

1000

USER MANUAL





Congratulations on your purchase of another cutting-edge suspension product from White Brothers! Please read this manual completely before you ride. It will help you to set your fork for optimum performance.

IMPORTANT CONSUMER SAFETY INFORMATION

WARNING: RIDING A BIKE IS DANGEROUS. NOT PROPERLY MAINTAINING OR INSPECTING YOUR BIKE AND ITS COMPONENTS IS EVEN MORE DANGEROUS. IT IS ALSO DANGEROUS TO NOT READ AND FOLLOW THESE INSTRUCTIONS.

1. NEVER REMOVE STEERER TUBE FROM CROWN. REMOVING IT WILL RENDER BOTH THE CROWN AND STEERER TUBE INOPERABLE. IF SERVICE BECOMES NECESSARY OR REMOVAL OCCURS, PLEASE CALL WHITE BROTHERS CUSTOMER SERVICE FOR PRODUCT EVALUATION AND DIAGNOSIS.
2. DO NOT PERFORM ANY MODIFICATIONS OR ADJUSTMENTS THAT ARE NOT OUTLINED IN THIS MANUAL. SEE THE TUNING SECTION FOR MORE DETAILS.
3. INSPECT YOUR FORK BEFORE EVERY RIDE. INSPECT THE CROWN, TUBES, AND AXLE SEAT AREAS FOR ANY SIGNS OF FATIGUE, BENDING, CRACKING OR OTHER DAMAGE. MAKE SURE THE FORK CAPS AND ALL FORK HARDWARE AND AXLE ARE TIGHT BEFORE EACH RIDE. IF YOU NOTICE ANY TYPE OF DAMAGE, DO NOT RIDE IT. RETURN IT TO YOUR DEALER OR TO WHITE BROTHERS FOR A COMPLETE INSPECTION AND NECESSARY REPAIR.
4. PERFORM ALL RECOMMENDED MAINTENANCE ACCORDING TO THE MAINTENANCE SECTION OF THIS MANUAL. FAILURE TO PERFORM MAINTENANCE COULD DRASTICALLY REDUCE THE FORK'S LIFE, PERFORMANCE AND CAUSE YOUR FORK TO BE A SAFETY HAZARD.
5. WHITE BROTHERS RECOMMENDS THAT YOU WEAR PROPER SAFETY EQUIPMENT EVERY TIME YOU RIDE, INCLUDING AN APPROVED BICYCLE HELMET. NEVER RIDE AT NIGHT WITHOUT LIGHTS.
6. ALWAYS USE GENUINE WHITE BROTHERS PARTS. USE OF AFTERMARKET REPLACEMENT PARTS AND UPGRADES VOIDS THE WARRANTY AND COULD CAUSE STRUCTURAL FAILURE.
7. WHITE BROTHERS FORKS ARE DESIGNED FOR OFF ROAD USE ONLY. THEY ARE NOT EQUIPPED WITH REFLECTORS FOR ROAD USE. IF YOU ARE GOING TO USE YOUR FORK ON THE ROAD, HAVE A DEALER OR MECHANIC INSTALL REFLECTORS THAT MEET THE CONSUMER PRODUCT SAFETY COMMISSION'S REQUIREMENTS.
8. ALL WHITE BROTHERS LOOP FORKS ARE DESIGNED BASED ON THE 74MM POST MOUNT DISC BRAKE STANDARD AND ARE COMPATIBLE WITH ROTORS FROM 160MM TO 203MM. MAKE SURE TO USE THE APPROPRIATE DISC BRAKE ADAPTER FOR THE ROTOR SIZE YOU PLAN TO USE, AS RECOMMENDED BY YOUR BRAKE MANUFACTURER.

LOOP

INTRODUCTION

Thank you for purchasing your new White Brothers fork. Our forks are designed to help you perform at your absolute peak. Your new White Brothers fork has oil damping and utilizes an air spring for lightweight performance. The air spring and damper are factory set to satisfy a wide range of rider weights and riding styles. Fine-tuning can be easily accomplished by changing air pressure of the air spring. See the adjustment and maintenance section for rider weight verses air pressures settings. The damper can be adjusted to give a wide range of compression and rebound damping. Steering accuracy is improved over conventional MTB forks by utilizing superior materials and design. These include oversized 32mm fork tubes, a torsion box design steering crown with pressed in tubes, a weight optimized cast magnesium lower, and patent-pending axle design. Fork travel has been chosen to offer the best performance possible for each fork's intended use. To ensure peak performance, proper installation and periodic maintenance is required. When riding on public land, please respect the rights of others and stay on established paths and trails. By riding responsibly, you are helping ensure the future of our sport.

FORK INSTALLATION

White Brothers forks feature a 1.125" or tapered 1.5-1.125" threadless aluminum steer tube. Do not add threads to your White Brothers steerer tube.

1. Remove your old fork from the bicycle. Measure the diameter and length of your old forks steerer tube to ensure that your new White Brothers steerer tube is the correct diameter and sufficient length for the installation. If your White Brothers fork has a tapered steerer tube, be sure to leave enough room above the taper to allow for proper stem installation.
2. Remove the crown race from your old fork.
3. Press the crown race onto your new White Brothers fork. (See Figure #1)
4. Preassemble the fork on the bike with the headset, stem, and spacers (optional). Refer to your stem manufacturer's instructions to determine how much room is needed to clamp the stem.
5. Mark the steerer tube at the top of the stem. The steerer tube will now need to be cut to the correct length. Disassemble and cut 3mm (1/8") below the mark. Consult

your dealer or mechanic if you don't have the proper tools to cut the steer tube.

6. The star fangled nut must now be installed into the steer tube. If you don't have the set tool, we recommend dealer installation of this part. (See Figure #3)

7. Clean and grease all headset bearings and races to prepare them for assembly.

Note: Replace the bearings if there is any sign of wear or corrosion.

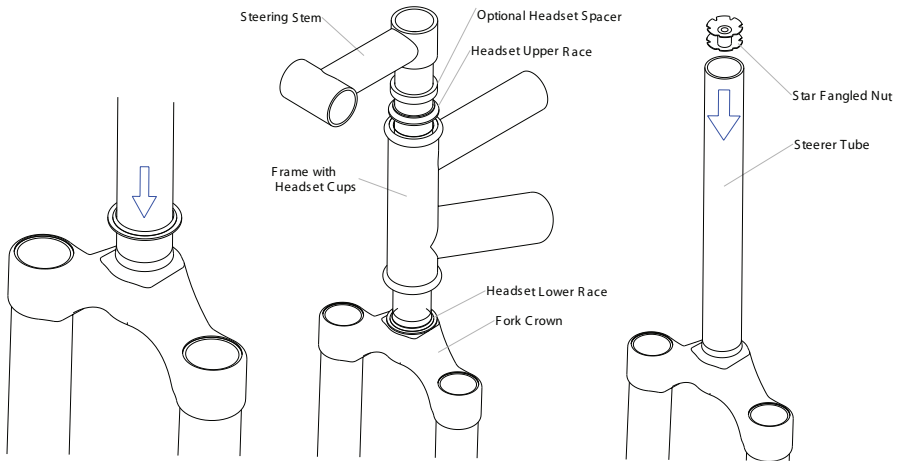
8. Now loosely assemble the headset, stem and handle bars as done in step four.

9. Install the headset according to the manufacture's instructions until there is no play and the fork turns smoothly.

10. Install your front brake and adjust according to the manufacture's instructions.

11. Install the wheel on the fork. Refer to the page 4 of this manual for proper axle operation.

12. Check to see that the brakes are adjusted and properly working. Make sure that the brake cable does not interfere with any part of the bike and is secured under the brake hose clamp on the fork brace. Make sure your brakes are adjusted and functioning properly, and the brake hose does not interfere with any part of the bike when the fork is compressed and released.



WARNING

ALL WHITE BROTHERS LOOP FORKS ARE DESIGNED BASED ON THE 74MM POST MOUNT DISC BRAKE STANDARD AND ARE COMPATIBLE WITH ROTORS FROM 160MM TO 203MM. MAKE SURE TO USE THE APPROPRIATE DISC BRAKE ADAPTOR FOR THE ROTOR SIZE YOU PLAN TO USE, AS RECOMMENDED BY YOUR BRAKE MANUFACTURER. FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY OR DEATH.

OPERATING THE QTAPER-15 AXLE

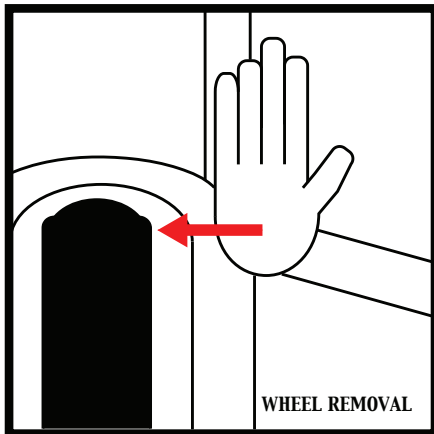
The QtapeR-15 axle operates in a similar manner to a traditional quick release skewer. It's patent pending tapered wedge interface grips both the axle and fork lowers. This provides you with an extremely stiff fork that steers very accurately.

INSTALLING WHEEL

1. Seat hub into the dropouts of the fork.
2. Insert axle through the disc brake side dropout, through the hub and into the captive nut on the non-disc brake side dropout.
3. Thread axle into the captive nut by turning the axle or the nut in a clockwise direction.
4. When you can feel tension on the quick release cam when the lever is pointing straight out from the axle (90 degrees from the fork leg), you've reached the correct starting point tension. If you don't feel the cam start to tension at the 90-degree point, more tension is needed.
5. Position the quick release lever so that when closed, it's parallel with the fork leg and pointing upwards.
6. Close the quick release lever until it stops



moving inward. After closing it, there should be a clear imprint of the lever in the palm of your hand. If not, there is not enough tension on the system. When closed correctly, the word "closed" is visible on the outside of the lever.



1. Open the quick release lever all the way. Because the QtapeR system's tapered wedges grip very tightly to the dropouts and the axle, it's normal for the tapered wedges to remain in their seated position when you open the quick release lever.
2. With the heel of your palm, apply a light side ways tap on the side of the tire. This allows the tapered wedges to release.
3. Un-thread the axle (counter clockwise rotation) and pull it out the disc brake side.

WARNING
DO NOT LUBRICATE AXLE PARTS

WARNING

WHEN INSTALLING THE WHEEL OR A NEW TIRE, CHECK FOR MINIMUM CLEARANCE. RELIEVE AIR PRESSURE IN THE AIR SPRING AND COMPRESS FORK COMPLETELY TO BOTTOM OUT. THERE MUST BE 1/8" OR 3MM CLEARANCE BETWEEN THE CROWN AND HIGHEST POINT ON THE TIRE AT FULL BOTTOM OUT TO ENSURE ADEQUATE CLEARANCE IN ALL RIDING CONDITIONS. ANY LESS CLEARANCE CAN RESULT IN THE TIRE HITTING THE CROWN RESULTING IN SERIOUS INJURY OR DEATH.

TUNING

Your new White Brothers fork has a break-in period of about 10 hours of ride time. During this time, the moving parts inside the fork will bed into each other and the fork will become even smoother than it was when brand new.

TOOLS NEEDED FOR TUNING:

- High pressure shock pump for use with Schrader valves
- 2.5mm allen key

LOOP 130/140/150

WEIGHT		PSI
LBS.	KG	
120	55	50-60
130	59	55-65
140	64	60-70
150	68	65-75
160	73	70-80
170	77	75-85
180	82	80-90
190	86	85-95
200	91	90-100
210	95	95-105
220	100	100-110

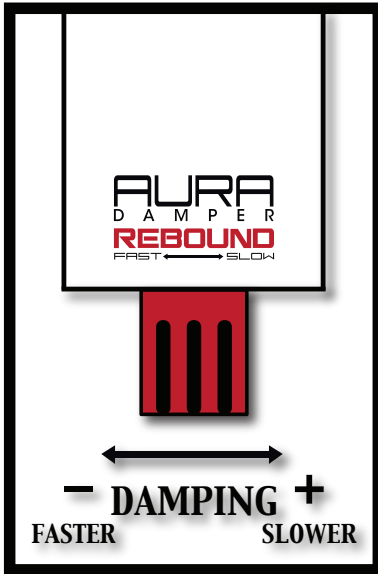
AIR SPRING PRESSURE

Inside the disc brake side stanchion tube is the air spring. To adjust air pressure, remove the dust cap on top of the leg to expose the Schrader valve. Use a high-pressure shock pump to adjust air pressure to desired level. Re-install dust cap. Refer to chart below for recommendations on beginning pressure. The best setting for you will vary according to rider personal preference, but this range will serve as an ideal starting point.

WARNING

NEVER EXCEED 110psi

REBOUND



Rebound damping is what prevents your suspension fork from feeling like a pogo stick. It controls the rebound stroke of the fork after a compression stroke (bump) has occurred. It is also one of the most useful adjustments and it's easy to feel the difference between different settings. Your fork comes from the factory at 6 clicks out from full slow. This is a very useable setting for the majority of trail conditions. Adjustments can be made by turning the red knob on the bottom of the damper leg. Increasing (turn knob clockwise) rebound damping slows the rebound stroke of the fork. Decreasing (turn knob counter clockwise) rebound damping speeds up the rebound stroke of the fork. Ideally, you want to arrive at a setting that allows your wheel to track the terrain and not get bounced off line.

Why would I want slower rebound damping?

By slowing down the rebound damping, you can increase the control of the fork in certain situations. Be careful not to slow it down too much however, or this could cause the fork to “pack up” on consecutive bumps that occur in rapid succession. Here are some situations that lend themselves toward a slower rebound setting:

- *Large, violent impacts that are spaced apart*
- *Slower speed riding*
- *Generally smooth trail conditions with small undulations*
- *Jumps and drops*
- *Personal preference*

Why would I want faster rebound damping?

By speeding up the forks rebound stroke, you can increase control in situations where you're encountering consecutive bumps in rapid succession. Doing so allows the fork to rebound more completely before it encounters the next bump, thus avoiding “pack up” which occurs when the forks rebound is set too slow to allow it to rebound fully before it encounters another bump. After several bumps like this, the fork is essentially moved down towards bottom out, adversely affecting handling because you don't have any more bump-eating travel left and overall fork length is much shorter. Here are some situations that lend themselves toward a quicker rebound setting:

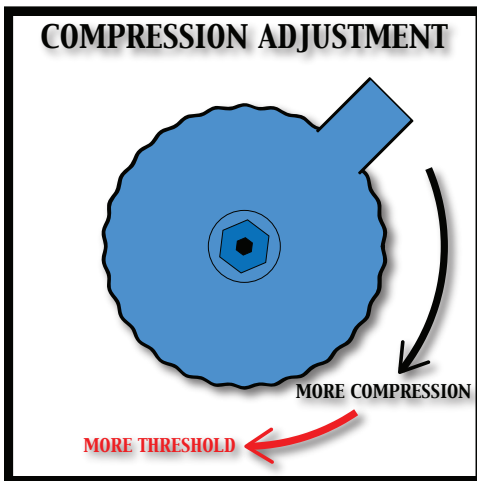
- *Small to medium sized consecutive bumps that occur in rapid succession*
- *Higher speed riding*
- *Generally rough trail conditions with lots of rocks*

REBOUND DAMPING ADJUSTMENT TIPS

Experiment with different settings in the parking lot. Become comfortable with what the adjustment actually does. Turn the rebound all the way to the slowest setting. Push on the fork. Turn the adjustment knob all the way to the fastest setting. Push on the fork. Feel the difference? The extreme ends of adjustment (both fast and slow) are rarely useful settings. Most of the time, you will want a setting that is somewhere in the middle, and it's likely that you'll want to adjust rebound often to get the most out of your fork on different terrain.

COMPRESSION WITHOUT THRESHOLD (APPLIES TO TCR FORKS ONLY)

Compression damping controls the compression stroke of your fork. Your fork comes from the factory set with the least amount of compression damping. Adjustments can be made by turning the blue knob on the top of the damper leg. It is an adjustment that is subtle, and often overlooked, but can make a big difference in how your fork performs. Your fork has 5 positions (starting at the furthest counter clockwise) of compression damping adjustment. They are indicated on the gradient decal on the crown by the color black or white. As you turn the dial clockwise, you are adding compression damping or slowing the forks compression stroke. This is a subtle adjustment, and even though you may not perceive a difference pushing on the fork in the parking lot, it will act differently on the trail. Aggressive riders tend to like more compression damping because it is a firmer, more positive feel. Comfort oriented, less aggressive riders tend to like less because it allows more small bump sensitivity. Do not confuse compression damping with pre-load (spring). They are very different adjustments, and while adding compression damping may make the fork feel "stiffer", it is not changing the spring rate.



Why would I want more compression damping?

- The fork is bottoming out easily
- To control brake dive
- To preserve geometry in hard cornering situations.
- You encounter lots of large violent impacts on the trail

Why would I want less compression damping?

- You want the most small bump sensitivity
- Comfort is your main objective in tuning your fork
- You encounter lots of small to medium sized bumps with few large impacts

COMPRESSION ADJUSTMENT TIPS

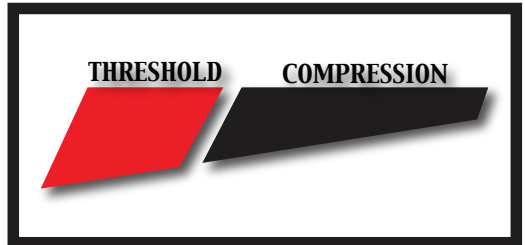
*For a softer, plusher, more comfort oriented ride, use **less compression**.*

*For a firmer, efficient, more performance oriented ride, use **more compression**.*

THRESHOLD (APPLIES TO TCR FORKS ONLY)

Your White Brothers fork comes with a unique, Patent-Pending magnetic threshold valve. This cutting edge technology allows you tune your fork so it supports you firmly and gets your energy to the rear wheel where you want it, instead of allowing your energy to be absorbed into the fork in the form of fork “bob”, a result of rider introduced forces. Our magnetic threshold valve is superior to the competing technologies because of the extremely efficient blow off capabilities it offers. In other words, when you are riding your White Brothers TCR fork with the threshold turned on and you encounter a bump, the fork can instantly absorb the bump with virtually no perceptible change to the rider. Another advantage to our magnetic threshold is it cannot be “confused” by different combinations of trail features, or speed and repetition of trail input. Once the rebound stroke of the fork begins, the threshold valve instantly closes again and is doing it’s job preventing unwanted bob or brake dive. This results in a fork that feels completely predictable, and always reacts instantly to any obstacle. All of this means that you will likely find that you can turn on the threshold and reap the benefits of it without needing to worry about turning it off.

The threshold is indicated on the gradient decal on the crown by the color red. The last 3 positions of the dial are on the threshold. We call this the “Red Zone”. There are 2 different ways to affect the way the threshold behaves.



BLEED

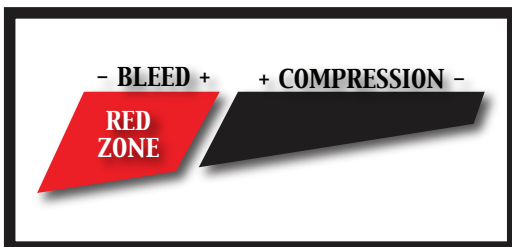
Bleed is simply allowing some of the oil to bypass the magnetic threshold valve until enough oil pressure is built to open it. Bleed is adjusted simply by turning the blue dial on the top of the fork leg. When in the Red Zone, as you continue to turn the dial clockwise, you are decreasing the amount of bleed. In the full clockwise position, you have very little bleed. Please note that no matter how much bleed you choose to allow, your threshold level remains unchanged.

Why would I want more bleed?

Personal preference plays a huge role here. More bleed will give you more small bump sensitivity while on the threshold. It will allow the fork to move more before you actually blow through the magnetic threshold. The rougher the trail conditions, the more bleed is usually desired.

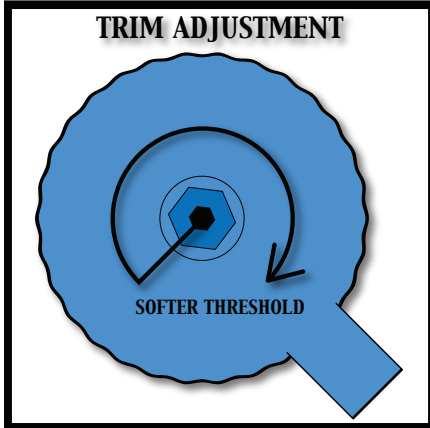
Why would I want less bleed?

If you want the fork to have less movement until it’s absolutely needed, then you may want less bleed. Typically, you would want very little bleed if you’re riding on a very smooth trail or road.



TRIM

Trim is adjusting the actual level of magnetic force being exerted on the valve. The more force, the larger the impact needed to overcome it and blow off the threshold. Your fork came from the factory with the trim close to the minimum level giving you a stronger feeling threshold. We strongly recommend you ride the fork for awhile at this setting to experience and become familiar with the threshold's characteristics. If you then decide to tune, it can be adjusted by removing the small black dust cap on the compression dial, and then using a 2mm allen key inserted through the hollow blue screw and turning the silver (2mm) allen screw beneath it.



Trim is a fine tuning adjustment and should usually only be used if you are very familiar with your fork and comfortable changing it's damping characteristics. To increase trim, (reduce the magnetic force on the valve) turn the allen key clockwise. This decreases the force needed to blow off the valve. Extremely small changes make a big difference in the threshold level. Baby steps! We recommend adjusting this in 1/8 turn increments.

WARNING

DO NOT REMOVE OR UN-THREAD THE HOLLOW BLUE SCREW

SAMPLE RIDER PROFILES

Rider A: Rides aggressive all-mountain style, on a 6" travel, full-suspension bike. The fork is a LOOP TCR 150 and settings would likely be:

Air Spring: Generally on the higher end of the recommended range

Rebound: Generally on the slower end of the range

Compression: Generally more compression

Threshold: Generally maximum bleed while on threshold

Trim: Generally more trim (lighter threshold force)

Rider B: Rides competitive, performance oriented cross-country on a 4" travel, full-suspension bike. The fork is a LOOP TCR 100 and settings would likely be:

Air Spring: Generally Mid to high end of the recommended range

Rebound: Generally in the middle of the rebound range

Threshold: Generally minimum bleed while on threshold
Trim: Generally less trim (higher threshold force)

Rider C: Recreational, comfort oriented rider riding a 5" travel, full-suspension bike. The fork is a LOOP TCR 140, and settings would likely be:

Air Spring: Generally on the lower end of recommended range

Rebound: Generally in the middle of the rebound range

Compression: Generally less compression for the most small bump sensitivity

Threshold: Generally maximum bleed while on threshold (still in the Red Zone).

LIMITED WARRANTY

Who is covered:

This warranty is extended only to the original end-use purchaser, or the person receiving the product as a gift, and shall not be extended to any other person or transferee. Original proof of purchase is required.

What is covered/For how long:

Your White Brothers fork is warranted for a period of 1 year from the date of retail purchase. White Brothers warrants that this product, when delivered to you in new condition, in original packaging, from a White Brothers authorized reseller and used in normal conditions, is free from any defects in manufacturing, materials, and workmanship.

What is not covered:

This warranty does not cover defects resulting from improper or unreasonable use or maintenance; improper installation, failure to follow operating instructions; accident; unauthorized alterations or modification of original condition; damages caused by inadequate packing or shipping procedures; wear items including seals, bushings, o-rings, piston bands, foam rings, stanchions, bottom out bumpers, stripped fastener threads and heads; and products purchased from unauthorized dealers.

What we will do:

During the warranty period, we will, at our sole option, repair or replace any defective parts within a reasonable period of time and free of charge.

What we will not do:

Pay shipping, insurance, or transportation charges from you to us, or any import fees, duties and taxes.

What you must do to obtain Limited Warranty Service:

Return product, with proof of purchase from an authorized White Brothers dealer, using the following procedures:

1. Contact White Brothers for specific return and shipping instructions.
2. Label and ship the product, freight prepaid, to the address provided by White Brothers; and
3. Place any necessary return authorization number prominently on the outside of the carton.

OTHER CONDITIONS

THE PROVISIONS OF THIS LIMITED WARRANTY ARE IN LIEU OF ANY OTHER WARRANTY, WHETHER EXPRESSED OR IMPLIED, WRITTEN OR ORAL, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. WHITE BROTHERS MAXIMUM LIABILITY SHALL NOT EXCEED THE ACTUAL PURCHASE PRICE PAID BY YOU FOR THE PRODUCT. IN NO EVENT SHALL WHITE BROTHERS BE LIABLE FOR SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR INDIRECT DAMAGES HOWSOEVER CAUSED INCLUDING WITHOUT LIMITATION THE REPLACEMENT OF EQUIPMENT AND PROPERTY. THIS WARRANTY IS VOID IF THE LABEL BEARING THE SERIAL NUMBER HAS BEEN REMOVED OR DEFACED.

OTHER LEGAL RIGHTS

This limited warranty gives you specific legal rights, and you also may have other rights that vary from state to state or country to country. Some places do not allow limitations on implied warranties or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

** Failure to register this product will not affect your limited warranty rights, however, proof of purchase is required.*



WHITE BROTHERS CYCLING IS A DIVISION OF:

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FOR MORE INFORMATION VISIT US ON THE WEB:

WHITEBROTHERSCYCLING.COM

