### Bike Owner's Manual and Assembly Guide



www.publicbikes.com

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PUBLIC

Mass Transit for One

#### **Letter from PUBLIC**

#### Safety and Civility: Why a Red Bell Matters

Our bikes have been specifically designed for safe city riding. We've included features such as European style upright handlebars, tires with reflective strips, solid brakes, and really strong steel frames. But these do not really make bicycling safe. Nor does a helmet. The most important element is your own good sense and awareness, and the respect you give to conditions, and to the other brothers and sisters on the road, and maybe our Federico Red Bell (see website to order) . Why? It will help you communicate to other riders and pedestrians with a pleasant tone. It is pretty. It is a gentle reminder to converse with respect. It may be the antidote to road rage and confrontation. It might remind us to smile. It is a symbol of civility.

We envisage a day when bicyclists and pedestrians and cars can co-exist with a little more respect and civility. What if car drivers' first thought when seeing someone on a bike was, "How great, there is one less person in a car causing congestion on my daily commute." What if bicyclists' first thought upon seeing cars crowding a street was, "Too bad those people don't have smart public transportation as an alternative to their cars." The 20th century has left most of us with cities that are not as friendly to pedestrians and bicyclists as they are to cars. But this is all changing for the better, and we are part of this movement in our own civil way.

Thanks for being part of PUBLIC.

Rob Forbes Founder

This Bicycle Manual and Assembly Guide are included to help make your PUBLIC bicycle experience as simple and safe as possible. A lot of it is written for the industry by the industry and it not so consumer friendly. We also offer your some additional assistance. Please call us at 1-888-450-0123. We will always have someone on hand to answer your call Monday-Friday between 9AM and 5PM PST. You may also find our website www.publicbikes. com helpful with FAQ's, assembly videos, and more.

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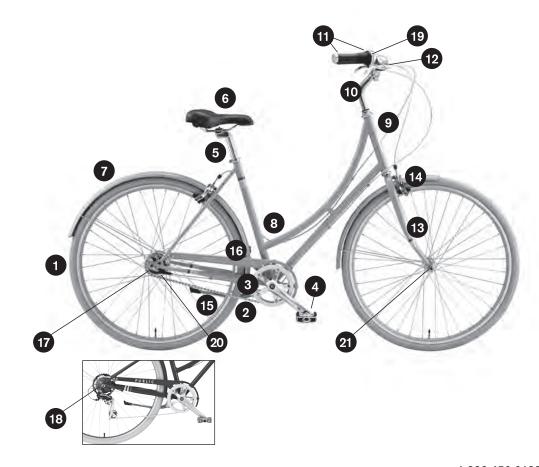
### **Bicycle Owner's Manual**

Modified from BPSA 11th Edition, 2015

#### **PUBLIC**

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- 1. Wheel
- 2. Chain
- 3. Chainring
- 4. Pedal
- 5. Seat Post
- 6. Seat
- 7. Fender
- 8. Frame
- 9. Steerer Tube
- 10. Quill Stem
- 11. Handlebars
- 12. Brake Lever
- 13. Fork
- 14. Brakes
- 15. Kickstand
- 16. Chain Guard
- 17. Internal Hub
- 18. Derailleur
- 19. Gear Shifter
- 20. Sprocket
- 21. Dropouts



#### IMPORTANT

This manual contains important safety, performance and service information. Read it before you take the first ride on your new bicycle, and keep it for reference.

Additional safety, performance and service information for specific components on your bicycle, or for accessories such as helmets or lights that you purchase, may also be available. In case of a conflict between the instructions in this manual and information provided by the manufacturer, always follow the manufacturer's instructions.

If you have any questions or do not understand something, give PUBLIC a call or consult with your local qualified bicycle shop.

NOTE: This manual is not intended as a comprehensive use, service, repair or maintenance manual. Please see your local bicycle shop for all service, repairs or maintenance.

#### **GENERAL WARNING**

Like any sport, bicycling involves risk of injury and damage. By choosing to ride a bicycle, you assume the responsibility for that risk. You will need to know—and to practice—the rules of safe and responsible urban riding and of proper use and maintenance, which can reduce risk of injury.

This Manual contains many "Warnings" and "Cautions" concerning the consequences of failing to maintain or inspect your bicycle and failing to follow safe urban cycling practices.

- The combination of the safety alert symbol and the word **WARNING** indicates a potentially hazardous situation, which, if not avoided, could result in serious injury or death.
- The combination of the \( \Delta \) safety alert symbol and the word **CAUTION** indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury. This notation may also direct attention to unsafe practices.

Many of the "Warnings" and "Cautions" say "you may lose control and fall."

Because any fall can result in serious injury or even death, we do not always repeat the warning of possible injury or death.

It is impossible to anticipate every situation or condition that can occur while riding. Therefore, this Manual makes no representation about the safe use of the bicycle under all conditions. There are risks associated with the use of any bicycle that cannot be predicted or avoided, and are the sole responsibility of the rider.

#### **A Special Note to Parents**

As a parent or guardian, you are

responsible for the activities and safety of your minor child. Before permitting your child ride the bicycle, you should read this manual and review its warnings and the bicycle's functions and operating procedures with your child. Be aware that some of your responsibilities include:

- Making sure that the bicycle is properly fitted to the child.
- Checking that the bicycle is in good repair and safe operating condition.
- Ensuring you and your child have learned and understand how to safely operate the bicycle, obey applicable local motor vehicle, bicycle and traffic laws, and common sense rules of safe and responsible bicycling.

WARNING: Make sure that your child always wears a CPSC approved bicycle helmet when riding, and that your child understands it is for bicycling only and must be removed when not riding. A bicycle helmet must not be worn while playing or while not riding a bicycle. Failure to follow this warning could compromise the helmet and result in serious injury or death during bicycle operation. Any helmet that was worn during a collision with head impact should be replaced, even if there is no obvious damage to the helmet.

### **First**

All PUBLIC bicycles are intended for use on paved roads only. Please make sure to use your bicycle for its intended purpose. Any other use may result in a failure of some part of your PUBLIC bicycle.

NOTE: We strongly urge you to read this Manual in its entirety before your first ride. At the very least, read and make sure that you understand each point in this section, and refer to the cited sections on any issue which you do not completely understand. Please note that not all bicycles have all of the features described.

#### **BICYCLE FIT**

- Is your bicycle the right size? To check, see p. 10 (Standover Height). If your bicycle is too large or too small, you could lose control and fall. If your new bicycle is not the correct size, contact PUBLIC (1-888-450-0123) to exchange it before you ride it.
- Is the seat at the appropriate height?
   To check, see p. 10 (Seat Position). If you adjust your seat height, follow the Minimum Insertion instructions on p. 12.
- 3. Are seat and seat post securely clamped? When correctly clamped,

- the seat does not permit movement in any direction. See p. 10 (Seat Position).
- 4. Are the stem and handlebars at the right height for you? If not, see p. 12 (Handlebar Height and Angle).
- Can you comfortably operate the brakes? If not, you may be able to adjust their angle and reach. See p. 13 (Control Position Adjustment and Brake Reach).
- Do you fully understand how to operate your new bicycle? If not, before your first ride, contact PUBLIC (1-888-450-0123) to explain any functions or features that you do not understand.

#### **SAFTEY FIRST**

- Always wear an approved helmet when riding your bike, and follow the helmet manufacturer's instructions for fit, use and care.
- 2. Do you have all the other required and recommended safety equipment? See p. 10 (Safety). It's your responsibility to familiarize yourself with the laws of the areas where you ride, and to comply with all applicable laws.
- 3. Do you know how to correctly secure your front and rear wheels? See p 13 (Wheels). Riding with an improperly

- secured wheel can cause the wheel to wobble or disengage from the bicycle, and cause serious injury or death.
- 4. If your bike has toeclips and straps or clipless ("step-in") pedals, make sure you know how they work. These pedals require special techniques and skills. Follow the pedal manufacturer's instructions for use, adjustment and care.
- 5. Do you have "toe overlap"? On smaller framed bicycles your toe or toeclip may be able to contact the front wheel when a pedal is all the way forward and the wheel is turned. Read p 20 (pedals) to check whether you have toeclip overlap.

#### **MECHANICAL SAFETY CHECK**

Routinely check the condition of your bicycle before every ride

• Nuts, bolts, screws & other fasteners: Because manufacturers use a wide variety of fastener sizes and shapes made in a variety of materials, often differing by model and component, the correct tightening force or torque cannot be generalized. To make sure that the many fasteners on your bicycle are correctly tightened, refer to the Fastener Torque Specifications in Appendix A of this manual.

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Correctly tightening a fastener requires a calibrated torque wrench. A professional bicycle mechanic with a torque wrench should torque the fasteners on you bicycle. If you choose to work on your own bicycle, you must use a torque wrench and the correct tightening torque specifications from the bicycle or component manufacturer or from your dealer. If you need to make an adjustment at home or in the field, we urge you to exercise care, and to have the fasteners you worked on checked by a qualified bike shop.

WARNING: Correct tightening force on fasteners – nuts, bolts, screws – on your bicycle is important. Too little force, and the fastener may not hold securely. Too much force, and the fastener can strip threads, stretch, deform or break. Either way, incorrect tightening force can result in component failure, which can cause you to loose control and fall.

• Make sure nothing is loose. Lift the front wheel off the ground by two or three inches, then let it bounce on the ground. Anything sound, feel or look loose? Do a visual and tactile inspection of the whole bike. Any loose parts or accessories? If so, secure them. If you're not sure, ask someone with experience to check.

- Tires & Wheels: Make sure tires are correctly inflated. See p. 20 (tires). Check by putting one hand on the saddle, one on the intersection of the handlebars and stem, then bouncing your weight on the bike while looking at tire deflection. Compare what you see with how it looks when you know the tires are correctly inflated; and adjust if necessary.
- Tires in good shape? Spin each wheel slowly and look for cuts in the tread and sidewall. Replace damaged tires before riding the bike.
- Wheels true? Spin each wheel and check for brake clearance and side-to-side wobble. If a wheel wobbles side to side even slightly, or rubs against or hits the brake pads, take the bike to a qualified bike shop to have the wheel trued.

CAUTION: Wheels must be true for rimbrakes to work effectively. Wheel truing is a skill that requires special tools and experience. Do not attempt to true a wheel unless you have the knowledge, experience and tools needed to do the job correctly.

• Wheel rims clean and undamaged? Make sure the rims are clean and undamaged at the tire bead and, if you have rim brakes, along the braking surface. Check to make sure that any rim wear indicator marking is not visible at any point on the wheel rim.

WARNING: Bicycle wheel rims are subject to wear. Ask PUBLC (1-888-450-0123) or your qualified bicycle shop about wheel rim wear. Riding a wheel that is at the end of its usable life can result in wheel failure, which can cause you to lose control and fall.

• Brakes: Check the brakes for proper operation. See p. 16 (brakes). Squeeze the brake levers. Are the brake quick-releases closed? All control cables seated and securely engaged? If you have rim brakes, do the brake pads contact the wheel rim squarely and make full contact with the rim? Do the brakes begin to engage within an inch of brake lever movement? Can you apply full braking force at the levers without having them touch the handlebar? If not, your brakes need adjustment. Do not ride the bike until the brakes are properly adjusted by a professional bicycle mechanic.

- Wheel retention system: Make sure the front and rear wheels are correctly secured. See p. 13 (Wheels)
- Handlebar and saddle alignment: Make sure the saddle and handlebar stem are parallel to the bike's center line and clamped tight enough so that you can't twist them out of alignment. See pp 10-12 (Seat Position and Handlebar Height).
- Handlebar ends: Make sure the handlebar grips are secure and in good condition, with no cuts, tears, or worn out areas. If not, contact PUBLIC (1-888-450-0123). Make sure the handlebar ends and extensions are plugged.

WARNING: Loose or damaged handlebar grips or extensions can cause you to lose control and fall. Unplugged handlebars or extensions can cut you and cause serious injury in an otherwise minor accident.

#### **FIRST RIDE**

When you buckle on your helmet and go for your first ride, take a minute to familiarize yourself with your new PUBLIC bicycle and how it rides. Be sure to pick a controlled, quiet environment—ideally, away from cars, other cyclists, obstacles or other hazards. Ride to get a sense of

the controls, features and performance of your new PUBLIC bicycle.

Familiarize yourself with the braking action of the bike. See p 16 (Brakes). Test the brakes at slow speed, putting your weight toward the rear and gently applying the brakes, rear brake first. Sudden or excessive application of the front brake could pitch you over the handlebars. Applying brakes too hard can lock up a wheel, which could cause you to lose control and fall. Skidding is an example of what can happen when a wheel locks up.

Practice shifting the gears. See p. 18 (Shifting Gears). Remember to never move the shifter while pedaling backward, nor pedal backwards immediately after having moved the shifter. This could jam the chain and cause serious damage to the bicycle.

Check out the handling and response of the bike; and check the comfort.

If you have any questions, or if you feel something with the bicycle is not as it should be, consult **PUBLIC** (1-888-450-0123) or your qualified bicycle shop before you ride again.

### Safety BASICS

**WARNING:** The area in which you ride may require specific safety devices.

It is your responsibility to familiarize yourself with the laws of the area where you ride and to comply with all applicable laws, including properly equipping yourself and your bike as the law requires.

Observe all local bicycle laws and regulations. Observe regulations about bicycle lighting, licensing of bicycles, riding on sidewalks, laws regulating bike path and trail use, helmet laws, child carrier laws, special bicycle traffic laws. It's your responsibility to know and obey the laws.

 Always wear a cycling helmet that meets the latest certification standards and is appropriate for the type of riding you do. Always follow the helmet manufacturer's instructions for fit, use and care of your helmet. Most serious bicycle injuries involve head injuries that might have been avoided if the rider had worn an appropriate helmet.

WARNING: Failure to wear a helmet when riding may result in serious injury or death.

- 2. Always do the Mechanical Safety Check (See p. 4) before you get on your PUBLIC bike.
- 3. Be thoroughly familiar with the controls

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#### -Elizbeth West

- of your bicycle: brakes (See p. 16); pedals (See p. 20); shifting (See p. 18).
- 4. Be careful to keep body parts and other objects away from the sharp teeth of chainrings, the moving chain, the turning pedals and cranks, and the spinning wheels of your bicycle.

#### 5. Always Wear:

- Shoes that will stay on your feet and will grip the pedals. Make sure that shoelaces cannot get into moving parts, and never ride barefoot or in sandals.
- Bright, visible clothing that is not so loose that it can be tangled in the bicycle or snagged by objects at the side of the road
- Protective eyewear, to protect against airborne dirt, dust and bugs tinted when the sun is bright, clear when it's not.
- Don't jump with your bike. Jumping a bike can be fun, but it can put huge and unpredictable stress on the bicycle and its components.
- Ride at a speed appropriate for conditions.

#### RIDING SAFETY

- Obey all Rules of the Road and all local traffic laws.
- You are sharing the road or the path with others — motorists, pedestrians and other cyclists. Respect their rights.
- Ride defensively. Always assume that others do not see you.
- 4. Look ahead, and be ready to avoid:
  - Vehicles slowing or turning, entering the road or your lane ahead of you, or coming up behind you.
  - Parked car doors opening.
  - Pedestrians stepping out.
  - Children or pets playing near the road.
  - Pot holes, sewer grating, railroad tracks, expansion joints, road or sidewalk construction, debris and other obstructions that could cause you to swerve into traffic, catch your wheel or cause you to have an accident.
  - The many other hazards and distractions which can occur on a bicycle ride.
- 5. Ride in designated bike lanes, on

- designated bike paths or as close to the edge of the road as practicable, in the direction of traffic flow or as directed by local governing laws.
- Stop at stop signs and traffic lights; slow down and look both ways at street intersections. Remember that a bicycle always loses in a collision with a motor vehicle, so be prepared to yield even if you have the right of way.
- 7. Use approved hand signals for turning and stopping.
- 8. Never ride with headphones. They mask traffic sounds and emergency vehicle sirens, distract you from concentrating on what's going on around you, and their wires can tangle in the moving parts of the bicycle, causing you to lose control.
- 9. Never carry a passenger; and, before installing a child carrier or trailer, check with the bicycle manufacturer to make sure the bicycle is designed for it. If the bicycle is suitable for a child carrier or trailer, make sure that the carrier or trailer is correctly mounted and the child is secured and wearing an approved helmet.

- 10. Never carry anything which obstructs your vision or your complete control of the bicycle, or which could become entangled in the moving parts of the bicycle.
- 11. Never hitch a ride by holding on to another vehicle.
- 12. Don't do stunts, wheelies or jumps.
- Don't weave through traffic or make any moves that may surprise people with whom you are sharing the road.
- 14. Observe and yield the right of way.
- 15. Never ride your bicycle while under the influence of alcohol or drugs.
- 16. If possible, avoid riding in bad weather, when visibility is obscured, at dawn, dusk or in the dark, or when extremely tired. Each of these conditions increases the risk of accident.

#### **OFF ROAD SAFETY**

PUBLIC bicycles are NOT designed for off-road riding. Please do not use your PUBLIC bicycle for off-road riding. We recommend that children not ride on rough terrain unless they are accompanied by an adult.

- The variable conditions and hazards of off-road riding require close attention and specific skills. Start slowly on easier terrain and build up your skills. Get to know how to handle your bike safely before trying increased speed or more difficult terrain.
- 2. Wear safety gear appropriate to the kind of riding you plan to do.
- Don't ride alone in remote areas. Even when riding with others, make sure that someone knows where you're going and when you expect to be back.
- 4. Always take along some kind of identification, so that people know who you are in case of an accident; and take along some cash for food, a cool drink or an emergency phone call.
- Yield right of way to pedestrians and animals. Ride in a way that does not frighten or endanger them, and give them enough room so that their unexpected moves don't endanger you.
- Be prepared. If something goes wrong while you're riding off-road, help may not be close.

#### WET WEATHER RIDING

WARNING: Wet weather impairs traction, braking and visibility, both for the bicyclist and for other vehicles sharing the road. The risk of an accident is dramatically increased in wet conditions.

Under wet conditions, the stopping power of your brakes (as well as the brakes of other vehicles sharing the road) is dramatically reduced and your tires don't grip nearly as well. This makes it harder to control speed and easier to lose control. To make sure that you can slow down and stop safely in wet conditions, ride more slowly and apply your brakes earlier and more gradually than you would under normal, dry conditions. See p.16 (Brakes).

#### **NIGHT RIDING**

Riding a bicycle at night is much more dangerous than riding during the day. A bicyclist is very difficult for motorists and pedestrians to see. Therefore, children should never ride at dawn, at dusk or at night. Adults who chose to accept the greatly increased risk of riding at dawn, at dusk or at night need to take extra care both riding and choosing specialized

equipment that helps reduce that risk. Consult **PUBLIC** (1-888-450-0123) about night riding safety equipment.

WARNING: Reflectors are not a substitute for required lights. Riding at dawn, at dusk, at night or at other times of poor visibility without an adequate bicycle lighting system and without reflectors is dangerous and may result in serious injury or death.

Bicycle reflectors are designed to pick up and reflect car lights and street lights in a way that may help you to be seen and recognized as a moving bicyclist.

CAUTION: Check reflectors and their mounting brackets regularly to make sure that they are clean, straight, unbroken and securely mounted. Have your dealer replace damaged reflectors and straighten or tighten any that are bent or loose.

WARNING: Do not remove the front or rear reflectors or reflector brackets from your bicycle. They arean integral part of the bicycle's safety system.

Removing the reflectors reduces your visibility to others using the roadway. Being struck by other vehicles may result in serious injury or death.

If you choose to ride under conditions of poor visibility, check and be sure you comply with all local laws about night riding, and take the following strongly recommended additional precautions:

- Purchase and install battery or generator powered head and tail lights which meet all regulatory requirements for where you live and provide adequate visibility.
- Wear light colored, reflective clothing and accessories, such as a reflective vest, reflective arm and leg bands, reflective stripes on your helmet, flashing lights attached to your body and/or your bicycle. Any reflective device or light source that moves will help you get the attention of approaching motorists, pedestrians and other traffic.
- Make sure your clothing or anything you may be carrying on the bicycle does not obstruct a reflector or light.
- Make sure that your bicycle is equipped with correctly positioned and securely mounted reflectors.

#### While riding at dawn, at dusk or at night:

- Ride slowly.
- Avoid dark areas and areas of heavy or fast-moving traffic.

- Avoid road hazards.
- If possible, ride on familiar routes.

#### If riding in traffic:

- Be predictable. Ride so that drivers can see you and predict your movements.
- Be alert. Ride defensively and expect the unexpected.
- If you plan to ride in traffic often, ask your dealer about traffic safety classes or a good book on bicycle traffic safety.

# CHANING COMPONENTS OR ADDING ACCESSORIES

There are many components and accessories available to enhance the comfort, performance and appearance of your bicycle. However, if you change components or add accessories, you do so at your own risk. The components and accessories sold by PUBLIC have been tested for compatibility with your bicycle, reliability and safety. Before installing any component or accessory, make sure that it is compatible with your bicycle by checking with PUBLIC (1-888-450-0123) or a qualified bicycle shop. shop. Be sure to read, understand and follow the instructions that accompany the products you purchase for your bicycle.

WARNING: Failure to confirm compatibility, properly install, operate and maintain any component or accessory can result in serious injury or death.

WARNING: Changing the components on your bike with other than genuine replacement parts may compromise the safety of your bicycle and may void the warranty. warranty. Check with PUBLIC (1-888-450-0123) before changing the components on your bicycle.

### Fit

NOTE: Correct fit is an essential element of bicycling safety, performance and comfort.

WARNING: Changing the components on your bike with other than genuine replacement parts may compromise the safety of your bicycle and may void the warranty. warranty. Check with PUBLIC (1-888-450-0123) before changing the components on your bicycle.

#### **STANDOVER HEIGHT**

#### **Diamond Frame Bicycles**

Standover height is the basic element of bike fit (see fig. 1). It is the distance from

the ground to the top of the bicycle's frame at that point where your crotch is when straddling the bike. To check for correct standover height, straddle the bike while wearing the kind of shoes in which you'll be riding, and bounce vigorously on your heels. If your crotch touches the frame, the bike is too big for you. (Don't even ride the bike around the block.) A bike should give you a minimum standover height of two inches (5 cm)

#### Step-Through & Mixte Frame Bicycles

Standover height does not apply to bicycles with step-through frames. Instead, the limiting dimension is determined by saddle height range. You must be able to adjust your saddle position as described in the Seat Postion Section without exceeding the limits set by the height of the top of the seat tube and the "Minimum Insertion" or "Maximum Extension" mark on the seat post.



Figure

#### **SEAT POSITION**

Correct seat adjustment is an important factor in getting the most performance and comfort from your bicycle. Small changes in seat position can have a sub-stantial effect on performance and comfort. To find your best seat position, make only one adjustment at a time. If the seat position is not comfortable for you, contact a qualified bicycle shop.

# The saddle can be adjusted in three directions:

- 1. Up and down adjustment. To check for correct saddle height (see Fig. 2):
  - sit on the saddle.
  - place one heel on a pedal.
  - rotate the crank until the pedal with your heel on it is in the down position and the crank arm is parallel to the seat tube.



Figure 2

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If your leg is not completely straight, your saddle height needs to be adjusted. If your hips must rock for the heel to reach the pedal, the saddle is too high. If your leg is bent at the knee with your heel on the pedal, the saddle is too low. Ask your local bicycle shop to set the saddle for your optimal riding position and to show you how to make this adjustmentn if you need assistance.

# If you choose to make your own saddle height adjustment:

- Loosen the seat post clamp.
- Raise or lower the seat post in the seat tube.
- Make sure the saddle is straight fore and aft.
- Re-tighten the seat post clamp to the recommended torque (See Apendix A).

Once the saddle is at the correct height, make sure that the seat post does not project from the frame beyond its "Minimum Insertion" or "Maximum Extension" mark (see Fig. 3).

WARNING: Do not remove the front or rear reflectors or reflector brackets from your bicycle. They arean integral part of the bicycle's safety system.

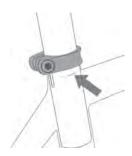


Figure 3

- 2. Front and back adjustment. The saddle can be adjusted forward or back to help you get the optimal position on the bike. Ask your dealer to set the saddle for your optimal riding position and to show you how to make this adjustment. If you choose to make your own front and back adjustment, make sure that the clamp mechanism is clamping on the straight part of the saddle rails and is not touching the curved part of the rails, and that you are using the recommended torque on the clamping fastener(s) (see Apendix A).
- 3 Saddle angle adjustment. Most people prefer a horizontal saddle; but some riders like the saddle nose angled up or down just a little. If you choose to make your own saddle

angle adjustment and you have a single bolt saddle clamp on your seat post, it is critical that you loosen the clamp bolt sufficiently to allow any serrations on the mechanism to disengage before changing the saddle's angle, and then that the serrations fully re-engage before you tighten the clamp bolt to the recommended torque (see Apendix A).

WARNING: When making saddle angle adjustments with a single bolt saddle clamp, always check to make sure that the serrations on the mating surfaces of the clamp are not worn. Worn serrations on the clamp can allow the saddle to move, causing you to lose control and fall.

Always tighten fasteners to the correct torque. Bolts that are too tight can stretch and deform. Bolts that are too loose can move and fatigue. Either mistake can lead to a sudden failure of the bolt, causing you to lose control and fall.

WARNING: After any saddle adjustment, be sure that the saddle adjusting mechanism is properly seated and tightened before riding. A loose saddle clamp or seat post clamp can cause damage to the seat post, or can cause you to lose control and fall.

#### -Christopher Morley

A correctly tightened saddle adjusting mechanism will allow no saddle movement in any direction. Periodically check to make sure that the saddle adjusting mechanism is properly tightened.

If, in spite of carefully adjusting the saddle height, tilt and fore-and-aft position, your saddle is still uncomfortable, you may need a different saddle design. Saddles, like people, come in many different shapes, sizes and resilience. Your dealer can help you select a saddle which, when correctly adjusted for your body and riding style, will be comfortable.

WARNING: Some people have claimed that extended riding with a saddle which is incorrectly adjusted or which does not support your pelvic area correctly can cause short-term or long-term injury to nerves and blood vessels, or even impotence. If your saddle causes you pain, numbness or other discomfort, listen to your body and stop riding until you talk to PUBLIC (1-888-450-0123) adjustment or a different saddle.

#### HANDLEBAR HEIGHT AND ANGLE

Your bike is equipped either with a "threadless" stem, which clamps on to the outside of the steerer tube, or with a "quill" stem, which clamps inside the steerer tube by way of an expanding binder bolt. If you aren't absolutely sure which type of stem your bike has, ask PUBLIC (1-888-450-0123).

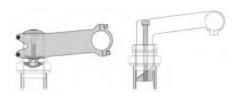


Figure 4 Figure 5

If your bike has a "threadless" stem (see Fig. 4) your local bike shop may be able to change handlebar height by moving height adjustment spacers from below the stem to above the stem, or vice versa. Otherwise, you'll have to get a stem of different length or rise. Consult **PUBLIC** (1-888-450-0123). Do not attempt to do this yourself, as it requires special knowledge.

If your bike has a "quill" stem (see Fig. 5) you can ask your dealer to adjust the handlebar height a bit by adjusting stem height.

A quill stem has an etched or stamped mark on its shaft that designates the stem's "Minimum Insertion" or "Maximum Extension". This mark must not be visible above the headset.

WARNING: A quill stem's
Minimum Insertion Mark must not be
visible above the top of the headset. If
the stem is extended beyond the
Minimum Insertion Mark the stem may
break or damage the fork's steerer
tube, which could cause you to lose
control and fall.

WARNING: Always tighten fasteners to the correct torque. Bolts that are too tight can stretch and deform. Bolts that are too loose can move and fatigue. Either mistake can lead to a sudden failure of the bolt, causing you to lose control and fall. (See Apendix A).

WARNING: An insufficiently tightened stem clamp bolt, handlebar

clamp bolt or bar end extension clamping bolt may compromise steering action, which could cause you to lose control and fall. Place the front wheel of the bicycle between your legs and attempt to twist the handlebar/ stem assembly. If you can twist the stem in relation to the front wheel, turn the handlebars in relation to the stem, or turn the bar end extensions in relation to the handlebar, the bolts are insufficiently tightened.

# CONTROL POSITION ADJUSTMENTS

The angle of the brake and shift control levers and their position on the handlebars can be changed. Ask your dealer to make the adjustments for you. If you choose to make your own control lever angle adjustment, be sure to re-tighten the clamp fasteners to the recommended torque (See Appendix A).

#### **BRAKE REACH**

PUBLIC bicycles have brake levers that can be adjusted for reach. If you have small hands or find it difficult to squeeze the brake levers, a qualified bicycle shop can either adjust the reach or fit shorter-reach brake levers.

WARNING: The shorter the brake lever reach, the more critical it is to have correctly adjusted brakes, so that full braking power can be applied within available brake lever travel. Brake lever travel insufficient to apply full braking power can result in loss of control, which may result in serious injury or death.

#### Tech

It's important to your safety, performance and enjoyment to understand how things work on your bicycle. If you have even the slightest doubt as to whether you understand something in this section of the Manual, talk to **PUBLIC** (888-450-0123). Also, see Appendix A, B, C and D.

#### WHEELS

Bicycle wheels are designed to be removable for easier transportation and for repair of a tire puncture. In most cases, the wheel axles are inserted into slots, called "dropouts" in the fork and frame

Wheels secured in one of three ways:

1. A hollow axle with a shaft ("skewer") running through it which has an adjustable tension nut on one end and an over-center cam on the other (cam action system, see Fig 6).

- 2. A hollow axle with a shaft ("skewer") running through it which has a nut on one end and a fitting for a hex key, lock lever or other tightening device on the other (through bolt, see Fig. 7).
- Hex nuts or hex key bolts which are threaded on to or into the hub axle (bolt-on wheel, see Fig. 8).

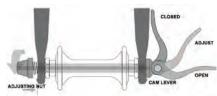


Figure 6

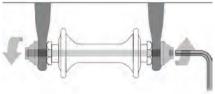


Figure 7

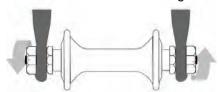


Figure 8

WARNING: Riding with an improperly secured wheel can allow the wheel to wobble or fall off the bicycle, which can cause serious injury or death.

#### Therefore, it is essential that you:

- Ask your dealer to help you make sure you know how to install and remove your wheels safely.
- Understand and apply the correct technique for clamping your wheel in place.
- Each time, before you ride the bike, check that the wheel is securely clamped.

The clamping action of a correctly secured wheel must emboss the surfaces of the dropouts.

# Front Wheel Secondary Retention Devices

Most bicycles have front forks that utilize a secondary wheel retention device to reduce the risk of the wheel disengaging from the fork if the wheel is incorrectly secured. Secondary retention devices are not a substitute for correctly securing your front wheel. The integral type is molded, cast or machined into the outer faces of the front fork dropouts. Ask PUBLIC (1-888-450-0123) to explain the particular secondary retention device on your bike.

WARNING: Do not remove or disable the secondary retention device. As its name implies, it serves as a back-up for a critical adjustment. If the wheel is not secured correctly, the secondary retention device can reduce the risk of the wheel disengaging from the fork. Removing or disabling the secondary retention device may also void the warranty.

Secondary retention devices are not a substitute for correctly securing your wheel. Failure to properly secure the wheel can cause the wheel to wobble or disengage, which could cause you to loose control and fall, resulting in serious injury or death.

#### **Wheels with Cam Action Systems**

Your bicycle may have a traditional over-center cam (see Fig. 6). The wheel hub is clamped in place by the force of the over-center cam pushing against one dropout and pulling the tension adjusting nut, by way of the skewer, against the other dropout. The amount of clamping force is controlled by the tension adjusting nut. Turning the tension adjusting nut clockwise while keeping the cam lever from rotating increases clamping force; turning it counterclockwise while keeping the cam lever from rotating reduces

clamping force. Less than half a turn of the tension adjusting nut can make the difference between safe clamping force and unsafe clamping force.

WARNING: The full force of the cam action is needed to clamp the wheel securely. Holding the nut with one hand and turning the lever like a wing nut with the other hand until everything is as tight as you can get it will not clamp a cam action wheel safely in the dropouts.

#### **Removing and Installing Wheels**

WARNING: If your bike is equipped with a hub brake such as a rear coaster brake; or if it has an internal gear rear hub, do not attempt to remove the wheel. The removal and re-installation of most hub brakes and internal gear hubs requires special knowledge. Incorrect removal or assembly can result in brake or gear failure, which can cause you to lose control and fall.

# REMOVING A FRONT WHEEL WITH DISC OR RIM BRAKE.

(1) If your bike has rim brakes, disengage the brake's quick-release mechanism to increase the clearance

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between the tire and the brake pads (see p. 17).

(2) If your bike has cam action front wheel retention, move the cam lever from the locked or CLOSED position to the OPEN position (see Fig. 6). If your bike has through bolt or bolt-on front wheel retention, loosen the fastener(s) a few turns counter-clockwise using an appropriate wrench, lock key or the integral lever.

You may need to tap the top of the wheel with the palm of your hand to release the wheel from the front fork.

# INSTALLING A FRONT WHEEL WITH DISC OR RIM BRAKE.

caution: If your bike is equipped with a front disk brake, be careful not to damage the disk, caliper or brake pads when re-inserting the disk into the caliper. Never activate a disk brake's control lever unless the disk is correctly inserted in the caliper.

(1) If your bike has cam action front wheel retention, move the cam lever so that it curves away from the wheel (see Fig. 6). This is the OPEN position. If your bike has through bolt or bolt-on front wheel retention, go to the next step.

- (2) With the steering fork facing forward, insert the wheel between the fork blades so that the axle seats firmly at the top of the fork dropouts. The cam lever, if there is one, should be on rider's left side of the bicycle (see Fig. 6). If your bike has a clip-on type secondary retention device, engage it.
- (3) If you have a traditional cam action mechanism: holding the cam lever in the ADJUST position with your right hand, tighten the tension adjusting nut with your left hand until it is finger tight against the fork dropout (see Fig. 6).
- (4) While pushing the wheel firmly to the top of the slots in the fork dropouts, and at the same time centering the wheel rim in the fork
- (a) With a cam action system, move the cam lever upwards and swing it into the CLOSED position (see Fig. 6). The lever should now be parallel to the fork blade and curved toward the wheel. To apply enough clamping force, you should have to wrap your fingers around the fork blade for leverage, and the lever should leave a clear imprint in the palm of your hand.
- (b) With a through-bolt or bolt-on system, tighten the fasteners to the torque specifications (see Appendix D

- or the hub manufacturer's instructions).
- (5) If you disengaged the brake quick-release mechanism, re-engage it to restore correct brake pad-to-rim clearance.
- (6) Spin the wheel to make sure that it is centered in the frame and clears the brake pads; then squeeze the brake lever and make sure that the brakes are operating correctly.

### REMOVING A REAR WHEEL WITH DISC OR RIM BRAKE.

(1) If you have a multi-speed bike with a derailleur gear system: shift the rear derailleur to high gear (the smallest, outermost rear sprocket).

If you have an internal gear rear hub, consult **PUBLIC** (1-888-450-0123), a qualified bicycle shop or the hub manufacturer's instructions before attempting to install the rear wheel.

If you have a single-speed bike with rim or disc brake, go to step (4) below.

(2) If your bike has rim brakes, disengage the brake's quick-release mechanism to increase the clearance between the wheel rim and the brake pads (see p. 17).

- (3) On a derailleur gear system, pull the derailleur body back with your right hand.
- (4) With a cam action mechanism, move the quick-release lever to the OPEN position (see Fig. 6). With a through bolt or bolt on mechanism, loosen the fastener(s) with an appropriate wrench, lock lever or integral lever; then push the wheel forward far enough to be able to remove the chain from the rear sprocket.
- (5) Lift the rear wheel off the ground a few inches and remove it from the rear dropouts.

# INSTALLING A REAR WHEEL WITH DISC OR RIM BRAKE.

CAUTION: If your bike is equipped with a rear disk brake, be careful not to damage the disk, caliper or brake pads when re-inserting the disk into the caliper. Never activate a disk brake's control lever unless the disk is correctly inserted in the caliper.

- (1) With a cam action system, move the cam lever to the OPEN position (see Fig. 6). The lever should be on the side of the wheel opposite the derailleur and freewheel sprockets.
- (2) On a derailleur bike, make sure that

the rear derailleur is still in its outermost, high gear, position; then pull the derailleur body back with your right hand. Put the chain on top of the smallest freewheel sprocket.

If you have an internal gear rear hub, consult **PUBLIC** (1-888-450-0123), a qualified bicycle shop or the hub manufacturer's instructions before attempting to install the rear wheel.

- (3) On single-speed, remove the chain from the front sprocket, so that you have plenty of slack in the chain. Put the chain on the rear wheel sprocket.
- (4) Then, insert the wheel into the frame dropouts and pull it all the way in to the dropouts.
- (5) On a single speed or an internal gear hub, replace the chain on the chainring; pull the wheel back in the dropouts so that it is straight in the frame and the chain has about 1/4 inches of up-and-down play.
- (6) With a cam action system, move the cam lever upwards and swing it into the CLOSED position (see Fig. 6). The lever should now be parallel to the seat stay or chain stay and curved toward the wheel. To apply enough clamping force, you should have to wrap your fingers around the fork

- blade for leverage, and the lever should leave a clear imprint in the palm of your hand.
- (7) With a bolt-on system, tighten the fasteners to the torque specifications (see Appendix A or the hub manufacturer's instructions).

CAUTION: If, on a traditional cam action system, the lever cannot be pushed all the way to a position parallel to the seat stay or chain stay, return the lever to the OPEN position. Then turn the tension adjusting nut counterclockwise one-quarter turn and try tightening the lever again.

- (8) If you disengaged the brake quick-release mechanism, re-engage it to restore correct brake pad-to-rim clearance (see p. 17).
- (9) Spin the wheel to make sure that it is centered in the frame and clears the brake pads; then squeeze the brake lever and make sure that the brakes are operating correctly.

#### **BRAKES**

There are three general types of bicycle brakes: rim brakes, which operate by squeezing the wheel rim between two brake pads; disc brakes, which operate by squeezing a hub-mounted disc

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between two brake pads; and coaster brakes. On some models of bicycle, the internal hub brake is operated by pedaling backwards. This is called a Coaster Brake (see Apendix D).



#### **WARNING:**

- Riding with improperly adjusted brakes, worn brake pads, or wheels on which the rim wear mark is visible is dangerous and can result in serious injury or death.
- Applying brakes too hard or too suddenly can lock up a wheel, which could cause you to lose control and fall. Sudden or excessive application of the front brake may pitch the rider over the handlebars, which may result in serious injury or death.
- Some bicycle brakes, such as disc brakes are extremely powerful. Take extra care in becoming familiar with these brakes and exercise particular care when using them.
- 4 Disc brakes can get extremely hot with extended use. Be careful not to touch a disc brake until it has had plenty of time to cool.
- See the brake manufacturer's instructions for operation and care of your brakes and for when brake pads must

- be replaced. If you do not have the manufacturer's instructions, contact **PUBLIC (1-888-450-0123)** or a qualified bicycle shop.
- If replacing worn or damaged parts, use only manufacturer-approved genuine replacement parts.

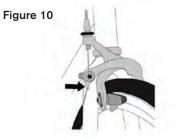
#### **Brake Controls and Features**

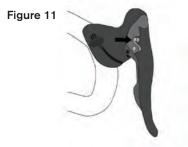
It's very important to your safety that you learn and remember which brake lever con-trols which brake on your bicycle. PUBLIC bicycles have the right brake lever controlling the rear brake and the left brake lever controlling the front brake. To make sure your bicycle's brakes are set up this way, squeeze one brake lever and look to see which brake—front or rear—engages. Now do the same with the other brake lever.

Make sure that your hands can reach and squeeze the brake levers comfortably. If your hands are too small to operate the levers comfortably, consult your dealer before riding the bike. The lever reach may be adjustable; or you may need a different brake lever design.

Most rim brakes have some form of quick-release mechanism to allow the brake pads to clear the tire when a wheel is removed or reinstalled. When the brake quick release is in the open position, the brakes are inoperative. Ask your dealer to make sure that you understand the way the brake quick release works on your bike (see Fig. 9, 10 & 11) and check each time to make sure both brakes work correctly







#### **How Brakes Work**

The braking action of a bicycle is a function of the friction between the braking surfaces. To make sure that you have maximum friction available, keep your wheel rims and brake pads or the disk rotor and caliper clean and free of dirt, lubricants, waxes or polishes.

Brakes are designed to control your speed, not just to stop the bike. Maximum braking force for each wheel occurs at the point just before the wheel "locks up" (stops rotating) and starts to skid. Once the tire skids, you actually lose most of your stopping force and all directional control. You need to practice slowing and stopping smoothly without locking up a wheel. The technique is called progressive brake modulation. Instead of jerking the brake lever to the position where you think you'll generate appropriate braking force, squeeze the lever, progressively increasing the braking force. If you feel the wheel begin to lock up, release pressure just a little to keep the wheel rotating just short of lockup. It's important to develop a feel for the amount of brake lever pressure required for each wheel at different speeds and on different surfaces. To better understand this, experiment a little by walking your bike and applying different amounts of pressure to each brake lever,

"[T]he bicycle will accomplish more for women's sensible dress than all the reform movements that have ever been waged."

-Author Uknown, from Demerarest's Family Magazine, 1895

until the wheel locks.

When you apply one or both brakes, the bike begins to slow, but your body wants to continue at the speed at which it was going. This causes a transfer of weight to the front wheel (or, under heavy braking, around the front wheel hub, which could send you flying over the handlebars).

A wheel with more weight on it will accept greater brake pressure before lockup; a wheel with less weight will lock up with less brake pressure. So, as you apply brakes and your weight is transferred forward, you need to shift your body toward the rear of the bike, to transfer weight back on to the rear wheel; and at the same time, you need to both decrease rear braking and increase front braking force. This is even more important on descents, because descents shift weight forward.

Two keys to effective speed control and safe stopping are controlling wheel lockup and weight transfer. This weight transfer is even more pronounced if your bike has a front suspension fork. Front suspension "dips/compresses/dives" under braking,

increasing the weight transfer. Practice braking and weight transfer techniques where there is no traffic or other hazards and distractions.

Everything changes when you ride on loose surfaces or in wet weather. It will take longer to stop on loose surfaces or in wet weather. Tire adhesion is reduced, so the wheels have less cornering and braking traction and can lock up with less brake force. Moisture or dirt on the brake pads reduces their ability to grip. The way to maintain control on loose or wet surfaces is to go more slowly.

#### **SHIFTING GEARS**

Your PUBLIC multi-speed bicycle will have a derailleur drivetrain or an internal gear hub drivetrain.

#### How a Derailleur Drivetrain Works

If your PUBLIC bicycle has a derailleur drivetrain, the gear-changing mechanism will have:

 a rear cassette or freewheel sprocket cluster

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- a rear derailleur
- usually a front derailleur
- one or two shifters
- one, two or three front sprockets called chainrings
- a drive chain

There are several different types and styles of shifting controls: levers, twist grips, triggers, combination shift/brake controls and push-buttons. Contact PUBLIC (1-888-450-0123) or a qualified bicycle shop to explain the type of shifting controls that are on your bike, and to show you how they work.

CAUTION: Never move the shifter while pedaling backward, nor pedal backwards immediately after having moved the shifter. This could jam the chain and cause serious damage to the bicycle.

#### SHIFTING THE REAR DEARAILLEUR

The rear derailleur is controlled by the right shifter. The function of the rear derailleur is to move the drive chain from one gear sprocket to another. The smaller sprockets on the gear cluster produce higher gear ratios. Pedaling in the higher gears requires greater pedaling effort, but takes you a greater distance with each revolution of the pedal cranks. The larger sprockets

produce lower gear ratios. Using them requires less pedaling effort, but takes you a shorter distance with each pedal crank revolution. Moving the chain from a smaller sprocket of the gear cluster to a larger sprocket results in a downshift. Moving the chain from a larger sprocket to a smaller sprocket results in an upshift. In order for the derailleur to move the chain from one sprocket to another, the rider must be pedaling forward.

#### SHIFTING THE FRONT DEARAILLEUR

The front derailleur, which is controlled by the left shifter, shifts the chain between the larger and smaller chainrings. Shifting the chain onto a smaller chainring makes pedaling easier (a downshift). Shifting to a larger chainring makes pedaling harder (an upshift).

#### WHICH GEAR SHOULD I BE IN?

The combination of largest rear and smallest front gears is for the steepest hills. The smallest rear and largest front combination is for the greatest speed. It is not necessary to shift gears in sequence. Instead, find the "starting gear" which is right for your level of ability — a gear which

is hard enough for quick acceleration but easy enough to let you start from a stop without wobbling — and experiment with upshifting and downshifting to get a feel for the different gear combinations. At first, practice shifting where there are no obstacles, hazards or other traffic, until you've built up your confidence. Learn not to use either the "smallest to smallest" or "largest to largest" gear combinations because they may cause unacceptable stress on the drive train. Learn to anticipate the need to shift, and shift to a lower gear before the hill gets too steep. If you have difficulties with shifting, the problem could be mechanical adjustment. Contact PUBLIC (1-888-450-0123) or a qualified bicycle shop for help.

#### WHAT IF IT WON'T SHIFT GEARS

If moving the shift control one click repeatedly fails to result in a smooth shift to the next gear, chances are that the mechanism is out of adjustment. Take the bicycle to a qualified bicycle shop to have it adjusted.

# How an Internal Gear Hub Drivetrain Works

If your PUBLIC bicycle has an internal gear hub drivetrain, the gear changing mechanism will consist of:

- a 7- or 8- speed internal gear hub
- one shifter
- one control cable
- one front sprocket, called a chainring
- a drive chain

#### SHIFTING INTERNAL HUB GEAR HUBS

Shifting with an internal gear hub drivetrain is simply a matter of moving the shifter to the indicated position for the desired gear ratio. After you have moved the shifter to the gear position of your choice, ease the pressure on the pedals for an instant to allow the hub to complete the shift.

#### WHICH GEAR SHOULD I BE IN?

The numerically lowest gear (1) is for the steepest hills. The numerically largest gear is for the greatest speed.

Shifting from an easier, "slower" gear (like 1) to a harder, "faster" gear (like 2 or 3) is called an upshift. Shifting from a harder, "faster" gear to an easier, "slower" gear is called a downshift. It is not necessary to shift gears in sequence. Instead, find the "starting gear" for the conditions — a gear which is hard enough for quick accelera-

tion but easy enough to let you start from a stop without wobbling — and experiment with upshifting and downshifting to get a feel for the different gears. At first, practice shifting where there are no obstacles, hazards or other traffic, until you've built up your confidence. Learn to anticipate the need to shift, and shift to a lower gear before the hill gets too steep. If you have difficulties with shifting, the problem could be mechanical adjustment. See a qualified bike shop for help.

#### WHICH GEAR SHOULD I BE IN?

If moving the shift control one click repeatedly fails to result in a smooth shift to the next gear, chances are that the mechanism is out of adjustment. Take the bicycle to a qualified bicycle shop to have it adjusted.

#### **PEDALS**

Toe Overlap is when your toe can touch the front wheel when you turn the handle-bars to steer while a pedal is in the forward-most position. This is common on small-framed bicycles, and is avoided by keeping the inside pedal up and the outside pedal down when making sharp turns. On any bicycle, this technique will also prevent the inside pedal from striking the ground in a turn.

WARNING: Toe Overlap could cause you to lose control and fall. Ask your dealer to help you determine if the combination of frame size, crank arm length, pedal design and shoes you will use results in pedal overlap. Whether you have overlap or not, you must keep the inside pedal up and the outside pedal down when making sharp turns.

#### **TIRES AND TUBES**

#### **Tires**

Bicycle tires are available in many designs and specifications, ranging from general-purpose designs to tires designed to perform best under very specific weather or terrain conditions. If, once you've gained experience with your new bike, you feel that a different tire might better suit your riding needs, **PUBLIC (1-888-450-0123)** or a qualified bicycle shop can help you select the most appropriate design.

The size, pressure rating, and on some high-performance tires the specific recommended use, are marked on the sidewall of the tire (see Fig. 12). The part of this information which is most important to you is Tire Pressure. But some wheel rim manufacturers also specify maximum tire pressure with a label on the rim.

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WARNING: Never inflate a tire beyond the maximum pressure marked on the tire's sidewall or the wheel rim. If the maximum pressure rating for the wheel rim is lower than the maximum pressure shown on the tire, always use the lower rating. Exceeding the recommended maximum pressure may blow the tire off the rim or damage the wheel rim, which could cause damage to the bike and injury to the rider and bystanders.

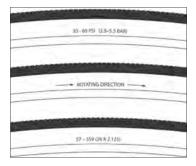


Figure 12

The best and safest way to inflate a bicycle tire to the correct pressure is with a bicycle pump that has a built-in pressure gauge.

WARNING: There is a safety risk in using gas station air hoses or other air compressors. They are

not made for bicycle tires. They move a large volume of air very rapidly, and will raise the pressure in your tire very rapidly, which could cause the tube to explode.

Tire pressure is given either as maximum pressure or as a pressure range. How a tire performs under different terrain or weather conditions depends largely on tire pressure. Inflating the tire to near its maximum recommended pressure gives the lowest rolling resistance; but also produces the harshest ride. High pressures work best on smooth, dry pavement.

Very low pressures, at the bottom of the recommended pressure range, give the best performance on smooth, slick terrain such as hard-packed clay, and on deep, loose surfaces such as deep, dry sand.

Tire pressure that is too low for your weight and the riding conditions can cause a puncture of the tube by allowing the tire to deform sufficiently to pinch the inner tube between the rim and the riding surface. This may also result in rim damage.

CAUTION: Pencil type automotive tire gauges can be inaccurate and should not be relied upon for consistent, accurate pressure readings.

Instead, use a high quality dial or digital gauge.

Some tires may need to be brought up to pressure every week or two, so it is important to check your tire pressures before every ride.

Some special high-performance tires have unidirectional treads: their tread pattern is designed to work better in one direction than in the other. The sidewall marking of a unidirectional tire will have an arrow showing the correct rotation direction. If your bike has unidirectional tires, be sure that they are mounted to rotate in the correct direction.

#### **Tires Valves**

There are primarily two kinds of bicycle tire valves: The Schrader Valve and the Presta Valve. The bicycle pump you use must have the fitting appropriate to the valve stems on your bicycle.

The Schrader valve is like the valve on a car tire. To inflate a Schrader valve tire, remove the valve cap and clamp the pump fitting onto the end of the valve stem. To let air out of a Schrader valve, depress the pin in the end of the valve stem with the end of a key or other appropriate object.

The Presta valve has a narrower diameter and is only found on bicycle tires.

To inflate a Presta valve tire using a Presta headed bicycle pump, remove the valve cap; unscrew (counterclockwise) the valve stem lock nut; and push down on the valve stem to free it up. Then push the pump head on to the valve head, and inflate. To inflate a Presta valve with a Schrader pump fitting, you'll need a Presta adapter (available at your bike shop) which screws on to the valve stem once you've freed up the valve. The adapter fits into the Schrader pump fitting. Close the valve after inflation. To let air out of a Presta valve, open up the valve stem lock nut and depress the valve stem.

WARNING: We highly recommend that you carry a spare inner tube when you ride your bike, unless the bike is fitted with tubeless tires. Patching a tube is an emergency repair. If you do not apply the patch correctly or apply several patches, the tube can fail, resulting in possible tube failure, which could cause you to lose control and fall. Replace a patched tube as soon as possible.

### Service

WARNING: Technological advanc-

es have made bicycles and bicycle components more complex, and the pace of innovation is increasing. It is impossible for this manual to provide all the information required to properly repair and/or maintain your bicycle. In order to help minimize the chances of an accident and possible injury, it is critical that you have any repair or maintenance that is not specifically described in this manual performed by your dealer. Equally important is that vour individual maintenance requirements will be determined by everything from your riding style to geographic location. Consult PUBLIC (1-888-450-0123) or a qualified bicycle shop for help in determining your maintenance requirements.

WARNING: Many bicycle service and repair tasks require special knowledge and tools. Do not begin any adjustments or service on your bicycle until you have learned from your dealer how to properly complete them. Improper adjustment or service may result in damage to the bicycle or in an accident which can cause serious injury or death.

# If you want to learn to do major service and repair work on your bike:

- Ask PUBLIC or a qualified bicyle shop for copies of the manufacturer's installation and service instructions for the components on your bike, or contact the component manufacturer.
- 2. Ask PUBLIC or a qualified bicyle shop to recommend a book on bicycle repair.
- Ask PUBLIC or a qualified bicyle shop about the availability of bicycle repair courses in your area.

We recommend that you ask a qualified bicycle shop to check the quality of your work the first time you work on something and before you ride the bike, just to make sure that you did everything correctly. Since that will require the time of a mechanic, there may be a modest charge for this service.

We also recommend that you a qualified bicycle shop for guidance on what spare parts it would be appropriate for you to have once you have learned how to replace such parts when they require replacement.

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#### SERVICE INTERVALS

should be performed by the owner, and require no special tools or knowledge beyond what is presented in this manual. The following are examples of the type of service you should perform yourself. All other service, maintenance and repair should be performed in a properly equipped facility by a qualified bicycle mechanic using the correct tools and procedures specified by the manufacturer.

Some service and maintenance can and

 Break-in Period: Your bike will last longer and work better if you break it in before riding it hard. Control cables and wheel spokes may stretch or "seat" when a new bike is first used and may require readjustment by your dealer. Your Mechanical Safety Check (see p. 8) will help you identify some things that need readjustment. But even if everything seems fine to you, it's best to take your bike back to the dealer for a checkup. PUBLIC typically suggest you bring the bike in for a 30-day checkup. Another way to judge when it's time for the first checkup is to bring the bike in after three to five hours of hard off-road use, or about 10 to 15 hours of on-road or more casual off-road use. But if you think something is wrong with the bike, take it to

- your dealer before riding it again.
- 2. **Before every ride:** Mechanical Safety Check (see p. 8).
- 3. After every long or hard ride; if the bike has been exposed to water or grit; or at least every 100 miles:
  Clean the bike and lightly lubricate the chain's rollers with a good quality bicycle chain lubricant. Wipe off excess lubricant with a lint-free cloth. Lubrication is a function of climate.
  Talk to PUBLIC (1-888-450-0123) or a qulifired bike ship about the best lubricants and the recommended lubrication frequency for your area.
- 4. After every long or hard ride or after every 10 to 20 hours of riding:
  - Lift the front wheel off the ground and swing it from side to side. Feel smooth? If you feel any binding or roughness in the steering, you may have a tight headset. Have your dealer check it.
  - Grab one pedal and rock it toward and away from the centerline of the bike; then do the same with the other pedal. Anything feel loose? If so, have your dealer check it.
  - Take a look at the brake pads. Are they worn or not hitting the wheel rim squarely? Time to have the dealer

- adjust or replace them. Carefully check the control cables and cable housings. Any rust? Kinks? Fraying? If so, have your dealer replace them.
- Squeeze each adjoining pair of spokes on either side of each wheel between your thumb and index finger. Do they all feel about the same? If any feel loose, have your dealer check the wheel for tension and trueness.
- Check the tires for excess wear, cuts or bruises. Have your dealer replace them if necessary.
- Check the wheel rims for excess wear, dings, dents and scratches. Consult your dealer if you see any rim damage.
- Check to make sure that all parts and accessories are still secure, and tighten any that are not.
- Check the frame, particularly in the area around all tube joints; the handlebars; the stem; and the seatpost for any deep scratches, cracks or discoloration. These are signs of stress-caused fatigue and indicate that a part is at the end of its useful life and needs to be replaced.

- 5. Disc brakes require a different set of inspection steps. Check for these issues before every ride:
  - Pads rubbing on rotors.
  - Worn out pads (which can lead to over-extended pistons).
  - Pistons that are stuck and/or won't retract fully.
  - Disc rotors that are bent and need straightening by the dealer.

WARNING: Like any mechanical device, a bicycle and its components are subject to wear and stress. Different materials and mechanisms wear or fatigue from stress at different rates and have different life cycles. If a component's life cycle is exceeded, the component can suddenly and catastrophically fail, causing serious injury or death to the rider. Scratches, cracks, fraying and discoloration are signs of stress-caused fatigue and indicate that a part is at the end of its useful life and needs to be replaced. While the materials and workmanship of your bicycle or of individual components may be covered by a warranty for

- a specified period of time by the manufacturer, this is no guarantee that the product will last the term of the warranty. Product life is often related to the kind of riding you do and to the treatment to which you submit the bicycle. The bicycle's warranty is not meant to suggest that the bicycle cannot be broken or will last forever. It only means that the bicycle is covered subject to the terms of the warranty.
- 6. As required: If either brake lever fails the Mechanical Safety Check (see p. 8), don't ride the bike. Have a qualified bike shop check the brakes. If the chain won't shift smoothly and quietly from gear to gear, the derailleur is out of adjustment. Consult a qualfied bicycle shop.
- 7. Every to 50 hours of riding: Take your bike to your dealer for a complete checkup.

# IF YOUR BICYCLE SUSTAINS AN IMPACT:

 First, check yourself for injuries, and take care of them as best you can. Seek medical help if necessary.

- 2. Next, check your bike for damage.
- After any crash, take your bike to your dealer for a thorough check. Carbon composite components, including fames, wheels,

handlebars, stems, cranksets, brakes, etc. which have sustained an impact must not be ridden until they have been disassembled and thoroughly inspected by a qualified mechanic.

WARNING: A crash or other impact can put extraordinary stress on bicycle components, causing them to fatigue prematurely. Components suffering from stress fatigue can fail suddenly and catastrophically, causing loss of control, serious injury or death.

P 24 +1 888 450 0123

# PUBLIC Bikes Limited Warranty

PUBLIC warrants each frame, fork, and original component part of the bicycle against defects in workmanship and materials:

- The bicycle frame and fork are covered for the lifetime of the original owner
- Paint, decals and all components are covered for a period of one (1) year
- All original parts are covered for a period of one (1) year

#### This warranty does not cover:

- Normal wear and tear
- mproper assembly
- Improper follow-up maintenance
- Installation of parts or accessories not originally intended for, or compatible with, the bicycle as sold
- Damage or failure due to accident, misuse, abuse, or neglect
- Labor charges for part replacement or changeover

This warranty is void in its entirety by any modification of the frame, fork, or components. This warranty is expressly limited to the repair or replacement of a defective item and is the sole remedy of the warranty. This warranty extends from the date of purchase, applies only to the original owner, and is not transferable. PUBLIC Bikes is not responsible for incidental or consequential damages. Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you.

Claims under this warranty must be made through PUBLIC. To process your warranty claim, submit the following to customerservice@publicbikes.com or contact PUBLIC (1-888-450-0123).

- A photo of the issue
- A description of the issue
- Your serial number

Proof of purchase and assembly by a professional mechanic is required. Please note a photo and serial number are essential to processing your submission.

This warranty gives the consumer specific legal rights, and those rights may vary from place to place. This warranty does not affect the statutory rights of the consumer.

# WHERE CAN I LOCATE THE SERIAL NUMBER ON PUBLIC BIKE?

Each PUBLIC model features a unique serial number that identifies the make and model of your bike. The unique serial number also proves ownership of the bike to the purchaser in our customer database. Your unique serial number is engraved into the frame and located underneath the bottom bracket where the crank arms meet the frame. Simply turn your bike upside down and record the number (see Fig. 13 below).



Figure 13

### Appendix A

#### **FASTENER TORQUE SPECIFICATIONS**

- Correct tightening torque of threaded fasteners is very important to your safety. Always tighten fasteners to the correct torque. In case
  of a conflict between the instructions in this manual and information provided by a component manufacturer, consult with your dealer
  or the manufacturer's customer service representative for clarification. Bolts that are too tight can stretch and deform. Bolts that are
  too loose can move and fatigue. Either mistake can lead to a sudden failure of the bolt.
- Always use a correctly calibrated torque wrench to tighten critical fasteners on your bike. Carefully follow the torque wrench manufacturer's instructions on the correct way to set and use the torque wrench for accurate results.
- Always use the correct size Allen socket, open-end or box-end wrench. Avoid use of a crescent wrench or vice grips as they can damage components.

#### **FASTENER RECOMMENDED TORQUE:**

- FRONT WHEEL AXLE NUTS 180-240 IN-LBS
- REAR WHEEL AXLE NUTS 240-300 IN-LBS
- PEDALS 300-360 IN-LBS
- SEAT POST CLAMP 130-170 IN-LBS
- STEM BINDER BOLT 145-180 IN-LBS
- HANDLEBAR CLAMP 120-145 IN-LBS
- BRAKE LEVER CLAMP 25-35 IN-LBS
- SHIFTER CLAMP 25-30 IN-LBS

### Appendix B

#### INTENDED USE OF YOUR BICYCLE

WARNING: Understand your bike and its intended use. Choosing the wrong bicycle for your purpose can be hazardous. Using your bike the wrong way is dangerous.



#### **GENERAL PURPOSE RIDING**

INTENDED: For paved roads, gravel or dirt roads that are in good condition, and bike paths.

NOT INTENDED: For off-road or mountain bike use, or for any kind of jumping. Some of these bikes have suspension features, but these features are designed to add comfort, not off-road capability. Some come with relatively wide tires that are well suited to gravel or dirt paths. Some come with relatively narrow tires that are best suited to faster riding on pavement. If you ride on gravel or dirt paths, carry heavier loads or want more tire durability talk to your dealer about wider tires.

### Appendix C

#### CHANGING COMPONENTS OR ADDING ACCESSORIES

- There are many components and accessories available to enhance the comfort, performance and appearance of your bicycle. However,
  if you change components or add accessories, you do so at your own risk. The bicycle's manufacturer may not have tested that
  component or accessory for compatibility, reliability or safety on your bicycle.
- Before installing any component or accessory, including but not limited to a different size tire, a lighting system, a luggage rack, a child seat, a trailer, etc., make sure that it is compatible with your bicycle by checking with with PUBLIC. Be sure to read, understand and follow the instructions that accompany the products you purchase for your bicycle.

WARNING: Failure to confirm compatibility, properly install, operate and maintain any component or accessory can result in serious injury or death.

WARNING: Exposed springs on the saddle of any bicycle fitted with a child seat can cause serious injury to the child.

WARNING: Changing the components on your bike with other than genuine replacement parts may compromise the safety of your bicycle and may void the warranty. Check with PUBLIC (1-888-450-0123) or an authorized bicycle shop before changing the components on your bike.

### Appendix D

#### **COASTER BRAKE**

#### How the Coaster Brake Works:

The coaster brake is a sealed mechanism that is a part of the bicycle's rear wheel hub. The brake is activated by reversing the rotation of the pedal cranks (see Fig. 15). Start with the pedal cranks in a nearly horizontal position, with the front pedal in about the 4 o'clock position, and apply downward foot pressure on the pedal that is to the rear. About 1/8 turn rotation will activate the brake. The more downward pressure you apply, the more braking force, up to the point where the rear wheel stops rotating and begins to skid.

WARNING: Before riding, make sure that the brake is working properly. If it is not working properly, have the bicycle checked by your dealer before you ride it.

WARNING: If your bike has only a coaster brake, ride conservatively. A single rear brake does not have the stopping power of front-and-rear brake systems.

#### **Adjustining your Coaster Brake:**

Coaster brake service and adjustment requires special tools and special knowledge. Do not attempt to disassemble or service your coaster brake. Take the bicycle to an authorized bicycle shop for coaster brake service.



Figure 15

"Life is like riding a bicycle – in order to keep your balance, you must keep moving." -Albert Einstein



# PUBLIC

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