

FAG



Bottom Bracket Bearing BB66

Bottom bracket bearing
for city, trekking and load-carrying cycles

SCHAEFFLER

Foreword

The performance capability and load capacity of cycles are determined to a significant extent by the components used.

FAG has decades of experience in the development and production of cycle bottom bracket bearings, which is reflected in FAG bottom bracket bearings.

As a result, cycles fitted with the FAG bottom bracket bearing have a technical advantage and greater market acceptance.

FAG bottom bracket bearings have a high load capacity, are of a ready-to-fit design and can be fitted easily.

Bottom bracket bearings

Features

The bottom bracket bearing BB66BSA is characterised by:

- smooth-running design
- integrated deep groove ball bearings with double action seals on both sides (additional sealing action due to the housing)
- anti-corrosion protection
- Shimano® mounting fixture
- more space for feeding cables
- suitability for load-carrying cycles.

Technical data

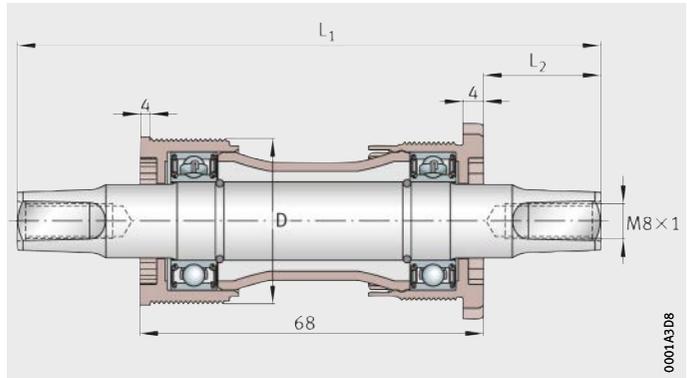
Features		Bottom bracket bearing BB66BSA
Housing	Width	68 mm
	Material	Glass fibre reinforced plastic
	Finish	Black
Bottom bracket bearing thread		BSA 1,37"×24 TPI
Minimum thread length		20 mm (each side)
Crank mounting		JIS
Spindle length		113 mm to 127 mm
Mass		260 g
Certification		DIN EN 14766-MTB

Bottom bracket bearing BB66BSA

The bottom bracket bearing BB66BSA, JIS fulfils the requirements of DIN EN 14766, *Figure 1*. The pedal cranks are attached to the axle by means of two screws $M8 \times 1$ of grade 10.9. The bottom bracket bearing has a mass of 260 g.

$D = 1,37''$

Figure 1
Bottom bracket bearing BB66BSA



The spindle of the bottom bracket bearing BB66BSA, JIS has a conical square section of thickness 12,63 mm to the Japanese standard (JIS) on both sides, see table.

Designs

Bottom bracket bearing	Spindle lengths	
	L_1 mm	L_2 mm
BB66BSA-JIS113/18	113	18
BB66BSA-JIS116/21	116	21
BB66BSA-JIS119/23	119	23
BB66BSA-JIS122,5/24	122,5	24
BB66BSA-JIS127/25,5	127	25,5

Tools and accessories

For correct mounting of the BSA bottom bracket bearing, the following tools are available:

- bottom bracket bearing hand wrench with FAG fixture (designation Z-564414-1071. MWKZ#K)
- bottom bracket bearing wrench socket (available by agreement).

The fixing screws ($M8 \times 1$, grade 10.9) are available as accessories under the designation Z-563956.02.SHR_HLB#N.

Bottom bracket bearings

Design and safety guidelines Mounting requirements

For correct mounting of the BSA bottom bracket bearing, the frame must have:

- left hand thread on the chain ring side
- right hand thread on the non-chain ring side.

Mounting

Before carrying out any work, please read the manual fully and observe the guidelines.



Use the appropriate tools only. Do not use an impact wrench. Observe the tightening torque.

Scope of delivery

Before starting work, check that all the parts in the scope of delivery are present, *Figure 2*.

The bottom bracket bearing comprises:

- 1 bottom bracket bearing housing for chain ring side with bottom bracket bearing unit (left hand thread, marked LH)
- 1 bottom bracket bearing housing for non-chain ring side (right hand thread, marked RH).

- ① Screw M8×1 (separate accessory)
- ② Bottom bracket bearing housing for non-chain ring side
- ③ Bottom bracket bearing unit
- ④ Bottom bracket bearing housing for chain ring side

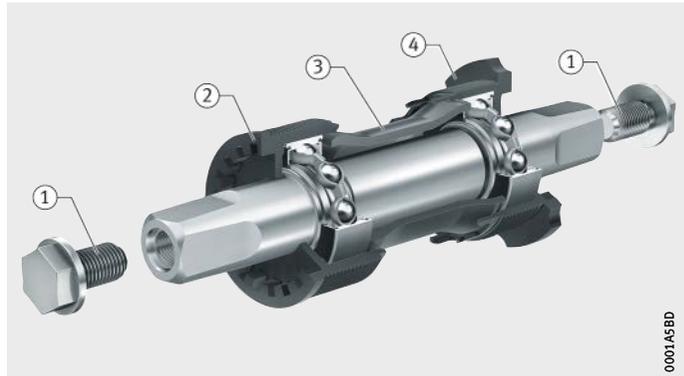


Figure 2
Scope of delivery
Bottom bracket bearing BB66BSA

Tools

Suitable tools for mounting of the bottom bracket bearing are:

- bottom bracket bearing hand wrench with Shimano® fixture
- bottom bracket bearing wrench socket with Shimano® fixture.

Alternatively, the bottom bracket bearing housing for the chain ring side can be mounted using the bottom bracket bearing hand wrench or the bottom bracket bearing wrench socket with the FAG fixture.

Mounting

Check whether the threads in the frame are cleanly cut and free from paint. If necessary, clean the threads.

Apply some grease or mounting paste to the threads of the crank sleeves.

Screw in the bottom bracket bearing housing for the non-chain ring side with the right hand thread (RH) on the side opposing the chain ring by hand to approximately one third of the thread length.

The screwing-in direction is clockwise, *Figure 3*.

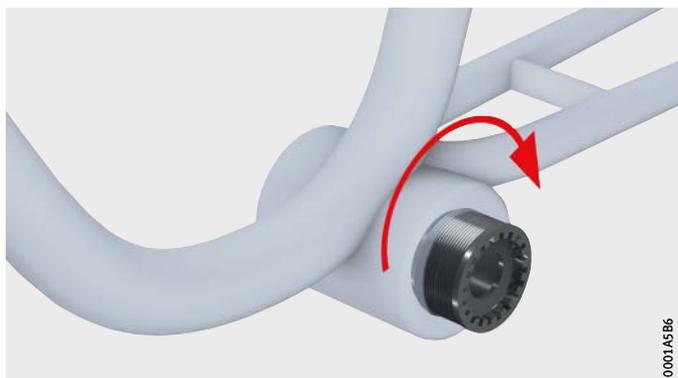


Figure 3
Screwing in
the bottom bracket bearing housing
for the non-chain ring side (RH)

Screw in the bottom bracket bearing housing for the chain ring side with the bottom bracket bearing unit with the left hand thread (LH) by hand on the frame.

Screw in the bottom bracket bearing housing for the chain ring side (LH) with the bottom bracket bearing unit lightly into the frame.

The screwing-in direction is anticlockwise, *Figure 4*.

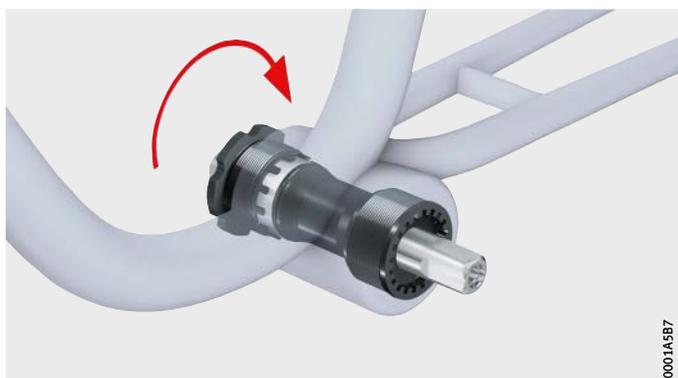


Figure 4
Screwing in
the bottom bracket bearing housing
for the chain ring side (LH)

Bottom bracket bearings

Screw in the bottom bracket bearing housing for the chain ring side (LH) using the bottom bracket bearing hand wrench or the bottom bracket bearing wrench socket until the flange is in contact with the frame. The screwing-in direction is anticlockwise, *Figure 5*.



Observe the tightening torque of 30 Nm.



Figure 5
Tightening
the bottom bracket bearing housing
for the chain ring side using
a bottom bracket bearing hand
wrench

Screw in the bottom bracket bearing housing for the non-chain ring side (RH) using the bottom bracket bearing hand wrench or the bottom bracket bearing wrench socket until the flange is in contact with the frame. The screwing-in direction is clockwise, *Figure 6*.



Observe the tightening torque of 30 Nm.

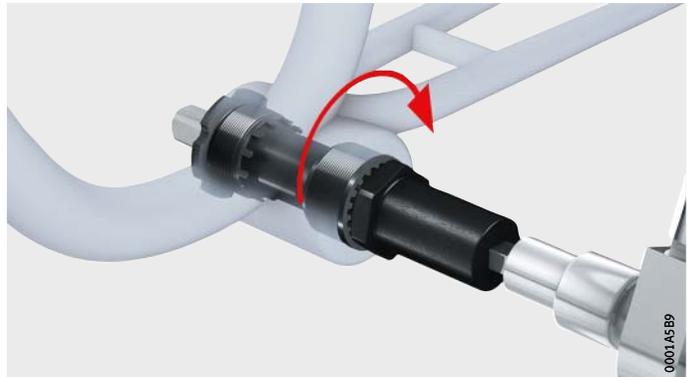


Figure 6
Tightening
the bottom bracket bearing housing
for the non-chain ring side using
a bottom bracket bearing hand
wrench

The bottom bracket bearing is now fitted.

Fix the pedal cranks to the bottom bracket bearing spindle using the supplied screws M8×1. Tighten the screws using a torque wrench.



Observe the tightening torque of 35 Nm.

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Issued: 2014, January

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TPI 187 GB-D