Rolf PRIMA
WHEEL SYSTEMS

Wheel Systems
Owner's Manual

Congratulations!

You have chosen wisely and we thank you for purchasing the world's finest high performance wheel system. We build all wheels by hand and we are proud to have built them for you.

Because there are a variety of Rolf Prima wheels, this manual may contain information that does not apply to your wheelset. Some illustrations may show details which vary from your wheelset. If you have any questions after reading this manual, please consult www.rolfprima.com, your Rolf Prima dealer or contact us at info@rolfprima.com.

Please inspect and save all packaging materials that came with your wheels. If there is any damage to the wheels or the packaging, it is important to identify it immediately.

The structural condition of your wheels and correct installation are crucial to your safety. 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. If you have any question about the details of installation or maintenance, have a qualified bicycle dealer perform the installation or maintenance.

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

Installation and maintenance instructions are included in this manual. Even if your wheelset was installed by a bike shop, you should read this manual thoroughly.
A detailed service manual is available at www.rolfprima.com

Please register your wheelset at www.rolfprima.com with the serial numbers of your wheels. These are located on the card that came with your wheels and on each rim by the valve hole.

Some maintenance and repair should only be performed by your Rolf Prima dealer. Any such service will be indicated in this manual. If you have a question or issue your dealer cannot answer, please contact us at info@rolfprima.com.

Rolf Prima
info@rolfprima.com
888.308.7700
www.rolfprima.com

Inspection – Before Every Ride

Before every ride be sure to inspect every item on this list to ensure your Rolf Prima wheels are in top condition and are properly installed on your bicycle. If you find that your wheel system requires service or further inspection, see www.rolfprima.com for our Factory Service Program or contact your Rolf Prima dealer.

- 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 brake pads are clean and properly adjusted
- Check that the tires are properly inflated

For aluminum clincher wheels, inflate tires to the inflation pressure indicated on the tire sidewall or as indicated in the Tire Pressure section of this manual. Your rims can be damaged by riding with insufficient tire pressure. Inspect the tires for damage or excessive wear. If you have any questions about the condition of your tires, have them inspected by your local bike shop.

For carbon tubular road wheels, inflate tires to a minimum of 110 psi (7.6 bar). Do not exceed the maximum pressure indicated on the tire sidewall.

PLEASE NOTE: Rims can be damaged if ridden with insufficient tire pressure. Appropriate pressure dependent on road conditions, rider weight and tire size. 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 for proper tire pressure 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

IMPORTANT: IF YOU DO NOT UNDERSTAND ANY PORTION OF THESE INSTRUCTIONS, HAVE YOUR ROLF PRIMA DEALER SHOW YOU PROPER INSTALLATION OR CONTACT ROLF PRIMA DIRECTLY.

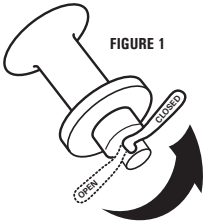

FIGURE 1

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 in the frame or fork tips [figure 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, ensuring that the nut is threaded on a minimum of 5 turns.

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.

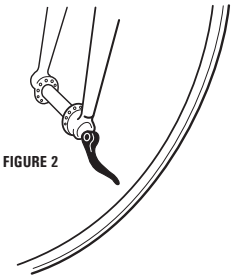
FIGURE 2

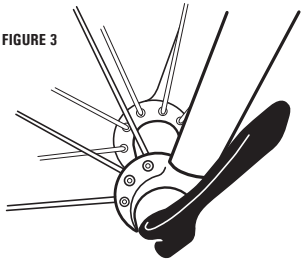
FIGURE 3

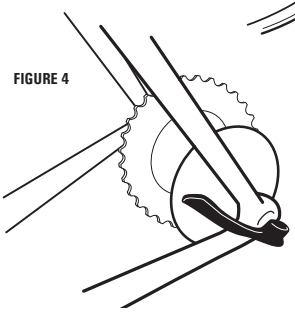
FIGURE 4

5. If the quick release lever can 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 will be adequate to cause metal into metal engagement [embossing] of the fork or frame tips. It should require effort to close the Quick Release, yet it should not be difficult.

DO NOT TIGHTEN THE QUICK RELEASE MECHANISM BY USING THE QUICK RELEASE LEVER LIKE A WING NUT [FIG 5]. OVER-TIGHTENING THE QUICK RELEASE MECHANISM MAY CAUSE DAMAGE TO 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 to 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.

FIGURE 5

Inspection – Weekly

- Check that there are no loose, damaged, or broken spokes
- Check that there are no cracks in front or rear rims

As alloy rims near the end of their fatigue life, cracks may develop. If cracks are found, do not ride the wheel. Take the wheel to your Rolf Prima dealer or contact Rolf Prima 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 the rims may appear outwardly 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, loose fibers and other surface flaws. If you suspect the rim has been damaged, take your wheel to your Rolf Prima dealer for further inspection.

Inspection – Monthly

- Check that there is no excessive looseness in hub bearings in both wheels
- Check both rims for wear

Bicycle rims will wear from the friction of rim braking and may eventually require replacement. Inspect the rim sidewalls and braking surfaces for heavy grooving or cracks. Excessive wear from braking can result in an accident causing serious injury or death.

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 may result in serious injury or death.

Installation and Recommendations

There are many different drivetrain and tire systems. Before attempting any installation of components onto this wheelset, make sure the parts are compatible. Tires, valves, gear clusters, brakes and the frame and fork spacing must be correct. If you are unsure of the compatibility of any part, consult your Rolf Prima dealer.

Brakes and Brake Pads

- Proper brake pad adjustment
  Rim brake pads should be adjusted so that they sit 1mm to 2mm away from the rim when the brakes are released. Toe-in brake pads 1mm. When the forward most tip of the pad first contacts the rim, there should be 1mm space at the back of the pad. Brakes should be properly centered over the rim so that each pad is the same distance from the rim when the brakes are released.

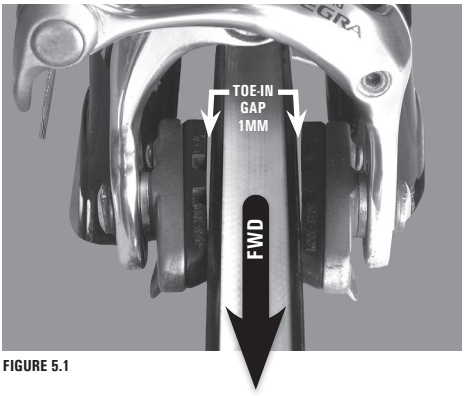

FIGURE 5.1

  Rim brake pads should be aligned properly with the braking surface of the rim and should contact only the machined or designated brake surface of your rim. Ensure there is adequate clearance between the top of the brake pad and the tire. Improper or misaligned pads can cause premature rim wear or a sudden tire blowout.

- Rims with aluminum braking surface: Brake pad selection and maintenance
  While your Rolf Prima alloy wheels do not require special brake pads, for best braking performance use Rolf Prima RED or GRAY brake pads. Brake pads from many manufacturers are available in different compounds. It is important that medium compound pads designed for aluminum rims are used with your Rolf Prima wheels. Soft pads may cause brake stutter or be too "grabby". Hard compound pads are abrasive and may decrease the life of your wheels.

  Inspect and clean your brake pads frequently. Road grit, small rocks and other items can become embedded in brake pads and cause accelerated wear of the braking surface. If you hear scratching noises when you brake that is a hint. Check and clean your pads.

- Rims with carbon braking surface: Brake pad selection and maintenance
  Rolf Prima Carbon wheels with carbon brakewalls feature a specially prepared braking surface, but can still be susceptible to heat build-up issues and abrasion. These carbon wheels come with Rolf Prima brake pads. We strongly recommend the use of the supplied Rolf Prima pads as the use of other pads will void the warranty and decrease the braking function. Do not use brake pads that have previously been used with aluminum rims.

Wheel model	Brake pad color
58RSC & all alloy models	Rolf Prima Gray or Red
All TdF models	Rolf Prima Gray or Red
Eos3 & all Ares models	Rolf Prima Gray or Yellow
TT Disc	Rolf Prima Gray or Blue

Wheels with carbon fiber rims will exhibit different braking characteristics than wheel with aluminum rims. Please refer to our FAQ and carbon rim braking manual insert for more information. Carbon rims do not dissipate the heat generated by braking as fast as aluminum rims. Managing rim temperatures through proper brake application is 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, and for the shortest possible time period. Just like in a car, DO NOT DRAG YOUR BRAKES. The technique of frequent, hard braking and releasing, even if only releasing for brief periods, significantly reduces rim temperatures.

Carbon rims can have a higher rate of brake pad wear, especially in wet conditions. Check your brake pad thickness before each ride.

Carbon rims are different from aluminum rims in wet braking conditions. We recommend test riding your carbon wheels in wet conditions.

- Brakes and Tandem Wheels
  Rolf Prima tandem wheels are compatible with disc brakes. Carbon fiber tandem wheels and Tandem Stealth models are designed for disc brake only.

  Follow the brake manufacturer's instructions for installation and adjustment.

- MTB, Road Disc, Adventure, Gravel & Cyclocross disc brakes
  Rolf Prima mountain bike, Adventure, cyclocross and road disc wheels are compatible with Center Lock disc brake rotors. They are not rim brake compatible. Refer to your bike and/or brake owner's manual for proper installation and setup.

Cassette Compatibility

- **ROAD** - All Rolf Prima road and tandem wheels are Shimano/SRAM 11-speed compatible. To use a 10-speed cassette with 11-speed compatible wheels, use a 1.8mm spacer behind the cassette in addition to any spacer included with your cassette, (this can be provided by Rolf Prima upon request).

  Rolf Prima Campagnolo wheels are 10/11-speed compatible. Conversion kits can be purchased from Rolf Prima or contact your Rolf Prima dealer for options to convert between Shimano and Campagnolo (road), or Shimano and SRAM XD (MTB).

- **MOUNTAIN / ADVENTURE** - All Rolf Prima MTB wheels are Shimano/SRAM MTB 10-speed compatible and most are 10/11-speed road compatible. For 11-speed MTB cassettes use a 1.8mm spacer behind the cassette in addition to any spacer included with your cassette.

  Rolf Prima XST hubs are available with a SRAM XDR freehub body. Use the supplied 1.85mm spacer behind the XD cassette for proper spacing. Rolf Prima XR hubs are available with a SRAM XD freehub body and do not require a spacer.

Tires

- Important information about rim strips
  Each Rolf Prima wheel (with clincher rims) comes with a rim strip or tape installed. Before installing tires, make sure this is in place and completely covers all spoke holes in the tire bed. If the spoke holes are not completely covered, a sudden loss of tire pressure or blowout could occur.

- **Tire selection, installation and tire pressure – clincher tires**

CLINCHER TIRES WITH INNER TUBES:
This is the type of tire system most riders are familiar with. Follow normal clincher tire installation procedures. If you are not familiar with tire installation, see your dealer. Do not use metal or narrow plastic tire levers to install or remove tires. These levers can damage the rim. For best results use: Park Tool - TL-6, TL-1.1, TL-4, TL-4.2 or Lezyne Power XL levers.

ROAD
Do not inflate tires above the pressure listed in the Recommended Tire Pressure table or the maximum pressure listed on the sidewall of the tire, whichever is lower. Overinflating can cause sudden blowout or damage to your wheels. For carbon clinchers in particular, under inflation of tires may allow rims to make contact with the road surface resulting in damage to the rim. Do not use Latex inner tubes with carbon clincher wheels.

TANDEM
Due to the greater weight of two riders, we recommend inflating tires to maximum pressure recommendation (table below or sidewall of tire, whichever is lower). Using a larger tire at a lower pressure provides more rim protection than a narrower tire at higher pressure.

TUBELESS CLINCHER TIRES (WITHOUT INNER TUBES):

ROAD

Rolf Prima clincher road wheels are shipped with a rim strip which is not tubeless compatible. Most of these wheels can be set up tubeless, but require tubeless rim tape, valve and tubeless specific tire. Refer to tire manufacturer's instructions for installation.

Our tubeless compatible road wheels can also be used with conventional clincher tires and inner tubes however some combinations will be tight and require a tire lever so we recommend you carry tire levers with you on your rides.

MOUNTAIN BIKE & ADVENTURE

Rolf Prima mountain bike and adventure wheels are tubeless ready and come with rim tape and tubeless valve stems. They can also be used with standard tire/tube systems.

Tire size selection

	Rim Width (internal)	Minimum Tire size	Maximum Tire size
Eos3,Ares6, Ares4	17mm	23mm	50mm / 2.0"
Ares3, Vigor, Elan, Tandem, Echelon, Aspin	19mm	25mm	62mm / 2.4"
Hyalite, Ralos	21mm	28mm	64mm / 2.5"
Alsea, Hyalite ES Carbon	23mm	37mm / 1.5"	67mm / 2.65"
Black Rock	28mm	50mm / 2.0"	70mm / 2.8"
Alsea Plus, Hyalite Explore	40mm	55mm / 2.2"	76mm / 3.0"

Recommended Tire Pressure

		Tubeless		Tube Type	
Tire Size (mm)	Tire Size (inch)	Low	High	Low	High
23mm - 25mm		80	100	85	110
26mm - 30mm		60	90	70	100
31mm - 35mm		50	80	65	90
36mm - 42mm	1.40" - 1.65"	35	60	50	85
43mm - 50mm	1.66" - 1.99"	35	50	40	65
51mm - 57mm	2.0" - 2.24"	30	45	35	55
58mm - 62mm	2.25" - 2.44"	25	35	30	50
63mm - 76mm	2.45" - 3.0"	20	35	25	40

Tire selection, installation and tire pressure: Tubular tires

Tubular tire installation requires specific experience or training. Correct tire installation is critical to your safety. If you do not know how to install tubular tires, have them installed professionally by your dealer. Have your dealer teach you correct tire installation. It is not difficult, but it is important that it is done correctly. Below are important notes regarding safe installation.

CARBON TUBULAR RIMS:

Rolf Prima tubular road wheels can be used with tire widths ranging from 22mm to 28mm and cyclocross tubular wheels can use 22mm – 35mm. Appropriate minimum tire pressure may be dependent upon road conditions, rider weight and tire size. As a general recommendation we recommend a minimum of 110psi for

road wheels to protect your carbon rim from impact damage. Never exceed the maximum tire pressure marked on the tire sidewall.

Only use tire cement designed specifically for tubular tires and follow the tire cement maker's instructions carefully. We do not recommend 3M Fast Tack.

Thoroughly clean the tire mounting surface of the rim before adding cement. There should be no dirt, oil or grease on the mounting surface. Dirty surfaces will not adhere properly. For alloy tubulars, lightly sand the rim tire bed. Old cement can be safely removed from the rim using acetone, Goof Off or isopropyl alcohol.
**Never use a heat gun to assist in removing adhesive from carbon rims.

We do not recommend using tape such as TUFO. While tapes can work well, some are overly adhesive and can damage the rim upon removal.

After curing, inflate tires and test the bond by attempting to pull the tire off the rim. For more detailed instructions, see the tire or cement manufacturer's website.

Do not use any tools to install or remove a tubular tire from a carbon rim as they may damage the rim.

Valve Extenders

Rolf Prima carbon road wheels (except: Eos3, Ares3 and Tandem Carbon) come with a valve extender matched to the rim height. Be sure to install the valve extender before mounting the tire.

Installation procedure:

> Remove valve core from tube or tire valve using supplied valve core tool

> Securely install valve core in female threaded end of valve extender

> Install valve extender into tube or tire valve using supplied valve extender tool. Overtightening can cause damage to the extender. If you are using sealant via the valve, install sealant before reinserting the valve core

WARNING!

Incompatible or improperly installed components can damage your wheelset and/or cause an accident which may 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

WARNING!

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

WARNING!

Carbon rim wheels can be damaged from excessive heat. Examples can include wheels left in a parked vehicle on a very hot day or placed next to a heat source such as car exhaust on a rear mount bicycle rack. Take care to avoid these situations with carbon wheels.

Care and Cleaning

For general cleaning use soap and water. Do not use high pressure water to clean wheels. High pressure water can damage the hub bearings.

To remove tubular tire glue use acetone, Goof Off or a similar product. Take care to avoid getting solvent on the tire, tire/rim bondline or decals. Decals can be damaged by solvents. If this occurs, replacement decals are available on www.rolfprima.com

Wheel Truing

Wheel truing involves special tools and knowledge and should be performed by a qualified professional wheel builder. Should you suspect your wheels need truing, we recommend that you take them to your Rolf Prima dealer for evaluation.

Before truing a wheel, it is important to apply oil between the rim and the nipple, and between the spoke and the nipple. This can be accomplished by dripping oil into the hole where the spoke enters the rim and also through the hole in the tire well.

Hub Bearing Inspection and Adjustment

Inspection

Over time bearings in your wheel hubs may become worn or may otherwise come out of adjustment. With the wheel installed on the bicycle, grab the wheel near the brake calipers and gently rock side to side. If you feel play (light clunking), the bearings may need to be adjusted or possibly replaced. See www.rolfprima.com for hub adjustment instructions.

For further inspection remove the wheel from your bicycle and remove the Quick Release assembly. With your forefinger and thumb holding the axle endcap on one side of the wheel, rotate the axle. It should rotate smoothly. If the bearing feels rough or makes noise, it is time to replace the bearing.

Bearing replacement

Rolf Prima hub systems use a variety of bearings. To determine which bearing you require, refer to the bearing chart at www.rolfprima.com under service and tech info. Care must be taken during removal and installation of bearings to prevent damage to the hub shell and bearing. We recommend this procedure be performed by a qualified service technician. Rolf Prima will not be responsible for damage to the hub or bearing as a result of improper removal or installation.

Freehub body lubrication and overhaul

Occasionally it may be necessary to service the Freehub Body mechanism. This requires special knowledge. Rolf Prima recommends this service be performed by a qualified service technician. For more information, see the Rolf Prima Service Manual at www.rolfprima.com.

CRASH REBUILD AND FACTORY SERVICE PROGRAM

If you have damaged your wheels or they require service beyond your capabilities, contact your Rolf Prima dealer or call us. If you do not have a Rolf Prima dealer in your area, or you have further questions, see www.rolfprima.com and select Factory Service. We provide every customer direct access to service from our facility. Our goal is to turn around all repair work in 48 – 72 hours.

REGISTER YOUR WHEEL WARRANTY

www.rolfprima.com/warranty-registration/

NOTE: WHEN SENDING A WHEEL BACK FOR WARRANTY OR OTHER SERVICE WORK, PLEASE REMOVE ALL ACCESSORY ITEMS SUCH AS TIRE, TUBE, COMPUTER MAGNET, QUICK RELEASE AND CASSETTE. ROLF PRIMA WILL NOT BE RESPONSIBLE FOR LOST OR DAMAGED PARTS.

TROUBLESHOOTING. SEE OUR ONLINE SERVICE MANUAL AT WWW.ROLFPRIMA.COM

ROLF PRIMA LIMITED WARRANTY

Rolf Prima (RP) warrants each Rolf Prima wheel to be free from defects in material and workmanship for a period of five years from the date of original retail purchase. Decals and bearings are warranted for a period of two years from the original date of retail purchase. The warranty is extended only to the original owner and is not transferable. Proof of purchase and wheel serial number(s) are required for any warranty claim so be sure to keep your receipt.

RP will, at its sole discretion, repair or replace any wheel or wheel component that it determines to be defective with an equivalent part. There is no other remedy, expressed or implied, under this warranty. RP cannot guarantee that all custom colors or decals will be available for replacement, but we will do our best provide a comparable option.

This warranty does not cover normal wear and tear, nor does it apply to damage that is the result of abuse, neglect, improper assembly, improper maintenance, alteration, damage resulting from or relating to use with unauthorized components, modifications or attachments, damage caused by use of the wheels for purposes other than those for which it was designed, including use on unsuitable surfaces or at unsafe speeds, misuse or riding like a complete and utter knucklehead. The costs of disassembly, reassembly or repair of any attached components are not covered by this warranty and are the responsibility of the original owner. Under no circumstance are the costs of shipping to or from Rolf Prima covered by this limited warranty. No employee, distributor, dealer or agent of RP is authorized to make any warranty in addition to or different from the foregoing limited warranty.

Unless otherwise provided, the sole remedy under the above warranty, or any implied warranty, is limited to the replacement of defective parts with those of equal or greater value at the sole discretion of Rolf Prima. In no event shall Rolf Prima be liable for any other damages or liability including for direct, incidental, consequential damages, including, without limitation, damages for personal injury, property damage, or economic losses, whether based on contract, warranty, negligence, strict tort, product liability, or any other theory.

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 or replacement, 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.