



Congratulations! You have just purchased what many people regard as the finest headset in the world.

### **IMPORTANT!**

The SteelSet headset uses a 1" deep cup skirt that will require a deeper bore than a conventional frame will have. The depth of the bore must exceed the depth of the skirt by a minimum of .25" (-7mm) for a total depth of 1.25" (-32mm) in order to get a cup removal tool behind the cup skirt. Even then, the geometry of the inside of the head tube may make SteelSet removal impossible and some frames are simply not compatible with the SteelSet. Reaming your head tube bore deeper than its stock condition may void your frame warranty and could critically weaken your frame. Check with your frame manufacturer before installing a SteelSet in your bike or reaming your head tube bore any deeper than they did at the frame factory.

### **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.

**ReamDepth: 32mm**  
**Headtube Bore: 33.9mm**  
**Crown Seat OD: 30.1mm**

### **Cutting of Steer tube and Installation of Star Nut**

- Insert fork into frame.
- Remove o-ring from bearing cap and slide bearing cap, then any spacers and the stem over steer tube. Scribe a line flush with top of stem.
- Remove stem and mark another line 3mm below the first. Cut on the lower line with a hacksaw.
- Remove all sharp edges from inside and outside of steerer tube. With a file or sandpaper, round outside edge of tube to avoid shearing the o-ring upon installation.
- Thread star nut onto installation tool. (If installation tool is not available, thread bolt well into star nut and use it to drive the star nut 15mm below the top of the steerer.)
- With a soft hammer or mallet, drive star nut straight into steerer tube until tool contacts top of steerer.
- Unscrew tool from star nut.
- Use extreme caution when cutting steerer and installing star nut to avoid injury.

### **Final Assembly and Adjustment**

- Re-install o-ring into bearing cap.
- Insert fork into frame.
- Taking care not to shear o-ring, slide bearing cap, scuff washer, any spacers, and then stem over steerer. Place stem cap on top of stem and insert screw through cap, threading into star nut. Tighten approx. 4-10 in.-lb. (Max. 15 in. lb.)
- Adjust alignment of stem and secure according to stem manufacturer's specifications.
- Check headset for proper adjustment. When properly adjusted, the fork will rotate smoothly without play or restriction. Some settling may occur after a few rides; readjust if necessary.

**PLEASE NOTE:** New seals will produce some resistance in rotation for the first 50-100 hours of use. Avoid confusing this with rubbing or installation that 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 in wet conditions, service as often as every 6 months; in dry conditions, up to every 5 years. Set 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 service your headset.

### 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.

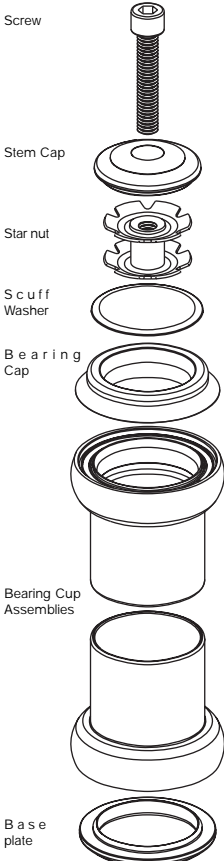
### Removal and Reinstallation

- 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 improper installation, 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 of the Chris King product. 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.



### **KING CYCLE GROUP**

2801 NW Nela Street  
Portland, Oregon 97210  
800.523.6008

<http://www.chrisking.com>  
email: [info@chrisking.com](mailto:info@chrisking.com)

Rev. 8/04-A