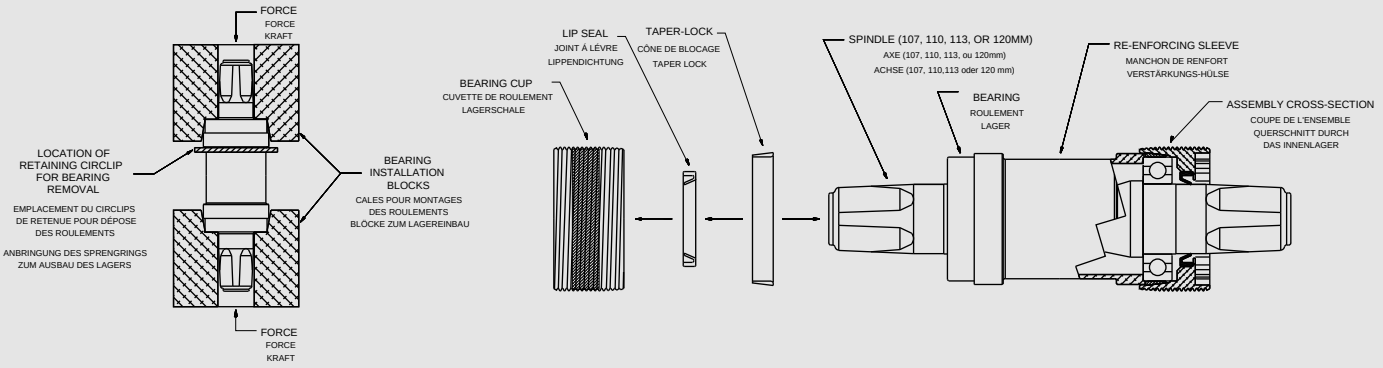
TAPER LOCK BOTTOM BRACKET: EXPLODED VIEW

ÉCLATÉ DU BOÎTIER DE PÉDALIER TAPER LOCK • TAPER LOCK INNENLAGER (EXPLOSIONSZEICHNUNG)



Congratulations on the purchase of your new Race Face Taper Lock BB (bottom bracket). Smart move. Please save your original sales receipt. Read the Warranty section for complete information. Also, please read all the instructions before you begin to install your new Race Face BB.

INSTALLATION INSTRUCTIONS

Tools Required:

· Standard splined (20 slot) cartridge bottom bracket installation tool such as Shimano TLUN73 or Park BBT-2.

· adjustable wrench with 6-8" handle for use with BB installation tool

· torque wrench (opti onal)

1) Have a professional bike shop chase your bikes BB shell to ensure the threads are clean.

2) Apply a film of grease to the BB threads in your frame prior to installation of the Race Face Taper Lock BB. This is critical in preventing seizing or galling, especially in aluminum frames.

Note: The orange, high pressure anti-vibration thread sealant on the cup threads is formulated to function with grease on the threads and is re-useable for multiple adjustments.

3) The Race Face BB assembly is clearly labeled for orientation and installation. Look for the label on the re-enforcing sleeve and note the drive side. The BB cup on the drive side should indicate it is a left hand thread (LH) with an arrow showing the direction of tightening. The opposing BB cup is the non drive side and is marked (RH), for right hand thread, with an arrow showing its direction of tightening.

4) Remove drive side cup with the taper lock (LH Thread) from the assembly. (The taper lock is the gray plastic piece that clips into the cu p.) Thread it into the frame until 1 mm of is thread is left exposed (68 mm shell) or until the cup is 1 mm inboard of the BB shell face (73 mm shell).

Note: As you thread the cup into your frame, the excess orange thread sealant will "peel-off" leaving only what is required for proper sealing.

5) Install the RH thread cup/spindle assembly into the shell and tighten with your chosen installation tool until all play is removed from the assembly. A torque setting of 30-40 ft/lbs (40-55 NM) is required t o ensure taper locks firmly clamp the bearings. This is easily achieved with a 6-8" wrench.

6) Upon completion of the installation, a small amount of friction may be evident when rotating the spindle. This is caused by the lip seal applying pressure to the spindle. This can be virtually eliminated by applying a few drops of oil to the surface of the spindle where the seal makes contact.

Note: The Race Face Taper Lock BB is designed to fit both a 68 mm and 73 mm BB shell. Upon completion of Step #5, the cups should ideally sit as follows:
· 68 mm shells: 1mm exposed thread on both sides of the shell.
· 73 mm shells: both cups sit 1mm in-board of the BB shell face.

CHAIN-LINE ADJUSTMENTS

The Race Face BB offers an adjustable chainline to ensure accurate and smooth shifting.

1) Install right hand crank with chain rings on the bike and tighten to manufacturer's torque recommendations.

2) Using a ruler, measure from the tip of the teeth on the middle ring to the vertical center line of the seat tube.

3) Because the vertical cen ter line of any bike is not always obvious, any measurement taken that falls between 47.5 mm to 50.0 mm will satisfy most popular mountain bike geometry. Please reference the front derailleur and/or frame manufacturer's specifications.

4) If the measurement made does not put you within this tolerance simply remove the crank, release both cups and screw the cups in or out. One full rotation of a cup in any direction provides approximately 1mm of horizontal travel.

5) Repeat step # 5 on the Installat ion Instructions section, and re-check your measurements.

Note: As you dial-in your chainline, the amount of exposed threads will differ on either side of the BB shell. This is ok and is a feature of the Race Face BB with adjustable chain-line.

Maintenance Instructions

The BB is designed to be a hard wearing component, parts within this assembly will eventually wear and require replacement. To ensure long and trouble free use of this product, Race Face encourages the replacement of worn parts. Authorized dealers can suppl y Race Face bearings, lip seals, and the other replacement parts on our BB.

LIP SEAL REMOVAL & REPLACEMENT

To remove, place the cup on a flat surface with the splined face upwards. Push your thumb through the hole and force the rubber lip downwards, this should cause the seal to press out. It is not advised to use sharp metal tools in this operation as it can result in damage to the cup and sealing surfaces. To refit new seals, place spline side down and press with both thumbs, the new seal into position. The seal should fi t slightly below the inside face of the cup. The manufacturer's name and seal size should be readable when in this position, if they are not, you have put it in backwards.

BEARINGS

Race Face BB bearings are manufactured to high running tolerances and are 80% filled with high quality waterproof grease. They are designed to be maintenance-free, and should be replaced when worn-out. Race Face has a service tool kit that makes replacement of worn bearings simple. Contact your local dealer regarding the tool kit.

Bearing Removal

The service tool kit includes a 1 ¼" external circlip that is used for bearing removal. Use an external circlip plier (wear eye protection) when installing the circlip. Attach the circlip onto the middle section of the BB's aluminum sleeve against one of the shoulders that abuts the bearing. Support the circlip. This can be done by closing a set of vise jaws to the point that the circli p will sit on top of the jaws, but not tight enough to press on the sleeve. Tap the spindle through the bearing using a hard plastic mallet. Repeat the process for the remaining bearing. Use of this circlip will ensure the aluminum sleeve will not be damaged.

BEARING INSTALLATION

1) It is important that both the inner and outer races of the bearings are supported, to prevent side loading, during installation. The use of Race Face BB bearing installation blocks are required. The installation blocks are included in t he service tool kit available from your local dealer.

2) Slide one bearing onto the spindle and insert that end of the spindle into one of the installation blocks.

3) Tap the opposite end of the spindle with a hard plastic mallet until the bearing is bottomed-out against the spindle shoulder.

4) Drop the sleeve, the second bearing, and second installation block onto the spindle.

5) Tap the second installation block to press the second bearing until it has bottomed-out on the sleeve.

6) Install your BB into your bi ke as per the installation instructions.

Note: If the fit between the spindle and the bearings becomes loose, use a couple of drops of Loctite #RC680 on the press fit surfaces.

WARRANTY

At Race Face we stand behind what we make. For that reason we offer the following warranties for our Taper Lock Bottom Bracket:

1) Our bottom bracket spindles carry a limited lifetime warranty.

2) Our bottom bracket cups, sleeve, and Taper Locks are covered by warranty for one year from the user's date of original purchase.

3) This warran ty is limited to the original purchaser. Proof of original purchase is required. This can take the form of a photocopy of the original sales receipt. **SAVE YOUR RECEIPTS!!!**

4) This warranty covers defects in materials and workmanship, and does not cover wear and tear from normal use.

5) This warranty also does not cover defects arising from misuse, abuse, accidents, alterations, lack of main preventative and routine maintenance, or failure to install according to the instructions and proper procedures.

6) Race Face warranties do not cover fading of anodized colors, nor will Race Face replace non-defective sub-component pieces because they do not exactly color-match the replaced defective piece. Colors vary from year to year. We will however do our best to match colors with the replaced peice.

RACE FACE CRANK COMPATIBILITY CHART

Tableau de compatibilité des pédaliers Race Face.

Kompatibilitätstabelle von Race Face Innenlagern mit verschiedenen Kurbeln

	Race Face BB spindle size • *RaceFaceInnenlagerAchslänge* Longueur de l'axe du boîtier de pédalier			
Crank Type *Type de pédalier* Kurbeltyp	**107.0mm**	**110.0mm**	**113.0mm**	**120.0mm**
'93-'96 Race Face IB Mountain	-	-	-	X
'94-'97 Race Face LP Mountain	X	X	-	-
'95-'97 Race Face IB Road	X	X	-	-
'93-'95 Shimano XTR	X	X	-	-
Shimano XT/LX Compact	X	X	-	-
Sugino Impel Series	-	X	X	-

Note **: Race Face spindle tapers are machined to ISO standards.**

Remarque ***: Les cônes des axes Race Face sont usinés aux normes ISO.***

Beachten Sie **: Die abgeschrägten Vierkant-Passungen der Race Face Achsen entsprechen den ISO Normen.**