

# TREK BB90/95 ANGULAR CONTACT BEARING KIT FOR SHIMANO HT2 CRANK SETS

## IMPORTANT NOTES:

This bottom bracket is designed for use with Trek BB90 and BB95 proprietary BB shells with "net molded sockets" running "Hollowtech II" crank sets. These cranks have spindle diameters of 24mm and an end cap adjuster that allows the bearing tension to be adjusted.

If your frame uses a plastic spindle sleeve, please note that one half of the sleeve has a slightly larger Inside Diameter. In case you ever convert to a GXP crank set, place the larger sleeve half on the NON-drive side of the BB shell.

THE ANGULAR CONTACT BEARINGS INCLUDED IN THIS KIT ARE DIRECTIONAL. THE BLACK SEALS MUST FACE INWARD. In properly adjusted angular contact bearings, all of the ball bearings are engaged and spread the force over a larger surface area, decreasing friction and minimizing wear. In addition, excess play can be adjusted out of the bottom bracket without the usual risk of side-loading the bearings.

PLEASE FAMILIARIZE YOURSELF WITH THE INSTALLATION DIAGRAM BELOW BEFORE PROCEEDING

- 1) Be sure the spindle sleeve is properly seated and oriented with the larger half toward the non-drive side bearing, as illustrated.
- 2) Use Super Coat Grease (or similar) to coat the outer races of the bearings and inside surfaces of the BB shell bearing sockets.
- 3) For some Trek applications, the bearings can be fully seated into the sockets by hand. Other applications will be a tighter fit. In some cases, a careful tap with a rubber mallet will seat the bearings. If your application is particularly tight, you may need to use a special press tool.
- 4) Place one of the auxiliary seals onto the crank spindle and slide it down against the crank spider. Look at the diagram to verify proper seal orientation.
- 5) Lightly grease the crank spindle.
- 6) Carefully guide the crank spindle through both bearings, being careful not to push out the non-drive side bearing.
- 7) Grease the back of the non-drive side auxiliary seal and slide it onto the protruding spindle.
- 8) Properly align the non-drive side crank arm and slide it onto the spindle.
- 9) Install and tighten the crank arm adjuster cap until the non-drive crank arm contacts the auxiliary seal.
- 10) Tighten the end cap to 12 to 26 inch-Pounds. If you do not have a torque wrench, do the following:  
Turn the adjuster cap in 1/4 turn increments, rotating the crank set between each adjustment until you can feel the crank set start to bind and slow down. At this point, back the adjuster out 1/4 turn.
- 11) Gradually tighten each of the opposing crank arm fixing bolts in an alternating pattern. The final torque value of these bolts is 12-15 NM (88 TO 132 INCH-LBS). Spin the crankset to check for smooth rotation. Test for side-to-side play.

AFTER A FEW HOURS OF RIDING, DOUBLE-CHECK THE BEARING ADJUSTMENT BY LINING UP THE CRANK ARM WITH THE FRAME'S CHAIN STAY AND ALTERNATELY PUSHING THE ARM AND STAY TOWARD AND AWAY FROM EACH OTHER. IF BEARING PLAY CAN BE DETECTED, LOOSEN THE CRANK ARM CLAMP BOLTS AND RE-ADJUST AS PER STEPS 9-11

