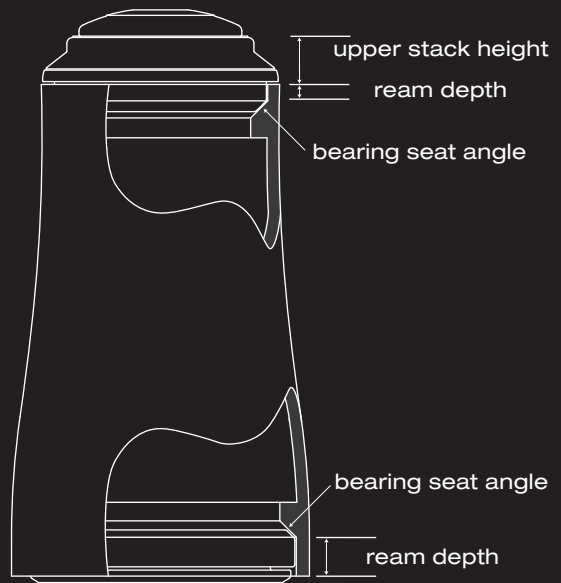
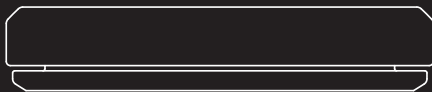




CHRIS KING
PRECISION COMPONENTS

DropSet™



Made in the USA

All Chris King Precision Components products are manufactured in the USA using industry leading environmental and quality control standards.

Chris King Precision Components

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Headset Specifications										
Type	Bearing Position	S.H.I.S.	Bearing O.D.	Headtube I.D.	Fork Steerer Tube O.D.	Crown Seat O.D.	Crown Race Angle	Bearing Seat Angle	Stack Height	Ream Depth
DropSet™ 1	Upper	IS41/28.6	41.0mm	41.15mm (+0.05 -0.05)	28.60mm (+0.05 -0.05)	-	-	45°	9mm	3.1 - 3.2mm
	Lower	IS52/40 45°	52.0mm	52.10mm (+0.05 -0.05)	-	39.79-39.85mm	45°	45°	1mm	7.4 - 7.5mm
DropSet™ 2	Upper	IS42/28.6	41.8mm	42.00mm (+0.05 -0.05)	28.60mm (+0.05 -0.05)	-	-	45°	9mm	2.8 - 3.0mm
	Lower	IS52/40 45°	52.0mm	52.10mm (+0.05 -0.05)	-	39.79-39.85mm	45°	45°	1mm	7.4 - 7.5mm
DropSet™ 3	Upper	IS41/28.6	41.0mm	41.15mm (+0.05 -0.05)	28.60mm (+0.05 -0.05)	-	-	45°	9mm	3.1 - 3.2mm
	Lower	IS52/40 36°	52.0mm	52.10mm (+0.05 -0.05)	-	39.79-39.85mm	36°	45°	1mm	7.4 - 7.5mm
DropSet™ 4	Upper	IS42/28.6	41.8mm	42.00mm (+0.05 -0.05)	28.60mm (+0.05 -0.05)	-	-	45°	9mm	3.1 - 3.2mm
	Lower	IS42/30 45°	41.8mm	42.00mm (+0.05 -0.05)	-	30.00-30.05mm	45°	45°	1mm	6.6 - 6.8mm

Stem Cap Bolt Torque = 1.92Nm (17 in.lbs)

Additional Support

Check our web site often for updated technical information produced in an effort to help you, our customers, stay on your bike. Visit: chrisking.com/pages/support.

Additional Questions? Please email us at info@chrisking.com or call the Customer Service Hotline at 800-523-6008.

Congratulations! You have just purchased what many people regard as the best 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 many years of the legendary quality and performance built into each and every component we make.

Compatibility

See the DropSet™ Specifications table for required headtube dimensions. Do not attempt to modify a different style headtube to fit this dimension. Contact the bicycle frame manufacturer or an authorized Chris King dealer to verify frame compatibility.

Installation

We recommend that the headset installation procedure be performed by a professional bicycle mechanic.

Note: It is important that the supplied Chris King DropSet™ bearing cap assembly is used with the DropSet™ bearings to ensure the longest lasting, and best performing headset.

Preparation of Frame

Check fit of bearings into frame. Clean bearing bores in frame to remove any grit or debris. Bearings should install into the upper and lower bores of the headtube using only light hand pressure, at most. If the bearings do NOT install easily then consult with Chris King Precision Components. Metal bearing seats may need to be reamed and faced using appropriate tools.

CAUTION: An improperly reamed headtube may cause frame failure, loss of control of the bicycle while riding, serious injury or death.

Installation of Bearings into Frame

Install upper bearing by simply fitting the bearing into the clean and lightly greased headtube. Please refer to the orientation diagram for proper orientation of the bearing. Repeat process for the lower headset bearing.

Preparation of Fork and Installation of Baseplate

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

1. See table for crown seat outer diameter (OD) specifications. The baseplate press fit onto the fork should have no more than 0.1mm, (0.004") of interference.
2. Clean the baseplate (crown race) seat area by removing any chips, shavings, and/or cutting oil.
3. Slide the baseplate, conical side up (marked "This Side Up"), onto the fork steer tube. With the beveled side of the Chris King baseplate installation adapter against the baseplate, use a crown race setting tool to set the baseplate.

Note: It is important to use the King baseplate (crown race) supplied with the DropSet™ bearings unless the fork has an integrated crown race with a 45 degree bearing seat.

Cutting the Steerer Tube

Use extreme caution when cutting steerer tube to avoid injury.

1. Insert fork, with base plate installed, into frame.
2. Slide GripLock™ cap assembly, then spacers (if needed), and then the stem over steerer tube. Scribe a line flush with top of stem.
3. Remove items from steerer tube and mark another line 3 mm below the first line. Cut on the lower line using a hacksaw and saw guide.
4. Remove all sharp edges from inside and outside of steerer tube. With a file or sandpaper, round outside edge of tube to avoid shearing GripLock™ cap O-ring upon installation.

Installation of Star Nut

For forks with Carbon steerers please refer to the Fork Manufacturers instructions regarding pre-load devices.

1. Thread star nut on to the star nut installation tool.
2. With a soft hammer or mallet, drive star nut straight into steer tube until tool contacts top of steerer tube. Unscrew tool from star nut.

GripLock™ Assembly

The GripLock™ is shipped pre-assembled. If it has been disassembled, then assemble together as shown in Figure 1. Follow the procedure below.

1. Place thin bearing ring O-ring into outer groove of bearing ring.
2. Place split ring into bearing ring.
3. Snap the bearing ring and split ring into the GripLock™ cap.
4. Feed cap O-ring into the groove created by the assembled parts.

GripLock™ Installation, Final Assembly and Adjustment

1. Remove all sharp edges from inside and outside edges of the cut steerer tube with a file or sandpaper to avoid shearing the cap O-ring during installation.
2. Apply thin layer of grease onto cap O-ring.
3. Insert fork into frame.
4. Place assembled GripLock™ onto steerer tube. In most cases, the assembly will easily slide onto steerer. If cap O-ring hangs up on the top edge of the steerer tube, take care not to shear the O-ring. Gently push the cap O-ring to the side and push the GripLock™ assembly onto the steerer using steady downward pressure and a slight twisting or rocking motion.

***If you have a carbon steerer tube with expansion plug, loosen the plug prior to bearing cap installation.**

5. Note: If GripLock™ assembly comes apart during installation, go back to “GripLock™ Assembly” section and then repeat the installation steps.
6. Slide scuff washer, then any spacers and stem on to steerer tube. Thread stem cap screw through stem cap and into star nut. Tighten to 1.92nm (17 in.lbs.) of torque using 5mm hex wrench. Rotating the fork in alternating directions while tightening the stem cap will help to optimally seat the bearings.
7. Adjust alignment of stem and then secure stem according to the manufacturer’s specifications.
8. 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; re-adjust as 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, poorly cut spacers, or stems that are not properly faced. We recommend using Chris King Spacers.

Note: It is important to use the King bearing cap and GripLock™ assembly supplied with the DropSet™ bearings.

Maintenance

Chris King bearings are engineered to provide high performance over a long lifespan – improving over time. As such, our headsets are designed to be fully serviceable. Occasional adjustment, cleaning, and re-greasing are all that is required to maintain optimal performance. Riding conditions will dictate how often service is needed. In wet conditions service may be necessary as often as every 6 months; in dry conditions, up to every 5 years

To service the headset optimally the bearings will need to be removed from the frame.

GripLock™ Removal

1. Remove stem cap, stem and spacers from steerer tube. Release GripLock™ “lock” by tapping side of steerer tube with palm of hand or rubber mallet. Do not hit steerer tube from top, as this may damage the headset bearings.

Servicing the Bearings (Picture tutorial available at chrisking.com)

1. Remove the bearings from the frame.

***Do not attempt to remove the inner, white seal of the headset bearing. This may result in damage of the seal.**

2. Carefully, using a small screwdriver, pick, or penknife, remove the snap ring by gently prying 1.5cm clockwise from the split in the snap ring. Follow the ring around with the tool until the snap ring is

completely dislodged.

3. Lift and remove exposed rubber seal to access the interior of the bearing.
4. Thoroughly flush the bearing with a light spray lubricant (e.g., WD-40™) and blow dry.
5. Wipe dirt and other contaminants from the seals and snap rings. Used snap rings and seals can be reinstalled unless warped, punctured, or otherwise damaged.

Replacement seals and snap rings are available from any authorized Chris King dealers or directly from Chris King Precision Components.

Some solvents, synthetic lubricants, and greases with high-pressure additives may attack and damage seals and other nonmetallic materials. Minimize exposure to these substances and thoroughly dry bearing assembly after cleaning. Do not use citrus based cleaners.

6. Lay a bead of waterproof, synthetic grease around the top of the bearing. Rotate the inner race to work grease throughout the ball area.
7. Reinstall rubber seal between inner and outer bearing race. Be sure to reinstall seals and snap ring in their original orientation.
8. Insert the acute 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.
9. 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 split rings.

FIGURE 1.

