USER MANUAL

UNIVERSAL BEARING PRESS KIT

Screw press for fitting hub and press-fit bottom bracket bearings square: central press, knurled handle, 18 pairs of aluminium rings, washers, carry case. This manual covers choosing the ring, fitting, removal and the final checks.

REF. S20763 · ALUMINIUM + STEEL · CASE 33 × 26 × 8 CM



01 · BEFORE YOU START

CONTENTS AND FIRST LOOK

ITEM	QUANTITY	ROLE
Central press	**1**	Steel threaded rod with its operating bar
Non-slip knurled handle	**1**	The nut you turn: it does the pushing
Aluminium rings and adapters	**18 pairs**	One pair per bearing size (table p. 3)
Washers and accessories	**set**	Take up the spare length, keep the rings flat
Carry case	**1**	About 330 × 260 × 80 mm



Central press, knurled handle and rings: the whole set fits in one hand and assembles without a spanner.

The principle

A ring on each side, the bearing between the ring and its seat, and a handle you screw in: the bearing moves **in line**, a millimetre at a time, pushed by its outer race. That is all a bearing asks for, and everything a hammer cannot do.

Compatibility

- Cartridge bearings of road, MTB and gravel **hubs**: 6000, 6001, 608, R6, 6800 to 6806, 6900 to 6903, 1526, 1728.
- **Press-fit bottom brackets** BB30, BB70, BB86, BB90 and BB92.
- Not for cup-and-cone hubs with loose balls. For a size missing from the list, the Velkyne 7075 kit covers one more.

SAFETY

- Gloves and safety glasses.
- Never a hammer on the press, the rings or the bearing.
- Tighten by hand, a quarter turn at a time. Sudden resistance means "askew": back off, start again.
- The ring pushes the bearing's **outer race**. Never the inner race alone, never the seal.
- On a carbon frame, cleanliness and alignment are everything; force fixes nothing.

You will also need

- Tools for the hub axle and end caps, or for the crankset.
- Expanding blind-bearing puller, for the first bearing of a closed hub.
- Degreaser, a cloth, assembly grease.
- New bearings of the same size, in pairs.

02 · GETTING READY

READ THE CODE, CHOOSE THE RING

The bearing carries its code on the seal: **6902-2RS**, **6001-ZZ**... The digits give the size, the suffix only describes the sealing. Before stripping anything, read it, write it down and order new bearings of the same code: the ring is chosen on that code.

CODE	D × D × B (MM)	RING
608	8 × 22 × 7	608
R6	9.5 × 22.2 × 7.1	R6
6800	10 × 19 × 5	6800
6900	10 × 22 × 6	6900
6000	10 × 26 × 8	6000
6801	12 × 21 × 5	6801
6901	12 × 24 × 6	6901
6001	12 × 28 × 8	6001
6802	15 × 24 × 5	6802
1526	15 × 26 × 7	1526
6902	15 × 28 × 7	6902
6803	17 × 26 × 5	6803
1728	17 × 28 × 7	1728
6903	17 × 30 × 7	6903
6804	20 × 32 × 7	6804
6805	25 × 37 × 7	6805
6806	30 × 42 × 7	6806

d = bore · D = outer diameter · B = width, standard dimensions of each series. The 6806 is the BB30 bottom bracket bearing.



Rings engraved with their code. The right ring centres in the bearing with no play and bears on the outer race.

Central press — Held by its bar, never turned with a spanner.

Knurled handle — Screwed in by hand. It advances, the rings push.

Washers — Fill the spare length so the handle reaches contact.

RING TEST

Set it on the new bearing before assembling anything: it must just enter the bore and stop flat on the outer race. If it rocks or touches the seal, it is not the right one.

03 · PROCEDURE

FITTING A BEARING, PULLING ONE OUT

Fitting the new bearing

1. **Strip and clean.** Axle, end caps and freehub body removed as the hub maker describes, seat degreased, free of burrs and corrosion. Photograph the order of the spacers.
2. **Lightly grease the seat:** a film, no more. The bearing slides in and the seat will not corrode.
3. **Offer the bearing up flat** on the mouth of the seat, marking facing out. It must be square to the axis before any pressure is applied.
4. **Assemble:** press bar → ring → bearing → hub → opposite ring or support → washers → knurled handle. Two new bearings are pressed together, one ring on each side.
5. **Screw in a quarter turn at a time,** watching the bearing go in square. If it leans, back off, realign, resume.
6. **Stop at the shoulder.** The tightening firms up sharply when the bearing bottoms out: **do not push on**, a hub cracks sooner than you think.
7. **Check, reassemble.** Smooth rotation with no rough spot, no side play, bearing flat all the way round. Reassemble in the order of your photo, to the maker's torque values.

> **IN PAIRS**
>
> Always replace both bearings of a hub or a bottom bracket, even if only one feels worn: a new one facing a worn one develops play within a few rides.



Press fitted on a hub: a ring on each side, the handle drives the bearing in.

Pulling a worn bearing

1. **Open one side.** The kit pushes a bearing whose inner face can be reached. In a closed hub, when the opposite bearing has the same bore, the first bearing is driven out beforehand with the hub axle, as its maker describes, or with an expanding blind-bearing puller; the kit takes over as soon as one side is open.
2. **From the inside,** set the ring of the bearing's size against its inner face, rod passed through the hub.
3. **On the exit side,** place between the hub and the handle a part whose opening lets the bearing through: a larger ring from the kit or a socket.
4. **Screw in slowly:** the bearing breaks free with a snap, then comes out. It is never refitted: pulling it has deformed its races.

> **PRESS-FIT BOTTOM BRACKETS**
>
> Same move inside the frame shell, a ring on each side, shell spotless: that is what keeps the creaking away.

04 · BUILT TO LAST

CARE, MISTAKES, TROUBLESHOOTING

Caring for the kit

- Wipe the rings after every job: a clean ring centres, a greasy ring slides askew.
- A drop of light oil on the press thread; case closed, kept dry.
- Every ring in its place: a lost ring is one bearing size gone.
- A marked, distorted or cracked ring goes aside.

If something goes wrong

SYMPTOM	LIKELY CAUSE	FIX
Rough spot after fitting	Bearing pressed askew or tightened past the shoulder	Pull it, clean, press a new bearing
Side play in the wheel	Bearing not bottomed out, or only one bearing replaced	Tighten again; replace both
Creaking when pedalling	Dirty shell or seat, bearing not seated	Remove, clean, grease, refit
The ring goes into the bearing	Wrong code	Re-read the seal, take the next pair
Tightening goes hard before the shoulder	Tilted bearing	Back off, realign, resume

On video

Independent tutorials, scan to watch.

Bicycle wheel hub bearings replacement tips
Zavyalov Cycling · English

How to replace your BB30 press-fit bottom bracket bearings
Brian Maynard · English

Atelier : changement roulement roue arrière
Butter Cream Suspension · French

Need help?

velkyne.com/contact
Our team answers your questions about bearing codes and ring selection.

Square, slowly, on the right ring.
Three conditions, and a bearing that runs for years. None of them calls for force.

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