



## Wheel Systems Owner's Manual

### **CONGRATULATIONS!**

Congratulations and thank you for purchasing the worlds' finest high performance wheel system.

Because different Rolf Prima Wheel system models are available this manual may contain information which does not apply to your wheel set. Some illustrations may show details which vary from your wheel set. If you have any questions after reading this manual, please consult our web site or your Rolf Prima Wheel Systems dealer.

It is important that you read this manual thoroughly before riding to ensure that your wheel system functions properly and safely. This manual explains the recommended care, inspection, and maintenance of your Rolf Prima Wheel System model. With proper care and maintenance, your wheel system will provide the highest performance riding experience for years to come.

If you sell or loan your wheel system, please provide the new rider with this manual.

Installation and maintenance instructions are included in this manual. Even if your wheel set was installed by your bike shop, you should read this manual thoroughly. A detailed service manual is available at our website: [www.rolfprima.com](http://www.rolfprima.com)

Some maintenance and repair should only be performed by your Rolf Prima Wheel System dealer. Any such service will be indicated in this manual. If you have a question or issue which your Rolf Prima Wheel System dealer cannot answer, please contact us:

Rolf Prima Incorporated  
Attn: Customer Service  
780 Bailey Hill Rd., Suite 2  
Eugene, OR 97402 USA  
1.541.868.1715  
<http://www.rolfprima.com>

## **GENERAL INFORMATION**

Wheels are the most important component on your bicycle. They have the greatest influence on the performance and ride quality of your bicycle. Your Rolf Prima Wheel System will deliver trouble free performance provided they are regularly inspected and properly maintained. The structural condition of your wheels and the performance of your brakes are crucial to your safety.

### **INSPECTION – BEFORE EVERY RIDE**

Before each ride be sure to inspect each item on this list to ensure your Rolf Prima Wheel system is in top condition and is properly installed to your bicycle.

#### **CHECK THAT THE WHEELS RUN TRUE**

##### **CHECK THAT THE RIMS ARE CLEAN**

Dirty or greasy rims greatly reduce braking effectiveness and can present a significant safety risk.

##### **CHECK THAT THE TIRES ARE PROPERLY INFLATED**

For Rolf Prima wheels with aluminum clincher rims, inflate tires with a bicycle pump equipped with a pressure gauge to the inflation pressure indicated on the tire sidewall or a maximum of 120 psi [8.1 atm]. Inspect the tires for damage or excessive wear. If you have any questions about the condition of your tires, have them inspected by your Rolf Prima Wheel System dealer.

For Rolf Prima Carbon tubular wheels, inflate tires to the maximum inflation pressure indicated on the tire sidewall, or a *minimum* of 120 psi [8.1 atm]. Please note: Carbon fiber rims can be easily damaged if ridden with insufficient tire pressure. Impact damage to rims is not covered under your Rolf Prima warranty. Many tubular tires tend to lose significant amounts of pressure over a short period of time. It is very important that tubular tires are checked and inflated before each ride.

##### **CHECK THAT THE QUICK RELEASE MECHANISMS ARE PROPERLY CLOSED**

Your wheels are equipped with quick release wheel retention mechanisms. The quick release allows the wheel to be removed and installed without tools. For proper and safe operation, read these instructions carefully.

#### **! WARNING !**

Failure to have wheel quick release retention mechanisms properly adjusted and closed may cause loss of control resulting in personal injury or death. If you have any questions about the operation of this system, consult your dealer.

**OPERATION OF QUICK RELEASE MECHANISMS:**

1. Check both wheels before every ride.
2. Move the quick release lever to the OPEN position and set the wheel so it seats firmly at the end of the frame or fork tips.

[fig. 1]

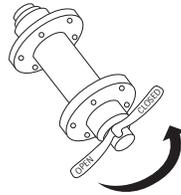


fig. 1

3. With the lever about halfway between the OPEN and CLOSED position [fig. 2], tighten the quick release adjusting nut on the opposite end of the quick release axle until finger tight.



fig. 2

4. Place the quick release lever in the palm of your hand and move the lever fully into the CLOSED position. [figure 3 for front wheels, figure 4 for rear wheels]. At the halfway closed position you should feel resistance to this motion.



fig. 3



fig. 4

5. If the quick release lever is able to be moved to the CLOSED position with little or no resistance, clamping strength is insufficient. Return the lever to the OPEN position and tighten the nut further. Close the lever, testing again for resistance. When the quick release mechanism is properly tightened and clamped in the closed position, the clamping force is adequate to cause metal into metal engagement [embossing] of the fork or frame tips.

**DO NOT TIGHTEN THE QUICK RELEASE MECHANISM BY USING THE QUICK RELEASE LEVER LIKE A WING NUT [FIG 5]. DO NOT OVERTIGHTEN THE QUICK RELEASE MECHANISM, WHICH MAY DAMAGE THE QUICK RELEASE ASSEMBLY.**

6. Perform these two tests to ensure that the quick release mechanisms are properly closed:
  - a. Lift the front of the bicycle and give the top of the tire a sharp downward blow with a closed fist. The wheel should not come out of the fork, be loose, or move from side to side. Repeat this test at the rear wheel. If uncertain, repeat the tightening process, as shown in steps 2-6, above.
  - b. With the quick release lever properly adjusted and closed, it will not be possible to rotate the quick release lever in a circular motion parallel to the wheel as pictured in figure 5.

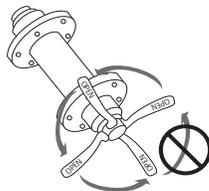


fig. 5

## **INSPECTION - WEEKLY**

**CHECK TO BE SURE THERE ARE NO LOOSE, DAMAGED, OR BROKEN SPOKES.**

**CHECK TO BE SURE THERE ARE NO CRACKS IN BOTH RIMS.**

Rims are considered a 'consumable' component, just like tires. Aluminum rims are highly stressed components and have a finite fatigue life. As a rim nears the end of its fatigue life, cracks will develop. If cracks are found, do not ride the wheel. Take the wheel to your Rolf Prima dealer for service.

Carbon fiber rims may become damaged as a result of an accident, impact, or improper handling. Damage to carbon fiber components may be contained internally and appear normal and undamaged at a glance. It is very important to thoroughly inspect all the parts on your bicycle after an accident – but it is especially important that you thoroughly inspect your carbon fiber rims for signs of damage. Look closely for cracks, deep scratches or gouges, delamination, loose fibers and other surface flaws. If you suspect the rim has been damaged, take your bicycle to your dealer for further inspection.

## **INSPECTION – MONTHLY**

**CHECK TO ENSURE THERE IS NOT EXCESSIVE LOOSENESS IN HUB BEARINGS IN BOTH WHEELS.**

**CHECK BOTH RIMS FOR WEAR.**

Bicycle rims will wear from the friction of braking and will eventually require replacement. Inspect the rim sidewalls and braking surface for heavy grooving or cracks.

**! WARNING !** Inspect your wheels regularly. Make sure your Quick Release mechanisms are closed properly before each ride. Worn or damaged components, or improperly closed Quick Release mechanisms can cause an accident which could result in serious injury or death.

## **INSTALLATION**

Before attempting any installation of components onto this wheel set, make sure the parts are compatible. Tires, tire valves, gear cluster, brakes and the frame and fork spacing must be correct. If you are unsure of the compatibility of any part, consult your dealer.

### **PROPER BRAKE PAD ADJUSTMENT**

Brake pads should be adjusted so that they sit 1mm to 2mm away from the rim when the brakes are released. Brakes should be properly centered over the rim so that each pad is the same distance from the rim when the brakes are released.

Brake pads should be aligned properly with the braking surface of the rim. Some brake pads may be too tall to fit your wheels properly. Improper or misaligned pads can cause premature rim wear or a sudden tire blowout. Check to be sure there is adequate clearance between the top of the brake pad and the tire.

### **BRAKE PAD SELECTION: RIMS WITH ALUMINUM BRAKING SURFACE**

Brake pads from many manufacturers are available in different compounds. It is very important that only soft compound pads designed for aluminum rims with machined sidewalls are used with your Rolf Prima wheels.

Hard compound pads are very abrasive and will substantially decrease the life of your wheels. Use of hard compound pads will void your Rolf Prima warranty.

Brake pads are not generally marked to identify the compound. If you have any question about the compound of your brake pads – replace them with new pads. It is cheap insurance!

### **BRAKE PAD SELECTION: RIMS WITH CARBON BRAKING SURFACE**

Rolf Prima Carbon wheels with carbon brake tracks feature a specially prepared braking surface and are susceptible to heat build-up issues and abrasion. We recommend the use of Zipp or Corima brand cork brake pads for use on all Rolf Prima carbon rims since they were developed specifically for carbon brake sidewalls. There is a wide range of brake pads available, and others may work well with your wheels – but it is very important that you test the suitability of any pad other than the recommended pads before braking hard.

#### **FURTHER NOTES ON BRAKING PERFORMANCE OF CARBON RIMS**

Wheels with carbon fiber rims will exhibit different braking characteristics as compared to wheels with aluminum rims:

- Increased pad consumption. Carbon rims have a higher rate of brake pad wear, especially in wet conditions. Check your brake pad thickness before each ride.
- Different wet braking performance. Carbon rims are fundamentally different from aluminum rims in wet braking performance. Use caution when braking in wet conditions.
- Heat build up from prolonged braking. Carbon rims do not dissipate heat generated by braking at the same rate that aluminum rims dissipate heat. Managing rim temperatures through braking application can be vitally important: if rims are allowed to overheat, damage to the rim and/or tire can result. During long descents, it is very important that brakes are applied with greater force, more frequently, for the shortest possible time period. This technique of frequent, hard braking significantly reduces rim temperatures.

#### **NOTES ON USE OF DRAG BRAKES WITH TANDEM WHEELS**

Rolf Prima tandem rear wheels are compatible with industry standard tandem drum brakes. Adaptors are available which allow the use of disc brakes on rear tandem wheels configured for drum brakes.

Follow the brake manufacturer's instructions for installation and adjustment. Follow the tandem bicycle maker's instructions on the proper use of drag brakes. Consult your tandem bicycle owner's manual or your tandem bicycle dealer for assistance.

#### **IMPORTANT INFORMATION ABOUT RIM TAPE**

Before installing tires, make sure an appropriate rim tape is in place which completely covers the rim tire well so that all spoke holes are completely covered. The tire well is the inner wall of the rim, visible when the tire, tube, and rim tape are removed. If the spoke holes in the tire well wall are not completely covered with a high strength rim tape, a sudden blowout could occur.

#### **TIRE SELECTION AND INSTALLATION – CLINCHER TIRES**

Follow normal clincher tire installation procedures. If you are not familiar with tire installation, consult your bicycle owner's manual or see your dealer. Do not use metal tire levers to install or remove tires. Metal tire levers can damage the rim.

Do not over inflate your tires. Tires should never be inflated to pressure greater than 120 psi [8.1 atm] or the maximum pressure marked on the tire, whichever is lower. Over inflated tires place greater stress on the rim and will shorten the life of your wheels. Over inflated tires could also cause a sudden blowout, or cause damage to your wheels if a sudden blowout should occur.

#### **TIRE INSTALLATION – TUBULAR TIRES**

Tubular tire installation requires specific experience or training. Follow normal tubular tire installation procedures. If you are not familiar with tubular tire installation, see your dealer. Only use tire cement designed specifically for tubular tires. Follow the tire cement maker's instructions carefully. Be absolutely certain that the tire mounting surface of the rim is clean and free of oil or grease before adding any cement. After curing, inflate tires and test the bond by attempting to pull the tire off the rim.

**i WARNING !** Incompatible or improperly installed components can damage your wheel set and/or cause an accident which could result in injury or death. Make sure your brakes are adjusted and functioning properly. Make sure your tires are installed and inflated properly. Test the braking performance of your new wheels in a safe manner.

#### **MAINTENANCE**

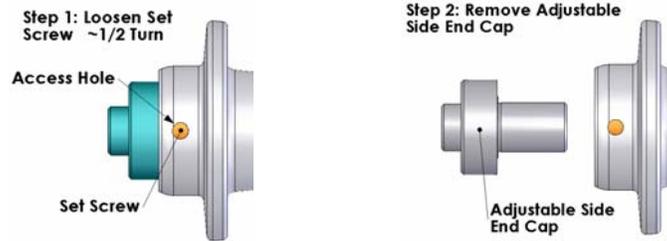
**i WARNING !** Repair and service of Rolf Prima wheels requires special tools and knowledge, and should only be undertaken by a qualified service technician at a professional bicycle shop. Repairs, service, or adjustments performed by an inexperienced person could lead to wheel failure which could cause a crash and resulting in injury or death.

## WHEEL TRUING

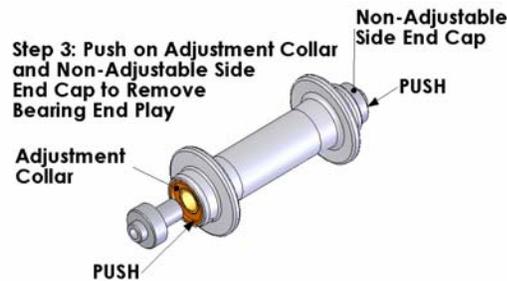
Rolf Prima wheels will likely only need truing if the rim should be bent in an accident. Should you suspect your wheels need truing, take them to your Rolf Prima dealer for evaluation. Wheel truing involves special tools and knowledge and should only be performed by a qualified professional wheel builder.

## HUB BEARING ADJUSTMENT

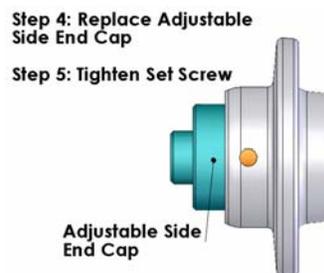
### VIGOR SERIES, ÉLAN SERIES, ASPIN, ECHELON, TANDEM & CARBON FRONT HUBS



1. Loosen the set screw[s] by inserting a 2mm Allen wrench in the access hole in the hub shell. For some 2007 models, the access hole will be through the flange. 2004-2006 models have one set screw in the adjustment collar. 2007 and later wheels have three.
2. Remove the adjustable side end cap from the hub. If needed, thread a M6 bolt into the adjustable side end cap and pull on the bolt for a better grip, or drive the end cap out with a drift. With the adjustable side end cap is removed, the adjustment collar is visible.

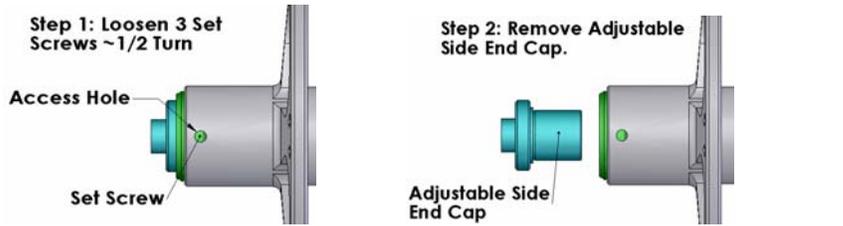


3. Apply inward pressure on the non-adjustable end cap and the adjustment collar simultaneously, making certain both parts are contacting the hub bearings. It is not necessary to maintain pressure.

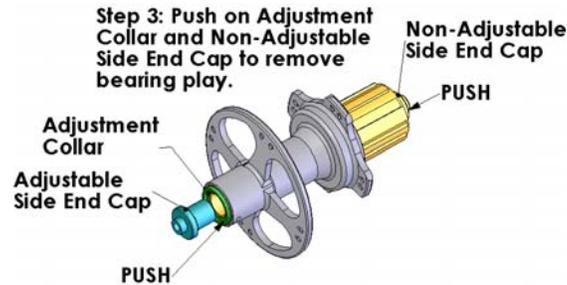


4. Replace the Adjustable-side End Cap carefully, so as not to move the axle or Adjustment Collar.
5. Tighten the set screw. Check adjustment. If bearing play remains, repeat.

## VIGOR SERIES, ÉLAN SERIES, ASPIN, ECHELON, TANDEM & CARBON REAR HUBS



1. Loosen the three set screws on the adjustable side of the hub by inserting a 2mm Allen wrench in the access hole in the hub shell.
2. Remove the adjustable side end cap from the hub. If needed, thread a M6 bolt into the adjustable side end cap and pull on the bolt for a better grip, or drive the end cap out with a drift. With the adjustable side end cap is removed, the adjustment collar is visible.



3. Apply inward pressure on the non-adjustable end cap and the adjustment collar simultaneously, making certain both parts are contacting the hub bearings. It is not necessary to maintain pressure.



4. Replace the Adjustable-side End Cap carefully, so as not to move the axle or Adjustment Collar.
5. Tighten the three set screws. If bearing play remains, repeat.

## APEX AND TEMPO FRONT AND REAR HUBS

These hubs have no bearing adjustment. Axle end play typically indicates worn bearings or axle. Inspect these parts and replace as needed. See the Rolf Prima Service Manual for bearing replacement instructions.

## LUBRICATION & OVERHAUL

Hub bearings may require replacement once a year or more often if the bike is ridden more than average, in wet weather, or off road. This requires special tools and knowledge and should only be performed by a qualified technician at a professional bicycle shop.

A detailed service manual is available at our website: [www.rolfprima.com](http://www.rolfprima.com)

## **ROLF PRIMA LIMITED WARRANTY**

Rolf Prima ("RP") warrants, but only to an original purchaser who purchased the wheel from a licensed Rolf Prima dealer or distributor, that for a period of 12 months from original purchase the new Rolf Prima wheel (the "Product") shall be free from material defects in workmanship and material. If the purchaser discovers within this period a material defect in Product workmanship or materials, the purchaser must promptly so notify RP in writing, through an authorized dealer or distributor, accompanied by proof of purchase of the Product. In no event shall such notification be received or effective later than 13 months after the original purchase. In the event that a Product does contain a material defect in workmanship or materials and proper notification is provided as required this limited warranty, then within a reasonable time after such notification, RP will correct any material defect in workmanship or materials, or provide replacement parts or products. If RP is unable to repair the Product to conform to this limited warranty, RP, within its sole discretion, will provide a replacement product, or a full refund of the purchase price. Labor charges for parts changeovers are not covered by the warranty. RP does not warrant (a) any product, components or parts not manufactured by RP, (b) defects caused by failure to provide proper and suitable Product installation and maintenance, (c) damage caused by use of the Product for purposes other than those for which it was designed, including use on unsuitable surfaces or at unsafe speeds, and including use of the Product without a helmet and other appropriate protective clothing or gear, (d) damage caused by misuse, abuse, neglect or natural elements, or normal wear and tear, and (e) damage resulting from or relating to use with unauthorized components, modifications or attachments. No employee, distributor, dealer or agent of RP is authorized to make any warranty in addition to or different from the foregoing limited warranty. THE FOREGOING LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

### **LIMITATION OF LIABILITY**

The sole remedy for breach of the limited warranty set forth herein is RP's repair, replacement or refund, as described herein. In no event shall RP be liable for any other damages or liability, including special, incidental or consequential damages based upon breach of warranty, breach of contract, negligence, strict tort, or any other legal theory, and including damages arising from or related to any physical injury to person or property. Some states do not allow the exclusion of incidental or consequential damages, so the above exception may not apply to you. This warranty, and statutory law, gives the consumer specific legal rights, and those rights may vary from place to place.

### **ROLF PRIMA WHEEL SERVICE**

Rolf Prima wheels require special parts. Do not attempt substituting weaker conventional spokes, hubs, or rims for replacement. Rolf Prima wheels are serviceable by most professional bicycle shops.

A detailed service manual is available at our website: [www.rolfprima.com](http://www.rolfprima.com)

If necessary, your wheels can be serviced by Rolf Prima directly.



© 2007 Rolf Prima Incorporated

780 Bailey Hill Rd.  
Suite 2  
Eugene, OR 97402 USA  
1.541.868.1715

[www.rolfprima.com](http://www.rolfprima.com)

PN 2070000 rev. 7/09