DIRT FREESTYLE BMX

20" BIKE OWNER'S MANUAL

K2B DIVISION

Owner's Responsibility

See inside back cover for Warranty Registration

This manual contains important information regarding the safe operation and maintenance of your bicycle . We urge you to read it and carefully follow the instructions. Instructions preceded by the words **NOTE, CAUTION,** or **WARNING** are of special significance.

NOTE: Instructions which are of special interest.

CAUTION: Instructions which if not followed, could result in mechanical damage or failure.

WARNING: You should pay special attention to these instructions since failure to do so may result in injury to the rider.

Theft and Warranty Information

- Record all numbers shown on the bicycle frame.
- Be sure to fill out and mail in the warranty card for our bicycle.

NOTE: The serial number is your proof of purchase. It is not on record where your bicycle was sold or manufactured.

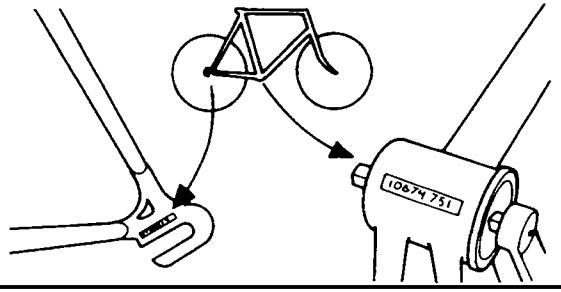
Keep the following information along with a copy of your sales receipt.
Serial Number: _____
Model Name: _____
Store Purchased From: _____
_____
Purchase Date: _____
Color: _____ Size: _____

- Lock your bicycle securely whenever it is out of your sight!
- Also, carefully follow the instructions in any additional literature supplied with this bicycle.

WARNING: Before your first ride, check the brakes and quick release units. Service, if necessary, is described in the maintenance section of this manual.

- Register your bicycle with your local law enforcement agency.
- Report any theft immediately.
- Add your bicycle to your homeowner's or apartment insurance policy.

Serial Number Locations



⚠ WARNING: MUST READ BEFORE RIDING

- Obtain, read and follow Owner's Manual.
- Check bike after assembly or any adjustments. Consult local bicycle shop with questions.
- Always wear a helmet.
- Children should never ride after dusk or at night.
- Before each ride, check that the front wheel is firmly attached and the brakes are in proper working condition.
- Adults should never ride after dusk or at night, unless absolutely necessary. If it is absolutely necessary, you must take steps to make yourself visible. (See Owner's Manual for requirements).
- On wet roads, apply brakes early and gradually.

Owner's Manual

for BMX and other Single Speed Bicycles

This manual contains important safety, performance and maintenance information.
Read this manual before taking your first ride on your new bicycle, and keep the manual handy for future reference.

AN IMPORTANT MESSAGE TO PARENTS: This Manual contains important safety information. For your child's safety, it is your responsibility to review this information with your child and make sure that your child understands all warnings, cautions, instructions and safety topics. We recommend that you periodically review and reinforce the information in this Manual with younger riders.

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1. About this manual...

GENERAL WARNING: Bicycling can be a hazardous activity even under the best of circumstances. Proper maintenance of your bicycle is your responsibility as it helps reduce the risk of injury. This Manual contains many "Warnings" and "Cautions" concerning the consequences of failure to maintain or inspect your bicycle. 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 repeat the warning of possible injury or death whenever the risk of falling is mentioned.

Why you should read this manual *before* you ride your new bicycle

This manual was written to help you understand and enjoy your new bike, and to help you ride it safely and responsibly.

It's important for you to understand your new bike, its features and its operation, so that, from your first ride, you get maximum enjoyment with maximum safety. By reading this manual before you go out on your first ride, you'll know how to get the most from your new bicycle.

It is also important that your first ride on a new bicycle is taken in a controlled environment, away from cars, obstacles and other cyclists.

A SPECIAL NOTE FOR PARENTS & OTHER ADULTS:

It is a tragic fact that most bicycle accidents involve children. As a parent or guardian, you bear the responsibility for the activities and safety of your minor child. Among these responsibilities are to make sure that the bicycle which your child is riding 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 common sense rules of safe and responsible bicycling. As a parent, you should read this manual before letting your child ride the bicycle. Even if you_ve been riding a bicycle all your life, you may need an updating of your bicycling habits, knowledge and assumptions. Why? Because bicycles and the rules of safe bicycling may have changed since the last time you thought about it. We have tried to make this manual interesting and instructive for both you and your child.

Make sure that your child always wears an approved bicycle helmet when riding.

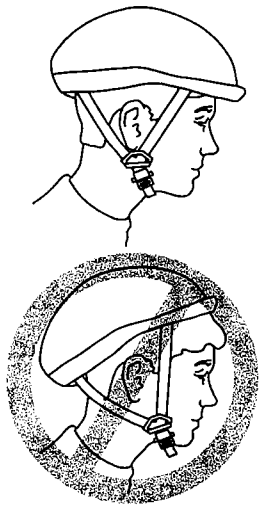


fig. 10 Wearing a Helmet

2. What it's called

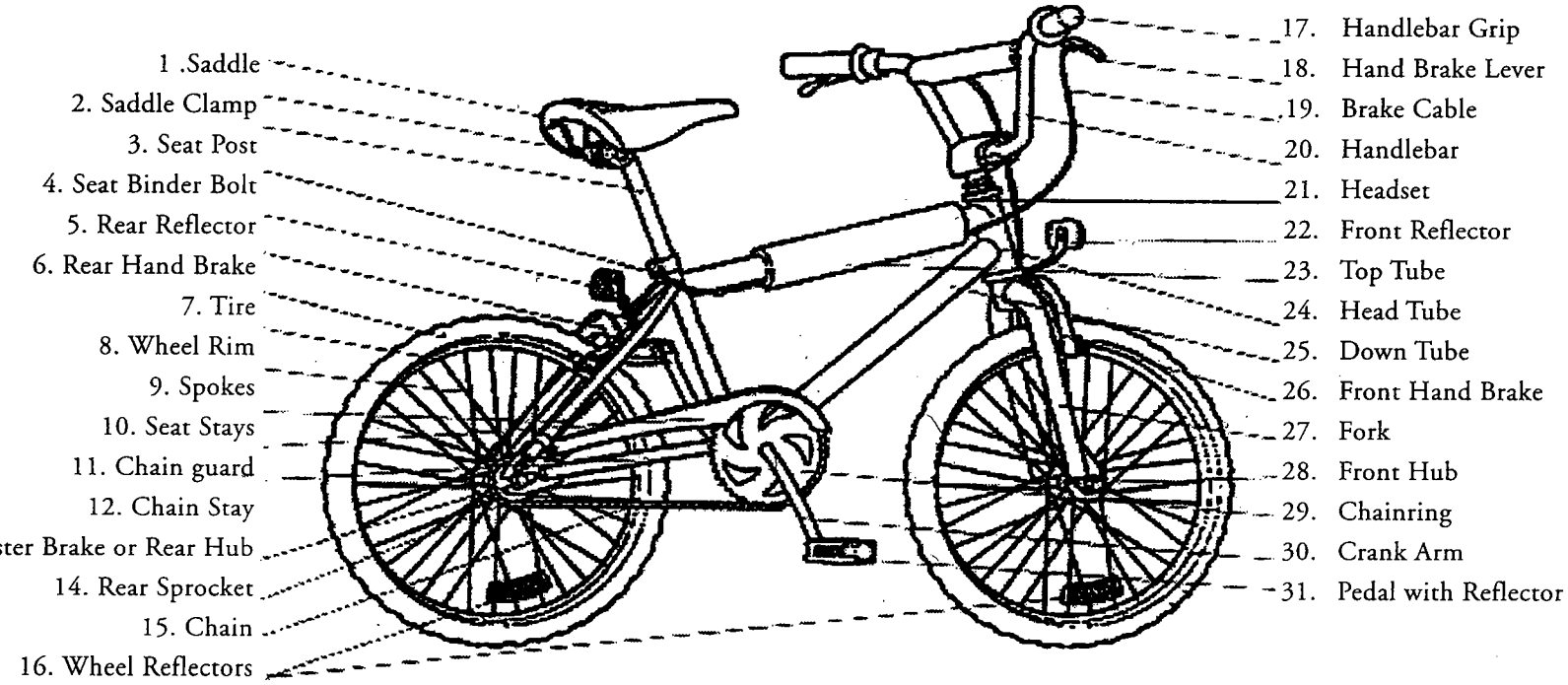


Fig. 1

3. Fit and Safety

A. Fit

Make sure the bike fits. A bike that's too big or too small for the rider is harder to control and can be uncomfortable.

⚠ **WARNING: If your bicycle does not fit properly, you may lose control and fall. If your new bike doesn't fit, ask your dealer to exchange it before you ride it.**

Size: Your dealer will have recommended the best bicycle size for you, based on the information provided. If you picked your own bike at the dealership, your dealer took the time to fit you to the correct frame size at the time. If someone else selected the bike for you, as a gift, for example, it's important for you to make sure that it fits before you ride it.

The first check for correct size is **standover height.** Standover height is the basic element of bike fit. It is the distance from the ground to the top of the top tube at that point where your crotch would be if you were straddling the bike by standing half way between the saddle and the handlebar stem. To check for safe standover height, straddle the bike while wearing the kind of shoes in which you'll be riding, and bounce vigorously on your heels. If your crotch touches the frame, the bike is too big for you. **Don't even ride the bike around the block.** You should have a minimum standover height clearance of one to two inches (see Fig. 2).

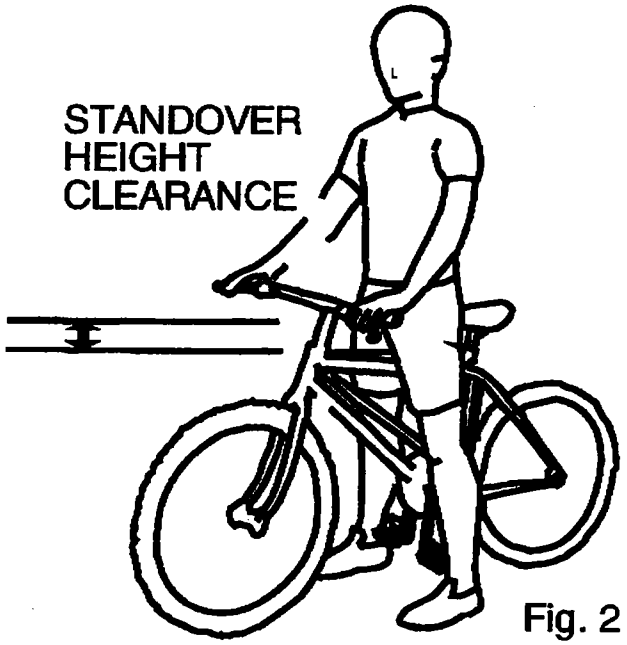


Fig. 2

1. **Saddle position:** Correct saddle adjustment is an important factor in getting the most performance and comfort from your bicycle.

Your dealer will have positioned the saddle where experience tells him most people find it comfortable. If you find the saddle position is not comfortable, there are adjustments you can make.

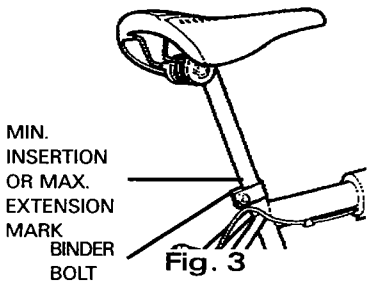


Fig. 3

A saddle can be adjusted in three directions:

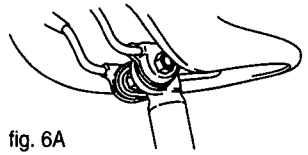
a. Up and down adjustment. To adjust the saddle height, loosen the seat binder bolt (Fig. 3) and move the seat post up or down as required. Then, make sure that the saddle is parallel to the top tube of the bike, and retighten the seat binder bolt tight enough so that you cannot twist the saddle out of alignment. Check the adjustment as described above. **Under no circumstances should the seat post project from the frame beyond its "Minimum Insertion" or "Maximum Extension" mark (Fig. 3).**

WARNING: If your seat post projects from the frame beyond the Minimum Insertion or Maximum Extension mark (see fig. 8) the seat post may break, which could cause you to lose control and fall.

b. Front and back adjustment. Many bicycles have saddles with adjustable clamps. If your saddle has an adjustable clamp (see Fig. 4), losen the saddle clampoing mechanism and slide the saddle back or forward on its rails. Start with the saddle clamped in about the middle, then adjust forward or back until you find the position which is most comfortable for you. Then, retighten the saddle clamping mechanism tight enough so that you cannot move or jiggle the saddle.

c. Saddle tilt adjustment. Most people prefer a horizontal saddle; but some riders prefer to have the saddle nose tilted up just a little, and others prefer it to be tilted down just a little. Saddles with adjustable clamps (Fig. 4) can have their tilt adjusted by loosening the saddle clamping mechanism, tilting the saddle to the desired position and retightening the saddle clamping mechanism tight enough so the you cannot move or jiggle the saddle.

Very small changes in saddle position can have a substantial effect on performance and comfort. Consequently, whenever you make a change to your saddle position, make only one directional change at a time, and make the changes in small increments until you have found the position at which you are most comfortable.


fig. 6A

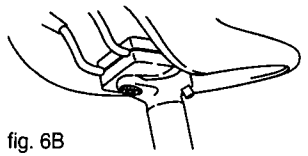

fig. 6B


fig. 6C

⚠ WARNING: After any saddle adjustment, be sure to tighten the saddle adjusting mechanism properly 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.

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

⚠ CAUTION: It has been alleged that extended riding with a saddle which is incorrectly adjusted or which does not support your pelvic area correctly can cause short-term or long-term injury to nerves and blood vessels. If your saddle causes you pain or numbness, adjust the saddle position and your riding position. If pain or numbness persist, talk to your dealer about fitting a different saddle to your bicycle.

Handlebar height and angle: If your bike is equipped with a stem which clamps directly on to the outside of the steerer tube, your dealer may be able to change bar height by moving height adjustment spacers from below the stem to above the stem, or vica versa. Otherwise, you'll have to get a stem of different length or rise. Consult your dealer. **Do not attempt to do this yourself, as it requires special knowledge.**

But on many bikes, you can raise or lower your handlebars a bit by adjusting stem height yourself. Loosen the stem binder bolt by turning it counterclockwise three or four full turns. If the bolt rises but the stem doesn't, get a piece of wood or a soft mallet and give the bolt a good whack to release the wedge. Adjust the stem position as desired, align stem with tire, and retighten the binder bolt tight enough so that you cannot twist the stem and handlebars out of alignment.

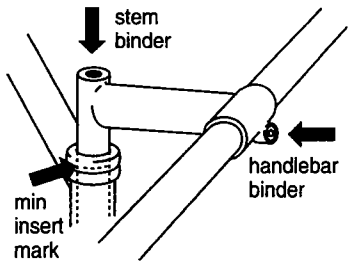


Fig. 5

Under no circumstances should the stem be retightened with its "Minimum Insertion" or "Maximum extension" mark visible.

WARNING: The stem's Minimum Insertion Mark must not be visible above the top of the headset (see Fig. 5). IF the stem is extended beyond the Minimum Insertion Mark the stem may break or damage the for's steerer tube, which could cause you to lose control and fall.

If your bicycle has hand brakes, check to make sure that the handlebars rotate freely in both directions without the brake cables catching or binding on anything.

CAUTION: On some bicycles, changing stem height can affect the tension of the front brake cable, locking the front brake or creating sufficient cable slack to make the front brake inoperable. If the front brake shoes move in towards the wheel rim or out away from the wheel rim when you change the stem or stem height, take your bicycle to your dealer for correct brake adjustment before riding it.

You can change the angle of the handlebar by loosening their binder bolt(s), rotating the bar to the desired angle, recentering it and retightening the binder bolt tight enough so that the bars or extensions can't move in relation to the stem.

⚠ WARNING: Failure to properly tighten the stem binder bolt, the handlebar binder bolt or the bar end extension clamping 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 handlebar in relation to the stem, tighten the bolts.

3. Control position adjustments: If your bicycle has hand-operated brakes, the brake levers are positioned on the handlebar where they work best for most people. The angle and position of the levers can be changed. **Ask your dealer to show you how, or to make the adjustments for you.**

4. Brake reach: Many bikes with hand-operated brakes have brake levers which can be adjusted for **reach**. If you have small hands and find it difficult to squeeze the brake levers, your dealer can either adjust the reach or fit shorter reach brake levers.

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

B. Safety Equipment

⚠ WARNING: Many states require specific safety devices. It is your responsibility to familiarize yourself with the laws of the state where you ride and to comply with all applicable laws, including properly equipping yourself and your bike as the law requires.

1. Helmet: While not all States require bicyclists to wear approved protective headgear, common sense dictates that you should wear an ANSI, Snell or other approved helmet whether the law requires it or not. Most serious bicycle injuries involve head injuries which might have been avoided if the rider had worn a

helmet. Your dealer has a variety of attractive helmets, and can recommend one to suit your needs. Your helmet must fit correctly, be worn correctly nad be properly secured to do its real job. Ask your dealer to help you with the fit and adjustment of your helmet, and refer to the owner's manual provided with your helmet.

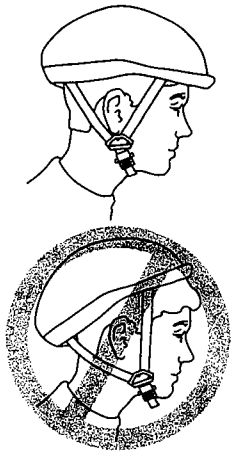


fig. 10 Wearing a Helmet

WARNING: Always wear an approved helmet when riding your bike. Always keep the chin strap securely buckled. Failure to wear a bicycle helmet may result in serious injury or death.

2. Reflectors: Reflectors are important safety devices which are designed as an integral part of your bicycle.

Federal regulations require every bicycle to be equipped with front, rear, wheel and pedal reflectors. The size, performance and location of each reflector is specified by the U.S. Consumer Products Safety Commission.

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

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

The mounting brackets of front and rear reflectors are often designed as brake straddle cable safety catches which prevent the straddle cable from catching on the tire tread if the cable jumps out of its yoke or breaks.

WARNING: Do not remove the front or rear reflector brackets from your bicycle. They are an integral safety device which protects you from the brake straddle cable catching on the tire in the event of brake cable failure. If a brake straddle cable catches on the tire, it can cause the wheel to stop suddenly, causing you to loose control and fall.

WARNING: Do not remove the reflectors from your bicycle. They are an integral part of the bicycle's safety system. Removing the reflectors may reduce your visibility to others using the roadway. Being struck by other vehicles may result in serious injury or death. Remember: reflectors are not a substitute for lights. Always equip your bicycle with all state and locally mandated lights.

3. Lights (see also Section 4.F)**: We strongly recommend that children not ride after dusk or before full daylight.** If you *must* ride your bike before dawn or after dusk, your bicycle *must* be equipped with lights so that you can see the road and avoid road hazards; and so that others can see you. Vehicle laws treat bicycles like any other vehicle. That means you *must* have a white front and a red rear light operating if you are riding after dusk. Your bike dealer can recommend a battery or generator powered lighting system appropriate to your needs.

WARNING: Reflectors are not a substitute for proper lights. It is your responsibility to equip your bicycle with all state and locally mandated lights. Riding at dawn, at dusk, at night or at other times of poor visibility without a bicycle lighting system which meets local and state laws and without reflectors is dangerous and may result in serious injury or death.

4. **Pedals:** Some higher performance model bicycles come equipped with pedals that have sharp and potentially dangerous surfaces. These surfaces are designed to add safety by increasing adhesion between the rider's shoe and the bicycle pedal. If your bicycle has this type of high-performance pedal you must take extra care to avoid serious injury from the pedals' sharp surfaces.

Based on your riding style or skill level, you may prefer a less aggressive pedal design. Your dealer can show you a number of options and make suitable recommendations.

C. Mechanical Safety Check

Here is a simple, sixty-second **mechanical safety check** which you should get in the habit of making *every time* you're about to get on a bike.

Nuts, bolts & straps: 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 quick visual and tactile inspection of the whole bike. Any loose parts or accessories? If so, secure them. If you're not sure, ask someone with experience to check.

Tires & Wheels: Tires correctly inflated? Check by putting one hand on the saddle, one on the intersection of the handlebars and stem, then bouncing your weight on the bike while looking at tire deflection. Compare what you see with how it looks when you *know* the tires are correctly inflated; and adjust if necessary. See Section 5.C.1 for details and recommended tire pressures.

Tires in good shape? Spin each wheel slowly and look for cuts in the tread and sidewall. Replace damaged tires *before* riding the bike.

Wheels true? Spin each wheel and check for brake clearance and side-to-side wobble. If a wheel wobbles side to side or hits the brake pads, take the bike to a qualified bike shop to have the wheel trued.



CAUTION: Wheels must be true for the brakes to work effectively. Wheel truing 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: Squeeze the brake levers. Are the brake quick releases closed? The straddle cable securely engaged? Are the brake shoes contacting the wheel rim within an inch of brake lever movement? Can you apply full braking force at the levers without having them touch the handlebar? If not, your brakes need adjustment. **Do not ride the bike until the brakes are properly adjusted.** See Section5.1a.

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

Quick Releases: Are the front wheel, rear wheel and seat post quick releases properly adjusted and in the locked position? See Section 6.A and 6.B for details.

WARNING: Riding with an improperly adjusted wheel quick release can cause the wheel to wobble or disengage from the bicycle, which can cause damage to the bicycle and serious injury or death.

Handlebar and saddle alignment: Are the saddle and handlebar stem correctly parallel to the bike's top tube and tight enough so that you can't twist them out of alignment?

Handlebar ends: Are the handlebar grips secure and in good condition? If not, replace them. Are the handlebar ends and extensions plugged? If not, plug them before you ride. On a mountain bike or Cross bike, are the bar end extensions tight enough so you can't twist them? If not, tighten them.

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

OK: now buckle on your helmet and enjoy your ride.

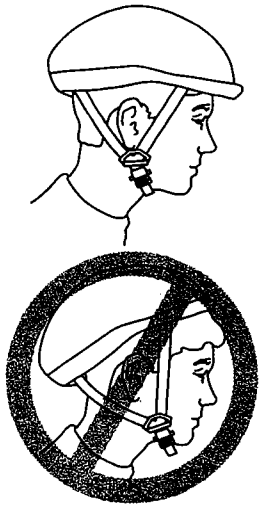


fig. 10 Wearing a Helmet

4. Riding Safely and Responsibly

NOTE: 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.

A. An Important Note to Parents:

In addition to **The Basics** (page 16), the **Rules of the Road** (page 16), the **Rules of the Trail** (page 18), **Wet Weather Riding** (page 19), **Night Riding** (page 19) and **Bicycling in Traffic** (page 21) kids need to be taught ... and to have frequently reinforced ... the following rules and lessons which adults are already expected to know. We urge you to take the time to familiarize yourself with these rules and to teach them to your child before you let your child ride unsupervised.

1. Rules

- No playing in the road or in the street.
- No riding on busy streets.
- No riding at night.
- Stop for all STOP signs.
- Ride on the right of traffic.

2. Lessons

The lessons that follow relate to some of the most common real situations that children encounter when riding their bikes. Go over these situations with your child and make sure the lesson objective is accomplished.

a. Driveway Rideout

When a youngster rides out of the driveway and is struck by a car, that is called a rideout accident.

What can you do? First, realize the danger of your own driveway. If there are obstructions to the view of

passing motorists (like bushes or trees), trim them back. You might park your car in front of the driveway, if local ordinance permits. This way, your child can't use the driveway as a launching pad.
But the most important thing you can do is teach your child about driveway safety. Take your child outside to the driveway and have him/her practice the following steps:

1) Stop before entering the street.
2) Look left, right and left again for traffic.
3) If there's no traffic, proceed into the roadway.

b. Running the Stop Sign

Car/bike crashes can happen when a cyclist runs a stop sign. Most cyclists who get hit riding through stop signs know that they were supposed to stop. They just thought it would be OK this time; or they may have been distracted. The thing to impress upon your child is that while he/she may not get hit every time, running stop signs will eventually result in an accident.

What can you do? Take your child to a stop sign near home. Explain what it means by emphasizing the following points:

1) Stop at all stop signs, regardless of what is happening.
2) Look in all directions for traffic.
3) Watch for oncoming cars making left turns.
4) Watch for cars behind you making right turns.
5) Wait for any cross traffic to clear.
6) Proceed when safe.

In order to make this lesson stick, you may have to change your own driving habits. If you creep through intersections controlled by stop signs, you are showing your child that you don't really believe what you preach. For your child's sake, stop at stop signs.

c. Turning Without Warning

Another major accident type involves cyclists who make unexpected left turns. They neither look behind for traffic, nor do they signal. The key factor here is neglecting to look to the rear. If the cyclist had looked, he/she would

have seen the danger coming up from behind.

What can you do? Of course, you ought to teach your child not to ride across busy streets - at least until the child has had some advanced training and is old enough to understand traffic. But in the meantime, for residential street riding, you can teach your child to always look **and** signal before turning left. A big part of this lesson is teaching the child how to look to the rear without swerving.

Take your child to a playground to practice riding along a straight line while looking behind. Stand alongside and hold up a different number of fingers on your hand after the child rides by. Call his/her name. After 15 minutes of practice, a ten year old should be able to look behind his/herself and identify how many fingers you are holding up - without swerving.

d. Night Time Riding (See also Section 5.F. on page 19).

Most car/bicycle accidents happen at night where an overtaking car hits a bike. (An overtaking car is one that comes up from behind and passes the cyclist on the left.) These overtaking accidents can be very serious.

What can you do? First, you should keep your youngster from riding at night. It requires special skills and equipment. Few children have either. Secondly, make sure your child understands that if he/she gets caught out after dark on a bike, the thing to do is to call you for a ride home. One suggestion is to tape "phone money" to the bike so that, in an emergency, the child will be able to call home.

e. Following the Leader

There is increased risk of car/bike collision if children are following each other, because if the first one does something dangerous, those following may do it too.

What can you do? Teach your child to always assess the traffic situation for him/herself. When a group is riding around, each cyclist should stop for stop signs; each cyclist should look to the rear before making left

turns; and so on. One way to get the message across is to play a game with the child similar to 'Simon Says'. In this game, however, the emphasis should not be on doing what 'Simon Says', but rather have the child make a decision based on the situation. The child should learn to ignore what 'Simon Says'. Children need to learn to think for themselves to ride safely.

SUMMARY

Teach your child early - the earlier the better. Learning skills such as looking and avoiding hazards takes time. Be prepared to repeat lessons until your child understands what you're trying to get across. Be patient. Your efforts will be rewarded, knowing that your child is aware of safe riding skills.

B. The Basics

1. **Always** do the Mechanical Safety Check (Section 3. C.) before you get on a bike.

2. Be thoroughly familiar with the controls of your bicycle

3. Be careful to keep body parts and other objects away from the sharp teeth of chainrings; the moving chain; the turning pedals and cranks; and the spinning wheels of your bicycle.

4. ***Always*** wear a cycling helmet which meets the latest Snell, ANSI or other approved standard. (See Fig. 8)

5. **Always** wear shoes that will stay on your feet and will grip the pedals. **Never** ride barefoot or wearing sandals.

6. Wear bright, visible clothing that is not so loose that it can catch on moving parts of the bicycle or be snagged by objects at the side of the road or trail.

7. Don't jump with your bike. Jumping a bike, particularly a BMX bike, can be fun; but it puts incredible stress on everything from your spokes to your pedals.

Perhaps most vulnerable to jumping-related damage is your front fork. Riders who insist on jumping their bikes risk serious damage, to their bicycles as well as to themselves.

8. Think about your speed, and keep your speed at a level which is consistent with conditions. Always keep in mind that there is a direct relationship between speed and control, and between speed and component stress

C. Rules of the Road

1. Learn the local bicycle laws and regulations. Many communities have special regulations about licensing of bicycles, riding on sidewalks, laws regulating bike path and trail use, and so on. Many states have helmet laws, child carrier laws and special bicycle traffic laws. In the U.S. and in most foreign countries, a bicyclist is required to obey the same traffic laws as the driver of a car or motorcycle. It's *your* responsibility to know and obey the laws.

2. You are *sharing* the road or the path with others — motorists, pedestrians and other cyclists. Respect their rights, and be tolerant if they infringe on yours.

3. Ride defensively. *Assume* that the people with whom you are sharing the road are so absorbed with what *they* are doing and where *they* are going that they are oblivious to you.

4. Look ahead of where you're going, and be ready to avoid:

- Vehicles slowing or turning in front of you, entering the road or your lane ahead of you, or coming up behind you.
- Parked car doors opening in front of you.
- Pedestrians stepping out in front of you.

- Children playing near the road.

- Pot holes, sewer grating, railroad tracks, expansion joints,road or sidewalk construction, debris and other obstructions that could cause you to swerve into traffic, catch your wheel or otherwise cause you to lose control and have an accident.

- The many other hazards and distractions which can occur on a bicycle ride.

5. Ride in designated bike lanes, on designated bike paths or on the *right* side of the road, in the *same* direction as car traffic and as close to the edge of the road as possible.

6. Stop at stop signs and traffic lights; slow down and look both ways at street intersections. Remember that a bicycle *always* looses in a collision with a motor vehicle, so be prepared to yield even if you have the right of way.

7. Use hand signals for turning and stopping. Learn the local vehicle code for the correct signals.

8. Never ride with headphones. They mask traffic sounds and emergency vehicle sirens, distract you from concentrating on what's going on around you, and their wires can tangle in the moving parts of the bicycle, causing you to lose control.

9. Never carry a passenger, unless it is a small child wearing an approved helmet and secured in a correctly mounted child carrier or a child-carrying trailer.

10. Never carry anything which obstructs your vision or your complete control of the bicycle, or which could become entangled in the moving parts of the bicycle.

11. Never hitch a ride by holding on to another vehicle.

12. Don't do stunts, wheelies or jumps. They can cause you injury and damage your bike.

13. Don't weave through traffic or make any moves that may surprise people with whom you are sharing the road.

14. Observe and yield the right of way.

15. Never ride your bicycle while under the influence of alcohol or drugs.

16. If possible, avoid riding in bad weather, when visibility is obscured, at dusk or in the dark, or when extremely tired. Each of these conditions increases the risk of accident.

C. Rules of the Trail

1. **We recommend that children not ride off-roda without the accopanienet of an adult. In any event, never ride alone in remote areas.** Even when rideing with other, make sure that someone knows where you're going and whenm you expect to be back. Always take along sone kind of identification, so that piople know who you are in case of an accident; and take a couple of dollars in cash for a candy bar, a cool drink or an emergency phone call.

2. Surface hazards make off-road riding much more difficult and therefore more dangerous than riding on paved roads. Start slowly and build up your skills on easier terrain before tackling the more difficult.

3. Learn and obey the local laws regulating where and how you can ride off-road, and respect private property. Don't ride where you are not welcome or where you are not allowed.

4. You are *sharing* the trail with others -- hikers, equestrians, other cyclists. Respect their rights, and be tolerant if they inconvenience you.

5. Yield right of way to pedestrians and animals. Ride in a way that does not frighten or endanger them, and stay far enough away so that their unexpected moves

don't endanger you.

6. You may be riding in sensitive habitat, so stay on the designated trail. Don't contribute to erosion by riding in mud or with unnecessary sliding. Don't disturb wildlife or livestock; and don't disturb the ecosystem by cutting your own trail through vegetation or streams.

7. It is your responsibility to minimize your impact on the environment. Ride accordingly. Leave things as you found them; and always take out *everything* you brought in.

8. If your bicycle sustains an impact:

First, check yourself for injuries, and take care of them as best you can.

Next, check your bike for damage, and fix what you can.

Then, when you get home, carefully perform the check described in Section 6.A.4 and check for any other damaged parts. All bent, scored or discolored parts as suspect and should be replaced.

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

CAUTION: If you have any doubet about the condition of the bicycle or any or its pars, take it to your dealer for a though check.

E. Wet Weather Riding

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

Under wet conditions, the stopping power of your brakes (as well as the brakes of other vehicles sharing

the road) is dramatically reduced and your tires don't grip nearly as well. This makes it harder to control speed and easier to lose control. To make sure that you can slow down and stop safely in wet conditions, ride more slowly and apply your brakes earlier and more gradually than you would under normal, dry conditions. See also Section 5.A.3.

F. Night Riding

Riding a bicycle at night is many times more dangerous than riding during the day. Therefore, children should *never* ride at dawn, at dusk or at night. Adults should not ride at dusk or at night unless it is absolutely necessary.

⚠ **WARNING: Riding at dawn, at dusk, after dark or at times of poor visibility without a bicycle lighting system which meets local and state laws and without reflectors is illegal, dangerous and can result in serious injury or death.**

Even if you have excellent night vision, many of the people with whom you're sharing the road don't. A bicyclist is very difficult for motorists and pedestrians to see at dawn, at dusk, at night, or at other times of poor visibility. If you must ride under these conditions, check and be sure you comply with all local laws about night riding; follow the Rules of the Road and of the Trail even more carefully, and you must take the following additional precautions:

Before riding at dawn, at dusk or at night, take the following steps to make yourself more visible:

- Make sure that your bicycle is equipped with correctly positioned and securely mounted reflectors (see Section 4 B).
- Purchase and install an adequate battery or generator powered head and tail light.
- Wear light colored, reflective clothing and accessories, such as a reflective vest, reflective

arm and leg bands, reflective stripes on your helmet, flashing lights ... any reflective device or light source that moves will help you get the attention of approaching motorists, pedestrians and other traffic.

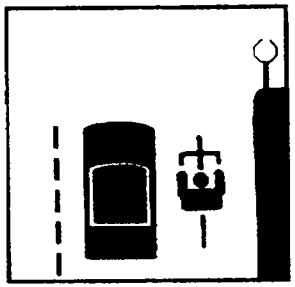
- Make sure your clothing or anything you may be carrying on the bicycle does not obstruct a reflector or light.

While riding at dawn, at dusk or at night:

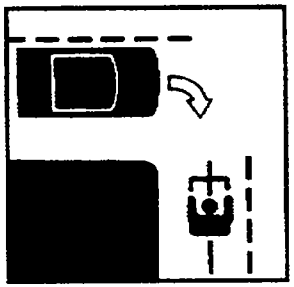
- Ride slowly.
- Avoid areas of heavy traffic, dark areas, and roads with speed limits over 35 mph.
- Avoid road hazards.
- If possible, ride on routes already familiar to you.

G. Bicycling in Traffic

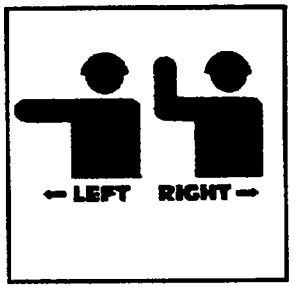
1. Be predictable. **Ride so that drivers can see you and predict your movements.**



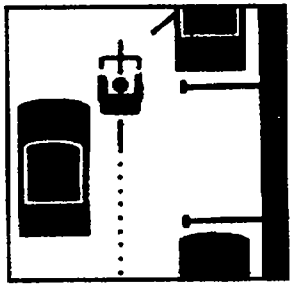
Obey traffic signs and signals— Bicycles must drive like other vehicles if they are to be taken seriously by motorists.



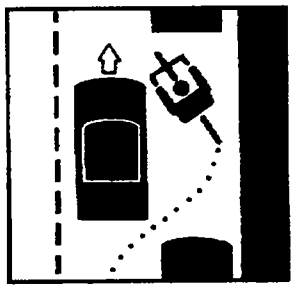
Never ride against traffic— Motorists aren't looking for bicyclists riding on the wrong side of the road.



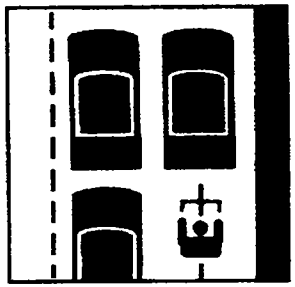
Use hand signals— Hand signals, using your left arm, tell motorists what you intend to do. Signal as a matter of law, courtesy and safety.



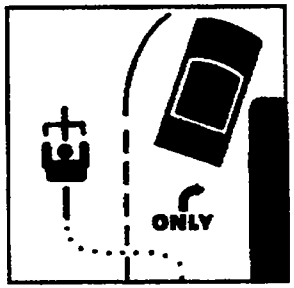
Ride in a straight line— Whenever possible, ride in a straight line, to the right of traffic, but about a car door's width away from parked cars.



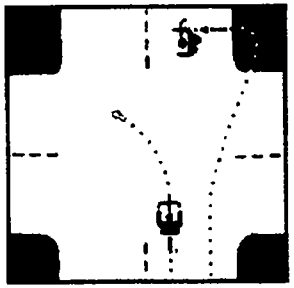
Don't weave between parked cars— Don't ride out to the curb between parked cars unless they are far apart. Motorists may not see you when you try to move back into traffic.



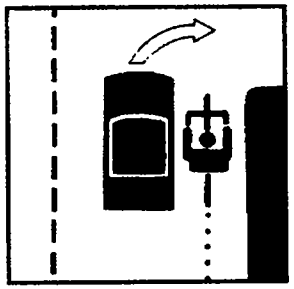
Ride in middle of lane in slow traffic— Get in the middle of the lane at busy intersections and whenever you are moving at the same speed as traffic.



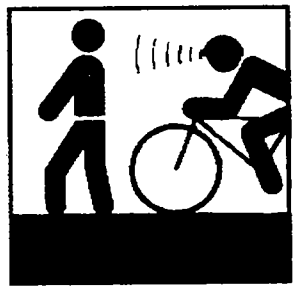
Follow lane markings— Don't turn left from right lane. Don't go straight in a lane marked 'Right Turn Only.'



Choose best way to turn left— There are two ways to make a left turn. #1 *Like an auto*— Signal, move into the left lane and turn left. #2 *Like a pedestrian*— Ride straight to the far side crosswalk. Walk your bike across.



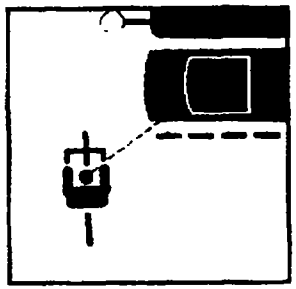
Don't pass on the right— Motorists may not look for or see a bicycle passing on the right.



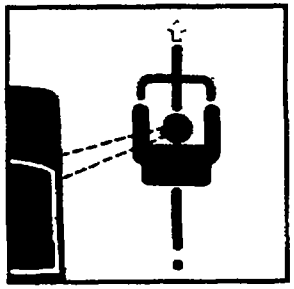
Go slow on sidewalks— Pedestrians have the right of way. By law, you must give pedestrians audible warning when you pass. Don't cross driveways or intersections without slowing to a walkers' pace and looking very carefully for traffic (especially traffic turning right on a green light).

G. Bicycling in Traffic

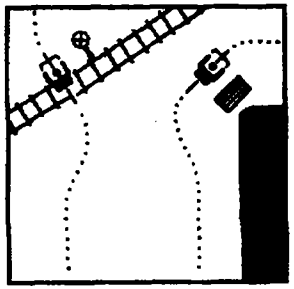
2. Be alert. Ride defensively and expect the unexpected.



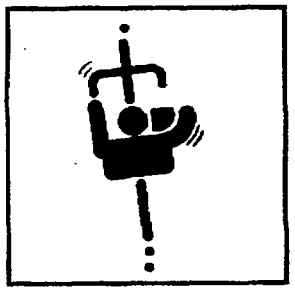
Watch for cars pulling out— Make eye contact with drivers. Assume they don't see you until you are sure they do.



Scan the road behind— Learn to look back over your shoulder without losing your balance or swerving left. Some riders use rear view mirrors.



Avoid road hazards— Watch out for parallel slat sewer grates, slippery manhole covers, oily pavement, gravel and ice. Cross railroad tracks carefully at right angles. To get better control as you move across bumps and other hazards, stand up on your pedals.



Keep both hands ready to brake— You may not stop in time if you brake one-handed. Allow extra distance for stopping in the rain, since brakes are less efficient when wet.



Watch for chasing dogs— Ignore them or try a firm 'No!' If the dog doesn't stop, dismount with your bike between you and the dog. Dogs are attracted to spinning wheels and feet.

5. How Things Work

It's important to your performance, enjoyment and safety to understand how things work on your bicycle. Even if you're an experienced bicyclist, don't assume that the way things work on your new bike is the same as how they work on older bikes. **It is your responsibility to read — and to understand — this section of the Manual.** If you have even the slightest doubt as to whether you understand something, talk to your dealer.

A. Brakes

Your bicycle is equipped either with a coaster brake (described in paragraph 1 below) or with hand brakes (described in paragraph 2 below). *Be sure that you understand how your bicycle's brakes work before you take your first ride, by reading and understanding paragraph 1 or 2* ***and*** *paragraph 3 below.*

1. Coaster Brake

a. How the coaster brake works

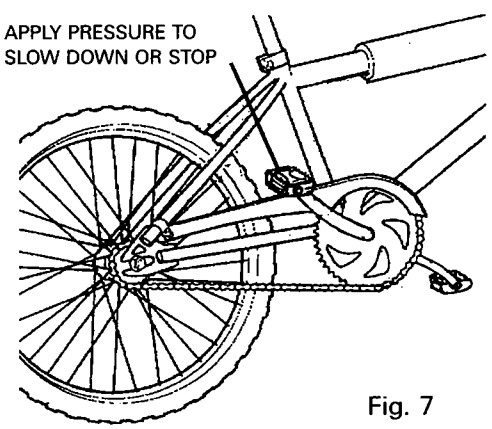


Fig. 7

The coaster brake is a sealed mechanism which is a part of the bicycle's rear wheel hub. The brake is activated by reversing the rotation of the pedal cranks (see Fig. 7). Start with the pedal cranks in a nearly horizontal position, with the *front* pedal in about the 4 o'clock position, and apply downward foot pressure on the pedal that is to the *rear*. The more downward pressure you apply, the more braking force, up to the point where the rear wheel stops rotating and begins to skid (see paragraph 3. **Braking Technique**, below).

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

b. Adjusting your coaster brake

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

2. Hand Brakes

a. How hand brakes work

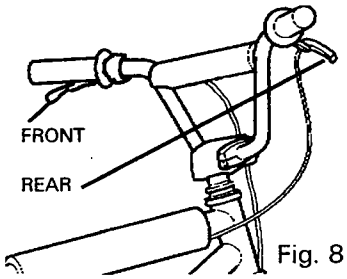


Fig. 8

A bicycle with hand brakes may have one hand lever which operates a rear brake, or two brake levers, one of which operates on the front wheel and the other on the rear wheel. It's important to your safety that you instinctively know which brake lever controls which brake on your bike. In the U.S., bikes are required to be set up with the *right* brake lever controlling the *rear* brake, and the *left* lever controlling the *front* brake.

NOTE: For most effective braking, use both brakes and apply them simultaneously. (See also par. 3. page 25).

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

The braking action of bicycle hand brakes is a function of the friction between the brake shoes and the wheel rim. To make sure that you have maximum friction available, keep your wheel rims and brake shoes clean and free of lubricants, waxes or polishes.

Make sure that your hands can reach and squeeze the brake levers comfortably. If your hands are too small

to operate the levers comfortably, consult your dealer *before* riding the bike. The lever reach may be adjustable; or you may need a different brake lever design.

Some hand brakes have a quick release mechanism to allow the brake shoes to clear the tire when a wheel is removed or reinstalled. When the brake quick release is in the open position, *the brakes are inoperative.* Ask your dealer whether you have a quick release on your brakes; and if you do, make sure that you understand the way the brake quick release works, and check each time to make sure both brakes work correctly before you get on the bike.

WARNING: Some bicycle brakes, such as linear-pull (fig 16B) and disc brakes, are extremely powerful. You should take extra care in becoming familiar with these brakes and exercise particular care when using them. Applying these brakes too hard or too suddenly can lock up a wheel, which could cause you to lose control and fall.

b. Adjusting your hand brakes

If either brake lever on your bike fails the Mechanical Safety Check (Section 3.C.) you can restore brake lever travel by turning the brake cable adjusting barrel (Fig. 9) counterclockwise, then lock the adjustment in by turning the barrel's lock nut clockwise as far as it will go. If the lever still fails the Mechanical Safety Check, have your dealer check the brakes.



3. Braking technique

Brakes are designed to *control* your speed, not just 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*

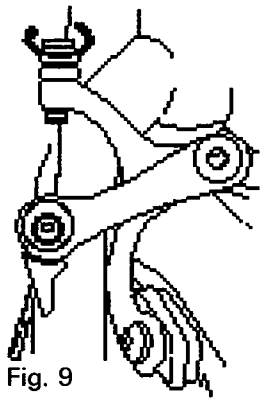


Fig. 9

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 area 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 hand brakes, *around the front wheel hub*, which could send you flying over the handlebars). A wheel with more weight on it will accept greater brake pressure before lockup; a wheel with less weight will lock up with less brake pressure. So, as you apply brakes and your weight shifts forward, you need to shift your body toward the rear of the bike, to transfer weight back on 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 lock up 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 to begin with.**

B. Wheels

1. Front Wheels

a. Front Wheel Secondary Retention Devices

The front fork of your bicycle (see Fig. 1, page 3) utilizes a secondary wheel retention device to keep the wheel from disengaging if the wheel nuts are insufficiently tightened.

Warning: Secondary retention devices are not a substitute for correct wheel installation. Failure to properly tighten the wheel nuts (see paragraph c. below) can allow the wheel to wobble or disengage, which could cause you to loose control and fall. Such a fall can result in serious injury or death.

Secondary retention devices fall into two basic categories:

1) The **clip-on** type is an accessory part which the manufacturer adds to the front wheel hub or front fork.

2) The **integral** type is molded, cast or machined into the outer faces of the front fork dropouts.

Ask your dealer to explain the particular secondary retention device on *your* bike.

WARNING: Removing or disabling the secondary retention device is extremely dangerous and may lead to serious injury or death. It also may void the warranty.

b. Removing a Bolt-On Front Wheel

1) If your bicycle has a front wheel hand brake with quick release, open up the brake shoes (see par. A.2.a. page 24).

2) With a correctly sized box wrench or a six inch adjustable wrench, loosen the two axle nuts.

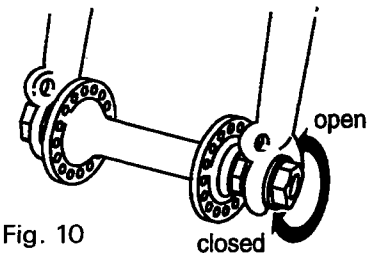


Fig. 10
Bolt-on Wheel in Front Dropouts

3) If your front fork has a clip-on type secondary retention device, disengage it and go to step (4). If your front fork has an integral secondary retention device, loosen the axle nuts enough to allow removal of the wheel; then go to step (4).

4) 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.

c. Installing a Bolt-On Front Wheel

1) With the steering fork facing forward, insert the wheel between the fork blades so that the axle seats firmly at the top of the slots which are at the tips of the fork blades. The axle nut washers should be on the outside, between the fork blade and the axle nut. If your bike has a clip-on type secondary retention device, engage it.

2) While pushing the wheel firmly to the top of the slots in the fork dropouts, and at the same time centering the wheel rim in the fork, use a six-inch adjustable wrench or a correctly sized box wrench to tighten the axle nuts as tight as you can.

3) If your bicycle has a front wheel hand brake with quick release, close the brake shoes; then spin the wheel to make sure that it is centered in the frame and clears the brake shoes.

d. Removing a Bolt-On Rear Wheel with Hand Brake

1) Open the rear brake shoes (see par. A.2.a. page 27).

2) With a correctly sized box wrench or a six-inch adjustable wrench, loosen the two axle nuts.

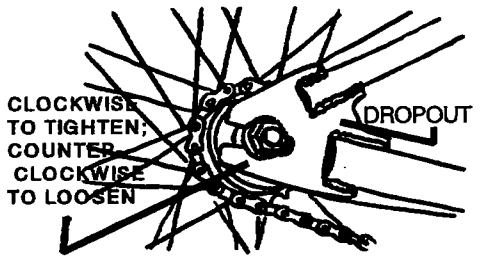


Fig. 11

3) Push the wheel forward to slacken the

chain, and remove the chain from the chainring and wheel sprocket.

4) Pull the wheel out of the frame.

e. Installing a Bolt-On Rear Wheel with Hand Brake

1) Put the chain on to the wheel sprocket. Then, insert the wheel into the frame dropouts and push it all the way in to the dropouts. The axle nut washers should be on the outside, between the frame and the axle nut.

2) Put the chain on to the chainring.

3) Pull the wheel back in the dropouts so that it is straight in the frame *and* the chain has about 1/4 inches of up-and-down play.

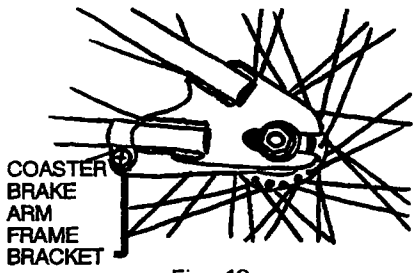


Fig. 12

4) Tighten the axle nuts as tightly as you can, using a six-inch adjustable wrench or a correctly sized box wrench.

5) Close the brake; then spin the wheel to make sure that it is centered in the frame and clears the brake shoes.

f. Removing a Bolt-On Rear Wheel with Coaster Brake

1) Disengage the coaster brake arm from its frame bracket (see Fig. 12).

2) With a correctly sized box wrench or a six-inch adjustable wrench, loosen the two axle nuts.

3) Push the wheel forward to slacken the chain, and remove the chain from the chainring and wheel sprocket.

4) Pull the wheel out of the frame.

g. Installing a Bolt-On Rear Wheel with Coaster Brake

1) Put the chain on to the wheel sprocket. Then, insert the wheel into the frame dropouts and push it all the way in to the dropouts. The axle nut washers should be on the outside, between the frame and the axle nut.

2) Put the chain on to the chainring.

3) Pull the wheel back in the dropouts so that it is straight in the frame and the chain has about 1/4 inches of up-and-down play.

4) Secure the coaster brake arm to its frame bracket (see Fig. 12), but do not fully tighten the securing nut and bolt.

5) Tighten the axle nuts as tightly as you can, using a six-inch adjustable wrench or a correctly sized box wrench. Spin the wheel to make sure it is straight in the frame.

6) Fully tighten the coaster brake arm securing nut and bolt.

C. Tires and Tubes

1. Tires

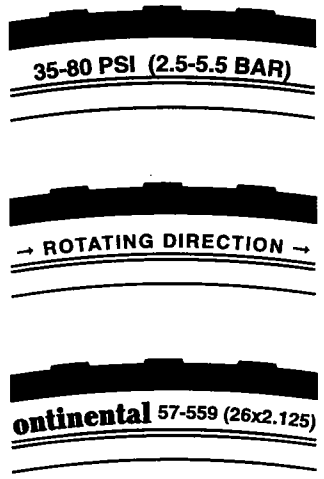


fig. 20 Tire Markings

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. 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. If, once you've gained experience with your new bike, you feel that a different

tire might better suit your riding needs, your dealer can help you select the most appropriate design.

The size, pressure rating, and on some high-performance tires the recommended use, are marked on the sidewall of the tire (see Fig. 13). The part of this information which is most important to you is **Tire Pressure**.

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

The best way to inflate a bicycle tire to the correct pressure is with a bicycle pump. Your dealer can help you select an appropriate pump.

⚠ **CAUTION: Gas station air hoses move a large volume of air very rapidly, and will raise the pressure in your tire very rapidly. To avoid overinflation when using a gas station air hose, put air into your tire in short, spaced bursts.**

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.

WARNING: riding your bicycle with a flat or under-inflated tire can seriously damage the tire, tube and bicycle, and could cause you to loose control and fall.

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.

Ask your dealer to recommend the best tire pressure for the kind of riding you will most often do, and have the dealer inflate your tires to that pressure. Then, check inflation as described in Section 3.C. so you'll know how correctly inflated tires should look and feel. Some tires may need to be brought up to pressure every week or two.

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. Tire Valves

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 (actually, there are other designs, but they are seldom seen in the US any more): The **Schraeder** Valve and the **Presta** Valve. The bicycle pump you use must have the fitting appropriate to the valve stems on your bicycle.

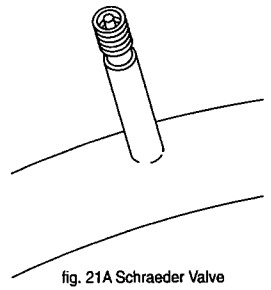


fig. 21A Schraeder Valve

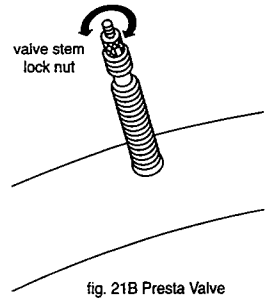


fig. 21B Presta Valve

The **Schraeder** (Fig. 14) is like the

valve on a car tire. To inflate a Schraeder valve tube, just 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.

The **Presta** valve (Fig. 15) has a narrower diameter and is only found on bicycle tires. To inflate a Presta valve tube using a Presta headed bicycle pump, remove the valve cap; unscrew (counterclockwise) the valve stem lock nut; and push down on the valve stem to free it up. Then push the pump head on to the valve head, and inflate. To inflate a Presta valve with a gas station air hose, you'll need a Presta adapter (available at your bike shop) which screws on to the valve stem once you've freed up the valve. The adapter fits the end of the air hose fitting. To let air out of a Presta valve, open up the valve stem lock nut and depress the valve stem. Always close the valve stem lock after inflation.

D. Bicycle Suspension

Some bicycles come equipped with suspension systems which are designed to smooth out some of the shocks encountered in off-road riding. There are many different types of suspension systems — too many to deal with individually in this Manual. If your bicycle has a suspension system of any kind, ask your dealer to provide you with the appropriate adjustment and maintenance instructions.

WARNING: Failure to maintain, check and properly adjust the suspension system may result in suspension malfunction, which may cause you to lose control and fall.

CAUTION: Changing suspension adjustment can change the handling and braking characteristics of your bicycle. Never change suspension adjustment unless you are thoroughly familiar with the suspension manufacturer's instructions and

recommendations, and always check for changes in the handling and braking characteristics of the bicycle after a suspension adjustment by taking a careful test ride in a hazard-free area.

CAUTION: Not all bicycles can be safely retrofitted with some types of suspension systems. Before retrofitting a bicycle with any suspension, check with the bicycle's manufacturer to make sure that what you want to do is compatible with the bicycle's design.

Suspension can increase the handling capabilities and comfort of your bicycle. This enhanced capability may allow you to ride faster; but you must not confuse the enhanced capabilities of the bicycle with your own capabilities as a rider. Increasing your skill will take time and practice. Proceed carefully until you are sure you are competent to handle the full capabilities of your bike.

WARNING: If your bike has suspension, the increased speed you may develop also increases your risk. When braking, the front of a suspended bike dips. You could lose control and fall if your skill is not up to handling this system. Get to know how to handle your suspension system safely before trying any downhill or very fast riding.

6. Service and Maintenance

NOTE: Technological advances have made bicycles and bicycle components more complex than ever before, and the pace of innovation is increasing. This on-going evolution makes it impossible for this manual to provide all the information required to properly repair and/or maintain your bicycle. In order to help minimize the chances of an accident and possible injury, it is critical that you have any repair or maintenance which is not specifically described in this manual performed by your dealer.

Equally important is that your individual maintenance requirements will be determined by everything from your riding style to geographic location. Consult your dealer for help in determining your maintenance requirements.

How much of your bike's service and maintenance you can do yourself depends on your level of skill and experience, and on whether you have the special tools required.

⚠ **WARNING: Many bicycle service and repair tasks require special knowledge and tools. Do not begin any adjustments or service on your bicycle if you have the slightest doubt about your ability to properly complete them. Improper adjustment or service may result in damage to the bicycle or in an accident which can cause serious injury or death.**

If you want to learn to do major service and repair work on your bike, you have three options:

1. Ask your dealer whether copies of the manufacturer's installation and service instructions for the components on your bike are available.

2. Ask your dealer to recommend a book on bicycle repair.

3. Ask your dealer about the availability of bicycle repair courses in your area.

Regardless of which option you select, we recommend that you ask your dealer to check the quality of your work the first time you work on something and **before** you ride the bike, just to make sure that you did everything correctly. Since that will require the time of a mechanic, there may be a modest charge for this service.

A. Service & Maintenance Schedule

Some service and maintenance can *and should* be performed by the owner, and require no special tools or knowledge beyond what is presented in this manual.

The following are examples of the type of service you should perform yourself. **All other service, maintenance and repair should be performed in a properly equipped facility by a qualified bicycle mechanic using the correct tools and procedures specified by the manufacturer.**

1. Break-in Period: Your bike will last longer and work better if you break it in before riding it hard. Control cables and wheel spokes may stretch or "seat" when a new bike is first used and may require readjustment by your dealer. Your Mechanical Safety Check (Section 4.C) will help you identify some things that need readjustment. But even if everything seems fine to you, it's best to take your bike back to the dealer for a checkup. Dealers typically suggest you bring the bike in for a 30 day checkup. Another way to judge when it's time for the first checkup is to bring the bike in after three to five hours of *hard off-road use*, or about 10 to 15 hours of *on-road or more casual off-road use.* But if you think something is wrong with the bike, take it to your dealer before riding it again.

2. Before every ride: Mechanical Safety Check (see Section 4.C)

3. After every long or hard ride; if the bike has been exposed to water or grit; or at least every 100 miles: Clean the bike and lightly oil the chain, free-

wheel cogs and rear derailleur pulley bushings. Wipe off excess oil. Lubrication is a function of climate. Talk to your dealer about the best lubricants and the recommended lubrication frequency for your area.

4. After every long or hard ride or after every 10 to 20 hours of riding:

- Squeeze the front brake and rock the bike forward and back. Everything feel solid? If you feel a clunk with each forward or backward movement of the bike, you probably have a loose headset. Have your dealer check it.

- Lift the front wheel off the ground and swing it from side to side. Feel smooth? If you feel any binding or roughness in the steering, you may have a tight headset. Have your dealer check it.

- Grab one pedal and rock it toward and away from the centerline of the bike; then do the same with the other pedal. Anything feel loose? If so, have your dealer check it.

- Take a look at the brake shoes. Starting to look worn or not hitting the wheel rim squarely? Time to have the dealer adjust or replace them.

- Carefully check the control cables and cable housings. Any rust? Kinks? Fraying? If so, have your dealer replace them.

- Squeeze each adjoining pair of spokes on either sideof each wheel between your thumb and index finger. Do they all feel about the same? If any feel loose, have your dealer check the wheel for tension and trueness.

- Check the frame, particularly in the area around all tube joints; the handlebars; the stem; and the seatpost for any deep scratches, cracks or discoloration. These are signs of stress-caused fatigue and indicate that a part is at the end of its useful life and needs to be replaced.

- Check to make sure that all parts and accessories are still secure, and tighten any which are not.

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

5. As required:

If either brake lever fails the Mechanical Safety Check (Section 4.C): restore brake lever travel by turning the brake cable adjusting barrel *counterclockwise*, then lock the adjustment in by turning the barrel's lock nut *clockwise* as far as it will go. If the lever still fails the Mechanical Safety Check, have your dealer check the brakes.

If the chain won't shift smoothly and quietly from gear to gear: the derailleur is out of adjustment. The cause may be as simple as cable stretch, in which case you can compensate by turning the shifter or derailleur cable adjusting barrel *counterclockwise* 1/2 turn. Try shifting again. If 1/2 turn to a full turn of the cable adjusting barrel does not cure the problem, see your dealer.

6. Every 25 (hard off-road) to 50 (on-road) hours of riding:

Take your bike to your dealer for a complete checkup.

7. About your Dealer

Your dealer is here to help you get the bike and accessories which are most appropriate for the kind of riding that you intend to do; and to help you maintain your equipment so that you can get the maximum enjoyment from it. Your bike shop's staff has the knowledge, tools and experience to give you reliable advice and competent service. Your dealer carries the products of a variety of manufacturers so that you can have the choices which best meet your needs and your budget.

But your dealer's staff can't make decisions for you; nor can they assume responsibility for *your* lack of knowledge, experience, skill or common sense. They can explain to you how something works, or what part or accessory will meet your special needs, but they can't *know* your questions or your needs unless you tell them.

If you have a problem with your bike or your riding, talk to your dealer. Make sure that the dealer understands your problem or question, and make sure that *you* really understand the answers.

There is a wide range of accessories available for your bicycle. Even if you are an experienced rider, don't assume you can properly install and operate the accessories without first reading any instructions that are enclosed with the product. Be sure to read, and understand, the instructions that accompany the accessories you purchase for you bicycle. If you have the slightest doubt as to your ability to install them correctly, ask your dealer to do it.



WARNING: Failure to install and operate any accessory properly can result in serious damage to the bicycle, and serious injury or death to the rider.

IMPORTANT PRODUCT REGISTRATION CARD

Thank you for purchasing this K2 bicycle. Please complete and mail this card immediately to take advantage of special offer.

1. ☐ Married 2. ☐ Single

❶

First Name: _____ Initial: _____ Last Name: _____

Address (Number and Street): _____

City: _____ State: _____ Zip Code: _____

❷ Bike Serial #: _____ *Located on bottom bracket*

❸ Bicycle Model: _____

❹ Date of Purchase: _____ *Month Day Year*

❺ Dealer Name: _____

❻ Purchase Price: $_____.00

❼ What were the top three (3) features influencing your purchase?

1. ☐ Received as a Gift
2. ☐ Value for Price
3. ☐ Color/Appearance
4. ☐ Prior Experience
5. ☐ Quality/Durability
6. ☐ Component Selection
7. ☐ Comfort/Fit
8 ☐ Weight of Bicycle
9. ☐ K2 Reputation
10. ☐ Advertisement
11. ☐ Frame Design/Materials
12. ☐ Recommendation of Friend/Family
13. ☐ Recommendation of Salesperson
14. ☐ Other

❽ What type of riding will you be doing? (Check one)

1. ☐ Road
2. ☐ Trail/Offroad
3. ☐ Mix of Road/Offroad
4. ☐ Racing
5. ☐ Commuting
6. ☐ Touring
7. ☐ Triathlon
8. ☐ Other

❾ How many times do you ride per month?

1. ☐ 1-5
2. ☐ 6-10
3. ☐ 11-15
4. ☐ 15+

❿ Date of YOUR birth: *Month*_____, *Day*_____, *Year*_____

⓫ Gender

1. ☐ Male
2. ☐ Female

⓬ Education (Please check which category applies):

1. ☐ High School
2. ☐ Some College
3. ☐ Completed College
4. ☐ Graduate School

⓭ Which best describes you family income?

1. ☐ Under $15,000
2. ☐ $15,000-$24,999
3. ☐ $25,000-$34,999
4. ☐ $35,000-$49,999
5. ☐ $50,000-$74,999
6. ☐ $75,000-$99,999
7. ☐ $100,000-$149,999
8. ☐ over $150,000

Thank you for filling out this questionnaire. We value your answers and input. Please check here [ ] if you would prefer not to participate in further market research for K2 Bike or obtain information on new and interesting opportunities from other exciting companies.

FREE OFFER!

Register your new K2 bike today, and as our way of saying 'thanks', we'll send you two free issues of MOUNTAIN BIKE or BICYCLING magazine and a free gift. Simply check one of the boxes below!

☐ Yes! Please send me a free 2 issue trial subscription to MOUNTAIN BIKE magazine and a free gift - Mountain Bike's Trail Finder. If I like what I see, I'll pay just $13.97 (plus $2. 97 for delivery) for 9 more issues*.

☐ Yes! Please send me a free 2 issue trial subscription to BICYCLING magazine and a free gift - Bicycling's Mileage Log and Training Guide. If I like what I see, I'll pay just $11.97 (plus $1.97 for delivery) for 9 more issues*.

* If I choose not to subscribe to BICYCLING or MOUNTAIN BIKE, I'll simply write 'cancel' on the invoice and owe nothing. No matter what, the 2 FREE issues and the free gift are mine to keep - they are a gift from K2.

KOWK115

K2 Bike Limited Warranty

K2 Bike, Inc. warrants each new K2 BMX frame and K2 BMX fork against defects in workmanship and materials for the lifetime of the bicycle frame or fork.

Non-K2 branded components shall be covered under the stated warranty of their original manufacturers or for a period of one year, whichever is longer. Parts and components not manufactured by K2 Bike shall be covered under the stated warranty of their original manufacturers or for a period of one year, whichever is longer.

This warranty is expressly limited to the repair or replacement of a defective frame, fork or defective part, and is the sole remedy of the warranty. This warranty applies to the original owner and is not transferable.

Claims under this warranty are to be made through an Authorized K2 Bike dealer. Proof of purchase is required. A warranty registration card must be completed and received by K2 Bike Inc. before a warranty claim may be processed.

This warranty does not cover normal wear and tear, improper assembly or follow-up maintenance, or installation of parts or accessories not originally intended or compatible with the bike or fork as sold.

The warranty does not apply to damage or failure due to accident, abuse, or neglect.

K2 Bike, Inc. shall not be responsible for incidental or consequential damages or personal injury. Labor charges for parts changeovers or the individual costs incurred by the dealer are not covered in the warranty. The user assumes the risk of any personal injury or damage to the bicycle or fork or other losses if the bicycle or fork is used at any time for stunt riding or similar activities, power or motor assist of any kind, or anything other than normal use.

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

WARNING: Do not ride or service your bicycle or fork until you have read and thoroughly understood the K2 BMX Owner's Manual. The manual contains important safety and care information to help you and your K2 BMX bike avoid injury and damage. If you have any questions about the operation or service of your bicycle, you should consult your authorized K2 Bike dealer. If you did not receive a copy of the Owner's Manual, please contact K2 or visit our website at www.k2bike.com.

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