



SUGINO

SPIRIT of JAPAN

2016

2016

Bicycle PARTS

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.

SUGINO ENGINEERING CORPORATION

<http://www.suginoltd.co.jp>

Feb. 2016 Sugino Printed in Japan



www.suginoltd.co.jp/

ENGLISH

OXSeries

Ø24mm Through Axle B.B. Compatible



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.



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 / 50-34T / 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

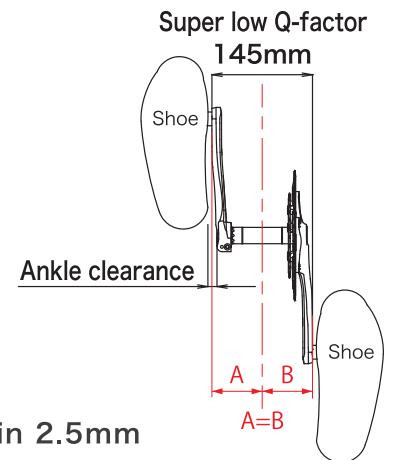


※ 52-36T combination is not available for OX601D.

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.

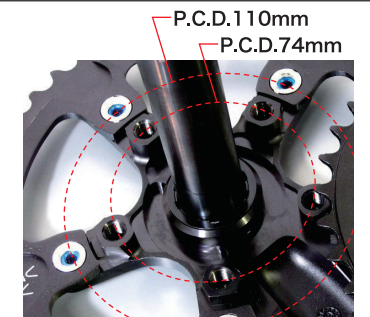


A variety of crank lengths

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

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 should be chosen among from 48T ~ 52T depending on course 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 best choice.

46T/30T 48T/32T 50T/34T

Cyclocross

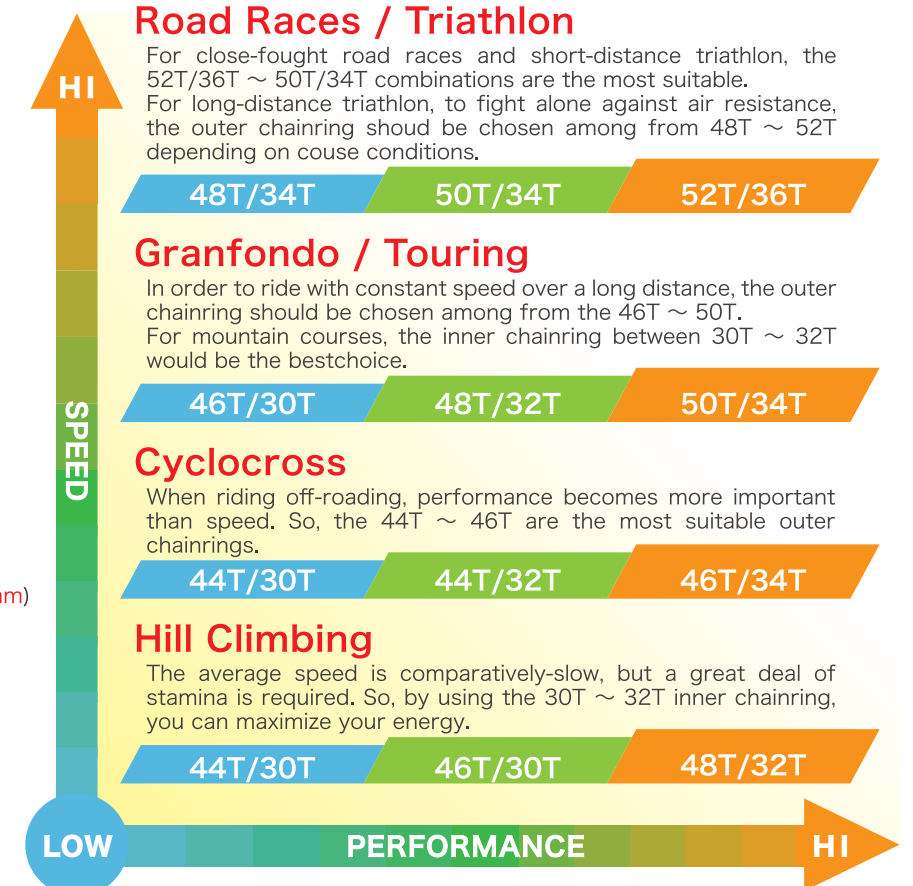
When riding off-roading, performance becomes more important than speed. So, the 44T ~ 46T are the most suitable outer chainrings.

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



EXP Series

PF30 & BB 30 compatible Ø30mm Through Axle



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.



EXP130 ZEN STRADA

- P.C.D. : 130mm
- B.B. : select from (A)-(D) 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



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.



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



EXP110 - 901D

- P.C.D. : 110mm
- B.B. : select from (A)-(D) 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



NEW

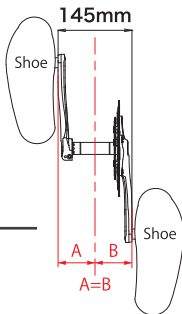


EXP110 - 601D

- Color : Silver / Black
- P.C.D. : 110mm
- B.B. : select from (A)-(D) 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**Sugino**

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

**XD Series****NEW XD - 701D**

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

**Sugino**

Silver

**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

**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

**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

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



#202

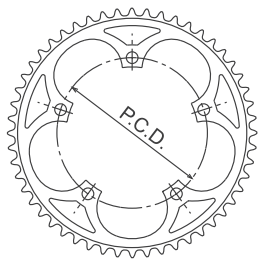


#203B

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



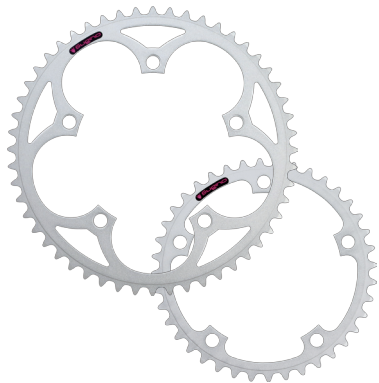


CP110S

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		

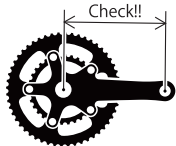
8 SPEED Model		130J	110J	110J & 74J (For Triple)	
Image					
	P.C.D.	130mm	110mm	110mm & 74mm	
	Outer	46 / 48 / 50 / 52 / 53 / 54 / 56 / 60T	46 / 48 / 50 / 52 / 53 / 54T	Combination 110J - 110J - 74J	48 - 38 - 28T
	Inner	38 / 39 / 40 / 42 / 44T	34 / 36 / 38 / 39 / 40 / 42 / 44T		48 - 36 - 26T 48 - 36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



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

Bottom Bracket

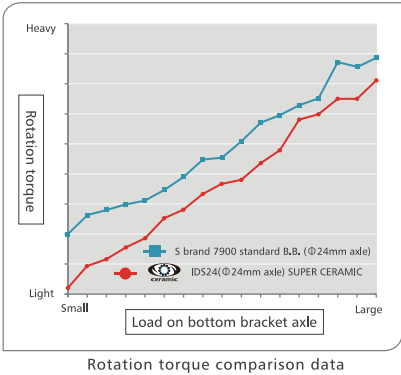
Sugino



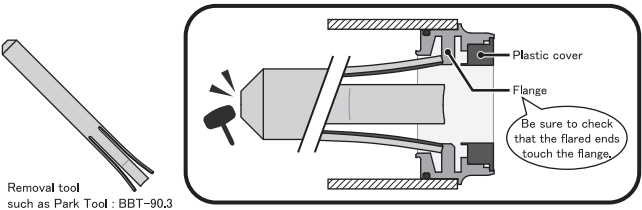
SUPER CERAMIC OVERSIZED BB SERIES FOR ROAD BIKE

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 !



- 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.



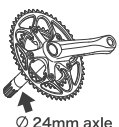
BB30-IDS24 CONVERTER is renewed to fit both BB30 and BB30A frames!



	Threaded	Press fit				
Frame	BSA	PF BB86	BB386EVO	PF30	BB30	BB30A
BB shell	BC1.37 × 24T 68mm	Φ 41mm 86.5mm	Φ 46mm 86.5mm	Φ 46mm 68mm	Φ 42mm 68mm 73mm	

※1 : inner diameter
※2 : width

Sugino Road Bike bottom brackets are compatible with;
• IDS24 series
• SHIMANO Ø24mm axle road cranks
※Please contact a professional for installation and settings.



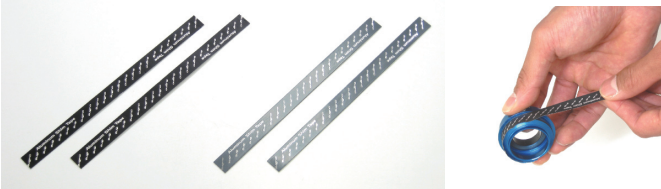
SHIMANO 11 Speed Di2 Compatible
Due to the shape of the water sheath, there is enough space for Di2 internal cable routing.

※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)



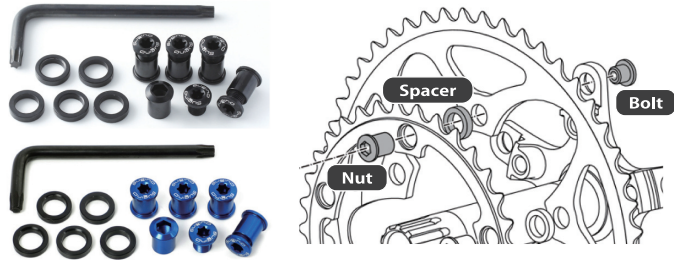
SMALL PARTS

Sugino

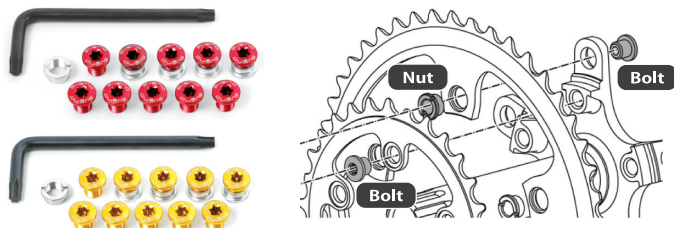
CHAINRING FIXING BOLTS & NUTS				
	Color	Model No.	BOLT	NUT
OX Compact bolt set & spacer	Silver	#801 SL	Torx 30	Hexagon 6
	Black	#801 BK		
	Blue	#801 BL		
	Red	#801 RD		
	Gold	#801 GO		
	Pink	#801 PK		
OX Compact Plus+ bolt set	Green	#801 GN	Torx 30	NUT
	Silver	#803 SL		
	Black	#803 BK		
	Blue	#803 BL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



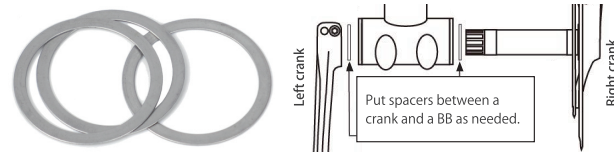
OX Compact bolt set & spacer #801
For OX series Compact (PCD110mm) w/3.4mm spacers



OX Compact Plus+ bolt set #803
For OX series Compact Plus+ (PCD110mm & PCD74mm)



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



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.



Chainring spacer
Φ15 × Φ10 × t0.5mm
5 piece set
Φ15 × Φ10 × t3.4mm
5 piece set



XD steel bolt set #403 For XD series



Inner steel bolt #403



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



CRANK DUST CAP		
Model	Tool	Material
CNS Alloy Dust Cap (with 14 Bolt)	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		
Size	Tool	Material
17mm	Hexagon	Cr-Mo Steel CP finish
19mm		
22mm		
25mm		

