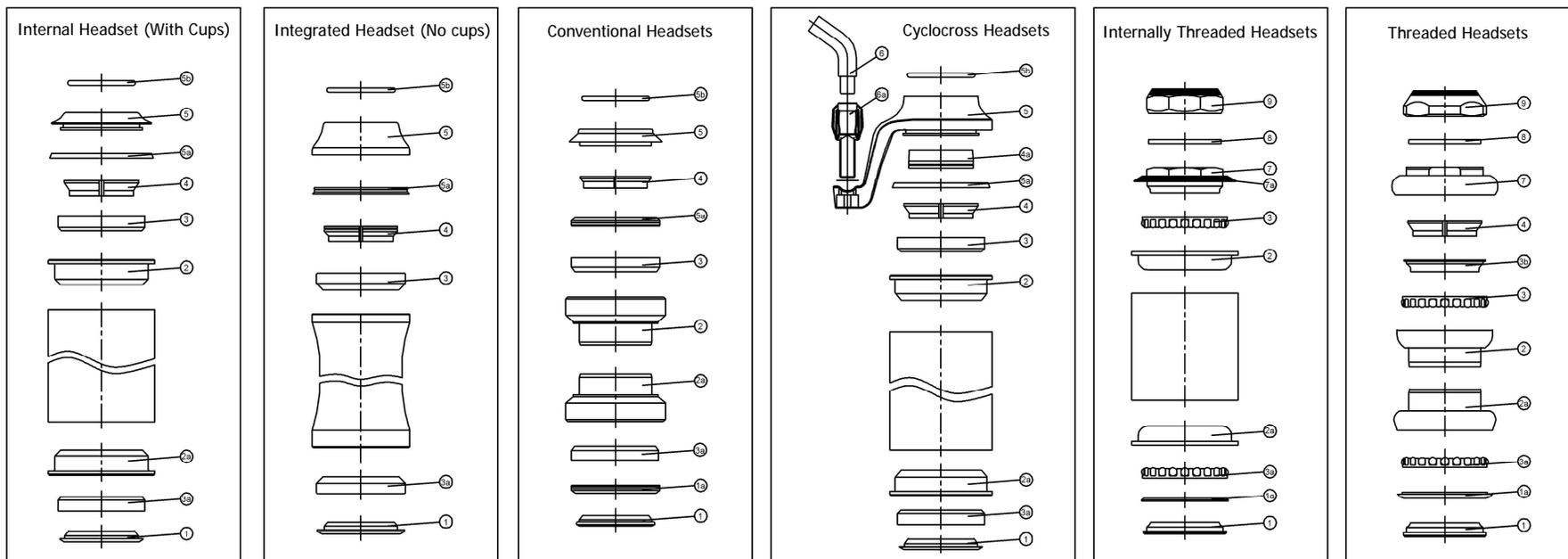




Headset Installation Instructions

Published – Mar, 2011. ZS074.v5 © Full Speed Ahead



Introduction

Congratulations on your Full Speed Ahead product. Please read these instructions and follow them for correct use. Failure to follow the warnings and instructions could result in damage to product not covered under warranty, damage to bicycle; or cause an accident resulting in injury or death. Since specific tools and experience are necessary for proper installation, it is recommended that the product be installed by a qualified bicycle technician. FSA & Vision assumes no responsibility for damages or injury related to improperly installed components.

Warranty

Full Speed Ahead (FSA) warrants all FSA, Gravity, Vision, Metropolis and RPM products to be free from defects in materials or workmanship for a period of two years after original purchase unless otherwise stated in the full warranty policy. The warranty is non-transferable and valid to the original purchaser of the product only. Any attempt to modify the product in any way such as drilling, grinding, and painting will void the warranty. For more information on warranty policy and instructions for completing a warranty claim, check out the Full Warranty Policy found at our website: <http://www.fullspeedahead.com/techdoc>

Specification

Item Number / Model Name: All Conventional, Internal, Integrated, Cyclocross, Internally Threaded, and Threaded headset models. Cyclocross headsets are available for both internal (with cups) and integrated (without cup) applications.

Components

Follow the assembly order in the illustration:

- | | | |
|------------------|-----------------------------|--------------------------------|
| ① Crown Race | ③b Ball bearing | ⑥ Cable Housing Stop (CX only) |
| ①a Lower Seal | ④ Upper Race | ⑥a Barrel Nut |
| ② Upper Cup | ④a Tapered compressing ring | ⑦ Threaded Top Cover |
| ②a Lower Cup | ⑤ Upper Bearing Cover | ⑦a Top Seal |
| ③ Upper Bearing | ⑤a Upper Seal | ⑧ Spacer |
| ③a Lower Bearing | ⑤b O-ring | ⑧ Lock nut |

Note: Description of numbered parts is comprehensive and for reference only. Headset models vary and may not include all parts listed above.

Conventional, Internal, Integrated, Cyclocross Headset installation

Attention: All frame & fork mating surfaces must be prepared correctly. Headtube and fork crown should be faced and/or reamed. Headtube facing and reaming cutters are available from various bicycle tool manufacturers. Consult facing and reaming cutter instructions for proper use. All surfaces should be clean and free of metal chips, paint, and debris.

Mounting the crown race onto the fork steerer: (When possible, always face the crown race seat on the fork with a crown race cutter to ensure the surface is flat and square before installing crown race. Crown race cutters are available from various bicycle tool manufacturers. Refer to cutter instructions for proper use).

1. Apply a thin layer of grease to the fork steerer mating surfaces.
2. Press the crown race ① onto the fork steerer using crown race setting tool (available from various bicycle tool manufacturers). Refer to crown race setting tool instructions for use. Failure to use tool and any included fittings correctly may result in damage to crown race and headset.

Pressing the cups into the head tube: (Conventional, threaded, internally threaded, and Internal models only. For Integrated models, skip to *Headset Assembly* below)

1. Apply a thin layer of grease to the inside surfaces of the head tube.
2. Press the cups ② ②a into the head tube using headset press (available from various bicycle tool manufacturers). Note: Refer to headset press instructions for use. Failure to use tool correctly may result in damage to poor performance or damage to headset or frame. Pressure should NOT be placed on bearings or bearing races by tool or fittings during installation. If the headset cups are not installed in the headtube squarely, damage to the head tube, headset cups, and bearings may occur. Always face and ream headtube of bicycle to ensure.

▲ CAUTION The headset cups are installed square in the frame.

Headset assembly:

1. Apply a thin layer of grease to all mating parts.
2. Push the bearings ③ 3a into the cups (conventional, internal) or the head tube bearing seats (integrated). Install the Ball bearing 3b on Upper Bearing ③.
3. Slide the fork with installed crown race and any included lower seal 1a through the head tube.
4. Slide on the upper race ④ onto the steerer and seat against the upper bearing.
5. Slide on the upper bearing cover ⑤ and any included upper seal 5a and O-ring 5b onto the steerer. Note: If parts 5a are grooved for an o-ring, ensure the o-ring is installed correctly. For CX headsets: Ensure the brake cable housing stop ⑥ faces forward.
6. Install any headset spacers and the stem. Note: Some stems may require the use of a spacer between the stem and headset to allow for proper headset adjustment.
7. Install the compression device or the star-fangled nut & top cap assembly.

▲ CAUTION Do not use a star-fangled nut in a carbon steerer; damage to steerer tube will result. Carbon steerers require the use of a compression device such as the FSA *Compressor*.

8. Adjust the top cap bolt on the star-fangled nut & top cap assembly or the compression device assembly until proper bearing preload is achieved. The headset is adjusted properly when the bearings turn freely without any irregular looseness, play or knocking in the bearing during use.

▲ CAUTION Do not over-tighten the top cap bolt. Poor performance or bearing damage may occur.

9. Tighten the stem bolts to manufacturer's specifications

Internally Threaded, Threaded Headset installation

For Internally Threaded and Threaded Headsets, follow above instructions to: Mount the crown race onto the fork steerer, Press the cups into the head tube.

Headset assembly:

1. Apply a thin layer of grease to all mating parts.
2. Slide on the lower seal 1a, then the lower bearing 3a onto the fork steerer.
3. Slide the fork with installed crown race ①, any lower seal 1a, and lower bearing 3a through the head tube.
4. Slide onto the fork the upper bearing ③ and Ball bearing 3b: for threaded headsets; slide on the upper race ④, then thread onto the steerer the threaded top cover ⑦, for internally threaded headsets; slide on the top seal 7a, then thread onto the steerer the threaded crown race ⑦.
5. Slide on the spacer ⑧, then thread on the lock nut ⑨. Note: If the lock nut ⑨ includes a seal, do not remove it.
6. Adjust the upper crown race ⑦ or threaded top cover ⑦ until proper bearing preload is achieved. The headset is adjusted properly when the bearings turn freely without play or knocking.
7. Tighten the lock nut ⑨.



Contact

If you have questions, please visit our web site technical section: <http://www.fullspeedahead.com/contact> or contact:

Full Speed Ahead, USA
12212 Cyrus Way Mukilteo, WA 98275-5702
Tel: 1_425_488_8653 Fax: 1_425_489_1082

Full Speed Ahead, Europe
Via Del Lavoro, 56 20874 Busnago, Milan, Italy
Tel: +39_039_688_5265 Fax: +39_039_682_3336

TH INDUSTRIES / FSA Asia
NO.6, Wu-gong 8th Rd., Wufeng Dist., Taichung City 41353, Taiwan (R.O.C.)
Tel: +886_4_2331_9134 Fax: +886_4_2331_9314

Notes: Specifications of product may be changed or improved for performance. Please refer to website periodically for technical updates and revised instructions. Printed in Taiwan.

vision

gravity

METROPOLIS