SPIRIT of JAPAN

2016

Bicycle PARTS

2016

Brand Story

Sugino has over a century of experience as a bicycle parts maker focusing on high-end parts.
Because of its reliable quality, Sugino also produces OEM parts for well-known complete bicycle makers.
Especially, its drive-train parts are chosen by many athletes in various competitions, such as Tour de France, Giro d'Italia, World Championship, Olympics, etc. and contribute their winnings.
Thus, with the know-how accumulated through its long experience, Sugino can offer higher-quality parts.

www.suginoltd.co.jp/

ENGLISH

SUGINO ENGINEERING CORPORATION
http://www.suginoltd.co.jp
Feb. 2016 Sugino Printed in Japan

OX Series

∅24mm Through Axle B.B. Compatible

Road · Hill climb · Cyclocross · Touring · Granfondo · Triathlon

OX crank offers advanced performance in various scenes, such as road races, triathlon, hill climbing.
OX901D is 10% lighter than the conventional model, compatible with Shimano 11 speed and designed anew for smoother shifting.

11 SPEED · IDS 24 ∅24mm Axle · 160-175mm



OX901D Compact Plus+

P.C.D.	:	110mm / 74mm
B.B.	:	MB-608-II (※ See page 9) With B.B.
Compatibility	:	SHIMANO 11Speed / 10Speed
Crank Length	:	160 / 165 / 167.5 / 170 / 172.5 / 175mm
Crank	:	Hard forged aluminum alloy
Chain Line	:	43.5mm
Q Factor	:	145mm
Combinations	:	52-36T 50-36T / 50-34T 48-36T / 48-34T / 48-32T 46-36T / 46-34T / 46-32T / 46-30T 44-36T / 44-34T / 44-32T / 44-30T

NEW **OX901D Classic**
Compact Plus+

※ The same specification as OX901D Compact Plus+ but with different graphics.



OX601D
Compact Plus+

10-9 SPEED

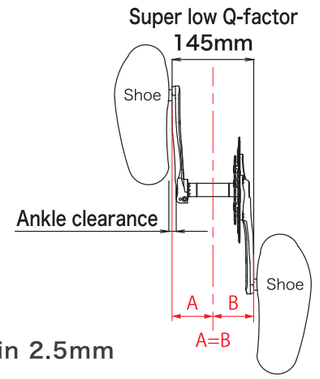


Color :
Silver
Black

※ 52-36T combination is not available for OX601D.

Ankle clearance and super low Q-factor

The OX crank has a large “ankle clearance” which prevents rider’s shoes from hitting the crank.
The super low Q-factor (minimized to 145mm) perfectly symmetric (A=B) is more efficient in pedaling and reduces the stress on the foot.



A variety of crank lengths

The cranks are available in lengths from 165 through 175 in 2.5mm increments and a short length of 160mm. The riders can choose one depending on their physical needs and lifestyles. The optimal riding position will reduce the stress on the body while pedaling.

Compact Plus+

It is a double crank but designed to use both 74mm and 110mm PCDs. This mounting pattern is Sugino original, called “Compact Plus+”, which enables the use of inner ring smaller than 34T and ensures a wide range of compatible rings and effective gear ratios. Compact Plus+ offers higher performance in such scenes that require physical strength, like hill climbing, cyclocross, long-distance ride.



“Compact Plus+” ensures a range of effective gear ratios for various scenes.

Compact (P.C.D.110mm)

EV110S※
52-36T
50-36T / 50-34T
48-36T / 48-34T
46-36T / 46-34T
44-36T / 44-34T

Compact Plus+

CP110S & 74S※ (P.C.D.110 & 74mm)
48-32T
46-32T / 46-30T
44-32T / 44-30T

※ EV and CP → See page 7

HI
SPEED
LOW

Road Races / Triathlon
For close-fought road races and short-distance triathlon, the 52T/36T ～ 50T/34T combinations are the most suitable.
For long-distance triathlon, to fight alone against air resistance, the outer chainring shoud be chosen among from 48T ～ 52T depending on couse conditions.

48T/34T · 50T/34T · 52T/36T

Granfondo / Touring
In order to ride with constant speed over a long distance, the outer chainring should be chosen among from the 46T ～ 50T.
For mountain courses, the inner chainring between 30T ～ 32T would be the bestchoice.

46T/30T · 48T/32T · 50T/34T

Cyclocross
When riding off-roading, performance becomes more important than speed. So, the 44T ～ 46T are the most suitable outer chainrings.

44T/30T · 44T/32T · 46T/34T

Hill Climbing
The average speed is comparatively-slow, but a great deal of stamina is required. So, by using the 30T ～ 32T inner chainring, you can maximize your energy.

44T/30T · 46T/30T · 48T/32T

LOW PERFORMANCE HI

EXP Series

PF30 & BB 30 compatible ∅30mm Through Axle

Triathlon Timetrial Road Cyclocross

The chainwheel set for professionals, combining both lightweight and high strength, 11 speed compatible, with a 30mm axle for BB30 or PF30 bottom bracket.
The bottom brackets are user selectable.

11 SPEED | IDS 30 ∅30mm Axle | BB30 / PF30 | 165-175mm





Super Aero
As the spider arms are flat in the same plane as the chainring, the arms are invisible when viewed from the front of the bike. Thus, it is designed to minimize air resistance and maximize aerodynamic effect.

Direct Drive
As the spider arms are flat in the same plane as the chainring, the pedaling power is directly transmitted to the drive.

EXP130 ZEN STRADA

P.C.D.	:	130mm
B.B.	:	select from Ⓐ~Ⓓ types above
Compatibility	:	SHIMANO 11Speed / 10Speed
Crank Length	:	165 / 167.5 / 170 / 172.5 / 175mm
Crank	:	Hard forged aluminum alloy
Chain Line	:	43.5mm
Q Factor	:	145mm
Combinations	:	54-42T / 54-39T 53-42T / 53-39T



The ZEN STRADA is a Super chainring with an aero-shape design suitable for Time trial and Triathlon races, and its rigidity is the world highest level.
The high-precision CNC chainring creates smooth rotations. It also features highly-rigid shifting pins to ensure smooth shifting without loss of power.

Bottom Bracket

BB set for PF30
For Sugino EXP crankset

Ⓐ 

PF30 CE (ceramic bearing)

Ⓑ 

PF30 ST (steel bearing)

BB set for BB30
For Sugino EXP crankset

Ⓒ 

BB-EXP30 CE Super Ceramic (ceramic bearing)

Ⓓ 

BB-EXP30 ST (steel bearing)

11 SPEED | IDS 30 ∅30mm Axle | BB30 / PF30 | 165-175mm

EXP110 - 901D

P.C.D.	:	110mm
B.B.	:	select from Ⓐ~Ⓓ types above
Compatibility	:	SHIMANO 11Speed / 10Speed
Crank Length	:	165 / 167.5 / 170 / 172.5 / 175mm
Crank	:	Hard forged aluminum alloy
Chain Line	:	43.5mm
Q Factor	:	145mm
Combinations	:	52-36T 50-36T / 50-34T 48-36T / 48-34T 46-36T / 46-34T





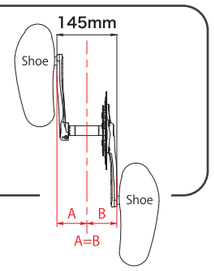
11 SPEED | IDS 30 ∅30mm Axle | BB30 / PF30 | 165-175mm

EXP110 - 601D

Color	:	Silver / Black
P.C.D.	:	110mm
B.B.	:	select from Ⓑ,Ⓓ types above
Compatibility	:	SHIMANO 11Speed / 10Speed
Crank Length	:	165 / 167.5 / 170 / 172.5 / 175mm
Crank	:	Hard forged aluminum alloy
Chain Line	:	43.5mm
Q Factor	:	145mm
Combinations	:	52-36T 50-36T / 50-34T 48-36T / 48-34T 46-36T / 46-34T

Super low Q-factor

The super low Q-factor (minimized to 145mm) perfectly symmetric (A=B) is more efficient in pedaling and reduces the stress on the foot.



MiGHTY

Road Touring

The classic style unaltered through time, succeeded the name of
“Sugino Mighty”

NEW **With EV chainrings※, Mighty series are up-graded to 11 speed version.**
For longtime bike lovers, for road & touring.

※ EV → See page 7



Silver

11 SPEED | JIS TAPER | 160-175mm

Mighty Comp.Road - 901D

P.C.D.	:	130mm
Type	:	4-TAPER（JIS）
B.B.	:	CBBAL-110 With B.B.
Crank Length	:	160 / 165 / 167.5 / 170 / 172.5 / 175mm
Compatibility	:	SHIMANO 11Speed / 10Speed
Color	:	Silver / Black
Crank	:	Forged aluminum alloy
Chain Line	:	43.5mm (CBBAL-110)
Combinations	:	53-39T / 53-38T 46-39T / 46-38T



Black



Silver

11 SPEED | JIS TAPER | 160-175mm

Mighty Tour - 901D

P.C.D.	:	110mm
Type	:	4-TAPER（JIS）
B.B.	:	CBBAL-110 With B.B.
Compatibility	:	SHIMANO 11Speed / 10Speed
Crank Length	:	160 / 165 / 167.5 / 170 / 172.5 / 175mm
Color	:	Silver / Black
Crank	:	Forged aluminum alloy
Chain Line	:	43.5mm (CBBAL-110)
Combinations	:	52-36T 50-36T / 50-34T 48-36T / 48-34T 46-36T / 46-34T 44-36T / 44-34T



Black



Silver

11 SPEED | JIS TAPER | Short Crank | 140-155mm

Mighty Mignon - 901D

P.C.D.	:	110mm
Type	:	4-TAPER（JIS）
B.B.	:	CBBAL-110 With B.B.
Compatibility	:	SHIMANO 11Speed / 10Speed
Crank Length	:	140 / 145 / 150 / 155mm
Color	:	Silver / Black
Crank	:	Forged aluminum alloy
Chain Line	:	43.5mm (CBBAL-110)
Combinations	:	52-36T 50-36T / 50-34T 48-36T / 48-34T 46-36T / 46-34T 44-36T / 44-34T



Black

XDSeries

Road Touring

NEW **XD - 701D**

SQ JIS TAPER | 160-175mm

P.C.D.	:	110mm
Type	:	4-TAPER（JIS）
B.B.	:	CBBF-110 With B.B.
Compatibility	:	SHIMANO 10Speed / 9Speed
Crank Length	:	160 / 165 / 167.5 / 170 / 172.5 / 175mm
Color	:	Silver / Black
Crank	:	Forged aluminum alloy
Chain Line	:	43.5mm (CBBF-110)
Combinations	:	50-36T / 50-34T 48-36T / 48-34T 46-36T / 46-34T



CBBF-110

Axle	:	110mm
Type	:	4-TAPER (JIS)
Cup Thread	:	BC1.37×24T
BB Width	:	68mm





BB for Mighty Series



CBBAL-110

Axle	:	110mm
Type	:	4-TAPER (JIS)
Cup Thread	:	BC1.37×24T
BB Width	:	68mm
Material	:	Cup - Aluminum alloy

Tool

TL-CBB (BB installation tool)



applicable tool
- 24mm spanner
- 1/2inch (12.7mm) socket wrench

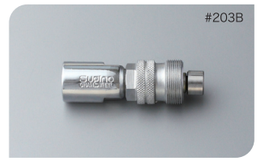
applicable model
- Sugino square taper cartridge BB (CBBAL, CBBF, all sizes)
- Custom Works BB for Φ24mm axle (BB SLC)
- Shimano square taper cartridge BB

Extractor #202 / #203B (Crank removal tool)

applicable tool
- 15mm hexagonal socket with handle (#202)
- 14mm hexagonal wrench, 16mm spanner (#203B)

applicable model
- Square taper crank

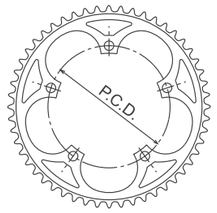




ROAD CHAINRING

Extensive lineup, from 11 speed to 7 speed

PCD130mm, 110mm and 74mm
chainrings with a variety of sizes



P.C.D. = B.C.D.

Pitch Circle Diameter	:	P.C.D.
Bolt Circle Diameter	:	B.C.D.

NEW 11 Speed (SHIMANO compatible)

11 SPEED Model	EV130S	EV110S	CP110S & 74S
Image			 for OX901D Compact Plus+
Color ● Black , ○ Polish			
P.C.D.	130mm	110mm	110mm	74mm
Outer	46 / 53T	44 / 46 / 48 / 50 / 52T	44 / 46 / 48T	–
Inner	38 / 39T	34 / 36T	–	30 / 32T
Material	CNC aluminum alloy			
Compatibility	SHIMANO 11Speed / 10Speed			

※ EV series and CP series are not compatible.

11 SPEED Model	ZEN STRADA
Image	
P.C.D.	130mm
Outer	53 / 54 / 55T
Inner	39 / 42T ※
Material	CNC aluminum alloy
Compatibility	SHIMANO 11Speed / 10Speed
Color	● Black

※ The same specifications as EV130S (inner)



ZEN STRADA



CP110S

Shifting performance

The chainrings precisely machined are not only beautiful. By providing a path for the chain on the backside, smoother shifting is realized.
The recessing structure restrains the weight increase while maintaining strength and stiffness. The high rigid shifting pins minimize momentum loss when changing gears.
Thus, Sugino 11 speed and 10 speed chainrings are the top quality products made using such latest technologies.

10 Speed (SHIMANO compatible)

10 SPEED Model	PE130S	PE110S	PE74S
Image			
P.C.D.	130mm	110mm	74mm
Outer	46 / 53 / 56T	40 / 42 / 44 / 46 / 48 / 50 / 52T	–
Inner	38 / 39 / 42 / 44T	34 / 36T	24 / 26 / 28 / 30 / 32T
Material	CNC aluminum alloy		
Compatibility	SHIMANO 10Speed / 9Speed		
Color	● Black , ○ Silver		

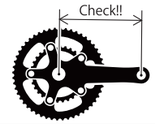
8 SPEED Model	130J	110J	110J & 74J (For Triple)
Image			
P.C.D.	130mm	110mm	110mm & 74mm
Outer	46 / 48 / 50 / 52 / 53 / 54 / 56 / 60T	46 / 48 / 50 / 52 / 53 / 54T	Combination 110J - 110J - 74J: 48 - 38 - 28T / 48 - 36 - 26T / 48 - 36 - 24T
Inner	38 / 39 / 40 / 42 / 44T	34 / 36 / 38 / 39 / 40 / 42 / 44T	
Material	Aluminum alloy		
Compatibility	8Speed / 7Speed		
Color	○ Silver		

Compact Plus+

It is a double crank but designed to use both 74mm and 110mm PCDs. This mounting pattern is Sugino's original, called "Compact Plus+", which enable the use of inner ring smaller than 34T and ensures a wide range of compatible rings and effective gear ratios. Compact Plus+ offers higher performance in such scenes that require physical strength, like hill climbing, cyclocross, long-distance ride.

Crank Length and Body Height Chart

This chart shall be used only as a guide.
Please choose a crank length depending on your physical needs.
We would recommend consulting a professional for a suitable crank length.



Height : cm \ Crank Length : mm	175	172.5	170	167.5	165	160	155	150	145	140
185	■									
180	■	■								
175	■	■	■							
170		■	■	■						
165			■	■	■					
160				■	■	■				
150						■	■	■		
140								■	■	■

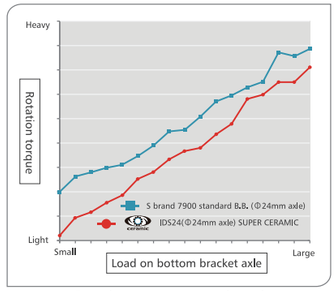
Bottom Bracket

SUPER CERAMIC

OVERSIZED BB SERIES FOR ROAD BIKE

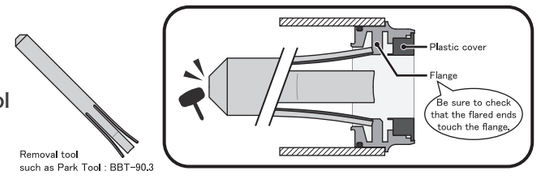
New series in the bottom bracket lineup featuring excellent rotational performance!
The high precision ceramic bearing system realizes amazing smooth rotational performance.
SUGINO focused on minimizing rotational resistance in win-or-lose situations such as during acceleration and under high-load conditions.

As a result, we succeeded in reducing the resistance by 20% for Road BB !



Rotation torque comparison data

- The rigidity of the cup is increased, the rotational performance is further improved.
- The dust-proofing effect is increased without impairing the rotational performance.
- For the Press fit BB, a hammer type removal tool (such as Park Tool : BBT-90.3) can be used.



BB30-IDS24 CONVERTER is renewed to fit both BB30 and BB30A frames!



	Threaded	Press fit				
Frame	BSA	PF BB86	BB386EVO	PF30	BB30	BB30A
BB shell ※1 ※2	BC1.37×24T 68mm	Φ41mm 86.5mm	Φ46mm 86.5mm	Φ46mm 68mm	Φ42mm 68mm	Φ42mm 73mm

※1 : inner diameter
※2 : width

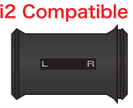
Sugino Road Bike bottom brackets are compatible with;
- IDS24 series
- SHIMNO ∅24mm axle road cranks

※Please contact a professional for installation and settings.



SHIMANO 11 Speed Di2 Compatible

Due to the shape of the water sheath, there is enough space for Di2 internal cable routing.

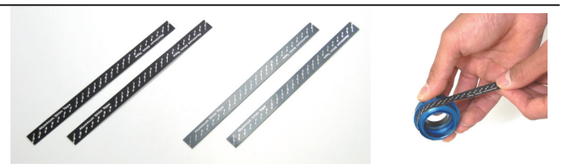


※Please consult with a Professional when choosing BB.

Aluminum Shim Tape

The aluminum shim tape is for Sugino press fit BB series, which is used to compensate for gaps between the BB and frame by wrapping it around the BB cup and secure the BB.

Set contents : 2×Black(thick) and 2×Grey(thin)

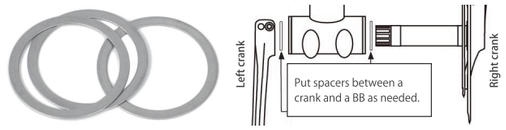


SMALL PARTS

CHAINRING FIXING BOLTS & NUTS	Color	Model No.	BOLT	NUT
OX Compact bolt set & spacer	Silver	#801 SL	Torx 30	Hexagon 6
	Black	#801 BK		
	Blue	#801 BL		
	Red	#801 RD		
	Gold	#801 GO		
	Pink	#801 PK		
	Green	#801 GN		
OX Compact Plus+ bolt set	Silver	#803 SL	Torx 30	NUT
	Black	#803 BK		
	Blue	#803 BL		
	Red	#803 RD		
	Gold	#803 GO		
	Pink	#803 PK		
	Green	#803 GN		
EXP / Mighty bolt set	Silver	#703 SL	Torx 30	Hexagon 6
	Black	#703 BK		
	Blue	#703 BL		
	Red	#703 RD		
	Gold	#703 GO		
	Pink	#703 PK		
	Green	#703 GN		
RD Messenger / BMX bolt set	CP	#402 CP	5 Hexagon	NUT
	Black	#402 BCP		
XD steel bolt set	CP	#403 CP	5 Hexagon	NUT
	Black	#403 BCP		
Inner steel bolt	CP	#403 BOLT		-

Crank spacer

Crank spacer set for two-piece cranks (Φ24mm axle)
Put them between a bottom bracket and a crank to adjust a distance.
Φ29×Φ24×t0.5mm / 3 pieces set



Chainring spacer



Φ15×Φ10×t0.5mm
5 piece set

Φ15×Φ10×t3.4mm
5 piece set

BB AXLE BOLTS	Tool	Material	Reference
KPB	8 Hexagon	Cr-Mo Steel	M8×1.0
14BK	14mm		
14CP			
15CP	15mm		

CRANK DUST CAP	Tool	Material
CNS Alloy Dust Cap (with 14 Bolt)	5 Hexagon	Aluminum

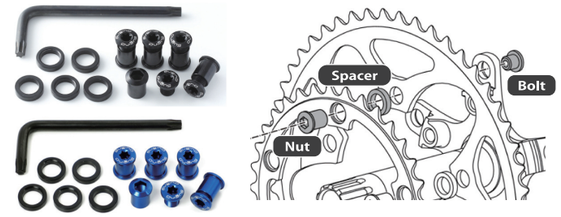
The ultra-lightweight alloy cap and axle bolt set for square taper crank. The wide range of colors allows you to choose the most suitable one for your bike.

Seatpost Clamp Bolt	Tool	Material
17mm	5 Hexagon	Cr-Mo Steel CP finish
19mm		
22mm		
25mm		

COLOR Silver Black Blue Red Gold Pink Green

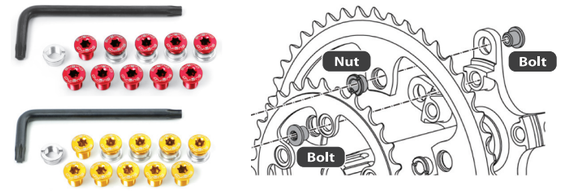
OX Compact bolt set & spacer #801

For OX series Compact (PCD110mm) w/3.4mm spacers



OX Compact Plus+ bolt set #803

For OX series Compact Plus+ (PCD110mm & PCD74mm)



EXP / Mighty bolt set #703

For EXP series and Mighty series

The high-strength aluminum alloy torx bolt is much more durable compared with a standard alloy bolt. It is lightweight, strong and beautifully colored.



XD steel bolt set #403 For XD series



Inner steel bolt #403





COLOR Siver Green Brass gold Bright orange Red Black Aqua blue Blue Violet Neon pink





