

## Bottom Bracket Installation

Our BBs are designed to work with many of today's most popular cranks. Please refer to the instructions below for installing our BBs. Please refer to your crank manufacturer's website for specific instructions pertaining to their cranks for bolt torque, etc.

It is of great importance to have the BB shell on your frame faced prior to installing our BB (please note press in frames such as BB30, BB86, BB90, etc. do not need to be faced). In today's market, almost no frame manufacturer faces during production as they assume the local shop will do this. But the local shop will generally only do this if you ask them and pay them for the service as it takes them extra time (and money) when installing the BB.

So this means that many frames are ridden unfaced without the rider (you) knowing. Do your bearings wear out quickly? This is a sign of an unfaced BB shell.

Facing is the single most important step in the installation process as it controls the alignment of the bearings. Facing the BB shell is to make sure the width is an even 68mm (English) or 70mm (Italian) all the way around. It also makes sure both sides are square. If one or both of these are not perfect, the BB may suffer from one or more of the following:

- Clicking
- Creaking
- Premature bearing wear and many other problems.

In short, have your frame faced to avoid having an issue your BB.

**TIP:** *You should keep your bearings well lubed and clean. Visit the "Bearing Maintenance" section of our tech pages.*

**TIP:** *DO not use anti-seize grease on our bearings or bottom brackets. It can adversely affect the bearing.*

**TIP:** *Apply some grease to the BB threads before installing the cups OR...*

**TIP:** *...Depending on your frame's BB thread tolerance you may want a tighter threading feel with our BB. Apply some plumbers or Teflon tape the the BB threads before installing the cups if you find you want a tighter threading of the BB cups.*

**TIP:** *Apply some of our grease to the crank spindle before inserting it into the dustcap to help prolong dustcap life.*

**TIP:** *Dustcaps can wear out and lead to play in the cranks. We sell replacement dustcaps if you cannot remove the play in your cranks using the instructions listed below.*

## **Shimano 10 Comp. Ceramic BB-**

Cup Torque:  
35-40 NM

We recommend that you follow Shimano's installation instructions (bolt torque, etc.) for their cranks with this BB. Instructions can be found at the Shimano website.

We recommend having your frame's BB shell chased and faced. Grease should be applied to the threads of the cups. Slowly begin threading the cup by hand to ensure the threads line up with your frame's BB shell threads *before* using a BB tool.

As the spindle passes through the non-drive side bearing, pressure should be applied to the non-drive side bearing with your fingers to avoid having the spindle knock the bearing or dustcap loose. Once the spindle is through the BB, follow Shimano's instructions for installing the non-drive crankarm and tightening their cranks using proper torque settings.

Please note the proper way to check for play in a Shimano crank is to first tighten the end cap, then torque the pinch bolts to 12-14nm, and then check for play. Checking for play without torquing the pinch bolts can lead to "false play" because the crankarm tolerance allows the non-drive arm to "rock" on the spindle until it is torqued down. This is especially true on older cranks that have been used as the tolerance start to wear.

We recommend a trained bicycle mechanic do all installs.

## **SRAM Road Comp. Ceramic BB (2012+)**

*Note: This version has a non drive shim with the words "NON DRIVE" printed on the shim.*

Cup Torque:  
35-40 NM

We recommend that you follow SRAM's installation instructions (bolt torque, etc.) for their cranks with this BB. Instructions can be found at the SRAM's website. This BB will work with all GXP road cranks.

We recommend having your frame's BB shell chased and faced. Grease should be applied to the threads of the cups. Slowly begin threading the cup by hand to ensure the threads line up with your frame's BB shell threads *before* using a BB tool.

The supplied wave washer should be installed on the drive side spindle so that it sits between the drive side crankarm and the drive side bearing.

As the spindle passes through the non-drive side bearing, pressure should be applied to the non-drive side bearing with your fingers to avoid having the spindle knock the bearing or dustcap loose. Once the spindle is through the BB, follow SRAM's instructions for installing the non-drive crankarm and tightening their cranks using proper torque (48-54 NM). If you cannot remove play upon the first installation try, SRAM recommends removing the crank, greasing the splines and repeating the installation until play is removed (sometimes 5-6 times is needed to remove play).

**SRAM CRANK PLAY:** Due to the design of SRAM's cranks and how they tension, play is a common occurrence and removing it can be quite a task. The GXP system captures the left side (non drive) bearing between the spindle and the left crankarm while allowing the drive-side bearing to float axially on the spindle, thereby eliminating the necessity to side-load bearings during adjustment. For this reason, as well as the fact that one bolt both tensions the bearings and hold the cranks on, most people do not properly install their cranks, leading to play. **If there is play in the crank, the left arm is not fully bottomed out.** If you experience any play and/or clicking noises etc. when using our BB with a SRAM (GXP) crank we suggest you do the following:

- Try removing the crank, greasing the spindle and re-installing the crank.
- BE SURE to use a torque wrench and torque to 48-54nm (this is really high, so you wouldn't be comfortable with this much torque if you are not using a torque wrench.
- Check that your frame's BB shell has been faced and the width of the frame is 68mm (English frames) or 70mm (Italian frames).

We recommend a trained bicycle mechanic do all installs.

## **SRAM Road Comp. Ceramic BB (2007-2011)**

*Note: This version was supplied with 2 pcs of our 1mm spacers to space the cups for SRAM's specs.*

Cup Torque:  
35-40 NM

We recommend that you follow SRAM's installation instructions (bolt torque, etc.) for their cranks with this BB. Instructions can be found at the SRAM's website. This BB will work with all GXP road cranks.

We recommend having your frame's BB shell chased and faced. Grease should be applied to the threads of the cups. Slowly begin threading the cup by hand to ensure the threads line up with your frame's BB shell threads *before* using a BB tool.

The two 1mm BB spacers are to be used between each cup and the BB shell of your frame. These are to ensure proper spacing for the GXP system. The supplied wave washer should be installed on the drive side spindle so that it sits between the drive side crankarm and the drive side bearing.

As the spindle passes through the non-drive side bearing, pressure should be applied to the non-drive side bearing with your fingers to avoid having the spindle knock the bearing or dustcap loose. Once the spindle is through the BB, follow SRAM's instructions for installing the non-drive crankarm and tightening their cranks using proper torque (48-54 NM). If you cannot remove play upon the first installation try, SRAM recommends removing the crank, greasing the splines and repeating the installation until play is removed (sometimes 5-6 times is needed to remove play).

**SRAM CRANK PLAY:** Due to the design of SRAM's cranks and how they tension, play is a common occurrence and removing it can be quite a task. The GXP system captures the left side (non drive) bearing between the spindle and the left crankarm while allowing the drive-side bearing to float axially on the spindle, thereby eliminating the necessity to side-load bearings during adjustment. For this reason, as well as the fact that one bolt both tensions the bearings and hold the cranks on, most people do not properly install their cranks, leading to play. **If there is play in the crank, the left arm is not fully bottomed out.** If you experience any play and/or clicking noises etc. when using our BB with a SRAM (GXP) crank we suggest you do the following:

- Try removing the crank, greasing the spindle and re-installing the crank.
- BE SURE to use a torque wrench and torque to 48-54nm (this is really high, so you wouldn't be comfortable with this much torque if you are not using a torque wrench.
- Check that your frame's BB shell has been faced and the width of the frame is 68mm (English frames) or 70mm (Italian frames).

We recommend a trained bicycle mechanic do all installs.

## **BB90/Shimano**

We recommend that you follow Shimano's installation instructions (bolt torque, etc.) for their cranks with this BB. Instructions can be found at the Shimano website.

Our kit comes with 2 ceramic bearings with plastic dustcaps preinstalled. These replace all of the Trek bearings and seals.

To install, first remove the Trek bearings/seals. Next press our bearings into the frame.

**Tip:** Some Trek BB90 frames have tolerance issues. If you encounter creaking/clicking, apply some medium Loctite to the outer race of our bearings and re-install. Allow time for the Loctite to dry.

Finish installation by installing your crank as per Shimano's specs for torque, etc.

Please note the proper way to check for play in a Shimano crank is to first tighten the end cap, then torque the pinch bolts to 12-14nm, and then check for play. Checking for play without torquing the pinch bolts can lead to "false play" because the crankarm tolerance allows the non-drive arm to "rock" on the spindle until it is torqued down. This is especially true on older cranks that have been used as the tolerance start to wear.

We recommend a trained bicycle mechanic do all installs.

## **BB90/SRAM (GXP) Version #1**

*Note: This version of our BB90/SRAM kit comes with a 1mm spacer to be pressed into the non drive side of the frame.*

We recommend that you follow SRAM's installation instructions (bolt torque, etc.) for their cranks with this BB. Instructions can be found at the SRAM's website. This BB will work with all GXP road cranks.

Our kit comes with 2 ceramic bearings with plastic dustcaps pre-installed (the non-drive side bearing has a shim pre-installed to accommodate SRAM's spindle), a wave spacer and 1, 1mm spacer (to ensure proper spacing for SRAM/GXP Cranks). These replace all of the Trek bearings and seals.. You should also remove the plastic center tube inserted into your frame, it is not used with our kit.

**Tip:** The 1mm spacer should be installed in the non-drive side of the frame prior to pressing the bearing in. The drive side does not use an extra spacer. The bearing with the shim goes on the non-drive side.

To install, first remove the Trek bearings/seals and plastic center tube. Next insert the 1mm spacer into the non-drive side of the frame. It should be pushed all the way in. Then press our bearings into the frame. Finally, insert wave spacer onto the driveside of the crankarm spindle before installing the crank. The wave spacer should sit between the drive side crankarm and the drive side bearing.

Finish installation by installing your crank as per SRAM's specs for torque (see below), etc.

**Tip:** Some Trek BB90 frames have tolerance issues. If you encounter creaking/clicking, apply some medium Loctite to the outer race of our bearings and re-install. Allow time for the Loctite to dry.

**TIP:** SRAM cranks require you to torque the crankarm bolt to 48-54 NM. If you cannot remove play upon the first installation try, SRAM recommends removing the crank, greasing the splines and repeating the installation until play is removed (sometimes 5-6 times is needed to remove play).

**Tip: SRAM CRANK PLAY:** Due to the design of SRAM's cranks and how they tension, play is a common occurrence and removing it can be quite a task. The GXP system captures the left side (non drive) bearing between the spindle and the left crankarm while allowing the drive-side bearing to float axially on the spindle, thereby eliminating the necessity to side-load bearings during adjustment. For this reason, as well as the fact that one bolt both tensions the bearings and hold the cranks on, most people do not properly install their cranks, leading to play. **If there is play in the crank, the left arm is not fully bottomed out.** Re-grease the splines and re-torque the crank to 48-54nm.

We recommend a trained bicycle mechanic do all installs.

## **BB90/SRAM (GXP) Version #2**

*Note: This version of our BB90/SRAM kit uses a new style non drive shim. The words "NON DRIVE" are printed on the shim. This kit does not include an extra 1mm spacer as did our older version.*

We recommend that you follow SRAM's installation instructions (bolt torque, etc.) for their cranks with this BB. Instructions can be found at the SRAM's website. This BB will work with all GXP road cranks.

Our kit comes with 2 ceramic bearings with plastic dustcaps pre-installed (the non-drive side bearing has a shim pre-installed to accommodate SRAM's spindle) and a wave spacer. These replace all of the Trek bearings and seals.

The bearing with the non drive shim goes on the non-drive side.

To install, first remove the Trek bearings/seals. Then press our bearings into the frame. Finally, insert wave spacer onto the driveside of the crankarm spindle before installing the crank. The wave spacer should sit between the drive side crankarm and the drive side bearing.

Finish installation by installing your crank as per SRAM's specs for torque (see below), etc.

**Tip:** Some Trek BB90 frames have tolerance issues. If you encounter creaking/clicking, apply some medium Loctite to the outer race of our bearings and re-install. Allow time for the Loctite to dry.

**TIP:** SRAM cranks require you to torque the crankarm bolt to 48-54 NM. If you cannot remove play upon the first installation try, SRAM recommends removing the crank, greasing the splines and repeating the installation until play is removed (sometimes 5-6 times is needed to remove play).

**Tip: SRAM CRANK PLAY:** Due to the design of SRAM's cranks and how they tension, play is a common occurrence and removing it can be quite a task. The GXP system captures the left side (non drive) bearing between the spindle and the left crankarm while allowing the drive-side bearing to float axially on the spindle, thereby eliminating the necessity to side-load bearings during adjustment. For this reason, as well as the fact that one bolt both tensions the bearings and hold the cranks on, most people do not properly install their cranks, leading to play. **If there is play in the crank, the left arm is not fully bottomed out.** Re-grease the splines and re-torque the crank to 48-54nm.

We recommend a trained bicycle mechanic do all installs.

## **BB30**

Our BB30 bearings are direct replacements for standard BB30 bearings. You should follow your frame's instructions for BB30 bearing installation. We do not supply specific spacers, dustcaps, circlips, etc. . We only supply the bearings. You re-use everything else (spacers, dustcaps, circlips, etc.) from your current crank setup. If you do not already have the spacers, dustcaps, circlips, etc. we do offer a kit with these. This kit is not included with our BB30 bearings.

**Tip:** If you encounter creaking, apply some Loctite to both the outer race (to fill the gap between frame and bearing) and the inner race (to fill the gap between the spindle and inner race).

We recommend a trained bicycle mechanic do all installs.

## **Press Fit BB30**

Our Press Fit BB30 kits are completely enclosed cups and should be pressed into your Press Fit BB30 frame using a headset press. Care should be taken that the cups are fully pressed into the frame. The supplied dustcaps should be installed with the raised center section facing towards the bearings. The crankarms should tighten up against the flat side of the dustcap.

Once the cups are pressed into the frame, finish installation by installing your crank as per the manufacturer's specs for torque, etc. We supply a wave washer to be used as per your manufacturers instructions.

We recommend a trained bicycle mechanic do all installs.

## **BB86/Shimano 10**

Our BB86 kits are completely enclosed cups and should be pressed into your BB86 frame using a headset press. Care should be taken that the cups are fully pressed into the frame.

Once the cups are pressed into the frame, finish installation by installing your crank as per Shimano's specs for torque, etc.

Please note the proper way to check for play in a Shimano crank is to first tighten the end cap, then torque the pinch bolts to 12-14nm, and then check for play. Checking for play without torquing the pinch bolts can lead to "false play" because the crankarm tolerance allows the non-drive arm to "rock" on the spindle until it is torqued down. This is especially true on older cranks that have been used as the tolerance start to wear.

We recommend a trained bicycle mechanic do all installs.

## **BB86/SRAM**

Our BB86 kits are completely enclosed cups and should be pressed into your BB86 frame using a headset press. Care should be taken that the cups are fully pressed into the frame.

Once the cups are pressed into the frame, insert wave spacer onto the driveside of the crankarm spindle before installing the crank. The wave spacer should sit between the drive side crankarm and the drive side bearing.

Finish installation by installing your crank as per SRAM's specs for torque, etc.

**TIP:** SRAM cranks require you to torque the crankarm bolt to 48-54 NM. If you cannot remove play upon the first installation try, SRAM recommends removing the crank, greasing the splines and repeating the installation until play is removed (sometimes 5-6 times is needed to remove play).

**Tip: SRAM CRANK PLAY:** Due to the design of SRAM's cranks and how they tension, play is a common occurrence and removing it can be quite a task. The GXP system captures the left side (non drive) bearing between the spindle and the left crankarm while allowing the drive-side bearing to float axially on the spindle, thereby eliminating the necessity to side-load bearings during adjustment. For this reason, as well as the fact that one bolt both tensions the bearings and hold the cranks on, most people do not properly install their cranks, leading to play. **If there is play in the crank, the left arm is not fully bottomed out.** Re-grease the splines and re-torque the crank to 48-54nm.

We recommend a trained bicycle mechanic do all installs.

## **Shimano DXR**

*Please note our BB is only designed for 68mm English threaded frames*

Cup Torque:  
35-40 NM

We recommend that you follow Shimano's installation instructions (bolt torque, etc.) for their cranks with this BB. Instructions can be found at the Shimano website.

We recommend having your frame's BB shell chased and faced. Grease should be applied to the threads of the cups. Slowly begin threading the cup by hand to ensure the threads line up with your frame's BB shell threads *before* using a BB tool. Please note you do not re-use any spacers that came with your old BB. No spacers are used with our BB on a 68mm BB shell

As the spindle passes through the non-drive side bearing, pressure should be applied to the non-drive side bearing with your fingers to avoid having the spindle knock the bearing or dustcap loose. Once the spindle is through the BB, follow Shimano's instructions for installing the non-drive crankarm and tightening their cranks using proper torque settings.

Please note the proper way to check for play in a Shimano crank is to first tighten the end cap, then torque the pinch bolts to 12-14nm, and then check for play. Checking for play without torquing the pinch bolts can lead to "false play" because the crankarm tolerance allows the non-drive arm to "rock" on the spindle until it is torqued down. This is especially true on older cranks that have been used as the tolerance start to wear.

We recommend a trained bicycle mechanic do all installs

## **BB30 Adapter**

Our BB30 adapter allows you to use a Shimano 10 speed crank on a BB30 frame. Installation is very straightforward. First, make sure your BB30 bearings are installed in your frame. Next, press our BB30 adapter into each bearing. They should press in by hand.

Next, install your Shimano 10 speed cranks as per Shimano's instructions for installing their cranks. Once you press the drive side crankarm through the adapter, be sure to follow Shimano's instruction for the non-drive crankarm and tightening their cranks using proper torque settings.

Please note the proper way to check for play in a Shimano crank is to first tighten the end cap, then torque the pinch bolts to 12-14nm, and then check for play. Checking for play without torquing the pinch bolts can lead to "false play" because the crankarm tolerance allows the non-drive arm to "rock" on the spindle until it is torqued down. This is especially true on older cranks that have been used as the tolerance start to wear.

We recommend a trained bicycle mechanic do all installs