USER MANUAL

BEARING PRESS KIT, 7075 ALUMINIUM

Fitting and removal of hub, press-fit bottom bracket and frame pivot bearings: 18 pairs of tapered drifts in 7075 aluminium, T-shaped threaded rod, non-slip handle, carry case. This manual explains how to identify a bearing, pull the old one and press the new one in without harming the seat.

REF. KIT7 · 7075 ALUMINIUM + STEEL · CASE 33 × 26 × 8 CM



01 · BEFORE YOU START

WHAT'S IN THE CASE

ITEM	QUANTITY	DETAIL
Tapered press drifts	**18 pairs**	CNC-machined 7075 aluminium, one pair per bearing size (table p. 3)
T-shaped threaded rod	**1**	High-strength, with nuts and stops
Non-slip handle	**1**	Push pads, balanced grip
Spacers and guide washers	**set**	Take up the spare length and keep the stack centred
Carry case	**1**	330 × 260 × 80 mm, a slot for every drift

What this kit does

It replaces hammer and socket with a **screw**: turning the handle drives the drifts along the rod and pushes the bearing into its seat, or out of it, with a **straight, slow and measured** force. The drifts are tapered: they centre themselves in the bearing and pass the load through the **outer race**, the one that is pressed in, without loading the balls.

Compatibility

- Cartridge bearings in road and MTB **hubs** (front, rear, freehub body).
- **Press-fit bottom bracket** bearings: BB30, PF30, BB70, BB86, BB90, BB92.
- **Pivot** and linkage bearings on full-suspension frames.
- Sizes covered: 608, R6, 6000, 6001, 6800 to 6806, 6900 to 6903, 1526, 1728 and 22/24 × 37. Not for cup-and-cone hubs with loose balls.



Every drift has its own slot in the case: one glance checks the kit before you close it.

SAFETY

- Gloves and safety glasses: a bearing breaks free with a sharp snap.
- Never a hammer, on the bearing, the drifts or the rod.
- Hand tightening only, a quarter turn at a time. If the effort feels wrong, stop: something is out of line.
- The load goes through the outer race. A drift bearing on the inner race alone wrecks the bearing.
- On a carbon frame or a thin alloy hub, never force it: clean, realign, start again.

You will also need

- The tools to strip the hub axle and end caps, or the crankset.
- An expanding blind-bearing puller, for the first bearing of a closed hub.
- Degreaser, a clean cloth, assembly grease, callipers.
- New bearings of the same size as the old ones.

02 · GETTING READY

IDENTIFY THE BEARING, PICK THE PAIR

The size code is printed on the bearing **seal**, for example **6805-2RS**. Only the digits matter for choosing the drifts; the suffix (2RS, LLB, ZZ…) describes the sealing. If the marking has worn off, measure the bore (d), outer diameter (D) and width (B) with callipers and find the matching line.

CODE	D × D × B (MM)	DRIFT TO USE
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
22/24 × 37	22 or 24 × 37 × 7	22/24 × 37

d = bore · D = outer diameter · B = width, standard dimensions for each series. The 6806 is the BB30 and PF30 bearing; the 22/24 × 37 is stepped for 24 mm and 22/24 mm spindle shells (BB86, BB92).



Each drift carries its code and dimensions. When in doubt, the callipers decide.

T-rod — The axis of the whole assembly. Its bar is a grip: you hold it, you never turn it with a spanner.

Handle — This is the nut. Its push pads bear on the drift; turn it by hand, slowly.

Spacers, washers — Fill the spare length on the rod and keep the drifts flat.

THE RIGHT DRIFT

Set on the bearing, the drift centres in the bore **with no play** and its face meets the outer race. If it floats or squashes the seal, take the next pair.

03 · PROCEDURE A

REMOVING A WORN BEARING

1. **Strip around it.** Wheel off, remove the axle, the end caps and, at the rear, the freehub body, as the hub maker describes. For a press-fit bottom bracket, remove the crankset. Clean the outside and photograph the order of the spacers.
2. **Find the direction.** A bearing comes out **towards the outside**, pushed from inside the hub or the shell. 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.
3. **Fit the pusher.** Slide the rod through the hub and, on the inside, fit the drift of the bearing's size: its tapered face enters the bore and its flat face bears on the bearing.
4. **Set up the exit support.** On the outside, place between the hub and the handle a drift or spacer whose opening **lets the bearing through**: it will receive the extracted bearing. Add washers so everything sits flat.
5. **Screw the handle up to contact,** then check that the rod is in line and that every part bears on its full face. A skewed stack marks the seats.
6. **Tighten a quarter turn at a time.** Hold the T-bar, turn the handle. The bearing breaks free with a snap, then slides into the exit support. Keep going until it is fully out.
7. **Repeat on the other side,** then clean the seats with degreaser. No old grease, corrosion or burr may remain before reassembly.



T-rod, handle and drifts assembled on a bearing: the force stays in line.

IF IT WON'T MOVE

- The bearing does not budge despite firm tightening: **stop**. The pusher may be bearing on a shoulder of the hub, or the exit support does not let the bearing through.
- Bearing seized by corrosion: penetrating oil, ten minutes of patience, then try again. No heat on a carbon hub or on a frame shell.
- A removed bearing is never refitted: pulling it has deformed its races.

FRAME PIVOTS

Same principle for the pivot bearings of a full-suspension frame, with the relevant link removed. Work one link at a time so axles and spacers never get mixed up.

04 · PROCEDURE B

PRESSING IN THE NEW BEARINGS

1. **Prepare the seat.** Clean and dry, then a **thin film of grease** on its wall: the bearing goes in without binding and the seat will not corrode.
2. **Pick the pair of drifts** for the bearing size (table p. 3). Two bearings to press, two identical pairs: one drift on each side.
3. **Offer the bearing up square,** flat on the mouth of the seat, marking facing out as originally. A bearing started at an angle jams within the first millimetre.
4. **Build the stack on the rod:** T-bar → drift → bearing → hub → opposite drift or support → washers → handle. When both bearings are new, press them **together**, each drift acting as the counter-support for the other.
5. **Turn slowly.** A quarter turn, a look: the bearing must advance square, without tilting. If it leans, back off, realign, resume.
6. **Stop at the shoulder.** When the bearing bottoms out or sits flush, the tightening firms up sharply: **do not push on**. Going further preloads the bearing and can crack a hub or a frame shell.
7. **Check and reassemble.** Remove the tool, check the bearing bears all the way round, then refit axle, spacers and end caps in the order of your photo. Torque values: those of the hub or crankset maker.

Final check

ITEM	EXPECTED
Spinning by hand	Smooth, no rough spot, no noise
Side play	None
Bearing	Bottomed out, flat, seal intact
First ride	Check for play again after a few dozen kilometres

Press-fit bottom brackets

BB30 and PF30 bearings are pressed with the 6806 pair, 24 mm spindle shells with the stepped 22/24 × 37 drift, one drift on each side of the shell. The shell must be spotless: creaking comes from dirt between bearing and frame, not from the bearing.

> **ROUGH SPOT AFTER FITTING**
> Bearing pressed at an angle, tightened past the shoulder, or debris left in the seat. Pull it out (procedure A), clean, and press in a **new** bearing: this one is scrap.

> **IN PAIRS**
> Always replace both bearings of a hub or a bottom bracket. A new one facing a worn one develops play within a few rides.

05 · BUILT TO LAST

CARING FOR THE KIT, MISTAKES TO AVOID

Caring for the kit

- Wipe drifts, rod and handle after every use; a drop of light oil on the thread.
- Every drift back in its slot: the case is the kit's only inventory.
- A drift with a marked taper or a distorted flat face goes aside: it no longer presses square.
- Case closed, kept dry. Anodised aluminium does not rust; the steel thread of the rod likes to stay clean.

Six mistakes that damage a hub

MISTAKE	CONSEQUENCE
Hitting with a hammer	Ovalised seat, warped bearing
Wrong drift size	Load off the outer race, crushed seal
Tightening fast or askew	Tilted bearing, instant rough spot
Dirty or dry seat	Bearing not seated, creaking
Pushing on past the shoulder	Preload, cracked hub or shell
Replacing one bearing only	Play comes back, faster wear

Going further, on video

Independent tutorials, scan to watch.

Replace sealed cartridge hub bearings
The Bike Sauce · English

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

Démontage, remontage d'un boîtier de pédalier press-fit
VTT Attitude · French

Need help?

velkyne.com/contact
Our team answers your questions about bearing codes and bottom bracket standards.

Force has no place here.
A well-pressed bearing asked for one thing only: the right drift, in line, one quarter turn after another.