

CHRIS KING®

GripNut™

Congratulations! You have just purchased what many people regard as the finest headset in the world. Since 1976 Chris King has been supplying serious cyclists with the best made, most reliable headsets you can buy. With proper installation and maintenance you can expect to enjoy the many years of the legendary quality and performance built into each and every component we make.

Installation

Please Note. To ensure proper installation, adapter kits are recommended. Sizes are available to fit all popular headset pressing and setting tools. Our press adapters help to correctly align the cups with the head tube and prevent damage to the bearings by directing pressure only and evenly over the cups. The crown race adapters prevent damage to the base plate by protecting the conical bearing contact surface from the crown race setting tool.

Preparation of Head Tube and Installation of Bearing Cups

- Proper preparation of the head tube is essential for best headset performance. Ream and face the head tube as necessary to ensure that the ends are square and parallel to each other, and the bores are the proper dimension (see chart below).
- Using a small file or sand paper, carefully remove any sharp edges or burrs and slightly round, or chamfer, the inside edges of the head tube at the top and bottom to prevent shearing any metal from the cups during installation.
- Clean to remove any chips, shavings, and/or cutting oil.
- The proper press fit should be with no more than .1mm (.004") of interference. See chart below for correct head tube bore size. Do not file or otherwise remove material from the cups to make them fit.
- Press in both bearing cups using a headset installation press fitted with our adapters. Check to assure the cups are seated flatly against the ends of the head tube.

Preparation of Fork and Installation of Base Plate

- Proper preparation of the fork is also important for best headset performance. Ream and face the crown race seat as necessary to ensure that the face is square with the steer tube and the press diameter is the proper dimensions (see chart below).
- Clean to remove any chips, shavings, and/or cutting oil. The proper press fit should be with no more than .1mm (.004") of interference. See chart below for correct crown race seat size.
- Slide the base plate, conical side up, onto the steerer tube. With the beveled side of the base plate installation adapter against the base plate, use a crown race setting tool to set the base plate.
- When sizing the steerer length, steerer tube should protrude 11-14mm above the top of the top bearing cup.

	Head tube bore	Crown seat OD
1"	30.1mm	26.5mm
1" BMX	32.7mm	26.5mm
1-1/8"	33.9mm	30.1mm
1-1/4"	36.9mm	33.1mm

Assembly of Chris King GripNut™

- Make sure the threads on the lock ring and the inside thread of the adjusting ring are lubricated thoroughly with an anti-seize compound or heavy grease. Also apply grease to the tapered surfaces of the threaded collet.
- Place the threaded collet into the threaded hole of the adjusting ring, positioning the key on the collet in the corresponding slot.
- Screw the lock ring into the adjusting ring/collet assembly until the collet has very little float inside the assembly.

Final Assembly and Adjustment

- Once the GripNut™ is securely on the steerer (about 4-5 turns and at least 1/8" prior to contacting the bearing), tighten the lock ring into the adjusting ring until it feels as though the entire GripNut™ assembly is dragging as it turns on the threads.
- Once you feel this drag, advance the entire GripNut™ assembly as a unit down to touch the bearing (using headset wrenches on both the lock and adjusting ring if necessary).
- Adjust the preload on the bearing and finish tightening the GripNut™ lock and adjusting rings together to 130-150 in/lb.
- To test GripNut™: Using both wrenches, try to turn the GripNut™ as a unit in the loosening direction. It should be extremely difficult, if not impossible, to turn. If it turns easily, continue to turn the entire unit 1/4 turn in the loosening direction and re-torque.

PLEASE NOTE: New seals will produce some resistance in rotation for the first 50-100 hours of use. Avoid confusing this with rubbing or binding that may result from improper installation or stems that are not properly faced.

Maintenance

CHRIS KING HEADSETS are designed to provide the maximum life of any headset with a minimum of maintenance. Besides an occasional adjustment, the only service necessary is an occasional cleaning and regreasing of the bearings. Riding conditions will dictate how often to ser-

vice your headset. In wet conditions, service may be necessary as often as every 6 months; in dry conditions, up to every 5 years.

Service of Bearings

- Our sealed bearings have removable snap rings holding the seals in place. Carefully remove snap ring and then seal to gain access to the bearings. Flush with solvent, blow dry, then lubricate with a waterproof grease and reassemble. Reuse seals and snap rings unless damaged.
- If necessary, seals and snap rings are available through your dealer or directly from Chris King Precision Components.

PLEASE NOTE: Water is the most common cause of problems with any sealed bearing. When water enters the frame through breather or other holes it can eventually work its way to the head tube and into the headset bearings. High pressure spray wash, transporting or riding the bicycle in the rain, or submersion in water while riding can quickly lead to this condition. Although the stainless steel bearings will resist corrosion, the grease will eventually deteriorate. Avoid these situations if possible or service as if in wet conditions.

Removal and Reinstallation

- Remove cups from head tube with a standard cup removal tool, taking care that tool contacts the inside edges of the cup, not the bearing.
- To remove base plate from fork, we recommend using a 1/4" or 3/8" drift punch *alternating strikes* on either side of fork crown to lessen the possibility of warping or bending.
- After removing base plate from fork, carefully inspect for damage. Some warpage may flatten upon reinstallation. If not, or if bearing contact surface has become damaged, replace.
- Base plates and other parts are available individually through your dealer or directly from Chris King Precision Components.

Warranty

Chris King Precision Components warrants its bicycle headsets to be free from defects in materials or workmanship for a period of 10 years from the original date of purchase. Any Chris King product that is found by Chris King Precision Components to be defective in materials or workmanship will be repaired or replaced at the sole discretion of Chris King Precision Components providing it is returned to the factory freight prepaid. This warranty does not cover damage or failure resulting from misuse, abuse, alteration, neglect, normal and reasonable wear and tear, crash or impact, failure to perform routine maintenance as instructed, or use other than that for which the product was intended.

If a defect is found, our entire liability and your sole remedy shall be, at our option, free repair or replacement. Chris King Precision Components shall not be held liable for any indirect, special, or consequential damages. The warranty does not cover any Chris King Precision Components product where the serial number has been altered or removed. This written express warranty is in lieu of all other warranties, implied or expressed, and does not cover any representation or warranty made by dealers beyond the provisions of this warranty. This warranty gives you specific legal rights, and you may also have other rights which vary state to state.

Lock ring



Thread collet



Adjusting ring



Bearing cups



Base plate



Thank you for your purchase!

KING CYCLE GROUP
2801 NW Nela Street
Portland, Oregon 97210
800.523.6008
<http://www.chrisking.com>
email: info@chrisking.com

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