

Outboard Bottom Bracket Cup Installation Instructions

To ensure maximum life and performance from your Phil Wood Outboard Bottom Bracket (OBB), proper frame preparation and installation is required. If you are not comfortable with performing any of the following instructions, contact our sales or service department and we will do our best to find a bicycle shop in your area that will be able to assist you. (See Service Information at the end of these instructions)

On the backside of this page you will find a diagram showing the assembly order and part names we will be using in these instructions.

Please visit www.philwood.com/support for up to date product care instructions, warranty, service and return policy information. Thank you for your support.

TOOLS NEEDED:

- Bottom Bracket Facing Set (recommended, not required)
- Bottom Bracket Tapping Set (recommended, not required)
- Outboard Bottom Bracket Tool for installing and removing 16-notch OBB cups (such as Park Tool BBT-19 Bottom Bracket Tool)
- Torque Wrench (recommended, not required)
- Mild Degreaser (cleaning/rubbing alcohol)
- Small, soft brush
- Blue Thread Retaining Compound (included, Phil Wood Part# MRCB00)

Step 1: Frame Bottom Bracket Shell Preparation

1. Ensure the bottom bracket shell (F) of the frame is properly faced, threads are chased and cleaned before continuing with the outboard bottom bracket installation.

PLEASE NOTE: If you are replacing a current OBB it is still important to follow proper bottom bracket shell preparation to help prevent damage to the frame or OBB.

2. Make sure to remove any paint, burrs and/or old thread retaining compound that could interfere with the OBB installation.
3. Inspect the bottom bracket shell threading of the frame for any damage and ensure the threading in your frame is compatible with the threading on your OBB.
4. Use your brush and a mild degreaser to clean grease, oil and any other debris in the threads and surrounding areas of the bottom bracket shell. If needed, wipe down the area again with a clean, dry towel and mild degreaser.
5. After cleaning, ensure the bottom bracket shell is completely dry before continuing.

Step 2: Installing Outboard Bottom Bracket Cups

1. One of the OBB cups may have red or yellow paint on the threaded side (this is the drive side cup (E)). This OBB cup is to be installed on the drive side of the frame's bottom bracket shell. The unpainted OBB cup (A) is to be installed on the non-drive side of the frame's bottom bracket shell.
2. To ensure a clean installation, install both OBB cups into the frame dry. This allows you to check that the cups thread freely into your frame before you install them with our blue thread retaining compound.

PLEASE NOTE: While dry fitting the OBB cups into the frame, if for any reason the cup starts to bind or become difficult to thread in by hand: **STOP**. Carefully remove the OBB cup and check the threads again for burrs or damage. Forcing the cup into the frame can cause damage to the frame, OBB cups or both.

3. Consult your original crank set installation instructions for proper use of the three supplied 2.5mm thick OBB spacers (B). These spacers only come with our 2nd generation British threaded OBB cups (Released September, 2013).

PLEASE NOTE: If additional spacers are needed they can be purchased separately from our web store.

4. If required, slide the correct number of OBB spacers onto each OBB cup.
5. Apply two drops of blue thread retaining compound to the threads of the drive side OBB cup. Then thread the drive side OBB cup into the frame by hand. For British and Swiss threaded OBB cups, the drive side OBB cup must be turned in a counterclockwise direction to tighten. Once you have tightened the cup down as far as you can by hand, use your OBB cup installation tool and torque to 40 N-m.
6. Now take the OBB center sleeve (D), find the side with the single O-ring (C) and slide this end into the non-drive OBB cup. To ease the installation of the center sleeve into the OBB cups you can lightly lubricate the O-rings (C) with Phil Tenacious Oil (Phil Tenacious Oil will not adversely affect the supplied O-rings). Verify the correct orientation of the center sleeve by holding the non-drive side OBB cup and center sleeve assembly in your left hand and rotate it until you can read the *Phil* logo from left to right, right side up. If the *Phil* is upside down then you need to flip the center sleeve.
7. Before threading the non-drive side OBB cup and center sleeve assembly into the frame, put two drops of blue thread retaining compound onto the base of the OBB cup threads. Then thread the non-drive side OBB cup into the frame by hand. Once you have tightened the cup down as far as you can by hand, use your OBB cup installation tool and torque to 40 N-m.

PLEASE NOTE: Once OBB cups have been installed, the blue thread retaining compound should be left to cure for 12 hours before being used.

8. To install your crank set, consult your original crank set installation instructions. A thin layer of Phil Waterproof Grease may be applied to the spindle surface before sliding it into the OBB (grease will not adversely affect the plastic dust covers).

Step 3: Maintenance

1. Once installed, our OBB cups do not require any routine maintenance. If the bearings become rough or damaged they should be replaced. The replacement of bearings or dust covers in your Phil Wood OBB should only be performed by an Authorized Phil Wood Dealer or sent back to Phil Wood & Co.

PLEASE NOTE: Repacking bearings will not repair damage or wearing that might have occurred to the bearing seals or other internal components of the bearing.

Outboard Bottom Bracket Overview

- A. Non-drive cup
- B. 2.5 mm thick spacer
- C. O-ring
- D. Outboard Bottom Bracket (OBB) center sleeve
- E. Drive side cup
- F. Frame bottom bracket shell

Torque Specifications

- A. Non-drive cup (torque to 40 N-m)
- E. Drive side cup (torque to 40 N-m)

Limited Warranty

Phil Wood & Co. provides a limited lifetime warranty against manufacturing defects. This means that we offer a guarantee on material and production thereof for the life of the product to the original owner. In order to be considered for warranty, original proof of purchase from an Authorized Phil Wood & Co. Retailer/Dealer showing date of purchase must be provided. We also offer a one-year guarantee on all our bearings from the date of purchase. Bearings that fail due to contamination, misuse, improper tampering, or improper maintenance are not covered under warranty even if failure occurs within one year from date of purchase.

All Phil Wood & Co. products have an intended purpose. Products used outside of that purpose will not be warranted and Phil Wood cannot be held responsible for any damage that may occur due to misuse. It is the end user's responsibility to examine the product on a regular basis to determine if it requires service and or replacement. (See included maintenance instructions for further information.)

NOT COVERED UNDER THIS LIMITED WARRANTY ARE THE FOLLOWING:

1. Normal wear of parts that are subject to wear (e.g. bearings and ratchet mechanisms)
2. Incorrect re-assembly
3. Use in combination with other products that are not compatible (e.g. threading a FW onto the fixed side of a track hub)
4. Insufficient maintenance, tampering, misuse, and neglect.

*Phil Wood & Co. does not cover the cost of shipping on repair or warranty items back to us beyond 90 days from the original purchase date.

Return Policy

All returns, regardless of reason or cause, must have a return authorization number (RA#). We will not accept or process any item(s) without an RA#. Please contact us for RA# information via email at sales@philwood.com or call us at (408) 298-1540.

- RA#s are good for up to 60 days from the day they are issued.
- Items returned for credit are subject to a 15% restocking fee unless the item is returned due to our mis-shipment.
- Product and parts can be returned for credit (less restocking fee) if the product was never installed, used, altered, or damaged in any way. The return must be within 90 days of the original date of purchase.
- Items returned for exchange due to an ordering error are subject to a 15% restocking fee and all shipping fees for up to 30 days from the date of purchase.
- Product and parts returned more than 30 days after date of purchase can be returned for credit (less a 30% restocking fee) for up to 90 days from the day of purchase.
- After 90 days, item(s) may not be returned for credit or exchange.
- Customer is responsible for properly packaging the returning item(s).
- Customer is responsible for any damages incurred due to improper packaging. Customer is also responsible for shipping fees.
- Partial credit may be given for returned item(s) that suffered cosmetic damages resulting from installation or shipping. Eligibility for credit will be determined by Phil Wood & Co.'s warranty and technical personnel. Any damage to a product that may compromise the integrity of the part will void any applicable credit.

Service Information

All services must have a return authorization number (RA#). We will not accept or process any item(s) without an RA#. Your issued RA# should be clearly written on the outside of your package so our service department can match your item(s) to the service information on file. Items sent to Phil Wood & Co. for service without a valid and legible RA# on the outside of the package will be REFUSED and returned to sender at their cost. (Depending on how busy our service department is, standard services can take 1-2 days to complete. Standard services can take longer to complete depending on service department workload and part availability.) Once issued, an RA# is valid for 60 days.

PLEASE NOTE: Items sent to Phil Wood & Co. for service without a valid and legible RA# placed on the outside of the package will be REFUSED and returned to sender at their cost. Phil Wood & Co. does not cover the cost of shipping on repair or warranty items sent back to us beyond 90 days from the original purchase date.

