Cane Creek
Crono Wheel Instructions: Track/Fixed-Gear Road

Introduction

Unique Design: Crono defines our proprietary technology (US Patent 5810453) of spoke nipples at the hub, spoke heads at the rim, and high-tension straight pull spokes. No weird, noodle like composite materials or dicey double-threaded spokes. The Crono design is different but very sensible.

Light weight: The high spoke tension allows the use of fewer spokes. And the reorientation of the spoke nipples at the hub reduces crucial rotating mass, making the Cronos the lightest-feeling wheels you can ride.

Acceleration and Stability: The high spoke tension and low rotating mass yield instant responsiveness and robust lateral stability. The wheels track beautifully straight and give you an eye-opening stiffness and speed into and out of corners.

Durability: The combination of high-tension straight-pull spokes secured by Nylock® reinforced nipples makes Crono wheels much more resistant to deviating from their original trueness.

Serviceability: As with traditional wire-spoked wheels, truing adjustments are simple and intuitive; and crash damage can be quickly rectified without having to give up the entire wheel.

Use

Cane Creek Crono wheels are intended for single rider 2 wheel track or fixed-gear road bicycles, with conventional rim brakes. Use on mountain bikes or other off-road applications is not recommended. Always observe safe cycling practices.

Installation of Rim Strips (for clincher rims only)

It is necessary to install protective rim strips before mounting tires and tubes. Use a high quality rim strip that is wide enough to cover the spoke access holes completely. For adhesive backed rim strips, we recommend a minimum width of 15 mm for road wheels. For non-adhesive “Stretch-on” poly rim strips, widths of 17 mm are recommended. Rim stri ps are not required for tubular wheels.

Installation of Tubes and Tires

There are no special requirements for mounting tires on Crono wheels. All clincher and tubular rims are drilled for Presta valves. As always with clinchers, don’t use any sharp metal tools that can damage the tire, tube or rim. Check to be sure the tire and tube are properly seated before inflating to maximum pressure. For tubular wheels, please consult a professional bicycle shop for proper gluing and tire mounting procedures.

Valve Extenders for Deep-Section/Carbon Rims

After the tires are installed, unscrew the knurled Presta valve locknut all the way. The locknut remains unscrewed while the extender is in use. A layer of Teflon® plumbers tape on the valve threads will assure a good seal. Screw the extender down finger-tight over the valve threads. To release air, push a small wire such as a paper clip into the extender to open the valve.

Axle Nuts

Crono track hubs are supplied with front (M9x1) and rear (M10x1) axle nuts. Once the wheels are installed in the frame dropouts, use a 15mm wrench to tighten the nuts to 120 in-lbs (13.6 N*m). A 5mm hex wrench can be inserted into the hex recess to keep the axle stationary while tightening the axle nuts. Always check that the axle nuts are firmly attached before every ride.

CAUTION: *Never use nuts with an incorrect thread pitch to secure your wheel to the bicycle. Improper installation could result in a wheel system failure, causing severe injury or death.*

Track Cogs

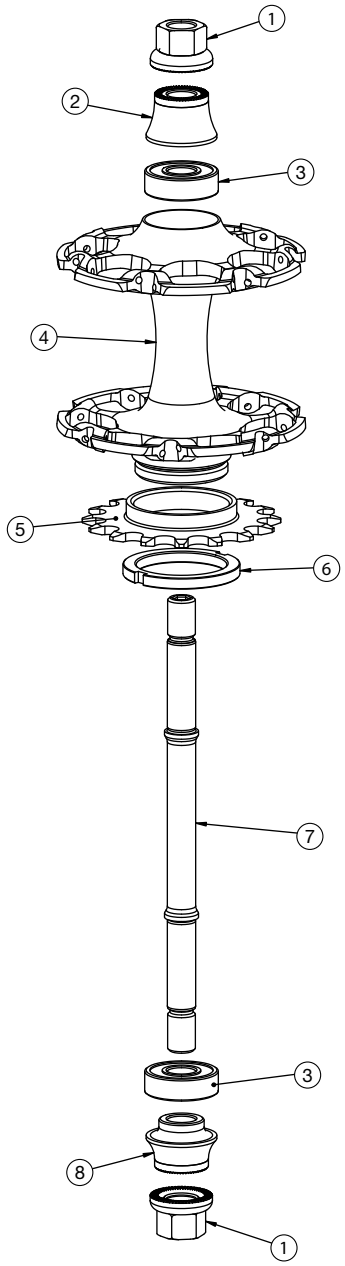
Crono track hubs are compatible with 1/8” and 3/32” cogs with BC 1.37” X 24 tpi right-hand internal threads. Install the cog (as shown in the exploded assembly view) so that the shoulder on the cog mates with the shoulder on the hub shell. Cogs threaded to ISO or other thread standards may not be compatible with your Crono track hubs. If you have any questions about track cog compatibility, please call Cane Creek Customer Service at 800.234.2725.

CAUTION: *When installing or replacing a cog, be careful not to cross-thread the cog on the hub shell. The cog should thread on smoothly (by hand) until the shoulder on the cog body mates with the shoulder on the hub shell. Use a chain whip to tighten the track cog firmly against the hub shell.*

WARNING: *NEVER install a track cog such that the sprocket teeth mate against the shoulder on the hub shell. Doing so may cause interference between the chain and hub flange - causing permanent damage and voiding the product warranty.*

NOTICE: *Crono track hubs are not designed for use with “BMX” style freewheel devices. Installing and using a freewheel device - even if the thread pitch is correct - could cause permanent damage and void the product warranty.*

Lockrings



Rear Hub Assy - Crono Track
Exploded View

1. Axle nut - M10x1
2. End Cap, rear non-drive side
3. Bearing -10 x 26
4. Hub Shell - Rear
5. Track Cog (purchased separately)
6. Lockring
7. Axle - rear
8. End Cap - rear drive side

2005 Crono Wheel Spoke Length/Tension (Track Hubs)		
Wheel	Road	
	Front	Rear
Volos Tubular	285mm	288mm
Volos Clincher	281mm	284mm
Aros 58	249mm	250mm
Spoke Tension: Road	120kg	120kg

Crono track hubs are supplied with a CroMoly lockring with BC 1.29" X 24 tpi left-hand internal threads. NOTE THAT THE LOCKRING THREADS ARE LEFT-HANDED to prevent loosening caused by drivetrain resistance (back-pedaling pressure). Lockrings with French or Itailian thread standards are not compatible with your Crono track hubs.

CAUTION: *When installing or replacing a lockring, be careful not to cross-thread the lockring on the hub shell. The lockring should thread on smoothly (by hand) until it mates with the sprocket-side face of the track cog. Use a lockring spanner to tighten the lockring firmly against the cog.*

WARNING: *Always secure the track cog with a lockring. Both the cog and lockring should be fully tightened before riding your bicycle. Periodically check the tightness of the lockring.*

Wheel Truing

Crono wheels are designed to stay straight, due to the unique configuration and high spoke tension. Should the wheels ever require truing, a 3/16" open end wrench is provided for turning the spoke nipples. The truing procedure is basically the same as for a conventional spoked wheel, except that the nipples are at the hub. The cassette cogs will have to be removed to provide access to the drive-side spoke nipples. If significant truing or spoke replacement is required, it is necessary to maintain the target spoke tensions as closely as possible. A Spoke Length/Tension Guide is provided above if spoke replacement or repair is necessary. We recommend that any truing of Cane Creek Crono wheels be performed by an experienced bicycle shop mechanic/wheel builder.

WARNING *Never try to straighten a J-bend spoke as a substitute for a straight-pull spoke in a Crono wheel.*

Spoke Information

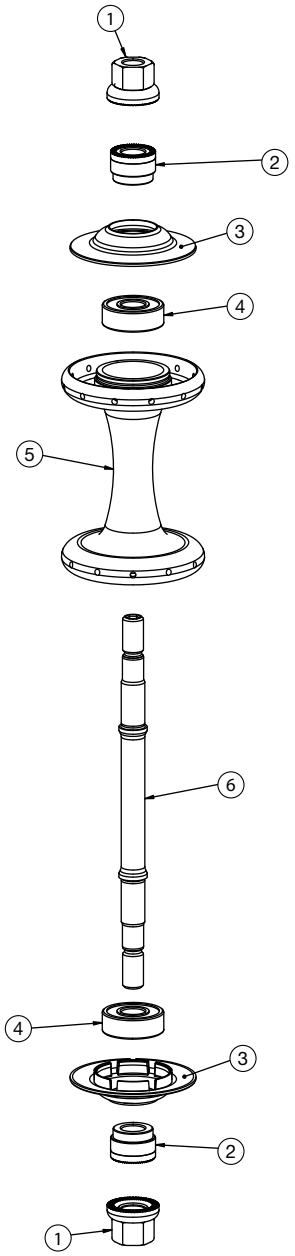
Crono wheels employ Cane Creek/Sapim's Leader, Race, Laser, CX or CX-ray depending on the particular model. Replacement spokes and nipples are available from Cane Creek, or proper spokes can be cut to length at a suitably equipped bicycle shop. Never use a J-bend spoke in a Crono wheel. Never try to straighten a J-bend spoke as a substitute for a straight pull spoke. We recommend that you have spokes replaced at your local bicycle shop. Refer to the Spoke Length/ Tension Guide (above) if replacement is necessary.

Safety and Maintenance

Although a Cane Creek Crono wheel is engineered for strength and durability, it is in fact a high performance lightweight bicycle component and not designed to withstand constant abuse. A little care and attention will extend the life of your wheels and your safety. Periodically inspect the rims for dings, cracks or excessive wear. Inspect the hub shells for cracks near the spoke holes, or on the flanges. If any cracks are present, do not ride the wheels. Take them to a bicycle shop for service. Be sure all of the spoke nipples are secure. Check your quick release for proper function. Check the performance of the axle bearings, and the rear freehub. Clean the wheels with water and a household, automotive or bicycle detergent. Do not use solvents or abrasives for cleaning.

Bearing Replacement

While the sealed cartridge bearings used in the Crono track hubs are very durable, eventually they may need to be replaced due to wear or contamination. The bearings in the front and rear Crono track hubs can be disassembled easily. Slide the end caps off the end of the axle by hand. Using a light hammer or press, tap one end of the axle until the far side bearing is clear of the housing. Before removing the axle, turn the hub around and carefully tap the remaining bearing out as well. Press a new bearing into one end of the hub using an old bearing as a drift (pressing on the outer race only). Reinsert the axle into the hub and press the remaining bearing into place by applying equal pressure to both the inner and outer race as it is pushed into position. Replace the end caps on the axle ends. Reinstall the spoke nipple covers (if applicable) and axle nuts. We recommend having the bearing replacement procedure carried out by a professional bicycle mechanic.



Front Hub Assy - Crono Track Exploded View

1. Axle Nut - M9x1
2. End Cap
3. Spoke Nipple Cover
4. Bearing - 10 x 26
5. Hub Shell - front
6. Axle - front

WARRANTY

Cane Creek Cycling Components warrants its bicycle products for a period of 2 years from the original date of purchase. Any product that is found to be defective in materials or workmanship will be repaired or replaced at the discretion of Cane Creek. This warranty applies to the original owner only. This warranty does not cover damage or failure resulting from misuse, abuse, alteration, neglect, wear and tear, crash or impact, lack of maintenance or other conditions judged by Cane Creek to be abnormal, excessive, or improper. It is mandatory that a Return Authorization Number (RA#) be obtained by calling Cane Creek before any product is returned. Additionally, a dated Proof of Purchase must accompany the product when returned.