## DELUXE BALANCE BIKE

THIS INSTRUCTION BOOKLET CONTAINS IMPORTANT SAFETY INFORMATION. PLEASE READ AND KEEP FOR FUTURE REFERENCE.

FOR SERVICE ASSISTANCE<br>CALL TOLL FREE 1.800.451.5368<br>Monday - Friday 8:00 a.m. to 4:00 p.m. Eastern Standard Time

Congratulations on the purchase of your new bike! With proper assembly and maintenance it will offer you years of enjoyable riding!

## IMPORTANT:

Carefully read and follow this manual (and any other materials included with this bike) before riding. Please retain this manual for future use. If this bike was purchased for a child, it is the responsibility of the purchaser to verify the bike has been properly assembled, and that the user has been properly trained and instructed in use of the bike.

This manual is provided to assist you and is not intended to be a comprehensive manual covering all aspects of maintaining and repairing your bicycle. The bicycle you have purchased is a complex piece of equipment that must be properly assembled and maintained in order to be ridden safely. If you have any doubts about the assembly or your ability to properly assemble and maintain the bicycle. You must have it assembled and maintained by a professional bicycle mechanic.

A DANGER! Failure to properly assemble and maintain your bicycle could result in serious injury or death to the rider.

Check and read this decal on your bicycle before each ride:

| WARNING! |
| :---: |
| ALWAYS WEAR A HELMET |
| Make Sure Stem And Pedals Are Tight |
| Check Your Brakes. |
| Do Not Ride At Night. |
| Read Owners Manua |
| For A Free Owner's Manual Or Questions Call 1-800-451-5368 |
| MADE IN CHINA |

MAKE SURE YOUR CHILD ALWAYS WEARS A PROPERLY FITTED HELMET WHEN THEY RIDE THE BICYCLE. DO NOT RIDE AT NIGHT. DO NOT RIDE ON THE STREET. THIS BIKE IS DESIGNED FOR SIDEWALK USE ONLY. AVOID RIDING IN WET CONDITIONS. ADULT SUPERVISION IS RECOMMENDED AT ALL TIMES.

## RESPONSIBILITY OF THE OWNER!

IMPORTANT: Reading and following the information and instructions in this manual are essential to your ability to ride safely.

## 1. It is the responsibility of the owner or in the case of a younger rider the parents of the rider to be certain all assembly instructions have been followed, even if the bike has been assembled by the seller or a professional assembly. compan

2. Brakes are essential to safety. Be sure they are checked and working properly before each use. Remember that any mechanical system changes condition during use and must be maintained and checked before each use.
3. Rules for bicycle use (bicycle laws) vary from location to location so be certain the rider knows and understands the rules that apply to bicycle usage in your area. Wearing a helmet and using lights and reflectors are two examples of rules which may exist and which make sense as rider safety precautions at all times.
4. Know how to operate the bicycle and all equipment on it before first use and be certain anyone else allowed to use the bike knows how to properly and safely use the bike as well.
5. There are many different types of bicycles and often these types are designed for different uses. Make sure you know what type unit you have and do not exceed its service limitations. Be sure you check and understand the bicycle classifications set forth below, including size of the unit that is proper for the rider to insure good control during use. Do not overload a unit with a rider that is too heavy or too large, and do not attempt to carry extra passengers, packages or loads on the bicycle. Do not attempt to use street bikes for off road riding.

Children's Bikes: (Max. weight of rider $=60 \mathrm{lbs} / 27 \mathrm{~kg})$.
These bikes are intended for use by children on sidewalks only. Children must always ride within their abilities under parental supervision and should wear a safety helmet and use other safety equipment at all times. A parent should check the bike regularly and do required maintentance.

Condition 1-This is a set of conditions for the operation of a bicycle on a regular paved surface or smooth unpaved surface where the tires may unintentionally lose ground contact.

## OWNER'S RESPONSIBILITY continued

NOTE. Carefully read this manual and follow instructions. Your bicycle may come with additional instruction sheets that cover features unique to your bike. Please ensure that you read and become familiar with their contents. Always wear an approved helmet when riding your bike. Familiarize yourself with local and state traffic and use laws. Keep all materials which come with the bike for future reference.

Any major service or adjustments on your bike should be carried out by a competent adult or professional bike mechanic. If you wish to make adjustments yourself, this manual contains important tips on how to do it. CAUTION: Any adjustments you make are entirely at your own risk. Do NOT use your bike for freestyle and stunt riding, jumping or competitive events. You are warned that you assume the risk for personal injury, damages or losses incurred from such use. Do not ride your bike when any part is damaged or not working properly. If you are unsure how to carry out repairs or maintenance on your bike, it is vital that you promptly consult a local bike mechanic for professional assistance and support.

WARNING: As with all mechanical components, the bicycle is subjected to wear and high stresses. Different materials and components may react to wear or stress fatigue in different ways. If the design life of a component has been exceeded, it may suddenly fail, possibly causing injuries to the rider. Any form of crack, scratches or change of coloring in highly stressed areas indicate that the life of the component has been reached and should be replaced.


Correct
Forehead covered


Incorrect
Forehead exposed

MAKE SURE YOUR CHILD ALWAYS WEARS A HELMET IT COULD SAVE THEIR LIFE!

A properly fitting approved bicycle helmet
should be worn at all times when riding your bicycle. In addition, if you are carrying a passenger (only use an approved child safety seat), and remember, the passenger must also be wearing a helmet

The correct helmet should:

- be comfortable
- be lightweight
- have good ventilation
- fit correctly
- cover the forehead
- be securely fastened on the rider.


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## A WARNING / CAUTION

Throughout this manual you will see the words WARNING and CAUTION.
Please pay special attention to this information, as it could affect your safety as you assemble and ride your bike.

MAKE SURE YOUR CHILD ALWAYS WEARS A PROPERLY FITTED HELMET WHEN THEY RIDE THEIR BICYCLE. DO NOT RIDE AT NIGHT. DO NOT RIDE ON THE STREET. THIS BICYCLE IS DESIGNED FOR SIDEWALK USE ONLY. AVOID RIDING IN WET CONDITIONS. ADULT SUPERVISION IS RECOMMENDED AT ALL TIMES.

## PARTS IDENTIFICATION

NOTE: This is a typical bicycle. Your bike
may have other or different parts, and in some cases, may not have all parts shown here.


IMPORTANT: Use this Diagram when reading this manual
to help you understand directions and instructions.

## RULES OF THE ROAD

In the interest of safe cycling, make sure you read and understand the owner's manual.
In this manual you will find DANGER, WARNING, CAUTION, IMPORTANT, and NOTE or NOTICE. These are important signal words telling you to pay special attention to that text as rider safety is involved. DANGER and WARNING: Pay special attention to these since failure to do so could result in serious injury or death to the rider or others.
CAUTION: If not followed these instructions could result in injury or mechanical failure or damage to the bicycle.
NOTE or NOTICE or IMPORTANT: These specify something that is of special interest.
IMPORTANT Before you ride this bicycle, read this RULES OF THE ROAD section and check that all parts are installed and working as per this manual. If you understand how the bicycle operates, you will get the best performance. When you read this instruction book, compare the illustrations to the bicycle. Learn the location of all the parts and how they work.

## Keep this book for future reference.

CAUTION Before you ride the bicycle, check the brake and other parts of the bike. Make sure all parts are tightened, assembled correctly and working properly. Take your first ride in a large, open, level area. If you have a problem, check the assembly instructions and follow the maintenance procedures in this book. If you do not feel comfortable with your skills in assembling or adjusting the bike, please take it to a professional bike repairman.

1. WARNING - ON AND OFF ROAD CONDITIONS: The condition of the riding surface is very important. If the surface is wet, or has sand, leaves, small rocks or other loose debris on the surface where you plan to ride, carefully decrease the speed of the bicycle and ride with extra caution. It will also take a longer time and more distance to stop. Apply the brake earlier than normal and with less force, rear brake first followed by the front brake if equipped, to help keep the bicycle from sliding or falling.
2. NOTICE: Some local laws may require that your bike be equipped with a warning device, such as a horn or bell or light. Do NOT ride at night. Vision is quite limited at dawn, dusk and at night. If you must ride at night, take extra precautions, use front and rear lights, wear flashers on your arms, wear light colored clothing, and plan your route to ride in well lighted areas.
3. Always wear shoes when riding a bicycle and avoid loose fitting clothes. Wear a cuff band or trouser clip to keep trousers from getting caught in the chainwheel. Long sleeves, long pants, gloves, eye protection, a good helmet, elbow and knee pads are recommended.

## RULES OF THE ROAD continued

4. CAUTION: WET WEATHER WARNING: Check your brakes frequently. The ability to stop is critical. Roads are slippery in wet weather so avoid sharp turns and allow more distance for stopping. Brakes may become less efficient when wet. Leaves, loose gravel and other debris on the road can also affect stopping distance. If at all possible, do not ride in wet weather. Vision and control are impaired, creating a greater risk of accidents and injury.
5. CAUTION: A bicycle rider's best defense against accidents is to be alert to road conditions and traffic in the area. Do not wear anything that restricts your vision or your hearing.

## 6. When riding, ALWAYS WEAR AN APPROVED BIKE HELMET

7. Obey all traffic regulations. Most traffic regulations apply to bike riders as well as automobile operators. Observe all local traffic regulations, signs and signals. Check with your local police station on bicycle licensing and inspection, and where it is legal to ride your bike.
8. Do not ride on the street. Ride on sidewalks only.
9. Never carry passengers. This is dangerous and it makes the bicycle harder to control. Never carry packages that can hinder your vision or control of the bike.
10. When riding in pairs or in larger groups, form a single line along the right side of the road. Set up a sensible distance between riders. Don't follow too closely.
11. Always be alert. Animals or people may dart in front of you. Give pedestrians the right-of-way. Don't ride too close to pedestrians, and don't park your bicycle where it can get in the way of foot/vehicle traffic.
12. Be careful at all crossroads. Slow down and look both ways before crossing.
13. Use hand signals. Always let other drivers and pedestrians know what you are going to do. Signal 100 ft . before turning unless your hand is needed to control the bike.

## RULES OF THE ROAD continued

14. WARNING: NIGHT TIME OPERATION: We do NOT recommend riding your bike at night. If you have an emergency that requires you to ride at night, you must have proper lights and reflectors. NEVER ride at night without a headlight, taillight, a white front reflector, a red rear reflector, pedal reflectors and white wheel reflectors.
15. Cover your stem, handlebar, and top tube with safety pads for additional protection.
16. Never hitch rides. Never hold onto moving vehicles while riding. Never allow your child to do stunts.
17. ON AND OFF ROAD OPERATION: Avoid the following road hazards: drain grates, pot holes, ruts, soft road edges, gravel, leaves (especially when they are wet), uneven pavement, railroad crossings, manhole covers, curbs, speed bumps, puddles, and debris call all have effect on your riding and result in loss of control.

## 18. ADULT SUPERVISION IS RECOMMENDED AT ALL TIMES.

## BEFORE RIDING:

Your new bicycle was assembled and tuned in the factory and then partially disassembled for shipping. The following instructions will enable you to prepare your bicycle for years of enjoyable cycling. For more details on inspection, lubrication, maintenance and adjustment of any area please refer to the relevant sections in this manual. If you have questions about your ability to properly assemble this bicycle, please consult a professional bicycle mechanic before riding.


TO AVOID INJURY, THIS PRODUCT MUST BE PROPERLY ASSEMBLED BEFORE USE. WE STRONGLY RECOMMEND THAT YOU REVIEW THE COMPLETE ASSEMBLY GUIDE AND PERFORM CHECKS SPECIFIED IN THE OWNER'S MANUAL BEFORE RIDING.

- $5 / 6 \mathrm{~mm}$ hex wrench
- Torque wrench
- Air pump \& tire gauge to inflate tires
- Bicycle lubricant or grease
- 6" adjustable wrench
- Phillips \& standard screwdrivers
- A pair of pliers with cable cutting ability



## A BEFORE EVERY RIDE:

Just a minute spent before each ride can significantly improve your safety and the enjoyment of your ride. So, each time before you ride make a habit of performing the following safety checks.

- Stand in front of the bicycle facing rearward and hold the front wheel securely between your legs. Try to twist the handlebar and verify that they do not move. Then pull the handlebars up, trying to lift the bike. There should be no movement.
- Try to push the front wheel from side to side and confirm that it feels tight and will not wobble. Lift the front wheel up by the handlebars and strike it downward with the heel of your hand and confirm that it is tight. Spin the front wheel and confirm that it does not wobble or contact the fork or brake pads.
- Try to lift, push down on and twist the seat to confirm that it is tight.
- Look at the connection of the pedals to the crank arm. You should see no pedal screw threads and the pedal should feel firm and be parallel to the ground.
- Apply your brake(s) and make sure that they feel firm to the touch, and then spin the wheel(s). Apply the brakes. They should stop the wheel(s).
- Check to be sure that fenders and accessories are firmly attached and will not contact any moving parts. Make sure all reflectors are in position and not broken.

Now, put on your bicycle safety helmet and enjoy your ride. Your safety is well worth just a minute. Also, be sure to read and follow the warnings and instructions in the Assembly, Maintenance and other sections of this manual.

## CORRECT SEAT HEIGHT

A
THE SEATPOST "MINIMUM INSERTION"/ "MAXIMUM HEIGHT" MARK SHOULD NOT BE VISIBLE WHEN THE SEAT POST IS INSERTED INTO THE SEAT MAST OF THE BIKE. DO NOT RAISE THE SEAT POST BEYOND THIS MARK. THE SEAT POST MAY BREAK CAUSING YOU TO LOSE CONTROL AND FALL. ALWAYS CHECK TO MAKE SURE SEAT POST ADJUSTING MECHANISM IS TIGHTENED SECURELY BEFORE RIDING.

## RIDING POSITION

## SADDLE HEIGHT

In order to obtain the most comfortable riding position and off the best possible pedaling efficiency, the seat height should be set correctly in relation to the rider's leg length. The correct saddle height should not allow leg strain from over-extension, and the hips should not rock from side to side when pedaling.

## REACH

To obtain maximum comfort, the rider should not over extend his or her reach when riding. There should be a slight bend in the rider's elbows. Refer to the section regarding seat and seat posts to learn how to adjust the seat post height.


## ASSEMBLING YOUR BIKE

## PREPARATION

It is important that you read this owner's manual before you start to assemble your bicycle. WE RECOMMEND THAT YOU CONSULT A PROFESSIONAL BICYCLE MECHANIC IF YOU HAVE DOUBTS OR CONCERNS AS TO YOUR ABILITY TO PROPERLY ASSEMBLE, REPAIR, OR MAINTAIN YOUR BICYCLE.
Remove all parts from the shipping carton. Check to make sure no parts are loose on the bottom of the carton. Carefully remove the front wheel which is attached to the side of the bicycle for shipping. Carefully remove all other packing material from the bicycle. This includes zip ties, axle caps and material protecting the frame.

## STEP 1: FRONT WHEEL

1. Remove the nuts, washers and wheel retainers from the front wheel axle, if necessary. If these are not on the wheel axle, they will be included in the hardware bag.
2. Slide the wheel onto the open ends of the fork. Slip an axle retainer onto each end of the axle, and hook the retainers into the holes in the fork end. Loosely install the washer onto each end of the axle (serrated end toward the retainer), then install the hex nut. (Note: there may be a washer head nut in place of the washer and hex nut).
3. Center the wheel in the fork and tighten the axle nuts securely, alternating from one side to the other.
4. Spin the wheel to make sure that it is centered in the fork and does not wobble. If the wheel is not centered, loosen the nuts and try again.


Torque requirement: $16-20 \mathrm{ft} . \mathrm{lbs}$ ( $21-27 \mathrm{~N}-\mathrm{m}$ ).

## SEAT \& SEAT POST ASSEMBLY

1. Loosen the seat clamp nuts.
2. Insert the top portion of the seat post into the seat clamp. Be sure the seat post is completely inserted into the seat clamp and butted tightly against the underside of the seat.
3. Tighten seat clamp nuts securely.
4. Insert the seat post (with seat attached) into the bike frame. Be sure that the seat post is inserted past the minimum insertion line.
5. Tighten the seat post binder bolt securely at the desired height.
6. Adjust the angle of the seat so that the top of the seat is parallel to the ground or comfortable to the rider.
7. Retighten the seat clamp nuts securely (torque requirement $15-20 \mathrm{ft}$. lbs). Check for tightness by attempting to twist the seat along with rocking it up and down. If the seat is loose, be sure to tighten the clamp nuts and binder bolt securely.


ATHE SEATPOST "MINIMUM INSERTION" / "MAXIMUM HEIGHT" MARK SHOULD NOT BE VISIBLE WHEN THE SEAT POST IS INSERTED INTO THE SEAT MAST OF THE BIKE. DO NOT RAISE THE SEAT POST BEYOND THIS MARK. THE SEAT POST OR FRAME MAY BREAK CAUSING YOU TO LOSE CONTROL AND FALL.

## always Check TO MAKE SURE SEAT POST ADJUSTING MECHANISM IS TIGHTENED SECURELY BEFORE RIDING. RIDING WITH AN IMPROPERLY TIGHTENED SEAT POST CAN ALLOW THE SEAT TO TURN OR MOVE AND CAUSE THE RIDER TO LOSE CONTROL

SADDLE HEIGHT: In order to obtain the most comfortable riding position and offer the best possible pedaling efficiency, the seat height should be set correctly in relation to the rider's leg length. The correct saddle height should not allow leg strain from over-extension, and the hips should not rock from side to side when pedaling. While sitting on the bicycle with one pedal at it's lowest point, place the ball of your
 foot on the pedal. The correct saddle height will allow the knee to be slightly bent in this position. To obtain maximum comfort, the rider should not over extend his or her reach when riding. There should be a slight bend in the rider's elbows.

## SEAT \& QUICK RELEASE SEAT POST ASSEMBLY if included

1. Loosen the seat clamp nuts.
2. Insert the top portion of the seat post into the seat clamp. Be sure the seat post is completely inserted into the seat clamp and butted tightly against the underside of the seat.
3. Tighten seat clamp nuts securely.
4. Insert the seat post (with seat attached) into the bike frame. Be sure that the seat post is inserted past the Minimum Insertion Line.
5. Tighten the tension adjusting nut by hand and move the quick release lever to the closed position. NOTE: Less than half a turn of the tension adjusting nut can make the difference between safe clamping force and unsafe clamping force. You should feel considerable resistance while moving the lever. If not, re-open and retighten the lever, then move it to the closed position so it is in line with the top tube of the frame (as shown in the top illustration).
6. Adjust the angle of the seat so that the top of the seat is parallel to the ground or comfortable to the rider.
7. Retighten the seat clamp nuts securely (torque requirement $15-20 \mathrm{ft}$. lbs). Check for tightness by attempting to twist the seat along with rocking it up and down. If the seat is loose, be sure to tighten the clamp nuts and binder bolt securely.

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## STEP 4: BAND BRAKE QUICK ADJUSTMENT

1. Loosen the anchor bolt on the brake arm
2. Pull brake cable through the anchor bolt forwards slightly.
3. Tighten anchor bolt snugly
4. Squeeze brake lever to check brake adjustment. If the brake is still too loose repeat the steps again this time move the brake arm forwards a little bit more than the first time.
5. If you only need to make a minor adjustment on the brakes to tighten them up slightly you can use the barrel adjuster to do this instead of anchor bolt, spin the barrel adjuster counter clockwise a few turns this will make the brake arm move forwards making the brake feel tighter. Make sure to not completely unthread the barrel adjuster.
6. Once the desired feel of the brakes is achieved if using the barrel adjuster turn the nut clockwise till it bottoms out.


## STEP 5: TIRES AND TUBES if applicable

After assembling your bike, it will be necessary to inflate the tires. Check the sidewall of the tire for the correct tire pressure (PSI) and inflate tires accordingly with a MANUAL BICYCLE PUMP. Improper inflation is the biggest cause of tire failure. Due to the slightly porous nature of bicycle inner tubes, it is normal for your bike tires to lose pressure over time. For this reason it is critically important to maintain the proper tire inflation on your bike.

1. Your bicycle has been equipped with tires which the bike's manufacturer felt were the best balance of performance and value for the use for which the bike was intended. The tire size and pressure rating are marked on the sidewall of the tire. CAUTION: Pencil type automotive tire gauges and gas station air hose pressure settings can be inaccurate and should not be relied upon for consistent, accurate pressure readings. Instead, use a high quality dial gauge.

## S 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 OTHERS. THE BEST WAY TO INFLATE A BICYCLE TIRE TO THE CORRECT PRESSURE IS WITH A BICYCLE PUMP. GAS STATION AIR HOSES MOVE A LARGE VOLUME OF AIR VERY RAPIDLY, AND WILL RAISE THE PRESSURE IN YOUR TIRE VERY RAPIDLY. WE DO NOT RECOMMEND USING GAS STATION AIR HOSES.

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.
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.
2. The tire valve allows air to enter the tire's inner tube under pressure, but doesn't let it back out unless you want it to. There are primarily two kinds of bicycle tube valves: The Schraeder Valve and the Presta Valve. The bicycle pump you use must have the fitting appropriate to the valve stems on your bicycle. The Schraeder is like the valve on a car tire, this is the type of valve stem you should have on your bike. To inflate a Schraeder valve tube, remove the valve cap and push the air hose or pump fitting onto the end of the valve stem. To let air out of a Schraeder valve, depress the pin in the end of the valve stem with the end of a key or other appropriate object.


## MAINTENANCE \& REPAIR

Correct routine maintenance of your new bike will ensure a longer life for your bike and a safer ride for you.
Every time you ride your bike, its condition changes. The more you ride, the more frequently maintenance will be required. We recommend you spend a little time on regular maintenance tasks. The following schedules will assist you in knowing what tasks need to be performed and how often. If you have any doubts about your abilities to accomplish these tasks, we recommend you take your bike to a professional bicycle mechanic periodically to have them done.

Schedule 1 - Lubrication

| Frequency | Component | Lubricant | How to Lubricate |
| :--- | :--- | :--- | :--- |
| Weekly | brake levers | oil | 2 drops from oil can |
| Every Six Months | brake cables | lithium based grease |  |
| Yearly | wheel bearings <br> headset <br> seat pillar | lithium based grease <br> lithium based grease <br> lithium based grease | Bicycle Mechanic <br> Bicycle mechanic <br> disassemble |

Note: The frequency of maintenance should increase with use in wet or dusty conditions. Do not over lubricate - remove excess lubricant to prevent dirt build up. Never use a degreaser to lubricate your chain (WD-40 ${ }^{\text {TM }}$ )

## Schedule 2 - Service Checklist

NOTE: Many instructions for adjustments can be found in the assembly portion of this manual.

| Frequency |  |
| :--- | :--- |
| Before every ride | Check wheel tightness <br> Check tire pressure (if applicable) <br> Check brake operation <br> Check wheels for loose spokes <br> Make sure all fasteners are tightened securely |
| After every ride | Quick wipe down with damp cloth |
| Weekly | Lubrication as per schedule 1 |
| Monthly | Lubrication as per schedule 1 <br> Check brake adjustment <br> Check tire wear and pressure <br> Check wheels are true and spokes tight <br> Check hub, head set and crank bearings for looseness <br> Check handlebars are tight |
|  | Check seat and seat post are tight and comfortably adjusted <br> Check frame and fork for trueness <br> Check all nuts and bolts are tight |
| Every Six Months | Lubrication as per schedule 1 <br> Check all points as per monthly service <br> Check and replace brake pads, if required |
| Yearly | Lubrication as per schedule 1 |

## Tools Required for Maintenance

1. Open ended wrench or ring wrenches: $8 \mathrm{~mm}, 9 \mathrm{~mm}, 10 \mathrm{~mm}, 12 \mathrm{~mm}, 13 \mathrm{~mm}, 14 \mathrm{~mm}, 15 \mathrm{~mm}$
2. Open end or pedal wrench 15 mm
3. Allen key wrenches: $4 \mathrm{~mm}, 5 \mathrm{~mm}, 6 \mathrm{~mm}, 8 \mathrm{~mm}$
4. Adjustable wrench
5. Standard flat head screwdriver
6. Standard Phillips head screwdriver
7. Standard slip joint pliers
8. Tire pump (if not solid)
9. Tube repair kit (if not solid)

10. Tire levers (if not solid)

## Travel Tools

We suggest you take the following items with you when going on a long bike ride:

1. Spare tube (if not solid)
2. Patch kit
3. Pump
4. Tire levers
5. Multi-tool
6. Cell phone or change for a pay phone

## CAUTION! Use ONLY genuine replacement

 parts for safety critical components.

## WHEELS AND TIRES

## Wheel Inspection

It is most important that wheels are kept in top condition. Properly maintaining your bicycle's wheels will help braking performance and stability when riding. Be aware of the following potential problems:

## - Dirty or greasy rims:

Caution: These can render your brakes ineffective. Do not clean them with oily or greasy materials. When cleaning, use a clean rag or wash with soapy water, rinse and air dry. Don't ride while they're wet. When lubricating your bicycle, don't get oil on the rim braking surfaces.

## - Wheels not straight:

Lift each wheel off the ground and spin them to see if they are crooked or out of true. If wheels are not straight, they will need to be adjusted. This is quite difficult and is best left to a professional bicycle mechanic.

## - Broken or loose spokes:

Check that all spokes are tight and that none are missing or damaged.
Caution: Such damage can result in severe instability and possibly an accident if not corrected. Again, spoke repairs are best handled by a mechanic.

- Loose hub bearings:

Lift each wheel off the ground and try to move the wheel from side to side. Caution: If there is movement between the axle and the hub, do not ride the bicycle. Adjustment is required.

- Axle nuts: Check that these are tight before each ride.
- Quick release: Check that these are set to the closed position and are properly tensioned before each ride.

Caution: Maintain the closed position and the correct adjustment. Failure to do so may result in serious injury.

## Tire Inspection if applicable

Tires must be maintained properly to ensure road holding and stability. Check the following areas:

Inflation: Ensure tires are inflated to the pressure indicated on the sidewall of the tire. Improper inflation is the biggest cause of tire failure. Due to the slightly porous nature of bicycle inner tubes, it is normal for your tires to lose pressure over time. For this reason, it is critically important to maintain the proper tire inflation on your bike. Caution: Use a hand or foot pump to inflate tires. NEVER inflate tires with an air compressor at a gas station. This can cause the tubes to over inflate and blowout.

Bead Seating: When inflating or refitting the tire, make sure that the bead is properly seated in the rim.
Tread: $\quad$ Check that the tread shows no signs of excessive wear or flat spots, and that there are no cuts or other damage.

## Caution: Excessively worn or damaged tires should be replaced.

Valves: $\quad$ Make sure valve caps are fitted and that valves are free from dirt. A slow leak caused by the entry of the dirt can lead to a flat tire, and possibly a dangerous situation.

## Recommended Tire pressures:

The recommended pressure molded on the sidewall of your bicycle tires should match the following chart. Use this as a general guide.

BMX 35-50 p.s.i.<br>MTB 40-65 p.s.i.<br>Road Touring 70-90 p.s.i.<br>Road Racing 110-125 p.s.i.<br>Hybrid/Crossbike 60-100 p.s.i.

HOW TO FIX A FLAT TIRE if applicable

## If you need to repair a tire, follow these steps:

1. Remove the wheel from the bicycle.
2. Deflate the tire completely via the valve. Loosen the tire bead by pushing it inward all the way around.
3. Press one side of the tire bead up over the edge of the rim. Note: Use tire levers, not a screwdriver, otherwise you may damage the rim.
4. Remove the tube, leaving the tire on the rim.
5. Locate the leaks and patch using a tube repair kit or replace the tube. Note: Ensure that the replacement tube size matches the size stated on the tire sidewall and that the valve is the correct type for your bicycle.
6. Match the position of the leak in the tube with the tire to locate the possible cause and mark the location on the tire.
7. Remove the tire completely and inspect for a nail, glass, etc. and remove if located. Also inspect the inside of the rim to ensure there are no protruding spokes, rust or other potential causes. Replace the rim tape which covers the spoke ends.
8. Remount one side of the tire onto the rim.
9. Using a hand pump, inflate the tube just enough to give it some shape.
10. Place the valve stem through the hole in the rim and work the tube into the tire. Note: Do not let it twist.
11. Using your hands only, remount the other side of the tire by pushing the edge toward the center of the rim. Start on either side of the valve and work around the rim.
12. Before the tire is completely mounted, push the valve up into the rim to make sure the tire can sit squarely in position.
13. Fit the rest of the tire, rolling the last, most difficult part on using your thumbs. Note: Avoid using tire levers as these can easily puncture the tube or damage the tire.
14. Check that the tube is not caught between the rim and the tire bead at any point.
15. Using a hand pump, inflate the tube until the tire begins to take shape, and check that the tire bead is evenly seated all the way around the rim. When properly seated, fully inflate the tire to the pressure marked on the sidewall.
16. Replace the wheel into the frame checking that all gears, brakes and quick release levers are properly adjusted.

## HUB BEARING ADJUSTMENT

When checked, the hub bearings of either wheel will require adjustment if there is any more than slight side play.

1. Check to make sure neither locknut is loose.
2.To adjust, remove wheel from bicycle and loosen the locknut on one side of the hub while holding the bearing cone on the same side with bicycle cone wrench or flat, thin open end wrench.
3.Rotate the adjusting cone as needed to eliminate free play.
4.Re-tighten the locknut while holding the adjusting cone in position.


## HEADSET

## INSPECTION

The headset bearing adjustment should be checked every month. This is import-ant as it is the headset which locks the fork into the frame, and if loose, can cause damage or result in an accident. While standing over the frame top tube with both feet on the ground, apply the front brake firmly and rock the bicycle back and forth; if you detect any looseness in the headset, it will need adjustment. Check that the headset is not over tight by slowly rotating the fork to the right and left. If the fork tends to stick or bind at any point, the bearings are too tight.
Note: If your bike is equipped with a threadless headset, please see a qualified specialist for repairs and adjustments.

## ADJUSTMENT

Loosen the headset top locknut or remove it completely along with the reflector bracket, if fitted. Turn the adjusting cup clockwise until finger tight. Replace the lock washer or reflector bracket and tighten the lock nut using a suitable wrench.
Note: Do not over tighten or bearing damage will occur.


# A WARNING! ALWAYS MAKE SURE THAT THE HEADSET IS PROPERLY ADJUSTED AND THAT THE HEADSET LOCKNUT IS FULLY TIGHTENED BEFORE RIDING. <br> AWARNING! OVER TIGHTENING THE STEM BOLT OR HEADSET ASSEMBLY MAY CAUSE DAMAGE TO THE BICYCLE AND/OR INJURY TO THE RIDER. 

| Problem | Possible Cause | Remedy |
| :--- | :--- | :--- |
| Freewheel does not rotate | - Freewheel internal pawl pins are jammed | - Lubricate. If problem persists,replace freewheel |
| Brakes not working effectively | - Brake blocks worn down | - Replace brake blocks |
|  | - Brake blocks/rim greasy, wet or dirty | - Clean blocks and rim |
|  | - Brake cables are binding/stretched/damaged | - Clean/adjust/replace cables |
|  | - Brakes out of adjustinent | - Adjust brake levers |
|  | - Center brakes |  |
| When applying the brakes they <br> squeal/squeak | - Brake blocks worn down | - Replace blocks |
|  | - Brake block toe-in incorrect | - Correct block toe-in |
|  | - Brake blocks/rim dirty or wet | - Clean blocks and rim |
|  | - Brake arms loose | - Tighten mounting bolts |
| Knocking or shuddering when | - Bulge in the rim or rim out of true | - True wheel or take to a bike shop for repair |
| applying brakes | - Brake mounting bolts loose | - Tighten bolts |
|  | - Brakes out of adjustment | - Center brakes and/or adjust brakeblock toe-in |
|  | - Fork loose in head tube | - Tighten headset |
| Wobbling wheel | - Axle broken | - Replace axle |
|  | - Wheel out of true | - True wheel |
|  | - Hub comes lose | - Adjust hub bearings |
|  | - Hub bearings collapsed | - Replace bearings |
|  | - QR mechanism loose |  |

## Remedy

| Steering not accurate | - Wheels not aligned in frame | - Align wheels correctly |
| :--- | :--- | :--- |
|  | - Headset loose or binding | - Adjust/tighten headset |
|  | - Front forks or frame bent | - Take bike to a bike shop for possible frame |
|  | - Stem wedge bolt not tight | - Adjust headset |
|  | - Headset binding | - Replace Inner tube |
| Frequent punctures | - Inner tube old or faulty | - Replace tire |
|  | - Tire tread/casing worn | - Replace with correct tire |
|  | - Tire unsuited to rim | - Remove sharp object embedded in tire |
|  | - Tire not checked after previous puncture | - Correct tire pressure |
|  | - Tire pressure too low | - File down spoke |

## LIMITED WARRANTY

This Limited Warranty extends only to the original retail purchaser, who must produce proof of purchase in order to validate any claim. This warranty is not transferable to anyone else.
What does this Limited Warranty cover? This warranty covers all parts of the bicycle to be free of defects in workmanship and materials. What must you do to keep the Limited Warranty in effect? This warranty is effective only if:

- The bicycle is completely and correctly assembled.
- The bicycle is used under normal conditions for its intended purpose, by a person that properly fits and is capable of controlling the bicycle.
- The bicycle receives all necessary maintenance and adjustments.

What is not covered by this Limited Warranty? This warranty does not include labour and transportation charges. The bicycle is designed for general transportation and recreational use only. This warranty does not cover normal wear and tear, paint, rust, normal maintenance items, personal injury, or any damage, failure, or loss that is caused by accident, improper assembly, maintenance, adjustment, storage, or use of the bicycle.
This Limited Warranty will be void if the bicycle is ever:

- Used in any competitive sport.
- Used for stunt riding, jumping, aerobatics or similar activity.
- Installed with a motor or modified in any other way.
- Ridden by more than one person at a time.
- Rented or used for commercial purposes.
- Used in a manner contrary to the instructions in this Owner's Manual. Kent International will not be liable for incidental or consequential loss or damage, due directly or indirectly from use of this product.

For how long does this Limited Warranty last? The frame and front forks will be coverd under warranty for the usable life of the bicycle. All other components come with a 6 month warranty, this does not cover wear and tear, or faults deemed to have been a result of misuse.
How do you get service? Phone the Customer Service Department (8am - 4pm E.S.T.) at 1-800-451-KENT. All warranty claims should be made to Kent International, Inc. 60 E. Halsey Rd. Parsippany, NJ 07054 USA.
What rights do you have? This limited warranty gives you specific legal rights. You may also have other rights which vary from State to State.


[^0]:    A
    THE SEATPOST "MINIMUM INSERTION" / "MAXIMUM HEIGHT" MARK SHOULD NOT BE VISIBLE WHEN THE SEAT POST IS INSERTED INTO THE SEAT MAST OF THE BIKE. DO NOT RAISE THE SEAT POST BEYOND THIS MARK. THE SEAT POST OR FRAME MAY BREAK CAUSING YOU TO LOSE CONTROL AND FALL.
    ALWAYS CHECK TO MAKE SURE SEAT POST ADJUSTING MECHANISM IS TIGHTENED SECURELY BEFORE RIDING. RIDING WITH AN IMPROPERLY TIGHTENED SEAT POST CAN ALLOW THE SEAT TO TURN OR MOVE AND CAUSE THE RIDER TO LOSE CONTROL AND FALL.

