BICYCLE OWNER'S MANUAL

NOTE: Please read the complete Owner's Manual before assembly or taking your first ride. Please check the website at swobo.com to make sure you have the most current version of the instructions for you Swobo bike.

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. Not the people who sold you the bike. Not the people who made it. Not the people who distribute it. Not the people who manage or maintain the roads or trails you ride on. You. So you need to know-and to practice-the rules of safe and responsible riding and of proper use and maintenance. Proper use and maintenance of your bicycle reduces risk of injury and damage.

This manual contains many "Warnings" and "Cautions" concerning the consequences of failure to maintain or inspect your bicycle and of failure to follow safe 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 ⚠ safety alert symbol and the word **CAUTION** indicates a potentially hazardous situation, which, if not avoided, could result in minor or moderate injury, or is an alert against unsafe practices.
- The word **CAUTION** used without the safety alert symbol indicates a situation that, if not avoided, could result in serious damage to the bicycle or the voiding of your warranty.

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.

Because it is impossible to anticipate every situation or condition that can occur while riding, 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 which cannot be predicted or avoided, and which are the sole responsibility of the rider.

This page intentionally left blank

Section 1

Assembly Instructions

Note: If you bought your SWOBO bicycle directly from the SWOBO web site, this section of the manual will help you in the final assembly of the bicycle. Once the bicycle is assembled and before your first ride, please be sure to read the Safety and Maintenance sections of this manual, which start on page 15 and page 41.

Assembly videos can also be found on swobo.com. Please refer to them if you have any doubt of the instructions of this manual or your local Swobo dealer.

⚠ WARNING: Bicycling can be a hazardous activity even under the best of circumstances. Proper assembly and maintenance of this bicycle is your responsibility as it helps reduce the risk of injury. Riding a bicycle that is improperly assembled or maintained can result in possible injury or death.

BEFORE YOU START:

1. Make sure that you have received the correct model and size.
2. Review these instructions and illustrations.
3. Note that the directions left, right, front and rear are used here as seen by a rider while seated on the bicycle.

TOOLS NEEDED:

You will need most of the following tools:

1. A 15 millimeter open-end wrench or a 6 or 8 inch adjustable wrench.
2. 2.5, 4, 5 and 6 millimeter metric hex wrenches
3. Side-cutters to remove packaging and zipties
4. A small tube of white Lithium grease
5. A rag for cleaning off excess grease

PREPARATION:

1. Review the Assembly section of this manual in its entirety.
2. Remove the bicycle and parts box from the shipping box. Check to make sure that no parts remain in the box.
3. Carefully remove the front wheel, which is attached to the side of the bicycle for shipping.
4. Carefully remove all packing material from the bicycle. This includes all zip ties, axle caps and material protecting the frame. Use side-cutters to cut the zipties, being careful not to damage the tube when cutting.

ASSEMBLY:

⚠ CAUTION: Never squeeze the disc brake control lever when the front wheel is not securely installed. Be careful not to damage the disc rotor or calipers when inserting the wheel.

1. INSTALL THE FRONT WHEEL:

Due to packing considerations, your swobo may have the front fork and handlebar stem facing backwards. Make sure to rotate them 180 degrees so that the stem points forward.

NOTE: IF the bike has a front disc brake (fig.2) exercise care when inserting the disc rotor into the brake caliper If the bike has a caliper or cantilever front brake (fig 11) the brake quick release needs to be open while the wheel is being installed.

FIG 1

If your wheel has fixed axle nuts (fig 1):

1. With the fork facing forward, insert the wheel axle into the slots at the tip of the fork so that the axle seats firmly at the top of the slots.
2. While pushing the wheel firmly to the top of the slots in the dropouts, and at the same time centering the wheel rim in the fork, use a 15mm box wrench or an adjustable wrench to tighten the axle nuts. *Righty Tighty. Lefty Loosey*.
3. Spin the wheel to make sure that the brake pads do not touch the disc rotor or wheel rim when the brake is fully released.
4. If one brake pad is touching the rotor or wheel rim, make sure the wheel is centered in the fork, then see:
   ADJUSTMENTS, 3. Brake adjustments on page 13.

FIG 2

If your wheel has an axle skewer (fig.3):

The front wheel retention skewer or Quick Release (QR) skewer is in the Parts Box. It looks like this:

FIG 3

1. Unscrew the tension nut from the end of the wheel retention skewer; insert the skewer into the hollow axle with the narrow end of the conical springs facing the hub, one spring on each side of the hub; then re-install the tension nut.
2. With the fork and the handlebar stems facing forward, insert the wheel axle into the slots at the tip of the fork so that the axle seats firmly at the top of the slots.
3. With the wheel firmly to the top of the slots in the dropouts, and at the same time centering the wheel rim in the fork, tighten the wheel retention nut to just touching the fork with the QR skewer open. Close the QR skewer so you see "closed". There should be resistance as the QR mechanism engages. ⚠ **See the video on Swobo.com if you do not understand these instructions before taking your first ride!**
4. Close the front brake Quick Release (fig 10) then spin the wheel to make sure that the brake pads do not touch the disc rotor or wheel rim when the brake is fully released.
5. If one brake pad is touching the rotor or wheel rim, make sure the wheel is centered in the fork, then see **ADJUSTMENTS, 3. Brake adjustment on page 13**.

⚠ **Warning: Riding with an improperly tightened wheel can allow the wheel to wobble or disengage from the bicycle, causing damage to the bicycle, and serious danger or death to the rider.**

2. INSTALL THE HANDLEBAR:

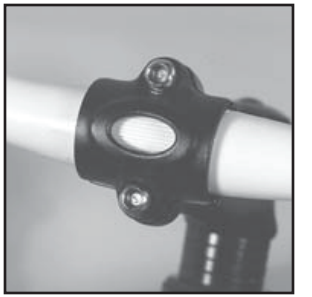

FIG 4

1. Using a 5mm or 6mm hex wrench, remove the stem's handlebar clamp plate from the stem (fig 4). Put a little bit of grease on the threads of each bolt; then place the center of the handlebar in the groove of the stem. Hold the handlebar in position against the stem, then loosely replace the clamp plate and bolts. If your SWOBO has only one hand brake (fig 5), the lever should be on the left. If your SWOBO has two and brakes, the front brake level should be on the left and the rear brake lever should be on the right.
2. Rotate the handlebar to a comfortable position and angle.
3. Securely tighten the handlebar bolts, first by turning them clockwise with the hex wrench the same number of turns until force is required; then, tightening each alternatively an equal amount until they are secure and you cannot twist the handlebar out of position.

FIG 5

⚠ WARNING: Failure to properly tighten the handlebar clamp bolts 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 or turn the handlebars in relation to the stem, tighten the appropriate bolts.

*If your SWOBO has a cable-activated hand brake & the cable is **NOT** connected to the brake lever:*

3. CONNECT THE BRAKE CABLE AT THE LEVER:

1. Squeeze the brake lever against the grip; then insert the barrel end of the front brake cable into the slot in the brake lever (fig 6).
2. Release the lever, then tighten the adjusting barrel locknut snugly by turning it clock-wise. If you SWOBO has a caliper or cantilever brake, close its quick-release (fig 11).
3. Make sure that the brake lever is securely clamped and cannot rotate on the handle-bar.
4. Squeeze the brake lever and make sure that there is at least one inch of clearance between the tip of the lever and the handlebar grip at the point where the brake is fully engaged. If there is less than one inch of clearance, go to **ADJUSTMENTS, 3. Brake adjustments on page 13**.
5. If applicable, close the front brake Quick Release then spin the wheel to make sure that the brake pads do not touch the disc rotor or wheel rim. See **ADJUSTMENTS, 3. Brake adjustments on page 13** for proper brake adjustment procedure.

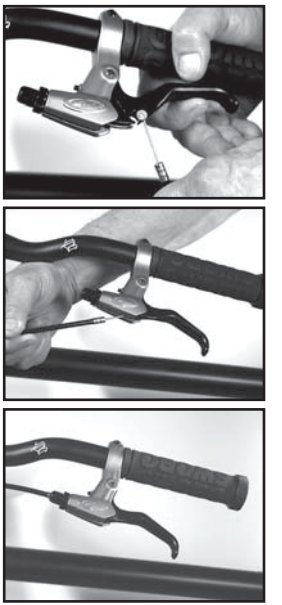

FIG 6

⚠ WARNING: Riding with improperly adjusted brakes is dangerous and can result in serious injury or death.

4. INSTALL THE PEDALS:

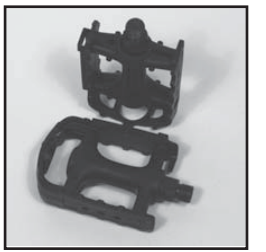

FIG 7

1. WARNING: Improperly installed and tightened pedals can work loose, damaging the bicycle and causing possible serious injury or death to the rider.
2. Apply a small amount of grease to the threads of each pedal.

⚠ Ignoring this step will damage the crank threads and void your warranty.

3. Look for the letter "L" or "R" on the side or end of each pedal spindle (fig. 7).
4. Turning the spindle clockwise by hand, thread the pedal marked "R" into the crank arm on the right (drive) side of the bicycle. Make sure that your are not "cross-threading", which can strip the threads in the crank arm. **If the threads do not turn easily, don't force them**. Back the spindle out and start over. Once the pedal is threaded into the crank, tighten the spindle securely to the crank arm with a 15mm open end or an adjustable wrench.

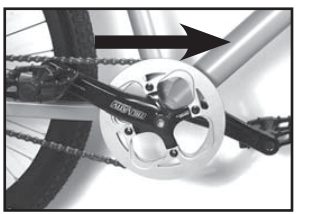

FIG 8

5. Turning the spindly counterclockwise by hand (fig. 8), thread the pedal marked "L" into the crank arm on the left side of the bike. Make sure that you are not "cross-threading", which can strip the threads in the crank arm. **If the threads do not turn easily, don't force them**. Back the spindle out and start over. Once the pedal is threaded into the crank, tighten the spindle securely to the crank arm with a 15 mm open end or an adjustable wrench.

⚠ WARNING: Riding with improperly installed pedals is dangerous and can result in serious injury or death.

5. ATTACH THE SEAT POST AND SADDLE:

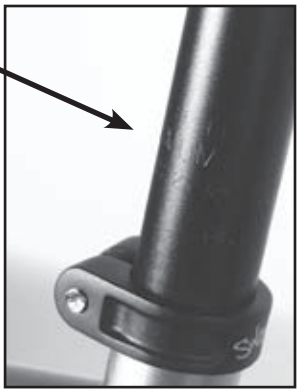

FIG 9

1. Using a 5 mm or 6mm hex wrench, loosen the seat post clamp bolt(s) just enough to loosen the clamp.
2. Put a light film of grease on the seat post at and below the "minimum insertion" mark; insert the seat post into the seat tube; then adjust the saddle to the desired height. The seat post must be inserted so that the "minimum insertion" line marked on the seat post (fig. 9) is not visible.
3. Using a 5 mm or 6mm hex wrench, tighten the seat post clamp bolt(s). The bolts(s) should be in front of the seat pose.
4. Try to twist the sable from side to side. If the saddle moves in relation to the bicycle frame you will need to adjust (tighten) the seat post clamp a bit tighter. Repeat steps (c) and (d) until the seat post is securely clamped.

⚠ WARNING: If your seat post projects from the frame beyond the "Minimum Insertion" mark (see fig. X) the seat post may break, which could cause you to lose control and fall and result in serious injury or death.

⚠ WARNING: Riding with an improperly tightened seat post can allow the saddle to turn or move and cause you to lose control and fall.

6. ATTACH THE REFLECTORS:

1. Securely fasten the front (white) reflector to the bracket using the mounting screw.
2. Securely fasten the reflector bracket to the handlebar.
3. Repeat for the rear (red) reflector and attach to the seat post.
4. Adjust each reflector's angle so that it is at a 90 degree to the ground.
5. Attach the two white wheel reflectors to a pair of adjoining spokes of each wheel, in a position opposite the tire valve stem and as close to the wheel rim as the mounting clips allow.
6. If your SWOBO has the 3M reflective strips on the sidewalls of the tires, you do not need to install the wheel reflectors.

⚠ WARNING: Do not fail to install the reflectors on your bicycle. They are an integral part of the bicycle's safety system.

ADJUSTMENTS:

SADDLE ADJUSTMENTS:

FIG 10

1. Sit on the saddle in a riding position.
2. Place one heel on a pedal. When you rotate the foot to the bottom of the pedal stroke (6 o'clock) your leg should be straight. You should have a slight bend in your knee.
3. Saddle angle and position is also important to your comfort. Most people prefer a horizontal saddle; but some riders like the saddle nose angled up or down just a little. To adjust saddle angle or front- to -back-position:
4. With a 6 mm hex wrench, loosen the clamp bolt under the saddle (fig. 10) enough to be able to change saddle angle and fore-and-aft.
5. Once the saddle is in the position you want, tighten the saddle clamp bolt as tight as you can.
6. Small changes in saddle position can have a substantial effect on performance and comfort. To find your best saddle position, make only one adjustment at a time.

PRO TIP: A properly adjusted saddle height is important to comfort and pedaling efficiency. Take your time to get it right.

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

HANDLEBAR HEIGHT

Handlebar height has a small range of adjustment: you can rotate the handlebars to move the grips slightly closer or further away from you. You can also lower the handlebars slightly by moving spacers at the handlebar stem.

BRAKE ADJUSTMENT

Coaster brakes are not adjustable. Hand brakes are adjustable.

If your SWOBO has a hand brake:

1. Hand brakes are generally adjusted with the adjusting barrel at the brake lever. If the brake is rubbing, turn the adjusting barrel and its lock nut clockwise. If the brake is not engaging soon enough, turn the adjusting barrel counterclockwise. Be sure to turn the adjusting barrel locknut all the way against the brake lever body when finished adjusting.
2. On a caliper (fig. 11) or cantilever (fig. 12) brake, you must make sure that the quick release, which opens the brake to allow the tire to pass between the brake pads, is in the closed position before turning the adjusting barrel. The caliper brake (fig. 11) has a small lever at the cable clamp bolt. Flick it up and outward: the brake is open; flick it down so it points at the pavement: the brake is closed.
3. On a cantilever brake (fig. 12), the straddle cable, the cable which connects the two sides of the brake, performs the function. Squeeze the brake shoes against the wheel rim with one hand and unhook the straddle cable from the cantilever arm with the other: the brake is open; squeeze the brake shoes and hook the barrel on the end of the straddle cable into the slot in the brake arm: the brake is closed.
4. On a disc brake, the cable adjusting barrel adjusts one pad, while the other pad is adjusted by turning the large knurled ring on the side of the brake caliper.

FIG 11

FIG 12

For additional information on brake adjustments, visit the SWOBO web site.

SHIFTING a multi-speed SWOBO

If shifting the gears is not smooth, visit the SWOBO web site for instructions on how to adjust your particular component group.

TIRES

Before every ride, make sure that the tires are inflated to the pressure marked on the sidewall.

FINAL CHECK

While this bicycle has been pre-assembled, some loosening of components may have occurred during shipping and handling. Before attempting to ride this bicycle, check all nuts, bolts and other hardware and tighten if necessary.

Section 2

Safety Guide

IMPORTANT:

This section of the SWOBO Bicycle Owner's Manual contains important safety and performance 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 accessories such as helmets or lights that you purchase, may also be available. If you have any questions or do not understand something, take responsibility for your safety and email us at info@swobo.com.

A special note for Parents:

⚠ **WARNING: SWOBO bicycles are not intended for use by children age 12 and under.**

As a parent or guardian, you are responsible for the activities and safety of your minor child, and that includes making sure that the bicycle is properly fitted to the child; that it is in good repair and safe operating condition; that you and your child have learned and understand the safe operation of the bicycle; and that you and your child have learned, understand and obey not only the applicable local motor vehicle, bicycle and traffic laws, but also the commons sense rules of safe and responsible bicycling. As a parent, you should read this manual, as well as review its warnings and the bicycle's functions and operating procedures with your child, before letting your child ride this bicycle.

⚠ **WARNING: Make sure that your child always wears and approved bicycle helmet when riding: but also make sure that your child understands that a bicycle helmet is for bicycling only, and must be removed when not riding. A helmet must to be worn while playing, in play areas, or on playground equipment, while climbing trees, or at any time while not riding a bicycle. Failure to follow this warning could result in serious injury or death.**

INTENDED USE

⚠ **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 and will void the warranty.**

- **SWOBO** bicycles are not intended for use by children age 12 and under.
- **SWOBO** bicycles are intended for riding on paved surfaces, smooth dirt or gravel roads and improved trails with moderate grades where the tires do not lose ground contact.
- **SWOBO** bicycles are not intended for use off-road, for touring with heavy panniers, for carrying children or other heavy loads, or for pulling trailers.

NOTE: *Some bicycle trailers attach at the rear hub axle. SWOBO's use of single speed and internal gear rear hubs means that there is insufficient axle length exposed to accommodate the trailer hitch. As a result, the axle nuts cannot be threaded far enough on to the axle to securely hold the trailer and the rear wheel.*

1. FIRST

NOTE: *We strongly urge you to read this section of the manual in its entirety before your first ride. A the very lease, read and make sure that you understand each point in the sub section and refer to the cited sections on any issue which you don't completely understand. Please note that not all models of SWOBO bicycles have all the features described here.*

A. Bike fit

1. Is your bike the right size? Allow between one and five inches of clearance when straddling the bicycle top tube. If your bicycle is too large or too small for you may lose control and fall. If your new bike is not the right size, return and exchange it for the right size before you ride it.
2. Is the saddle at the right height? To check, see Section I, Page 12. If you adjust your saddle height, follow the Minimum Insertion instructions in Section I, Page 10.

3. Are saddle and seat pose securely clamped? A correctly tightened saddle will allow no saddle movement in any direction.
4. Are the stem and handlebars at the right height for you? If not, see Section I, Page 13.
5. Can you comfortably operate the brakes? If not, consult a qualified bicycle mechanic for help before you ride.
6. Do you fully understand how to operate your new bicycle? If not, before your first ride, email info at swobo.com and we will explain any functions or features which you do not understand.

B. Safety First

1. Always wear an approved bicycle 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 Section 2, Safety, on page 15. It's your responsibility to familiarize yourself with the laws of the areas where you ride and to comply with all applicable laws.

C. Mechanical Safety Check

Nuts, bolts, screws and other fasteners: 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. **Routinely check the condition of your bicycle before each ride.**

⚠ WARNING: Correct tightening force on the fasteners (nuts, bolt, and 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. A professional bicycle mechanic with a torque wrench should torque the fasteners on your bicycle. If you choose to work on your own bicycle you should follow the tightening torque specifications on page 46. 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 bicycle mechanic as soon as possible.

Tire and Wheels: Make sure tires are correctly inflated. Correct tire pressure is shown on the tire sidewall.

- 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 side-to-side wobble. If a wheel wobbles side to side even slightly or rubs against or hits a brake pad, take the bike to a qualified bicycle mechanic to have the wheel trued.
- Wheel rims clean and undamaged? Make sure the rims are clean and undamaged and check for excess wear.

⚠ WARNING: Wheel trueing is a skill which 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.

Brakes: Check the brakes for proper operation (see Section 1, ADJUSTMENTS, page 13). Do not ride the bike until the brakes are properly adjusted by a qualified bicycle mechanic.

Handlebar and saddle alignment: Make sure the saddle and the handlebar stem are parallel to the bike's center line and clamped tight enough so that you can't twist them out of alignment.

Handlebar ends: Make sure the handlebar grips are secure and in good condition. If not, replace them. Make sure the handlebar ends are plugged. If not, get some plugs at a bicycle shop or at the SWOBO website and plug them in before you ride.

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

D. First Ride

1. When you buckle on your helmet and go for your first familiarization ride on your new SWOBO bicycle. Be sure to pick a controlled environment away from cars and other cyclists, obstacles and other hazards. Ride to become familiar with the controls, features and performance of your new bike.
2. Familiarize yourself with the braking action of the bike. Test the braking at slow speed and gently apply braking action. 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.
3. Check out the handling and response of the bike. Check the comfort.
4. If you have any question or feel something is wrong, contact us at info@swobo.com for assistance.

2. SAFETY

A. The Basics

⚠ WARNING: SWOBO products are not intended for use by children age 12 and under. Check the intended use information in the description of your SWOBO on our Web site at swobo.com to make sure the bicycle is compatible with how you intend to use it. Choosing the wrong bike or accessory for you intended purpose can be hazardous.

⚠ WARNING: Many states require specific safety devices. It is your responsibility to familiarize yourself with the laws of the state where your 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 these laws.

1. Always wear a cycling helmet which 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 which might have been avoided if the rider had worn an appropriate helmet.
2. Always do the Mechanical Safety Check (Section 2, page 15) before you get on a bike.
3. Be thoroughly familiar with the controls of your bicycle; braking, pedals; shifting.
4. Be careful to keep body parts and other objects away from the sharp teeth of chain rings, the moving chain, the turning pedals and cranks, and the spinning wheels of your bicycle.
5. 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. Riders who insist on jumping their bikes risk serious damage, to their bicycles as well as themselves. Before you attempt to jump, do stunt riding or race with your bike, read and understand sub-section C below.

6. Ride at speed appropriate for conditions. Increased speed means higher risk.
7. Always wear:

- Shoes that will stay feet and will grip the pedals. Make sure that the shoes laces 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 or trail.

B. Riding Safety

1. You are sharing the road or the path with others-motorists, pedestrians and other cyclists. Respect their rights.
2. Right defensively. Always assume that others do not see you.
3. Ride in designated bike lanes, on designated paths or as close to the edge of the road as possible, in the direction of traffic flow or as directed by local governing laws.
4. 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.
5. Use approved hand signals for turning and stopping.
6. Never ride with headphones. The 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.

7. Never carry a passenger; never carry more than 35 lbs of stuff on a bicycle carrier, or tow a trailer with your SWOBO.
8. 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
9. Never hitch a ride by holding on to another vehicle.
10. Don't do stunts, wheelies or jumps. Think carefully about your skills before deciding to take the large risks that go with this kind of riding.
11. Don't weave through traffic or make any moves that may surprise people with whom you are sharing the road.
12. Observe and yield the right of way.
13. Never ride your bicycle under the influence of drugs.
14. If possible, avoid riding in bad weather, when visibility is obscured, at dawn or in the dark, or when extremely tired. Each of these conditions increases the risk of accident.

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 or 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.

C. 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.

D. Night Riding

Riding a bicycle at night is many times 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, 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 which helps reduce the risk. Consult a bike shop about night riding safety equipment.

⚠ WARNING: Reflectors are not a substitute for required lights. Riding at dawn, dusk or 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 cyclist.

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

If you choose to ride under conditions or 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 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, 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.

C. Extreme or Stunt Riding

⚠ WARNING: Although many catalogs, advertisements and articles about bicycling depict riders engaged in extreme riding, this activity is extremely dangerous, increases your risk of injury or death, and increases the severity of any injury. Remember that the action depicted is always being performed by professionals with many years of training and experience. Know your limits and always wear a helmet and other appropriate safety gear. Even with the state-of-the-art protective safety gear, you could be seriously injured or killed when jumping, stunt riding downhill at speed or in a competition.

⚠ CAUTION: Bicycles and bicycle parts have limitations with regard to strength and integrity, and this type of riding can exceed those limitations.

We recommend against this type of riding because of the risks; if you choose to take the risk, at least:

- Take lessons from a competent instructor first.
- Start with easy learning exercises and slowly develop your skills before trying more difficult or dangerous riding.
- Do stunts, jumping, racing or fast downhill riding only in areas designed for this type of riding.
- Wear a full face helmet, safety pads and other safety gear.
- Understand and recognize that the stresses imposed on your bike by this kind of activity may break or damage parts of the bicycle and void the warranty.
- Take your bicycle to your dealer if anything breaks or bends. Do not ride your bicycle when any part is damaged.

If you ride downhill at speed, do stunt riding or ride in competition, know the limits of your skill and experience. Ultimately, avoiding injury is your responsibility.

F. 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 your components or add accessories, you do so at your own risk. SWOBO many not have tested that component or accessory for compatibility, reliability or safety on your bicycle. Before installing any component or accessory, including a different size tire, make sure that it is compatible with your bicycle. Be sure you read, understand and follow the instructions that accompany the products you purchase for your bicycle.

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

⚠ CAUTION: Changing the components on your bike may void the warranty. Refer to the warranty, and check with SWOBO before changing.

G. Modifying your SWOBO

Do not make structural or intended use modifications to your SWOBO. Your SWOBO is designed with specific use and performance characteristics, which are described in the descriptive text for your model SWOBO on the website swobo.com

⚠ WARNING: Making structural or intended use changes to your SWOBO can void the warranty and could result in component failure, serious injury or death.

3. How Things Work

A. Removing and installing wheels

Removing front wheel

1. If your bike has a rim brake, disengage the brake's quick-release mechanism to increase the clearance between the tire and the brake pads.
2. Using an adjustable or 15 mm wrench for a fixed nut axle or 5 mm hex wrench for a skewer axle, loosen the axle fastener enough to allow wheel removal.
3. Raise the front wheel a few inches off the ground and tap the top of the wheel with the palm of your hand to knock the wheel out of the fork ends.

Installing a front wheel

1. See section I page 5 for instructions; then
2. If you bike has a rim brake, re-engage the brake quick-release mechanism to restore correct brake pad-to-rim clearance; spin the wheel to make sure that it is centered n 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

⚠ WARNING: If you bike is equipped with an internal gear rear hub or a coaster brake, do not attempt to remove the rear wheel until you have read and understood Appendix A of this manual and any special instructions which came with your bike. The removal and re-installation of internal gear and coaster brake hubs require special knowledge. Incorrect removal or assembly can result in component failure, which can cause you to lose control and fall.

The rear wheel axle of your SWOBO is bolted into slots called "drop-outs". SWOBO uses two different styles of dropout. One type uses a horizontal rear-opening slot and is shown in fig. 13. The other uses a vertical slots, and is shown in fig. 14

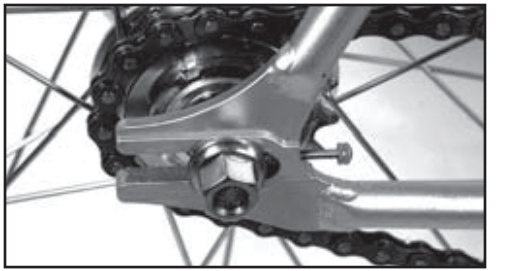

FIG 13

If you SWOBO has horizontal rear dropouts:

1. If your bike has a rear rim brake, disengage the brake's quick-release mechanism to open the clearance between the tire and the brake pads.
2. Turn the chain tension adjuster bolts. Counterclockwise, counting the exact number of turns, until they have come out about ½ inch. This will allow reducing chain tension so that the chain can be removed from the rear sprocket. You will need to remember the number of turns of the chain tensioning bolts.
3. Using a 15mm or adjustable wrench, loosen the two axle nuts.
4. If your SWOBO has a coaster brake or multi-speed rear hub, disconnect the coaster brake arm and shifter cable by following any special instructions that came with your bike or at swobo.com. Check the coaster brake bolt for tightness before every ride.

FIG 14

5. Push the wheel forward, remove the chain from the sprocket, ad carefully remove the wheel by pulling it backwards out of the dropout slots.

If your SWOBO has vertical rear dropouts:

1. If your bike has a rear rim brake, disengage the brake's quick-release mechanism to open the clearance

between the tire and the brake pads.
2. If your SWOBO has a coaster brake or multi-speed rear hub, disconnect the coaster brake arm and shifter cable by following the special instructions that came with your bike.
3. Using a 15 mm or adjustable wrench, loosen the two axle nuts and allow the wheel to come out of the dropouts.
4. If necessary, remove the chain from the sprocket.

Installing a rear wheel

If your SWOBO has horizontal rear dropouts:

1. Hang the chain from the right rear dropout; then carefully slide the wheel axle all the way into the drop-out slots.
2. Put the chain on to the sprocket.
3. Turn the chain tensioning bolts clockwise the same number or turns that you turned them counterclock-wise, or until the chain has no less than 1/8 inch and no more than 3/4 inch of up and down play at the mid point between the rear sprocket and the chain ring.
4. Make sure the wheel is centered in the frame. Using a 15mm or adjustable wrench, tighten the axle nuts enough so that the wheel stays in place; then use the wrench to tighten the nuts as tight as you can.
5. If applicable, re-engage the brake quick-release mechanism on the caliper brake, replace the coaster brake arm bolt; and/or reconnect the shifter cable.
6. Spin the wheel to make sure that it is centered in the frame and clears the brake pads; then make sure that the brakes are operating correctly.

If your SWOBO has vertical rear dropouts:

1. Put the chain on the sprocket; then carefully slide the wheel axle all the way into the dropout slots.

2. Make sure the wheel is centered in the frame. Using a 15 mm or adjustable wrench, tighten the axle nuts enough so that the wheel stays in place; then use the wrench to tighten the nuts as tight as you can.
3. If applicable, re-engage the brake quick-release mechanism on the caliper bike; replace the coaster brake arm bolt; and/or reconnect the shifter cable.
4. Spin the wheel to make sure that it is centered in the frame and clears the brake pads; then make sure that the brakes are operating correctly.
5. While each SWOBO vertical rear dropout has two bolts which can be used to fine-tune chain tension, under normal use you should never have to adjust chain tension with these special dropouts.

B. Brakes

⚠ **WARNING: some SWOBO single-speed models have rear wheels which allow the use of either a freewheel or a fixed gear. These bikes are shipped in free-wheel mode. If you don't know what a fixed gear is, continue to ride the bike in freewheel mode. If you do know what a fixed gear is and choose to ride the bike in fixed gear mode, it is imperative that you read the Fixed Gear section D, page 34 below before attempting to ride in Fixed Gear mode.**

A. Braking Technique

⚠ **WARNING**:

1. Riding with improperly adjusted brakes or worn brakes is dangerous and can result in serious injury or death.
2. Applying brakes too hard or 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.

3. Some bicycle 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.
5. See the brake manufacturer's instructions for operation and care of your brakes. If you do not have the manufacturer's instructions, contact the brake manufacturer or go to the SWOBO website.

Brakes are designed to control your speed, not to stop the bike. Maximum braking force for a 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 slamming on the coaster brake or jerking the brake lever to the position where you think you'll generate appropriate braking force, apply progressive force on the pedal or 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 pressure required for a wheel at different speeds and on different surfaces. To better understand this, experiment a little by riding your bike slowly in an unrestricted are and applying different amounts of pressure to the brake, until the wheel locks. When you apply the brake(s), 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 with handbrakes, 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 lockup with less brake pressure. So, as you apply brakes and your weight shifts forward, you need to shift your body toward the rear of the bike, to transfer weight back to the rear wheel. With hand brakes, you can further improve

brake performance by simultaneously decreasing rear braking and increasing front braking force. Shifting weight to the rear wheel is even more important on steep descents, because descents shift weight forward. The keys to effective speed control and safe stopping are controlling wheel lockup and 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. Tire adhesion is reduced, so the wheels have less cornering and braking traction and can lockup with less brake force. Moisture or dirt on the brake shoes of hand brakes reduces their ability to grip. The way to maintain control on loose or wet surfaces is to go more slowly.

B. Coaster Brake

The coaster brake is a sealed mechanism which is a sealed part of the bicycle's rear wheel hub. The brake is activated by reversing the rotation pedal cranks (see fig. 15). Start with the pedal cranks in a nearly horizontal position, with the rear pedal in about the 10 o'clock position, and apply downward foot pressure on the rear pedal. About 1/8 turn rotation will activate the brake. The more downward pressure you apply, the more braking force, up to a point where the rear wheel stops rotating and begins to skid.

⚠ CAUTION: Before riding, make sure that the brake is working properly. If it is no working properly, have the bicycle checked by and experience bicycle mechanic before you ride it.

FIG 15

C. Hand Brake

⚠ WARNING: Sudden or excessive application of the front brake may pitch the rider over the handlebars, which may result in serious injury or death.

A hand brake works by squeezing friction pads against either a disc rotor (disc brake) or the wheel rim (rim brake). The brake mechanism is cable-activated by a hand lever mounted on the handlebar. The amount of free play in the brake lever is adjusted by rotating the brake cable adjusting barrel which is on the brake lever.

If your SWOBO has a rim brake, it also has a simple mechanism which releases cable tension and allows the brake pads to move outward so that the tire can pass between the pads during wheel removal or installation.

D. Special instructions for fixed gear bikes

⚠ WARNING: A Fixed Gear Bicycle is specifically designed for competition on a banked oval course called a Velodrome. Riding a fixed gear bike in any other environment can be extremely dangerous, even for the experienced rider of fixed gear bicycles and exposes the rider to a higher degree of risk of serious injury or death than riding other types of bicycles in the same environment. To understand the reasons for this higher risk; to understand what makes a fixed gear bike different from other bicycles; and to learn the special features of your fixed gear bike, please read this special section.

What makes a fixed gear bike different?

The main difference between a fixed gear bike and all others is the fixed gear feature. "Fixed Gear" means that the rear sprocket, which is fixed to the rear wheel, does not free-wheel when you stop pedaling. Instead, the pedals and the cranks continue to rotate as long as the rear wheel is turning. They rotate in the same direction as the rear wheel and at a speed commensurate with the rotation speed of the rear wheel. It is not possible to "coast" on a fixed gear bike. As a result, riding technique is quite different from a bicycle with a free-wheeling rear wheel.

A fixed gear bike is designed for competition on a banked race track. There are no hills, no stop signs and no road hazards. As a result, the bike is often not fitted with brakes. You use your muscles and your weight on the pedals not only to accelerate and maintain speed, but also to slow down and stop. Your pedaling cadence is the only control you have over the speed of the bike. To do that, your feet must always be securely on the pedals.

⚠ WARNING:

1. **If a fixed gear bike is not fitted with brakes, its speed can only be controlled by the rider changing the pedaling cadence. To do that, the riders feet must always be securely on the pedals. Failure to keep both feet securely on the pedals can result in loss of control of the bicycle. Loss of control can lead to serious injury or death.**
2. **Riding a fixed gear bike safety requires a very high level of skills. Acquiring these skills may take many hours of practice in an environment where there is no traffic or other hazards and where the rider can practice and develop the skills you need to safely control a fixed gear bicycle. But even the process of learning to safely control a fixed hear bike is hazardous. You could easily loose con-**

trol, fall and injure yourself while practicing to develop you skills.

3. **Riding a fixed gear bike in an environment where there are other cyclists, pedestrians, other traffic, surface gradients or other hazards before safe riding skills are developed is extremely dangerous and can lead to serious injury or death.**

Maintenance of your fixed gear bike:

For general maintenance and service instructions and maintenance schedules, see the Maintenance section on page 41 of this manual.

The one maintenance and service requirement that is critical is chain tensioning. On a fixed gear bike, correct chain tension is critical. A chain that is too loosely tensioned can come off the sprocket, thereby severing the connection between the rear wheel and the pedals and thus making it impossible for the rider to control the bike's speed.

The chain is correctly tensioned when it has no less than 1/8 inch and no more than 3/4 inch of up and down play at the mid point between the rear sprocket and the chainring. You adjust chain tension by loosening the rear wheel nuts; sliding the wheel forward or back the appropriate distance in the rear-facing dropout slots; then re-tighenting the wheel nuts as hard as you can. Make sure that the wheel is centered in the frame when the wheel nuts are re-tightened.

NOTE: The chain tension often varies as you turn the pedals and rear wheel, so you must check chain tension over the complete revolution of the rear wheel.

⚠ WARNING: Riding a fixed gear bike with an incorrectly tensioned chain or with insufficiently tightened rear wheel nuts and a fixed gear sprocket is extremely dangerous. The chain could come off a sprocket or the rear wheel could shift and rub against the frame, resulting in loss of control which could cause serious injury or death.

C. Shifting gears

Your multi-speed SWOBO will have an internal gear hub drivetrain. Shifting with an internal gear hub drivetrain is simply a matter of moving the shifter to the indicated position for the desired gear.

D. Pedals

Some bicycles come equipped with pedals that have sharp and potentially dangerous surfaces. These surfaces are designed to add safety by increasing grip between the riders shoe and the pedal. If you bicycle has this type of high-performance pedal, you must take extra care to avoid serious injury from the pedal's sharp surfaces.

E. 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 suit your riding need, a bike shop can help you select the most appropriate design. The size, pressure rating and on some high-performance tires, the specific recommended use is marked on the sidewall of the tire. Tire pressure is the important information.

⚠ WARNING: Never inflate a tire beyond the maximum pressure marked on the tire's sidewall. Exceeding the recommended maximum pressure may blow the tire off the rim, which could cause damage to the bike and injury to the rider and bystanders.

The best and safest way to inflate a bicycle tire to the correct pressure is with a bicycle pump which 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 pressure work best on smooth, dry pavement. Pressures at the bottom end of the recommended range give more comfort and the best performance on loose or slippery surfaces.

⚠ 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 gauge.

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 you install unidirectional tires, be sure that they are mounted to rotate in the correct direction.

Tire Valves

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

The Schraeder valve (fig. 16) is like the valve on a car tire. To inflate a Schraeder valve tube, remove the valve cap and clamp the pump fitting onto the end of the valve stem. To let air out of the Schraeder valve, depress the pin in the end of the valve stem with then end of a key or other appropriate object.

FIG 16

The Presta valve (fig. 16) has a narrower diameter and is found only on bicycle tubes. To inflate a Presta valve tube using a Presta headed bicycle pump, remove the valve cap; unscrew (counter-clockwise) the valve stem lock nut, and push down on the valve stem to free it up. Then push the pump head onto the valve head and inflate. To inflate a Presta valve with a Schraeder pump fitting, you'll need a Presta adapter (available at a bike shop) which screws onto the valve stem once you've freed up the valve. The adapter fits into the Schraeder pump fitting. Close the valve after inflation. To let air out of a Presta valve, open the valve stem lock nut and depress the valve stem.

⚠ **WARNING: Patching a tube is an emergency repair. If you do not apply the patch correctly or if you apply several patches, the tube can fail which could cause you to loose control and fall. Replace the patched tube as soon as possible.**

E. Impact or crashes

1. First, check yourself for injuries and take care of them as best as you can. Seek medical help if necessary.
2. Check your bike for damage
3. After any crash or impact, take your bicycle to a qualified bicycle mechanic for a thorough check.

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

F. The SWOBO bottle opener

Your SWOBO has a very special feature: under the rear of the saddle is an integral bottle opener. (fig. 17)

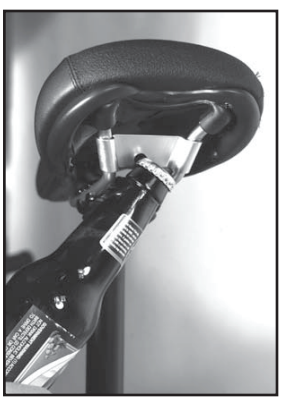

FIG 17

Section 3

Maintenance

⚠ 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 a qualified bicycle mechanic 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.

We recommend that you have a qualified bicycle mechanic 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. There may be a modest charge for this service.

Service intervals

Some service and maintenance can and should be performed by the owner and requires 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.

1. Break-in period: your bike will last longer and work better if you break it in before riding hard. Control cables and wheel spokes may stretch or "seat" when a new bike is first used and may require readjustment. Your Mechanical Safety Check (Section 2, page 21) will help you identify some items that need readjustments.
2. Before every ride: Mechanical Safety Check (Section 2, page 21).
3. After every long or hard ride: if the bike has been exposed to water or grit (or every 100 miles): clean the bike and lightly oil the chain. Wipe off excess oil. Lubrication needs are dependant on climate and condition. Talk with a qualified bicycle mechanic about the best lubricants and frequency for your area.
4. After every 10-20 hours of riding:

- Lift the front wheel off the ground and turn it side-to-side by the handle bars. Feel smooth? If you feel any tightness or roughness, have a qualified bicycle mechanic look at it.
- Grab one pedal and rock it toward and away from the center line of the bike. Do the same for the other

pedal. Anything loose? If so, have a qualified bicycle mechanic check it.

- If the bicycle has a hand brake, take a look at the brake pads. Starting to look worn or not hitting the wheel rim or disc rotor squarely? Time to have a qualified bicycle mechanic adjust or replace them.
- Carefully check any control cables and cable housings. Any rust? Fraying? If so, have a qualified bicycle mechanic 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 a qualified bicycle mechanic check the wheel for tension and trueness.
- Check to make sure that all parts and accessories are still secure. Tighten any that are not.
- Check the frame (particularly the are around all tube joints), the handlebars, stem and seat post for any deep scratches, cracks or discoloration. These are signs of stress-related fatigue and indicate that a part is at the end of its useful life and needs to be replaced.

⚠ 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 components 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-related 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 are covered by a warranty for a specific period of time, 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 subject 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.

SWOBO BICYCLE LIMITED WARRANTY

Fort Collins Bicycle Company LLC. warrants to the original owner of a new SWOBO bicycle or frame, that any bicycle or frame purchased from an authorized SWOBO dealer or from SWOBO directly, will be free from defects in materials and workmanship for a period of 5 years from date of purchase.

All components are covered under relevant manufacturers warranties, which is typically 1 year from date of purchase. Paint and finish are warranted for 1 year from date of purchase.

This warranty is conditioned upon the bicycle or frame being ridden under normal circumstances and being properly maintained.

Fort Collins Bicycle Company will replace with the same or comparable part, any frame or original component that is determined to be defective during the applicable warranty period. Dealer labor charges or any shipping expenses associated with warranty related work are the sole responsibility of the bicycle owner.

Every bicycle and frame set has a useful product cycle, depending on material used, construction, proper maintenance, care of the bicycle, weather and rider characteristics. Exclusion to the warranty include damage to the frame or component caused by improper assembly, improper maintenance, clamping the seat tube in a bike stand, jumping, trick riding, competitions, riding with heavy load and other types of non-standard use.

This warranty applies to the original owner only and is not transferable. Proof of ownership required. Samples of proof of ownership include:

1. Original receipt of purchase from an authorized dealer
2. Bicycle registration at www.swobo.com/register or via the link on the website.
3. Bicycles purchased from shop.swobo.com are automatically reregistered to the purchasing individual

Changing or adding unauthorized components, other than tires and tubes of equal specifications, may void this warranty.

Swobo "Stuff Happens" warranty.

We will offer replacement frames at a significant discount to any original owner who suffers a mishap such as a crash, impact or other instance that damages either a frame or fork. Components are not covered by this warranty nor are any labor charges associated with such a claim. Swobo reserves discretion. Please contact us at info@swobo.com for more information and requirements.

Fastener Torque Specifications.

The following fastener torque tightening guidelines are just that: GUIDELINES.

A good rule of thumb for all but wheel and brake mounting hardware fasteners is to use the least amount of force needed to clamp the component in place. Always use the component manufactures torque specification when available.

Hex size / torque range in newton meter (Nm)

2.5mm = 1.3 to 1.6 Nm
4mm = 13 to 14 Nm
5mm = 15 to 18 Nm
6mm = 18-20 Nm
15mm = 30-40 Nm

Serial Number: _____

Date Purchased: _____

Model: _____

Dealer: _____

Staple original receipt here.

NOTES

www.swobo.com
http://www.facebook.com/swobobikes
http://www.twitter.com/swobotwit
http://www.instagram.com/swobobikes
http://www.youtube.com/swobobikes