



# BOTTOMADAPT

## BBB SPINDLE ADAPTERS / BBO-16/17

BBB CYCLING.COM  
ROOSEVELTSTRAAT 46, 2321 BM  
LEIDEN, THE NETHERLANDS

EN MANUAL / DE HANDBUCH / FR MANUEL / NL HANDLEIDING / ES MANUAL / PT MANUAL /  
IT MANUALE / HU HASZNÁLATI UTASÍTÁS / PL PODRĘCZNIK / CZ UŽIVATELSKÁ PŘÍRUČKA  
/ JP 使用説明書 / RU РУКОВОДСТВО ПОЛЬЗОВАТЕЛЯ / SK MANUÁL / NO HÅNDBOK

BB SHELL WIDTH

86.5mm

68mm

reducer ④ to use :

BBO-17

BBO-16

### Ø 24 REDUCER INSTALLATION:

1. Verify the BB shell has the correct width and that the correct reducer is being used.
2. The PF30 bottom bracket should already be installed in the frame (or BB30 bearings for BB30 frames). Consult PF30 BB installation instructions for installation, do not install the reducers in PF30 bottom bracket before the bottom bracket is installed in the frame or damage can result. **Note:** If the bearings are not aligned in BB shell, remove and reinstall the bearings with proper tooling to guarantee bearing alignment. Otherwise the crank rotation will be poor after being installed.
3. Apply a layer of grease on the inside edge of the seal ③ to reduce friction when installed. Place the seals ③ on the bearing ②, with the rubber face outside on each side of the BB.
4. Press the reducer ④ into the bearings of the bottom bracket. The reducers should fit snug but not inhibit the rotation of the bearing.
5. Apply a layer of grease on the spindle where the bearing will have contact. Install the right crank ⑤ into the bottom bracket and reducers ④. Make sure the spindle splines are completely exposed from the reducers on non-drive side before proceeding. **Caution:** Take great care not to damage the plastic cover of the left BB cup.
6. Apply light amount of grease on the spindle splines of the right crank. Install the wave spring washer ⑥ onto the axle. Install the left crank arm ⑦ (The self-extracting crank bolt is pre-installed on the crank) onto the spindle. Tighten the crank bolt ⑧ to a the appropriate torque which is set in your crank set manual.

**Caution:** Do NOT tighten crank bolt over appropriate torque. Do NOT completely flatten the wave spring washer ⑥. Clearance between non-drive arm and reducer is 1.5-2.0mm. If the clearance is not within 1.5-2.0mm after applying correct torque. Do NOT tighten the crank bolt further. Recheck installation procedure and order of assembled parts. Ensure correct torque is used.

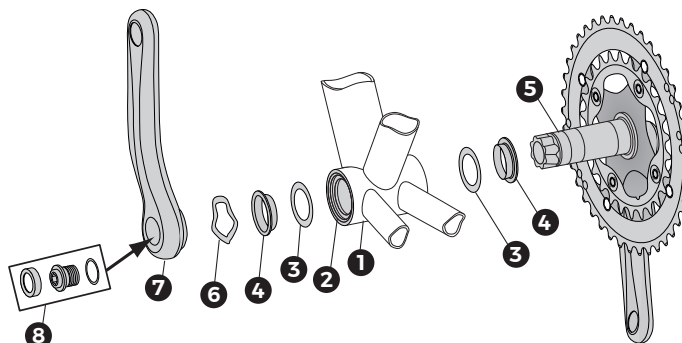
**Note:** Always use a calibrated torque wrench to tighten the crank bolt. Stripping or breakage due to installing without a torque wrench is NOT covered under manufacturing warranty.

FIND YOUR TRANSLATION  
ON BBBCYCLING.COM



### WARNING

Sold only by professional bicycle dealers.  
For proper installation, ask your BBB dealer.  
Not following the instructions in this manual  
may cause damage to the product not covered  
under warranty, damage to the bicycle, or  
cause an accident resulting in injury or death.



### COMPONENTS:

- ① Bottom bracket shell
- ② PF30 or BB30 BB (x2)  
(Already pressed into BB shell)
- ③ Seal (x2) (BB included, not adapter)
- ④ BBO-17: EVO 24 reducer (x2) or  
BBO-16: PF30 24 reducer (x2)
- ⑤ Right crank (x1)
- ⑥ Wave spring washer (x1)
- ⑦ Left crank (x1)
- ⑧ Self-extracting crank bolt assembly (x1)  
(already installed on crank):  
- Retaining nut (x1)  
- Crank bolt (x1)  
- Washer (x1)