INSTRUCTIONS FOR AHEADSET THREADLESS HEADSETS

This manual contains information on installing and maintaining your AheadSet® threadless headset.

The AheadSet product line consists of a wide range of threadless headsets for all types of bicycles.

AheadSet is a registered trademark. The patented AheadSet bicycle headset is available only from Cane Creek Cycling Components.

WARNING: The AheadSet threadless headsets are designed for use with unthreaded, full-thickness bicycle fork steering tubes. Use of this headset with a threaded steering tube or a steering tube with a reduced wall thickness can result in cracking or breaking of the steering tube, causing damage to the bicycle and possible injury or death to the rider.

A. INSTALLING THE FIXED BEARING RACES (CUPS).

1. Prepare the frame and fork by facing the top and bottom of the head tube and the fork crown race seat with good quality headset milling tools.
2. Press the fixed head tube races/cups into the head tube using a good quality headset press. NOTE: Press on the inner diameter of the cups only. Use the tool inserts if necessary.
3. Press the fork crown race onto the fork with an appropriate fork crown race tool.

B. CUTTING THE STEERING TUBE TO THE CORRECT LENGTH: A STACK-HEIGHT CALCULATION IS LISTED AT THE END OF THESE INSTRUCTIONS

1. Slip the lower seal (if applicable) and one bearing retainer (or bearing cartridge) over the fork steering tube. Make sure the ball bearing retainer cage is facing the crown race and the balls are facing the lower cup (or that the bearing cartridge is oriented correctly). Please see illustrations.
2. Insert the fork steering tube into the head tube. Seat the lower bearing seal, if necessary.
3. Slip the other bearing retainer and upper bearing race (or other bearing cartridge) over the steering tube. Make sure the balls are facing the cup and the retainer cage is facing the upper race (or that the bearing cartridge is oriented correctly). Please see illustrations.
4. Slide the compression ring, upper bearing cover (if applicable), any stem height adjustment spacers and stem onto the steering tube.
5. Seat the steering tube firmly in the head tube and the stem firmly against the stem firmly against the spacer, bearing cover or compression ring, and tighten one stem bolt enough to hold the assembly together. Mark the steering tube at the top of the stem.
6. Remove the stem from the steering tube and the fork from the head tube. Carefully cut the fork steering tube 3mm below the mark made in the previous step. Use a tubing cutter, hacksaw or other appropriate metal cutting tool. Use a file to remove any burrs from the area of the cut.

CAUTION: The top of the steering tube must be 3mm below the top of the stem before the compression bolt is tightened. If the steering tube is too long, sufficient compression may not be possible. In this condition, the headset will remain loose, risking rapid headset wear and possible damage to the frame. If the steering tubs is too short, the stem may not have sufficient clamping surface against the steering tube to be used safely.

C. ASSEMBLING THE HEADSET:

1. Position the star-fangled nut with the rim (concave end) facing up and the threaded hole (convex end) facing down. Press the nut into the steering tube to a point 15mm below the top of the steering tube. This can be done using a star-nut installation tool. If no tool is available, thread the compression bolt into the nut and lightly tap the assembly into position with a dead-weight mallet or similar tool.

2. Reassemble the headset parts as per the previous instructions B-1 through B-3. Thoroughly lubricate the ball retainers and races with a good quality bicycle grease during assembly.

3. Seat the steering tube firmly in the head tube and the stem firmly against the spacer, bearing cover or compression ring.

4. Lubricate the compression bolt. Insert the compression bolt through the recess in the top cap. Insert the assembly into the top of the stem and steering tube.

5. Thread the compression bolt into the star-fangled nut and tighten with a 5mm hex wrench to pre-load the bearings. Apply only enough force to sufficiently pre-load the bearings. The recommended torque is 2.5Nm (22 in.-lbs. or 25kg-cm).

CAUTION: Insufficient pre-load force will result in a loose headset. Excessive pre-load force will result in the headset binding. Either condition will cause rapid headset wear and could adversely affect the steering characteristics of the bicycle.

6. For the BMX/freestyle hollow compression bolt, tighten it with an 8mm hex wrench or 16mm open-end wrench. The recommended torque is 3.8Nm (33 in.-lbs. or 38g-cm). This pre-load assembly is used when routing the front brake cable through the fork steering tube, and is available from an AheadSet dealer.

7. Secure the stem to the steering tube and lock in the bearing pre-load by tightening the stem binder bolt(s). The stem binder bolt(s) should be tightened to the torque recommended by the stem manufacturer.

WARNING: Make sure that the stem binder bolts are sufficiently tight to keep the stem and handlebars from turning on the steering tube. A loose stem can result in damage to the bike, loss of control, and severe injury or death to the rider.

8. If the headset needs adjusting after the initial break-in period: Loosen the stem binder bolt(s), re-set the pre-load with the compression bolt (step C-6 above), and re-tighten the stem binder bolts (step C-7 above).

NOTE: It is essential that the stem is securely tightened to the steering tube.

D. CALCULATING STACK HEIGHT:

Measure from the crown race to the contact area of the lower cup. Then measure from the contact area of the upper cup to the top of the compression ring or upper bearing cover. Add the two dimensions to calculate the total stack height.

E. CALCULATING STEERING TUBE LENGTH:

Head tube length + headset stack height + total height of spacers + stem height (clamp) - 3mm (adjustment clearance) = required steering tube length

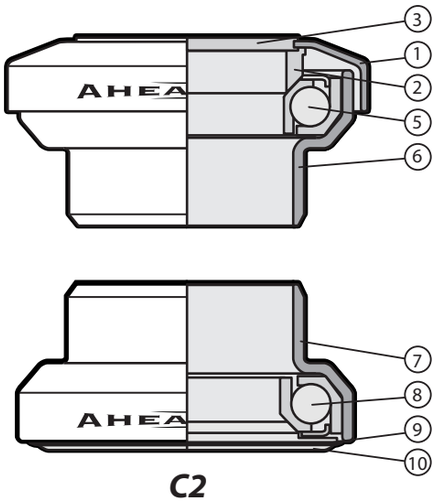
NOTE: When replacing the fork, it is necessary for a new star-fangled nut to be used in the new steering tube.

AheadSet threadless headsets are warranted for one year from date of purchase against defects in materials and workmanship. Cane Creek Cycling Components will repair or replace, at our option, the defective part at no charge. This warranty does not cover damage occurring during shipment, storage, failure to follow instructions, misuse, accidents or crashes, neglect or poor maintenance, improper assembly, installation or assembly with incompatible products, normal wear, or modification. Warranty claims should be made through the original dealer, when possible. A dated proof of purchase is required.

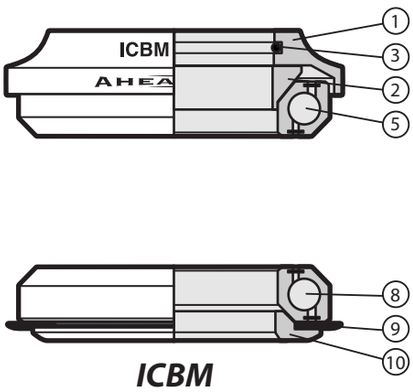
Please contact us if you have any questions about any AheadSet headset.
Cane Creek Cycling Components
355 Cane Creek Road Fletcher, NC 28732 USA
Phone: 828 684 3551 Toll free: 800 234 2725 Fax: 828 684 1057
Web: www.AheadSet.com E-mail: info@AheadSet.com

AHEADSET® US PAT. 5095770

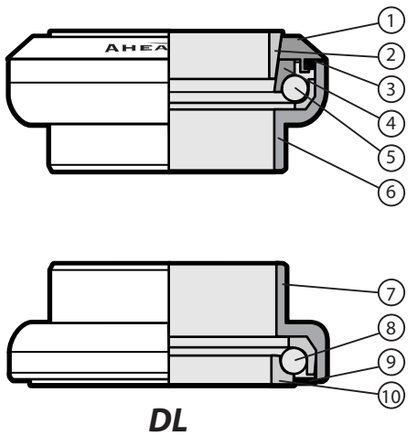
Headset Diagrams



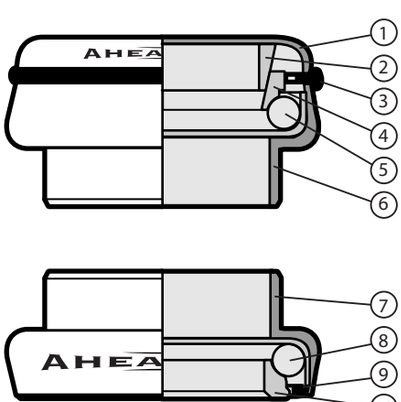
C2



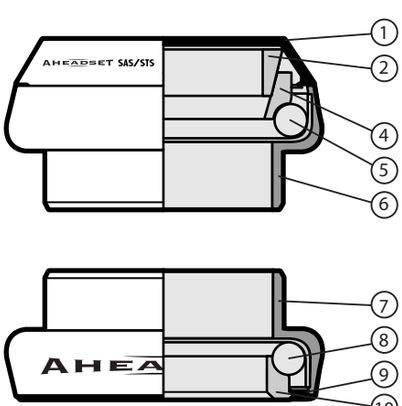
ICBM



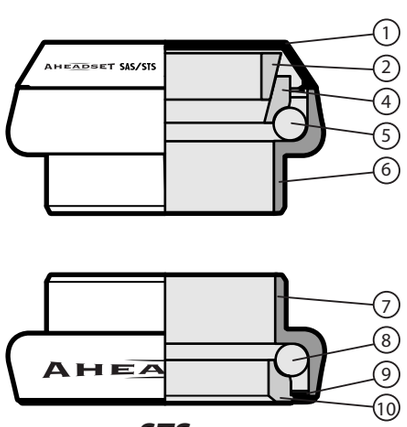
DL



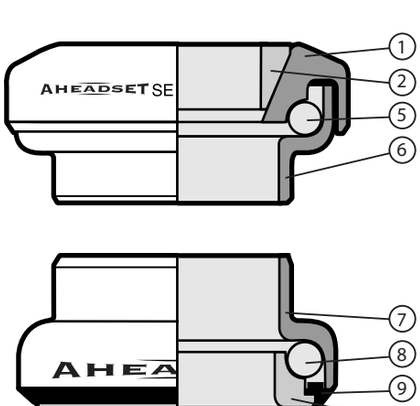
AL



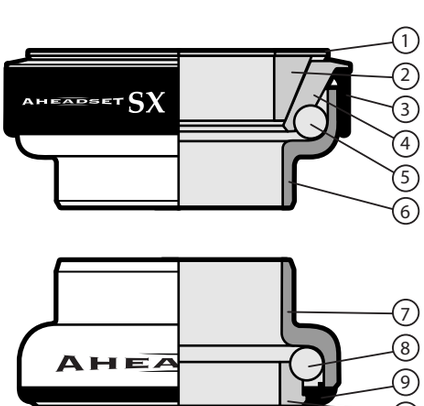
SAS



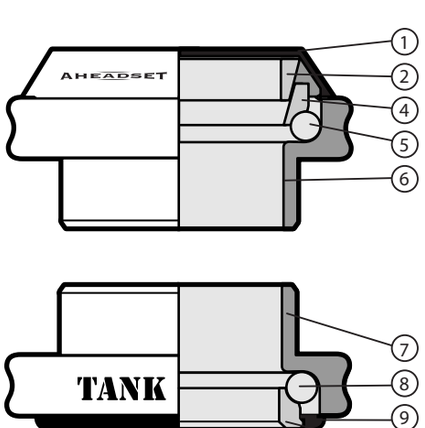
STS



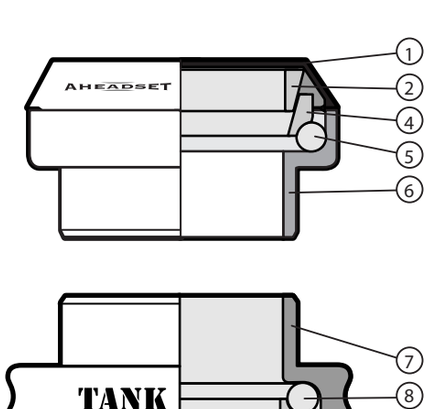
SE



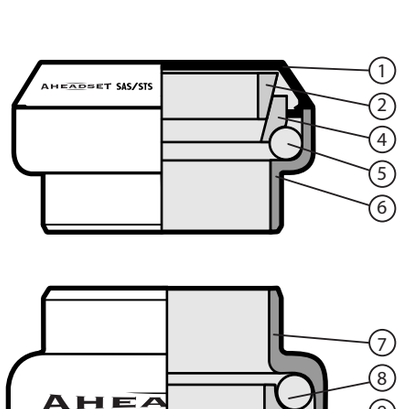
SX



TANK



TANK fs



SST

1. ***Upper Cover***
2. ***Compression Ring***
3. ***Upper Seal***
4. ***Upper Bearing Race***
5. ***Upper Bearing***
6. ***Upper Cup***
7. ***Lower Cup***
8. ***Lower Bearing***
9. ***Lower Seal***
10. ***Crown Race***

AHEADSET® US PAT. 5095770

Cane Creek Cycling Components • 355 Cane Creek Road • Fletcher, NC 28732
ph: 828.684.3551 • *fax:* 828.684.1057 • *e-mail:* info@canecreek.com