

1.5 NoThreadSet™ Owners Manual



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 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.

Thank you for your purchase!

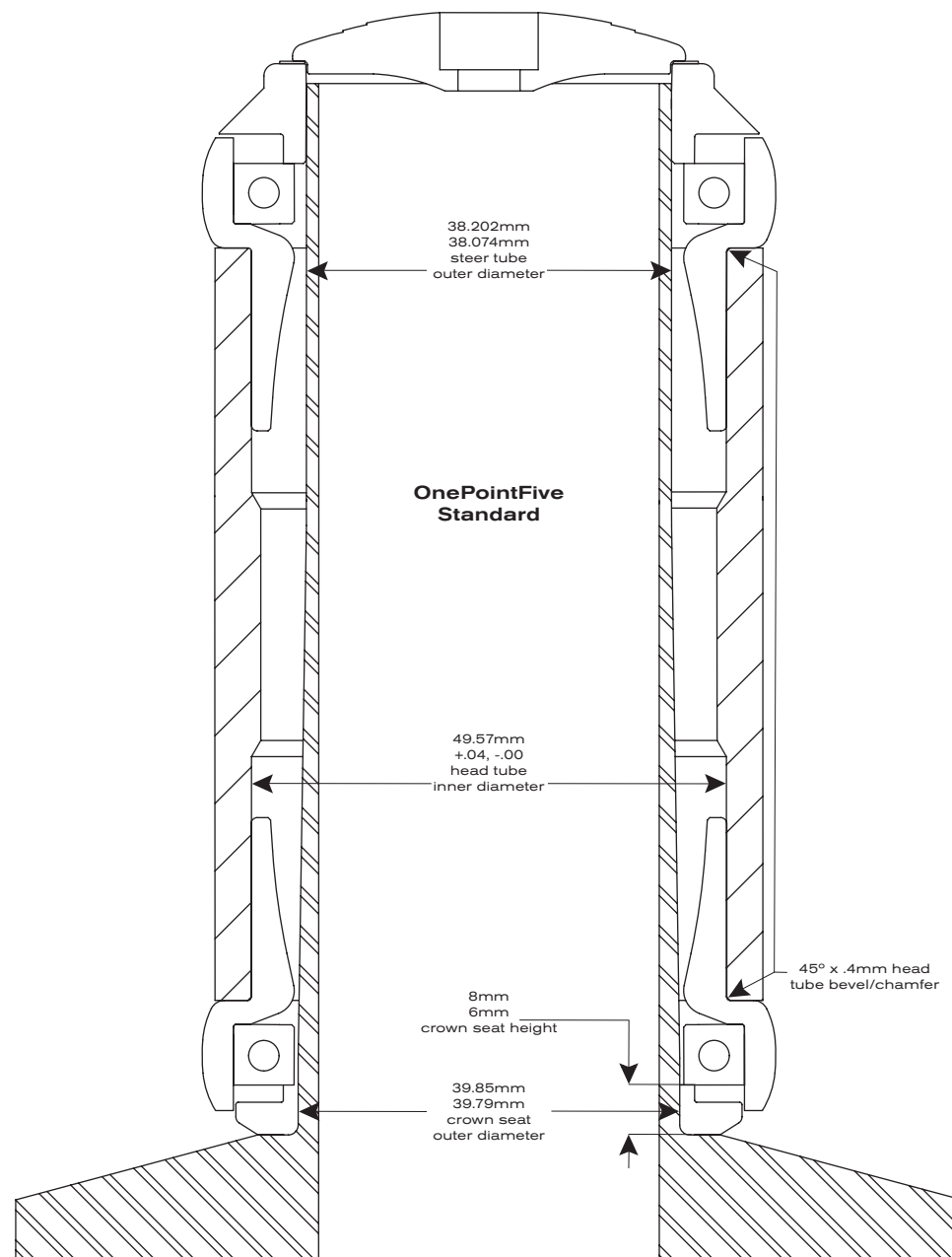
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Specifications	
head tube bore (inner diameter)	49.6mm
1.5 fork crown seat outer diameter	39.8mm
1-1/8" fork crown seat outer diameter	30.1mm
press fit tolerance	.1mm
cup skirt length	19mm
minimum head tube ream depth	25.4mm
stem cap screw torque	6 - 15 in.lbs.
1.5 total stack height	36mm
1.5 upper stack height	21.2mm
1.5 lower stack height	14.8mm
1.5 Devolution total stack height	37.3mm
1.5 Devolution upper stack height	22.5mm
1.5 Devolution lower stack height	14.8mm

Anchor Plate Compatibility Guide	
Lower Steer Tube Inner Diameter	PreLoader Anchor Plate
16mm - 19mm	none needed
19mm - 25mm	small
25mm - 35mm	large

Weights	
1.5 NoThreadSet	230g
1.5 Devolution NoThreadSet	250g
PreLoader	72g
large PreLoader anchor plate	9g
small PreLoader anchor plate	3g



Chris King Precision Components

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Congratulations! You have just purchased what many people regard as the finest headset in the world. Since 1976 Chris King has been supplying 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

Headset installation requires specialized tools. We recommend the procedure be performed by a professional bicycle mechanic.

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

Preparation of Head Tube and Installation of Bearing Cups (see Figure 1)

Proper preparation of the head tube is essential for best headset performance.

1. Ream and face the head tube to ensure that the ends are square and parallel to each other, and the head tube bore (inner diameter) is exactly **49.6mm** to ensure proper press fit. Minimum ream depth is **25.4mm** into the head tube.
2. 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.
3. Clean to remove any chips, shavings, and/or cutting oil.
4. The proper press fit should be with no more than **.1mm (.004")** of interference. Do not file or otherwise remove material from the cups to make them fit.
5. Press in both bearing cups using a headset cup installation press fitted with our headset cup press adapters. Check to assure the cups are seated flatly against the ends of the head tube.

Preparation of Fork and Installation of Baseplate

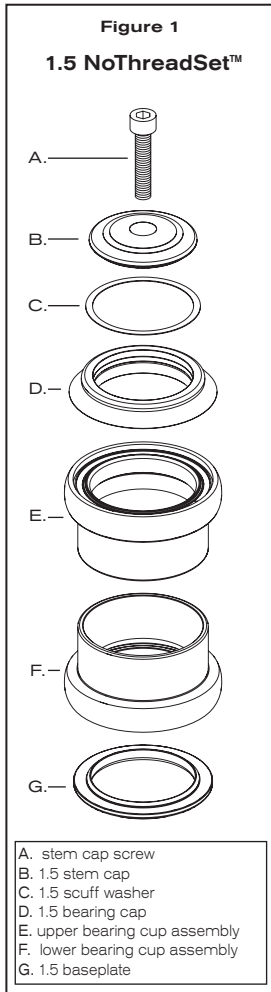
Proper preparation of the fork is essential for best headset performance.

1. Ream and face the crown race seat to ensure that the crown race seat face is square with the steer tube. The crown seat outer diameter should be **39.8mm** on a 1.5 steer tube or **30.1mm** on an 1-1/8". The proper base plate press fit should be with no more than **.1mm (.004")** of interference.
2. Clean to remove any chips, shavings, and/or cutting oil.
3. Slide the baseplate, conical side up, onto the steer tube. With the beveled side of the baseplate installation adapter against the baseplate, use a crown race setting tool to set the baseplate.

Cutting of Steer Tube

Use extreme caution when cutting steer tube to avoid injury.

1. Insert fork into frame.
2. 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.
3. Remove stem and mark another line 3mm below the first. Cut on the lower line using a hacksaw and saw guide.
4. Remove all sharp edges from inside and outside of steer tube. With a file or sandpaper, round outside edge of tube to avoid shearing the O-ring upon installation.
5. Re-install O-ring into bearing cap and apply grease to O-ring.
6. Proceed to **PreLoader Set Up** or **Installation of Star Nut**.



PreLoader Set Up (see Figure 2)

The PreLoader provides a secure bearing preload interface. The PreLoader is not intended to "lock" the headset adjustment, as this is ultimately the function of the stem clamp. We recommend the use of a standard 2-bolt stem to clamp the stem to the steer tube.

1. Measure the full length of the cut steer tube, from the upper opening to the lower opening under the fork crown.
2. Adjust PreLoader length 1mm to 20mm shorter than the cut steer tube length. Set the height by inserting the shear pin through both the rack and slider.
3. Use the Anchor Plate Compatibility Guide (on back page) to determine the proper PreLoader anchor plate configuration for your application. Slide the appropriate PreLoader anchor plate onto the PreLoader, conical side up.
4. Insert PreLoader into the fork's lower steer tube opening. When installed, the top of the PreLoader must be at least **4mm** below the top of the stem when the complete headset, spacers, stem, and steer tube are installed on the frame. This is to ensure the top of the slider does not bottom out on the under side of the stem cap when the stem cap is installed and the headset assembly is properly preloaded.
5. Proceed to **"Final Assembly and Adjustment"**

Installation of 1.5 to 1-1/8" Devolution NoThreadSet (see Figure 3)

The 1.5 Devolution NoThreadSet allows for a 1-1/8" steer tube to be used in a frame with a 1.5 head tube. The Devolution uses a standard 1.5 bearing cup assembly and 1.5 bearing cap. Parts that are exclusive to the 1.5 to 1-1/8" Devolution headset include the bearing cap adaptor, 1-1/8" stem cap, 1-1/8" scuff washer and 1.5 to 1-1/8" Devolution baseplate.

1. Apply grease to the 1.5 bearing cap O-ring.
2. Insert the Devolution bearing cap adaptor with the flange facing up (Fig. 3, D), through the 1.5 scuff washer and into the 1.5 bearing cap. Make sure the 1.5 scuff washer is seated flat on the bearing cap with the flange of the bearing cap adaptor over the scuff washer.
3. Apply grease to the Devolution adaptor O-ring.
4. Proceed to **"Final Assembly and Adjustment"**

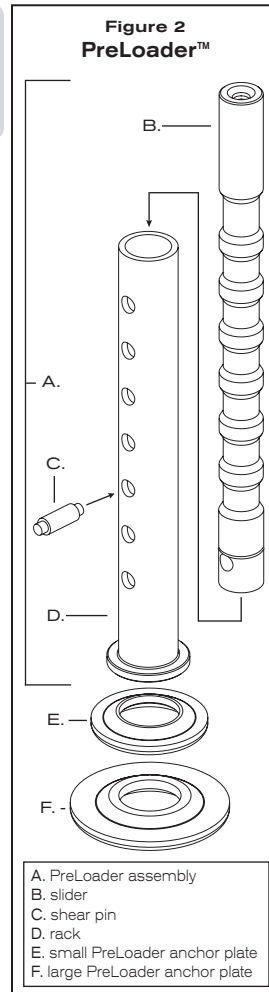
Final Assembly and Adjustment

1. Insert fork into frame.
2. Taking care not to shear O-ring, slide bearing cap assembly, then scuff washer, spacers, and stem onto steer tube. Insert PreLoader (already set to proper length) into fork's lower steer tube opening. Place stem cap on top of stem and insert stem cap screw through cap, threading into PreLoader (or star nut if applicable). Tighten screw to **6 to 15in.lbs.** of torque.
3. Adjust alignment of stem and secure according to stem manufacturer's specifications.
4. 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.

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.

Installation of Star Nut

A star nut can be used instead of the PreLoader. Note that the 1.5 headset is not factory assembled with a star nut. Use extreme caution when installing star nut to avoid injury.



1. 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 steer.)
2. With a soft hammer or mallet, drive star nut straight into steer tube until tool contacts top of steer.
3. Unscrew tool from star nut.

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 service 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

Chris King sealed bearings have removable snap rings that hold the rubber seals in place.

1. Carefully, using a small screwdriver, pick, or penknife, remove the snap ring by inserting tool into split of snap ring. Gently work one end of the snap ring toward bearing center until it is out of its groove. Follow the ring around with the tool until the snap ring is completely dislodged.
2. Lift and remove exposed rubber seal to access the interior of the bearing.
3. Thoroughly flush the bearing with a light spray lubricant (e.g., WD-40) and blow dry.
4. Lay a bead of waterproof grease around the top of the bearing. Rotate the inner race to work grease throughout the ball area.
5. Wipe dirt and other contaminants from the seals and snap rings.
6. Replace rubber seal between inner and outer bearing race.
7. Insert one edge of snap ring into groove of outer bearing race. Press along entire groove until snap ring is fully seated; a small gap should be visible between both ends of the snap ring.
8. Turn inner race of bearing by hand to test for binding. If bearings do not run smooth, repeat steps 1-8. Binding is often a result of improperly seated seals and/or snap rings.

Used snap rings and seals can be reinstalled unless warped, punctured, or otherwise damaged. If damaged, replacement seals and snap rings are available from any authorized Chris King dealers or directly from Chris King Precision Components.

Headset Removal

1. Remove cups from head tube with a standard cup removal tool, taking care that tool contacts the inside edges of the cup skirt, not the bearing.
2. To remove baseplate from fork, we recommend using a crown race removal tool to lessen the possibility of warping or deforming the baseplate. If necessary, a 1/4" or 3/8" drift punch can be used instead. Be sure to alternate strikes on either side of fork crown to lessen the possibility of warping or bending.
3. After removing the baseplate from the fork, check for deformities by placing it on a level surface. If the baseplate does not sit level on the surface and in any way appears to be warped or deformed, it must be replaced for optimal bearing performance.

Baseplates and other headset parts are available from any authorized Chris King Dealer or directly from Chris King Precision Components by calling our Customer Service number at 800-523-6008.

