doesn't rub against the brake pads, frame, or something else. If the wheel doesn't spin freely but it's not rubbing, the problem might be inside the hub.

4 Tires: Turn each wheel very slowly and look for big cuts, bulges, bubbles, or places you can see the inner casing. If you spot any, replace the tire. Remove glass or other debris. If the valve stem doesn't point straight at the middle of the wheel, the rim might cut it; let the air out and straighten the valve.

5 Shifting: Try all of your gears, shifting each gear lever from high to low. You have a problem if the lever sticks, you can't shift to all gears, the chain rubs the derailleur, or the chain jumps off the gears. These are usually caused by worn or dirty cables, or a derailleur that needs cleaning or adjustment.

6 Handlebar: Hold the front tire between your legs and try to turn the handlebar. If they're loose, tighten the stem bolt.

7 Brakes: You should have your brakes adjusted or replaced if you have any of these problems: (a) when you apply the brake on each wheel, one or both brake pads don't touch the rim; (b) you can squeeze your brake lever all the way to the handlebars; (c) on each wheel, the brake can't stop the tire from moving on dry, clean pavement.

Loose Parts: Pick up the bike and shake it hard. Check and fix anything that rattles.

DON'T LUBRICATE YOUR CHAIN WITH:

- ▶ Motor oil
- ▶ Mineral oil
- ▶ Household oil
- ▶ Vegetable oil
- ▶ Automotive cleaner such as WD-40
- ▶ Bicycle (bearing) grease
- ▶ Axle grease

Chains need lubing about every 200 miles or three months (more often in wet weather).

✓ **Check each time you ride!**