

Installation

english

Syncros Crank-o-Matics

Installation Instructions

Congratulations

You've just purchased the trickiest crank puller-come-titanium-crank-bolt in the world. With your new titanium Crank-o-Matics, you can install or remove your cranks with a single long arm 6 mm Allen key; no other pullers, socket wrenches or special tools are required. Crank-o-Matics are titanium with a coating that permanently impregnates the bolts with lubricant, eliminating galling and seizing and allowing the bolt to be used in any titanium or steel bottom bracket spindle.

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

Material

Bolt:	Ti 6Al4V Titanium and TiOiled
Washers:	Sintered, oil filled bronze
Cap:	Zircal alloy, hard anodized
Weight:	18 grams/pair

Installation

A. Component Preparation

1. Remove old crank bolts and washers and pull cranks off with a regular crank puller.
2. Clean B.B. spindle threads and spin in Crank-o-Matic bolts by hand to check threads. If threads do not run smoothly, chase B.B. spindle threads with an M8 x 1.0 tap.
3. Clean crank puller threads, wipe taper flats in crank arm and on BB spindle with biodegradable degreaser.

B. Crank-o-Matic Installation

Note: If you are installing Crank-o-Matics onto a crank and bottom bracket (B.B.) set that have not been previously used together, you must first install cranks with a steel crank bolt torqued to 35 ft. lb. (47.6 Nm).

1. Press crank arms onto B.B. spindle.
2. Lube Crank-o-Matic bolt threads and crank bolt washers (small and large diameter) with a titanium anti-seize compound and install both washers on bolt.
3. Thread Crank-o-Matic bolts with washers into crank arms finger tight.
4. Apply 1-2 drops of Loctite 242 (blue) to threads of caps and install into crank arms with a Park red handled pin tool.
5. Tighten threaded caps and back them off 1/8-1/4 turn to allow friction free operation.
6. Tighten Crank-o-Matic bolts with a torque wrench to 25 ft. lb. (34 Nm). Make sure bolt socket is clean and that Allen key is fully inserted into to bolt head before tightening.
7. Allow fifteen minutes for Loctite to set up before attempting crank removal.

C. Crank Arm Removal

1. Loosen Crank-o-Matic bolt approximately 1/2 turn with a 6 mm long arm (6 in or 150 mm minimum) Allen key. The bolt will loosen off and then become tight again.
2. Continue to loosen bolt and crank arm will pull off B.B. spindle.

D. Crank Arm Installation

1. Clean taper flats on B.B. spindle and crank arms with a biodegradable degreaser.
2. Align taper flats in crank with B.B. spindle and carefully thread Crank-o-Matic bolt onto spindle.
3. Tighten Crank-o-Matic bolts with a torque wrench to 25 ft. lb. (34 Nm). Make sure bolt socket is clean and that Allen key is fully inserted into to bolt head before tightening.

Warranty

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 warranted, for a period of two years, against defects in materials and workmanship only. They are NOT warranted 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 warranted 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 warranted 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[®]

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