



SUGINO

SPIRIT of JAPAN

Bottom Bracket list
for road bike

B.B. CONVERTER

BB CONVERTER series enables to install a crank with $\phi 24\text{mm}$ axle to various frame standards, offers smooth rotation, superior dust & waterproof quality and durability, for Sugino IDS24 and Shimano Hollowtech II cranks.



① Rotation and Dust & Water Protection

The BB series known for smooth and long-lasting rotation also offers impressive performance in terms of durability. The advanced seal provides great protection against dust and water without impairing rotation performance. So, it guarantees to deliver both smooth rotation and durability. These features are also incorporated into POWER SLEEVE series (P.2) and TREK BB (P.3).

② Stiffness and Rotation

The stiffness of the cup is increased, so the cup is less deformable when press-fitted to the frame. The bearing will operate with less friction and torque, which allows you to enjoy utmost performance of the high precision bearing.

③ Lightweight

Left and right cups separated, joining the cups with a plastic sleeve, optimized design for light weighting.



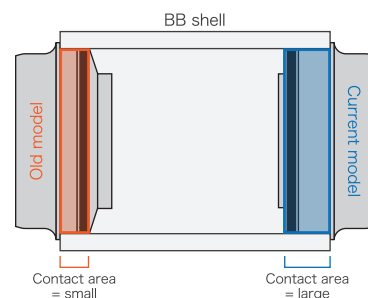
Slim sleeve design allows room for Di2 wires.

Separate type

The BB consists of a left and right cups with a plastic sleeve joining the cups. It will enhance overall characteristics of the frame and maximize performance.

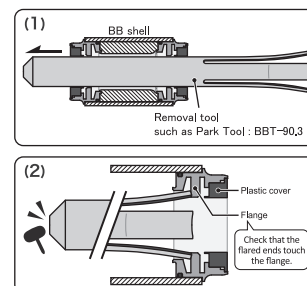
④ Stability

BB is designed to enlarge the contact area between cups and shell so that the BB will remain stable in the frame.



⑤ Easy removal

Press Fit type BB can be removed by a hammer type tool, as it has a flange on the inner wall of the cup, where the tool is snagged on, which allows you to remove the BB with less force and minimal amount of damage to the BB and frame.



*Please read the service manual carefully, as it contains important information which you should be aware of when removing the BB.

Aluminum Shim Tape

For press-fit BB, it compensates for gaps and imperfection within frame shell, and secures BB on the frame.

*The shim tape cannot be used for POWER SLEEVE (P.2).



Set contents : 2 x Black (thick) & 2 x Grey (thin)

SUPER CERAMIC

	BB BSA IDS 24	BB SHPF IDS 24	BB 386EVO IDS 24 CONVERTER	BB PF30 IDS 24 CONVERTER	BB PF30A IDS 24 CONVERTER	BB 30 IDS 24 CONVERTER	BB 30A IDS 24 CONVERTER
MB-608 (BSA) SUPER CERAMIC							
STEEL BEARING							

	Threaded	Press Fit					
1	BSA	PF BB86	BB386EVO	PF30	PF30A	BB30	BB30A
2	BC1.37x24T	41mm	46mm	46mm	46mm	42mm	42mm
3	68mm	86.5mm	86.5mm	68mm	73mm	68mm	73mm

Frame

B.B. shell

Crank compatibility

- Sugino : IDS24
- SHIMANO : Hollowtech II ($\phi 24\text{mm}$ axle)

BB30-IDS24

Spacer

OVERSIZED BB SYSTEMS IDS 24 CONVERTER

B.B. CONVERTER

POWER SLEEVE

BB with special Creak-free structure, left & right cups integrated, smooth rotation, dust & waterproof quality and rigidity guaranteed, and re-useable, for Sugino IDS24 and Shimano Hollowtech II cranks.



OVERSIZED
BB SYSTEMS
IDS 24
CONVERTER

③ Reusable

The special structure allows easy installation & removal, which reduces risk of damage to frame and BB, facilitates maintenance of internal cables, and enables reuse of BB after removal.

④ Creak-Free

Cause of Creaking noise

Creaking noise is caused by a gap between BB and frame which is created if either the frame or BB is out of tolerance or deformed due to long term use. Also, it can be caused by contaminants in the bearing.

POWER SLEEVE

CNC machined with ultra-high precision, featuring **thread-in structure** and **gasket-rings**, this unique structure solves noise issues. Also, **special seal** keeps dust & water out of bearing.

Thread-in structure

Left & right cups are integrated by thread-in structure and sandwiching shell between them to prevent motion. Gasket-ring helps maintain secure fitting during many rides. Added rigidity around BB area ensures power transmission.

Gasket-ring

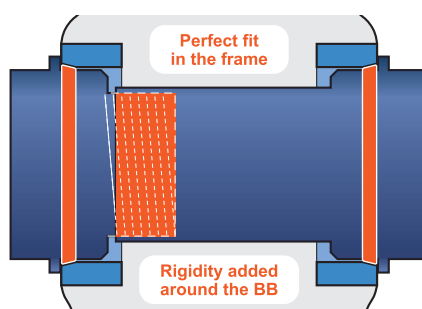
Original system for secure fitting. Power Sleeve has optimum clearance between cup and shell. Gasket-rings fill the clearance and provide secure fitting.

① Unique left & right integrated structure

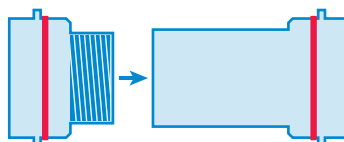
Thanks to thread-in structure and gasket-ring, it compensates for imperfection and wear-out within frame shell, and fits perfectly in the frame. Thus, it eliminates problems that other companies' BB have (such as too tight to fit, creaking noise).

② Rotation and Dust & Water Protection

Using technology successfully incorporated into BB CONVERTER (P.1), smooth rotation and dust & waterproof quality are guaranteed.



Left & right cups integrated

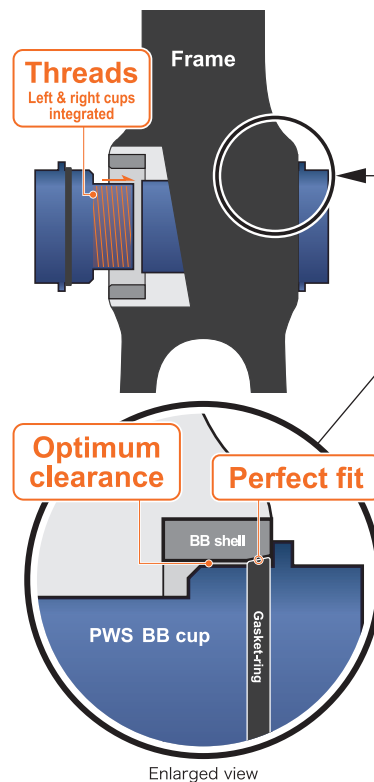


Thread-in structure

Gasket-ring

Special seal

Creaking
issues are
eliminated



PWS Gasket-ring set

Replacement gasket rings. If gasket-ring is damaged or worn, replace it with a new one.



PWS Gasket-ring set
for BB30/BB30A

PWS Gasket-ring set
for PF30/PF30A/BB386 EVO

Set contains : 2 x gasket rings

POWER SLEEVE List

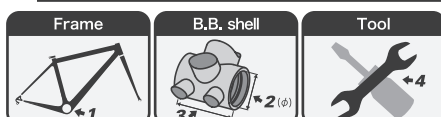


Press Fit

	BB386EVO	PF30	PF30A	BB30	BB30A
1	BB386EVO	PF30	PF30A	BB30	BB30A
2	46mm	46mm	46mm	42mm	42mm
3	86.5mm	68mm	73mm	68mm	73mm

TL-PWS BB wrench set
TL-PWS 86 tool set

TL-PWS BB wrench set



Crank compatibility

- Sugino : IDS24
- SHIMANO : Hollowtech II (φ24mm axle)



OVERSIZED
BB SYSTEMS
IDS 24
CONVERTER

TOOL



TL-PWS BB wrench set



TL-PWS 86 tool set

*Dedicated tools are required for installation and removal.

TREK B.B.

BB series for TREK frames, lightweight, high precision, high durability, special dust & waterproof structure to provide smooth rotation and longevity of ceramic bearings. For Sugino IDS24 and Shimano Hollowtech II cranks.

Sugino T47 SUPER CERAMIC



① T47 standard adopted by TREK

Trek adopted the treaded T47 standard on both carbon and alloy frames of the 2020 version of its select bikes. Sugino T47 BB can be used on both carbon and alloy frames.

② Easy installation and removal

Due to thin flanges on T47 cups, a wrench may slip off and damage BB and frame. The special tool TL-PWS 86" which matches the cup perfectly, makes installation and removal easy, and facilitates maintenance of internal cable.

TOOL

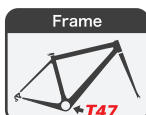


TL-PWS BB wrench set

* Dedicated tools are required for installation and removal.



for
TREK



Crank compatibility

- Sugino : IDS24
- SHIMANO : Hollowtech II (φ24mm axle)



Sugino BB90 SUPER CERAMIC Ver.2



① Superior dust & waterproof quality

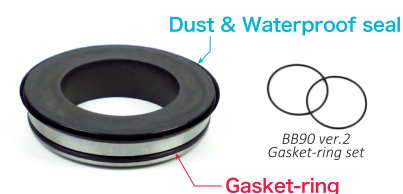
BB90 on the market are not well sealed, wear out fast and need maintenance so often. Sugino BB90, thanks to its advanced seal, can exhibit its high performance for a longer period. Also, due to less BB replacing frequency, risk of damage to the frame will be reduced.

② Upgraded to Version 2

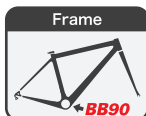
By adopting new structure with gasket rings, waterproofness is further improved. It provides secure fitting and less damage to the frame.

If gasket-ring is damaged or worn, replace it with a new one.

Set contents : 2 x gasket rings



for
TREK



Crank compatibility

- Sugino : IDS24
- SHIMANO : Hollowtech II (φ24mm axle)



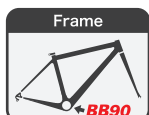
Sugino BB90-GXP SUPER CERAMIC Ver.2



Sugino BB90 for SRAM GXP crank, performs same functions as Sugino BB90 SUPER CERAMIC ver.2.

* For SRAM GXP crank only.

for
TREK



Crank compatibility

- SRAM : GXP



SHPF (BB86) SUPER CERAMIC / STEEL



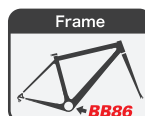
SHPF (BB86)
SUPER CERAMIC



SHPF (BB86)
STEEL

A number of TREK bikes uses BB86 standard. For those frames, BB CONVERTER - SHPF (BB86) can be used.

* For details, refer to P.1



Crank compatibility

- Sugino : IDS24
- SHIMANO : Hollowtech II (φ24mm axle)



B.B. CONVERTER POWER SLEEVE TREK B.B.

Sugino's B.B.



Made-in-Japan highest grade, high precision, ceramic bearing is used. The extremely low friction feature ensures super smooth rotation. Cyclists need to adjust power and cadence, so the ceramic bearing is most effective as less energy is required to turn pedals. It offers remarkable performance gain in competitions requiring high power output.

**WATER
PROOF
DESIGN**

Friction-free seal structure offers great protection against dust and water without impairing rotation performance. Gasket-rings fill the clearance between surfaces, keep out water effectively, and help prevent troubles of internal cables of electric components. Sugino BB is superior in both rotation and waterproof performances to others.

Crank compatibility guide

BB CONVERTER (P.1), POWER SLEEVE (P.2), TREK BB (P.3) are for crank with $\phi 24$ mm axle, namely Sugino IDS24 and Shimano Hollowtech II cranks.

Sugino BB90-GXP SUPER CERAMIC is for SRAM GXP cranks only.

Crank compatibility

● Sugino : IDS24

● SHIMANO : Hollowtech II ($\phi 24$ mm axle)



Crank compatibility

● SRAM : GXP



Sugino
IDS24



SHIMANO
Hollowtech II



SRAM
GXP

B.B. compatibility guide

TREK

TREK standard	Sugino BB	Page
T47 threaded	Sugino T47	3
BB90	Sugino BB90	3
Shimano PressFit	SHPF (BB86)	1
Shimano BB86.5		

Cannondale

Cannondale standard	Sugino BB	Page
PressFit30	BB30-IDS24	
BB30a	BB30A-IDS24	
BB30	PF30-IDS24	1, 2
PF30	PF30A-IDS24	
etc.		*Depending on standard used.

GIANT

GIANT standard	Sugino BB	Page
Press Fit (BB86)	SHPF (BB86)	1
Press Fit (BB86.5)		

Road and Cyclocross models all follow the BB86 standard.

*The above data is based on the information on website of each brand, as of Jan 2020.

CAUTIONS!!

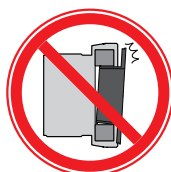
Sugino BB converter series includes excellent water & dust protection mechanism.

However, overhauling the cup unit will impair its functions and result in permanent failure and damage. So, don't disassemble the BB.

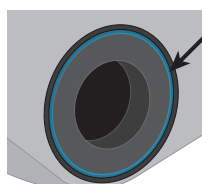
Any additional lubrication is not required.

Do Not Disassemble

Never remove plastic cover. Never disassemble. Otherwise, it may result in permanent failure.



Do Not Disassemble



OK

Plastic cover Lip



1, Wipe off dirt.
2, Apply oil and wipe away any excess.

Due to special sealing mechanism, maintenance of the interior of the bearing is not necessary.

⚠ Never remove the plastic cover. If once it is removed, it cannot be restored. This will result in permanent failure and void the warranty.

⚠ Abnormalities caused by mishandling, such as water contamination in the bearing, grease flown out of bearing and damaged seal will shorten the bearing life drastically. As such is not covered by warranty. — refer to the left illustration.

⚠ Please conduct maintenance on the lip of the plastic cover periodically. — refer to the left illustration.