

Rolf Prima Free Hub Body Replacement Instructions

1. Review all material

Please read the enclosed material carefully. Call the Rolf Prima service hotline (888) 308-7700 with any questions pertaining to this important safety notice.

2. Determine if your wheel is affected

Some Rolf Prima Vigor and Élan model rear wheels sold in 2003 are affected by this safety notice. These wheels can be easily identified by three tell-tale characteristics of the rear hub: [see fig. 1]

- First, there are hexagonal axle nuts at the left side of the rear hub.
- Second, the free hub body is aluminum, with a gray-green color anodized finish.
- Lastly, only black hubs are affected. Silver hubs are not subject affected.

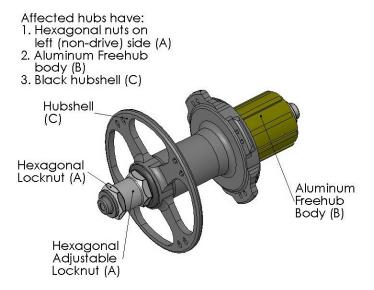


fig. 1

Any Rolf Prima wheel without axle nuts or with a bright silver free hub body is not subject to this safety notice since they used a different freehub engagement mechanism.



3. Determine whether the wheel is affected

The **free hub bodies** subject to this safety notice used a freehub engagement mechanism referred to as the **"Loop Spring" design**. This design uses a single loop spring to activate the free hub mechanism. See figure 2 below:



Loop Spring Mechanism

Older, 2003 Rolf Prima wheels with Loop Spring free hub bodies must be removed from service immediately and updated with the newer, 3-pin freehub engagement mechanism.

The **replacement free hub body** for affected wheels is referred to as the **"3 pin" design**. This design utilizes 3 independent pins to activate the free hub mechanism. See figure 3 below:



Figure 3.
3-Pin Mechanism



Rolf Prima Free Hub Body Replacement Instructions [continued]

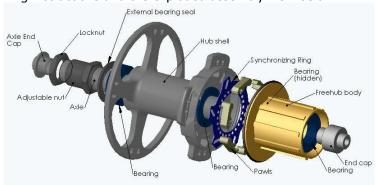
4. Obtain replacement free hub body from Rolf Prima

Bring your wheel to your local bike shop for inspection / evaluation. If the shop determines the freehub is affected, they can contact Rolf Prima on our toll free service hotline: 1.888.308.7700 to order a free 3-Pin replacement freehub body. The bike shop will be asked to provide the serial number located under the rim tape and specify Shimano or Campagnolo bodies. Rolf Prima strongly recommends that all freehub replacements and service be performed by a professional bike shop mechanic.

Replacement free hub bodies will be sent with installation instructions and a new serial number suffix to be placed next to the existing serial number located under the rim tape.

5. Install replacement free hub body

Refer to the following instructions and the exploded assembly view below:



- 1. Place the hub into an axle vise drive side down. DO NOT OVERTIGHTEN the vise. Axle damage could occur.
- 2. Loosen the axle lock nut and adjustable nut. Loosen the locknut until it contacts the axle end cap. Continue turning the locknut against the axle end cap, forcing it out of the axle end. Thread the locknut back onto the axle just until the locknut threads are fully engaged. Pry the axle end cap out of the axle using a screwdriver or other suitable prying tool. Remove the lock nut and adjustable nut.
- 3. Remove the entire hub and free hub body assembly from the hub axle. Observe the location of axle spacers and seals for proper reassembly.
- 4. Remove the Loop Spring free hub body by gently pulling it away from the hub shell. Note the location of the thrust washer between the free hub body and hub bearing for proper reassembly.



Rolf Prima Free Hub Body Replacement Instructions [continued]

- 5. Note the orientation of the pawls and synchronizing ring in the hub shell, remove these parts and set them aside for reassembly. Locate and remove the thin flat washer from beneath synchronizing ring. This washer occupies a space around the outside diameter of the hub bearing. This part is not required with the 3 Pin free hub body. Please note: some hubs may not have this washer, but you must check each hub. If the washer is left in place, 3 Pin free hub bodies will not function correctly.
- 6. After removing the washer, install the synchronizing ring and pawls in their original orientation.
- 7. Reassemble the hub. Place the new 3 Pin free hub body in place on the hub shell.
- 8. Turn the free hub body to engage the pawls and cassette body engagement teeth.
- 9. Install the axle by pushing the treaded end through the free hub body.
- 10. Ensure that the rubber seal is installed properly on the adjustable nut and thread the adjustable nut on the axle finger tight.
- 11. Replace the lock nut, also finger tight. Using the two 19mm wrenches as before, hold the lock nut while turning the adjustable nut tightly up against it.
- 12. Carefully replace the axle end cap by tapping it back into place with a soft faced hammer.

7. Apply new serial number suffix

A new wheel serial number suffix label is supplied with each replacement 3 Pin free hub body. The serial number suffix will enable quick and easy future confirmation that the wheel has been updated.

To install the label, remove the tire and tube and carefully lift the rim tape by sliding a flat bladed screwdriver beneath the tape at the valve hole. Apply the serial number suffix label next to the original serial number label. The original serial number label is found on the rim, under the rim tape, near the tire valve hole. Original serial numbers are five-digit numbers. For example, an original wheel serial number would be 06586.

After the suffix serial number is applied, a wheel serial number will look like this: 06586 E8157.