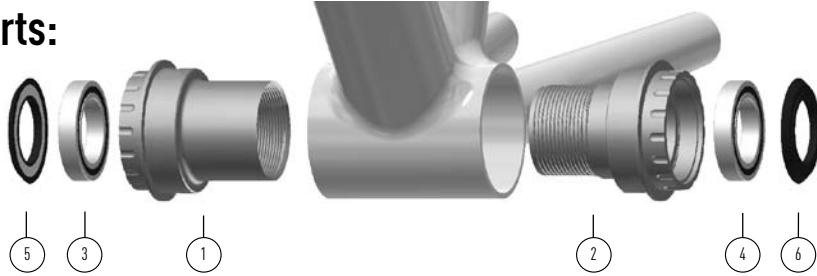


PF30-OUT Thread Together Bottom Brackets for 24mm Spindle

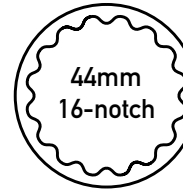
PF30-OUT-1 PF30-OUT-4 PF30-OUT-15
 PF30-OUT-2 PF30-OUT-5 PF30-OUT-16
 PF30-OUT-3 PF30-OUT-6



Parts:



BB Cup Tool Size:



Dimensions:

Bottom Bracket/Frame Interface: PF30, OSBB Carbon
Bottom Bracket Shell Width: 61mm - 73mm
Bottom Bracket Shell I.D.: 46mm
Crank Spindle Diameter: 24mm

#	Description	PF30-OUT-1	PF30-OUT-2	PF30-OUT-3	PF30-OUT-4	PF30-OUT-5	PF30-OUT-6	PF30-OUT-15	PF30-OUT-16
1	DRIVE SIDE CUP (FEMALE THREADS)								
2	NON-DRIVE SIDE CUP (MALE THREADS)								
3	DRIVE SIDE SEALED BEARING	SB-24X37-1	SB-24X37-1	SB-24X37AC-1	SB-24X37AC-1	SB-24X37CH-1	SB-24X37CH-1	SBC0-24X37-1	SBC0-24X37-1
4	NON-DRIVE SIDE SEALED BEARING	SB-24X37-1	SB-24X37-1	SB-24X37AC-1	SB-24X37AC-1	SB-24X37CH-1	SB-24X37CH-1	SBC0-24X37-1	SBC0-24X37-1
5	DRIVE SIDE OUTER SILICONE DUST SEAL	24MMSEAL	24MMSEAL	24MMSEAL	24MMSEAL	24MMSEAL	24MMSEAL	24MMSEAL	24MMSEAL
6	NON-DRIVE SIDE OUTER SILICONE DUST SEAL	24MMSEAL	24MMSEAL	24MMSEAL	24MMSEAL	24MMSEAL	24MMSEAL	24MMSEAL	24MMSEAL
	0.5MM CRANK SPINDLE SPACER (QTY 2)*	BB-24MM-0.5	BB-24MM-0.5	BB-24MM-0.5	BB-24MM-0.5	BB-24MM-0.5	BB-24MM-0.5	BB-24MM-0.5	BB-24MM-0.5
	1MM CRANK SPINDLE SPACER (QTY 2)*	BB-24MM-1.0	BB-24MM-1.0	BB-24MM-1.0	BB-24MM-1.0	BB-24MM-1.0	BB-24MM-1.0	BB-24MM-1.0	BB-24MM-1.0

* Please refer to your crankset instructions for exact crank spindle spacers and wave washer placement.
 - Cups produced after July 2018 do not use o-rings.

Wheels Mfg Limited Warranty

Wheels Manufacturing warrants bottom bracket components to be free from defects in materials or workmanship for a period of 2 years after original purchase. This warranty only applies to the original owner and is not transferable. Claims under this warranty must be made through the retailer where the Wheels Manufacturing component was purchased. Life expectancy of Wheels Manufacturing bottom brackets and bottom bracket sealed bearings depends on factors like frequency of use, environmental conditions and intended use. Failure to maintain bearings will void any and all bearing warranties. For full warranty and limitations to warranty visit: <https://wheelsmfg.com/warranty>.

Tools:

INSTALL



Universal BB Press
[PRESS-7 / PRESS-7-PRO]



Grease or Anti-Sieze
Compound



BB Socket
[BBTOOL-48-44]

OR



Flat Wrench
[WRENCH-BB48-44]

SERVICE



Bearing Extractors
[BB-EXT]



Universal BB Press
[PRESS-7 / PRESS-7-PRO]



Bearing Grease
[GR-001]

Installation:

IMPORTANT:

- **DO NOT USE BEARING RETAINING COMPOUND OR EPOXY DURING INSTALLATION, USE OF WHICH WILL VOID ANY WARRANTY.**
- Before installing bottom bracket, check that frame's BB shell has been properly prepped and is the correct width and inner diameter.
- Drive side cup may press in by hand. This is not uncommon and is acceptable. If both cups slip in by hand, you should use a tool on both cups to fully tighten bottom bracket.
- For carbon BB shells, use recommended grease. Contact frame manufacturer, or go to <https://wheelsmfg.com/carbon-bike-grease>.
- For titanium BB shells, anti-seize compound is recommended.

Bottom bracket installation and service by a professional or certified mechanic is recommended.



1. Thoroughly clean frame's bottom bracket shell. Do not install cups dry. Apply a thin layer of high quality, carbon-safe grease or anti-seize compound to inside surface of the shell.



2. Apply a thin layer of high quality grease to all threads on both cups.



3. Apply a thin layer of high quality, carbon-safe grease or anti-seize compound to outside surface of each BB cup.



4. Insert drive side cup (female threads) into frame by hand. If cup fully inserts by hand, this is OK and move on to step 8. Check that any internal wires or hoses are out of the way of the cup.



5. Using Wheels Mfg Universal Bottom Bracket Press [PRESS-7 or PRESS-7-PRO], insert one BB adapter into drive side bearing. Match the correct size step on the drift with bearing inner diameter. Slide press handle + rod thru BB adapter and cup.



6. Slide second BB adapter onto threaded rod and into the opposite side of the bottom bracket shell. Match the correct step size with the BB shell inside diameter. Adapter should fit with little to no play.



7. Spin on second press handle and fully tighten until drive side cup is flush with frame.



8. Insert non-drive side cup by hand and turn clockwise until threads begin to engage. Do not cross-thread cups. Check that any internal wires or hoses are out of the way of the cup.



9. Continue to turn cup clockwise until flush against the outer face of frame. Finish tightening cups using Wheels Mfg BB Socket [BBTOOL-48-44] or Flat Wrench [WRENCH-BB48-44]. Tighten cups 35Nm - 50Nm.



10. Frames with loose fitting cups may need a tool on each cup to fully tighten.



11. Bottom bracket is now installed. Install crankset per crank manufacturer's instructions.

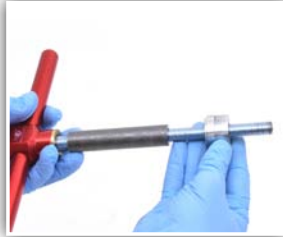


12. Outer silicone dust seals are placed directly against bearings. For added sealing, apply grease between seal and bearing.

Bearing Replacement:



1. Insert appropriate size extractor into bearing. Push extractor completely in until you feel it snap in place.



2. Slide the bearing extractor pusher onto a Wheels Mfg Universal BB Press [PRESS-7 or PRESS-7-PRO] rod. Next, add the matching adapter with the tapered end of the adapter opposite the pusher.



3. Insert handle, rod, pusher and adapter into the backside of the bearing you are removing.



4. Select a sleeve size that has a larger ID than the bearing's OD. Slide receiver cup + reducer sleeve over the rod and up against cup.



5. Spin on second handle and tighten handles together until you feel the bearing pop out of the cup.



6. Bearing is now removed from cup.



7. Remove handle from press. Remove adapter from extractor. Remove extractor from bearing.



8. Clean and dry bearing bore in cup. Apply thin film of Loctite 603 retaining compound to cup.



9. Slide one BB adapter over the press rod. Match the correct size step on the adapter with the cup or bearing. Insert into bearing or cup opposite the bearing you are installing.



10. Slide new bearing onto second BB adapter, matching up the correct size step on the adapter with the bearing ID. Slide both onto press rod.



11. Spin on second handle and tighten handles together until the bearing is seated in the cup.



12. Remove press handles and adapters from cups. Bearing is now installed.

IMPORTANT:

Angular Contact bearings are direction specific! They must be installed in the bottom bracket cup with red seal facing outwards and black seal facing inwards.

Bearing Service:

IMPORTANT:

- Bearings can be serviced without removing from the cups. However, it is often easier to get a more thorough service completed with bearings removed from cups.
- Angular Contact bearings are direction specific and come with two different color seals! Mark your bearings to note which side takes the black seal.



1. Lift up seal using a utility knife or pick. If servicing bearings outside of BB cups, remove both seals. Clean seals and set aside. For Angular Contact bearings, note which side takes the black seal.



2. Flush out old grease with a de-greaser. Dry bearing to remove any traces of degreaser.



3. Pack bearing with new, clean bearing grease [GR-001].



4. Lightly press seals onto bearing. Seals should sit flush to the outer face of the bearing races.