FC-6400-sg FC-6400 BB-6400

Front Chainwheel

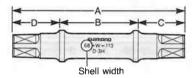
**Bottom Bracket** 

For proper and safe performance, read and follow these instructions carefully.

## **■**Product specifications

Material		Light alloy and steel		
Bolt circle diameter		130mm		
Applicable chain		Shimano UG narrow chain		
Chainring teeth	Biopace SG	52T×42T		
	Round SG gear	52T, 53T×42T		
	Biopace	50T, 52T, 53T×42T		
	Round gear	48T~53T×39T~45T		
Crank length		165mm, 167.5mm, 170mm, 172.5mm, 175mm		
Pedal threads		B.C.9/16"×20T.P.I.(English thread),M14×P1.25(French thread		
Bottom bracket cup thread dimensions		1.37×24T (English thread), M35×1.0 (French thread), M36×24T (Italian thread)		
Chain line		43.5mm		
Crank back to outer gear gap		9mm		
B.B. spindle		113mm (68mm shell width), 115mm (70mm shell width)		

#### Bottom bracket spindle width



	Shell width	Α	В	С	D
D-3H	68	113	51.1	31	31
D-5H	70	115	53.1	31	31

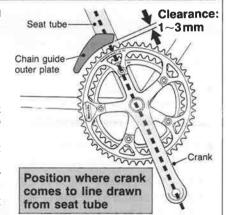
(Unit: mm)

### ■ Note

### Chains other than the Shimano narrow-type chain cannot be used.

Note the following cautions regarding the Biopace chainring.

- Use a front derailleur that has a capacity that is equivalent to the difference of number of teeth between the front chainwheel's large gear and small gear, plus 3 teeth.
- The installation position of the front derailleur should be where the crank comes to the position of an imaginary line drawn from the seat tube. Then adjust so that the clearance between the large gear and the chain guide outer plate is 1~3 mm and install the front derailleur.



Set the seal ring and seal cap after first adjusting the bottom bracket

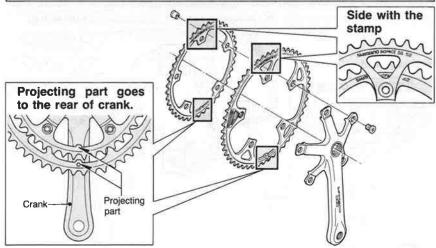
assembly.

This is a contact type seal to assure an effective seal so the hanger shaft may feel hard to turn by hand but it will have no effect when



# Installation of the chainring

The features of the Biopace SG gear, round SG gear and Biopace gear will not be obtained if installation of the chain ring is at the incorrect position or if it is not assembled correctly. Be sure, therefore that is assembled correctly and installed at the correct position.



are subject to change for impro

SHIMANO AMERICAN CORPORATION
One Shimano Drive, Irvina, California U.S.A. 92718 Tel. (714) 951-5003 One Shimano Drive, Irvine, California U.S.A. 92718 Tel. (714) 95
SHIMANO (SINGAPORE) PTE, LTD.
No. 20, Benoi Sector, Jurong Town, Singapore 2262 Tel. 2654777

SHIMARO (EUROPA) GmbH.
Kleinhülsen 1-3 4010 Hilden, West Germany Tel. 02103-5005-0 SHIMANO INDUSTRIAL CO., LTD. 3-77 Oimatsucho, Sakai, Osaka, Japan Tel. (0722) 23-3243