



# AER

## THE WORLD'S LIGHTEST HEADSET

By incorporating Norglide® composite bearing technology into a super lightweight design, the AER offers more than 50% weight savings over comparable models making it the world's lightest headset. It's the ultimate headset upgrade for road cyclists with an eye on weight. Cut in Fletcher, NC, USA.



### TECH: NORGLIDE® COMPOSITE BEARING

The AER headset incorporates Saint-Gobain Performance Plastics latest innovation in composite bearing technology; Norglide X2. A revolution in bearing technology, the X2 material sandwiches an aluminum base between a layer of low-friction PTFE tape and an elastomeric rubber backing material yielding a composite bearing that weighs scant 1.5 g. The Norglide X2 bearing is durable enough to provide over 450 hours of smooth steering.



[www.bearings.saint-gobain.com](http://www.bearings.saint-gobain.com)



## R5ca

### THE LIGHTEST BIKE DESERVES THE WORLD'S LIGHTEST HEADSET



The R5ca comes with 2 Norglide® X2 composite bearings, one pre-installed and a replacement. The X2 bearing has a typical service life of 450 hours.

### AER - Integrated (IS)

SIZE	1-1/8" to 1-3/8" Tapered
STACK HEIGHT	6.2 mm
TOP STACK HEIGHT	5.2 mm
BOTTOM STACK HEIGHT	1.0 mm
MATERIAL	Premium Headset Alloy 7075 T-6
WEIGHT	35g (excluding spacers and preload assembly)
UPPER BEARING	Norglide® X2 Composite Bearing
LOWER BEARING	1-3/8" Split-Lip Black Oxide



## AER® HEADSET ADJUSTMENT TIPS

### PRE-LOADING THE HEADSET ASSEMBLY:

With the headset fully assembled and with the stem bolts loose, tighten the headset preload bolt just until slight resistance is felt. Carefully continue tightening until all play is taken out of the headset assembly, this should require very little force. Align the stem with the front wheel and tighten the stem clamp bolts. Check for play by firmly holding the front brake and rocking the bike backwards and forwards. With the headset properly adjusted there should be no play in the assembly and the fork should rotate easily without binding.

#### Notes:

1. If the headset will not tighten properly check to be sure your steerer tube sits 3mm below the top of the stem or any spacers above the stem.
2. If the headset binds when tight be sure that the preload bolt is not too tight. If binding occurs while the headset is still loose check the gap between the top cover and upper bearing cup. If there is interference you can insert spacer shims between the compression ring and the top cover to increase this clearance.
3. After an initial break-in period you may need to repeat this process.

### AER - SPECIAL CONSIDERATIONS:

Due to the nature of the Norglide® composite upper bearing, the AER headsets are very sensitive to small changes in bearing preload. As a result, it may take several attempts to achieve the proper level of preload to remove play from the assembly without creating an undesirable level of friction. A small dab of grease on the outside surface of the Norglide® bearing can help reduce friction and make the adjustment process easier.

If a micro-torque wrench is available, it can be used to set a baseline preload torque of 0.25 N-m (2 in-lbs). Every steering assembly is different though so this value is only an approximation.

In order to maintain proper adjustment it is critical that the stem be perfectly fixed on the steerer tube. To ensure this, always torque the stem bolts to the manufacturer's specifications.

To ensure that the stem has the maximum possible gripping surface on the steerer tube it is recommended that the top of the steerer is cut flush with the top of the stem with a spacer being placed on top of the stem to allow for preload adjustment.

Lastly, after properly preloading the headset and tightening the stem bolts, tighten the preload cap firmly to further ensure that the stem cannot slide upwards during use.

### BREAK-IN PERIOD:

It is important to note that in the first 100 miles some additional friction and/or a "stick-slip" feel may be experienced as the PTFE material transfers from the bearing to the cup and the assembly "breaks-in". This phenomenon will become less noticeable over time though it may not disappear completely.

### ADDITIONAL NOTES:

After a particularly wet/rainy ride the headset may exhibit greater than usual friction. This is due to small particles infiltrating the area of sliding contact. As these particles become embedded in the PTFE layer and coated-over, the level of friction will return to normal over a period of time.