

BB30 Road Crankset Installation Instructions

Published - Sep, 2010. ZSP002.v0 © 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 BB30 Road Cranksets



Tools Necessary for BB30 Crankset Assembly: (1)- EE037 BB30 Bearing Installation Press

(2)- Adjustable Wrench

(3)- Circlip Pliers

(4)- Torque Wrench with 10mm Allen Key



2. Install bearings using BB30 Bearing Installation Press (1) and Adjustable wrench (2). Press the bearings ③ into BB shell until they are butted against the circlip. Note: Right and Left bearings are the same.



Crankset Installation

Before installing bearings, use the FSA reaming tool (#EE069) to ensure that Bottom Bracket (BB) shell is clean and free of metal chips, dirt and excess paint. Inspect the BB shell for ID ovalization or anything that could cause bearing mis-alignment.

1. Using circlip pliers, (3) collapse circlip (2) and insert into machined circlip groove in each side of the BB shell.

A CAUTION Wear eye protection while installing or removing circlip to prevent injury.



3. Apply a layer of grease on the outer edge of the bearing ③ to reduce friction between bearing and bearing shield, as well as improve protection from water and other contaminants.

WWW.FULLSPEEDAHEAD.COM



4. Apply grease to the machined surfaces of the spindle that will contact the bearings after crank installation (as shown in photo).



5. Install the Bearing Shield ④ on the right Bearing, with flange (machined grooves on alloy covers) toward bearing.



 The self-extracting crank bolt assembly and preload nut are pre-installed from factory. Install the left crank by engaging the spindle hole of crank to spindle. Thread self-exracting crank bolt into spindle using a torque wrench with 10mm allen key (4). Tighten crank bolt to a torque of 380-410 kgf.cm / 38-41 Nm / 337-363 in.lbs. Always use a calibrated torque wrench to tighten crankbolt. Stripping or breakage due to installing without a torque wrench is NOT covered under manufacturing warranty.



6. Insert the right crank arm and spindle through the both BB30 bearings. Position non-drive side bearing shield ④ over left bearings with flange inward, toward the bearings. (as shown in photo)



Note: The wave spring washer does not have to be completely compressed for proper use but does have to be in contact on both sides by the left arm and left bearing shield.

Clearance between non-drive arm and bearing shield 1.5~2.2mm

7. Position the wave spring washer (5) on the splindle on non-drive side.

WWW.FULLSPEEDAHEAD.COM



Assembly Note: If the crankbolt is tightened to maximum allowable torque 410 kgf.cm / 41 Nm / 363 in.lbs and there is lateral movement or play in the BB30 system, DO NOT tighten the bolt further to remove the excess play. Remove the crankarm and install MS188 preload shims ⑦ between bearing cover and wave spring washer to remove the excess play, and reinstall the non-drive crank arm using the recommended torque 350-400 kgf.cm / 35-40 Nm / 310-355 in.lbs. The MS188 shims are not required when the BB30 specifications of the frame are correct. The MS188 shims will be necessary when the bottom bracket shell is not made to exact specifications.



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

BB30 Road Crankset Components

Follow the assembly order in the illustration: For parts \bigcirc is used only for Chainline adjustment and reduce the side paly.

Components

 Bottom Bracket Shell
Circlip x2
BB30 Bearings x2
Bearing Shield x2
Wave Spring Washer x1
Self-extracting Crank Bolt Assembly Washer x1 M25 BB30 Crank Bolt x1 Washer x1 M18 Retaining Nut x1
MS188 BB30 Shim x3

Gravity METROPOLIS

E PM

Full Speed Ahead, USA 12810 NE 178th St. Suite 102 Woodinville, WA 98072 Tel: 1_425_488_8653 Fax: 1_425_489_1082

Contact

Full Speed Ahead, Europe Via Del Lavoro, 56 20040 Busnago, Milan, Italy Tel: +39_039_688_5265 Fax: +39_039_682_3336 TH INDUSTRIES / FSA Asia 6, Wu-gong 8th Rd., Wufeng Shiang, Taichung County 41353, Taiwan. 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.