

# Installation

english

## Syncros Steel Cranksets

### Installation Instructions

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#### Congratulations

You have just purchased a pair of the highest quality, ultra light, cranks in the world. The materials have been carefully selected to provide the ultimate in light weight without sacrificing performance. Your new Syncros Steel Cranks have been rigorously engineered, painstakingly handcrafted and meticulously inspected to provide thousands of miles of trouble free, industrial grade performance.

All Syncros components are subjected to rigorous, destructive testing by our computerized testing robot to prove their strength and reliability. Further field testing, by our network of professional racers, ensures optimal performance and function. Our commitment to perfection is your ticket to thousands of miles of trouble free riding.

Improper assembly and adjustment will dramatically reduce this product's strength, performance and life span. Please follow the enclosed instructions carefully, or preferably, have a professional bike shop install and service it for you.

If you have any questions or comments regarding this or any Syncros product, or you've just got a good story, drop us a line; we'd love to hear from you. Rider input fuels our passion.

#### Technical Specifications:

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##### Material:

Arms:	Custom drawn tubular Reynolds, heat-treated CroMoly.
Spider:	7075T6 Aluminum alloy, anodized black
Bolts:	Ti 6-4 Titanium alloy, cold rolled thread
Power plate:	Al2024T3 cold forged taper
Weight:	460g - 175mm

##### Sizes:

Length:	170, 172.5, 175, 177.5mm
Fits:	Road: 109mm bb Mtn: 117mm bb 74 - 110mm bolt pattern (mtn) 58 - 94mm bolt pattern (compact) 130mm bolt pattern (road)
Finish:	Matte black epoxy powder coat

#### A: Bike Preparation

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1. Shimano™ style non adjustable bottom brackets should be properly installed per the manufacturers instructions. Bottom brackets with adjustable chainline (Syncros) should be installed into the frame but not finally adjusted.

2. Syncros Steel cranks use a 117mm bottom bracket to achieve Shimano's recommended chainline of 47.5mm for most triple chainring cranks. Some suspension bikes, however, have very wide chainstays and will need a longer bottom bracket. It may also be possible to use shorter BB spindles on some bikes.

3. The taper flats of the bottom bracket spindle should be as clean as possible prior to crank installation. This can be done by rubbing lightly with a piece of abrasive plastic scouring pad (like 3M Scotchbright).

#### B: Crank Preparation

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1. Non drive-side crank requires no preparation.

2. Assemble drive side crank arm.

a. Mount middle and outer chainrings onto spider plate with regular outer chainwheel nuts and bolts (not supplied). Nuts should be torqued to 50 inlb (4 ftlb), 5.6Nm.

b. Mount spider plate/chainwheel. Thread crank arm through the center of plate/chainwheel assembly. Line up timing mark on chainring with crank arm.

Inner chainring bolts hold inner chainring and spider plate to crank.

Ti/Alu. inner chainring bolts are included, there are two sizes of spacers included for chainrings of different widths. Place the Ti bolt with the 5mm head on the outer face with the Alu. bolt on the inside. Inner chainwheel nuts should be torqued to 70 inlb (6 ftlb), 7.9Nm.

**Note:** Little bolts like these can be twisted off or stripped if over tightened. Nuts and bolts should always be assembled with a drop of locktite 242 (blue).

#### C: Crank Mounting

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##### Non adjustable (Shimano™) bottom brackets

1. Place cranks on the bottom bracket spindle (180 °. opposed), torque crank bolts (not included) to 35 ftlb (48 Nm) for first installation and 25 ftlb (34 Nm) on all re-installations.

##### Adjustable (Syncros) bottom brackets

1. Place cranks on the bottom bracket spindle (180 °. opposed), torque crank bolts (not included) to 35 ftlb (48 Nm) for first installation and 25 ftlb (34 Nm) on all re-installations.

2. Measure and note chainline.

3. Remove crank from spindle, adjust bb spindle to correct position (this may take several tries). When bottom bracket is in the correct position tighten it per manufacturer's installation instructions.

4. Repeat step 1.

#### Warranty

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At Syncros we use only the highest quality American made aerospace grade materials in all of our components. Each component is hand crafted with pride and rigorously inspected to insure quality.

We manufacture distinct levels of components to satisfy the demands of discerning riders.

Titanium handlebars, Titanium seatposts & Titanium bottom brackets and the Road Racing stem are designed for top level professional racing only and as such we recommend their replacement annually. Due to their ultra-light weight, they are warrantied, for a period of two years, against defects in materials and workmanship only. They are NOT warrantied against failures due to overload and fatigue wear. Note: ball bearings are not covered by this warranty.

Syncros Rims and Chainrings are designed to take an incredible amount of punishment but we consider them to be consumables, they wear out! Therefore these components are warrantied against defects in materials and workmanship for 60 days from date of purchase.

All other Syncros components are robustly built and designed for aggressive riding. Because they are built with more metal in critical areas, they are warrantied for five years against defects in materials and workmanship and for two years against overload and fatigue wear. Note: ball bearings are not covered by this warranty.

Component failure due to improper mounting, lack of proper maintenance or accidental damage are not covered by this warranty.

Since we have no control over our products' final use we cannot warrant their suitability for specific riders or uses.

Warranty claims must be made through authorized Syncros dealers only. Please keep your original sales receipt.

Life expectancy of each component can vary widely with frequency and type of use, maintenance, crashes, rider size and riding style. Therefore we strongly recommend:

1. Read and follow product installation instructions faithfully. Do not ever modify your components. Any modification will void all warranties.

2. Clean, lubricate and meticulously inspect your components regularly. Replace the component immediately if any bumps, dents, bends, cracks or other anomalies appear.

3. Bicycle components can fail catastrophically due to overloading, impact and/or fatigue. Although it may not be initially evident, overload and/or impact from a crash may induce undetectable microscopic cracks in the metal that will dramatically reduce the serviceable life of the part and may lead to catastrophic fatigue failure. If your bicycle is in a crash we recommend product replacement.

4. As with any metal structure, wear will be proportional to intensity and duration of use. When in doubt, throw it out.

We wish you lots of trouble free riding and ask that you respect the IMBA Off-Road Code, ride safely, wear a helmet and have fun.

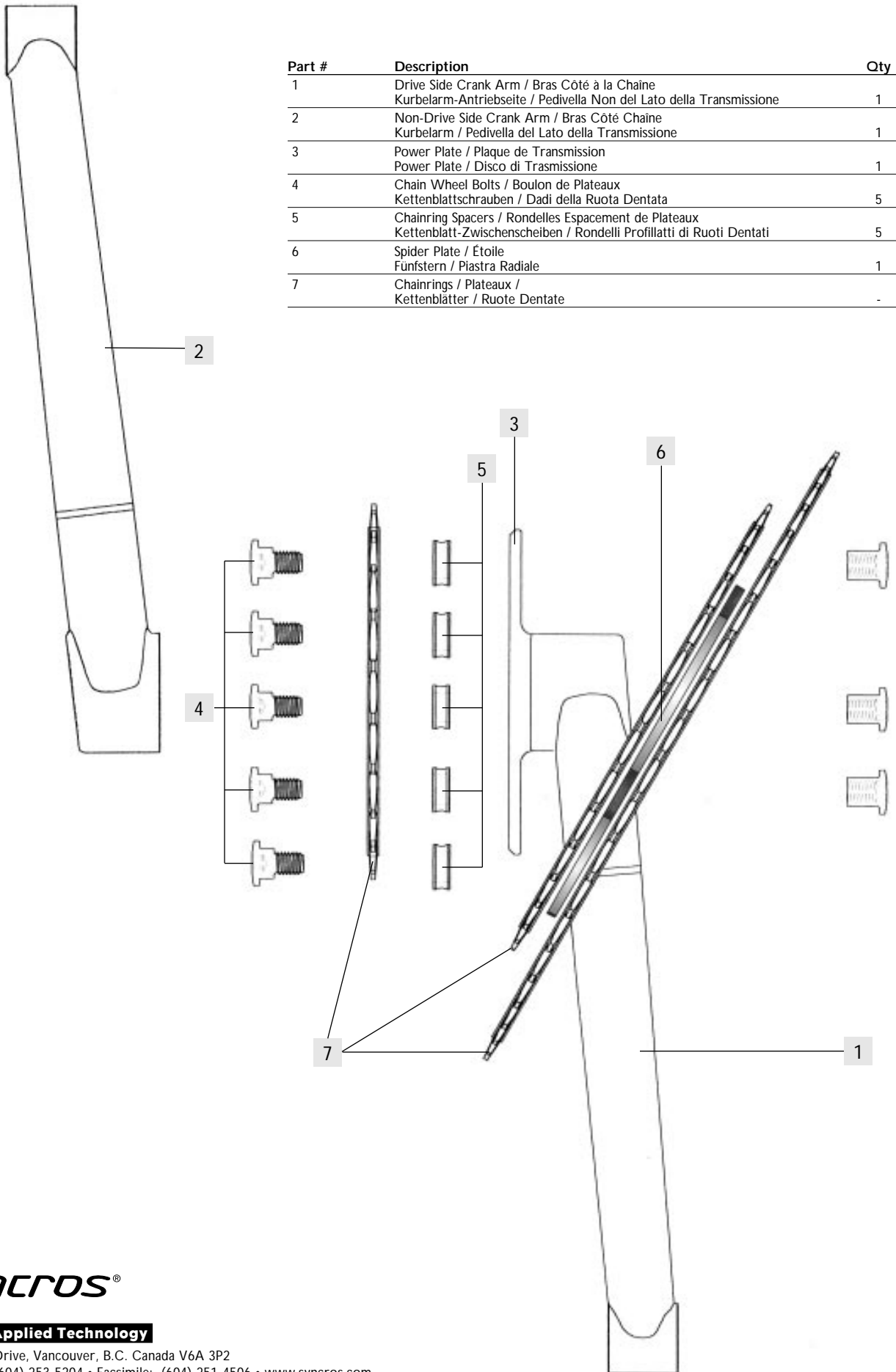
Component specifications may change at any time as we continue to improve our products.

Safety First!

**SYNCROS®**

General Assembly: Syncros Steel Cranksets

Part #	Description	Qty
1	Drive Side Crank Arm / Bras Côté à la Chaîne Kurbelarm-Antriebsseite / Pedivella Non del Lato della Trasmissione	1
2	Non-Drive Side Crank Arm / Bras Côté Chaîne Kurbelarm / Pedivella del Lato della Trasmissione	1
3	Power Plate / Plaque de Transmission Power Plate / Disco di Trasmissione	1
4	Chain Wheel Bolts / Boulon de Plateaux Kettenblattschrauben / Dadi della Ruota Dentata	5
5	Chainring Spacers / Rondelles Espacement de Plateaux Kettenblatt-Zwischenscheiben / Rondelli Profillatti di Ruoti Dentati	5
6	Spider Plate / Étoile Fünfstern / Piastra Radiale	1
7	Chainrings / Plateaux / Kettenblätter / Ruote Dentate	-



**SYNCROS®**

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