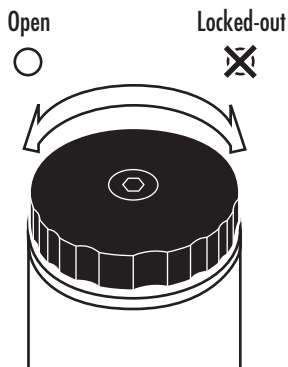


# 1999 HEADSHOK® SILK ROAD® OWNER'S MANUAL

Congratulations and thanks for your purchase of a HeadShok Silk Road suspension fork. The hydraulic DD15 cartridge in the Silk Road fork is designed to give a smooth, comfortable ride by absorbing minor impacts and hand numbing vibrations which cause rider discomfort and which actually slow the forward momentum of the bicycle. You have invested in a light weight suspension system featuring adjustability, absolute steering precision, and an "On-the-Fly" lock-out for increased efficiency climbing or sprinting. All of this translates into a faster, more enjoyable ride with less rider fatigue. This manual contains important and useful information regarding proper operation, care, and maintenance of your HeadShok Silk Road fork. Please read and carefully follow these instructions for miles of safe, high performance riding. If you have any questions about your fork or the contents of this manual, don't hesitate to contact us. See the back page for phone numbers and E-mail contacts.

Silk Road suspension forks offer 15mm of travel using a coil spring with a column of MicroCellular Urethane (MCU) running through its middle. They also feature the shim-valved DD15 hydraulic damper cartridge which controls the rebound speed of the spring and can be locked out "On-The-Fly" by turning the Damping Dial™, located atop the handlebar stem (See Fig.1,) And unlike other suspension forks which slide over high friction bushings, Silk Road forks roll inside the head tube on 88 needle bearings for unsurpassed smoothness of travel. Lack of static friction ("stiction") combines with the damped, dual rate spring system to be sensitive to both high frequency road buzz and to minor front wheel road impacts.

**Fig.1** ▼



## **WARNINGS:**

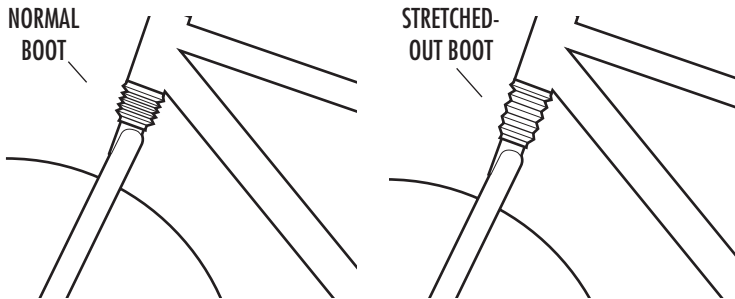
*HeadShok forks should be installed and adjusted by a qualified mechanic. Brakes must also be installed and adjusted by a qualified mechanic. If the brakes are improperly installed or adjusted, the bicycle will not be safe to ride. Improper installation, service, or adjustment of the fork or brakes will place the rider in danger of serious injury or death.*

*Use great care and pay close attention to the road or trail in front of you while turning the Damping Dial. Adjusting the fork can be distracting, and it is possible to lose control of the bicycle if your eyes wander from the surface directly in your path. Also remember that your balance and steering control change as soon as you remove one hand from the handlebars, and that your hand is further from the brake lever. If you are at all unsure of your ability to control the bike while adjusting the suspension fork, or if you are on a rough surface or a busy road, please stop before attempting to adjust the fork.*

*The HeadShok Silk Road fork is designed to be ridden on paved surfaces only. This fork is NOT designed for off-road use. Use of the HeadShok Silk Road fork for off-road, cyclo-cross, or in otherwise abnormal, excessive, or improper conditions will void the fork's warranty. Such misuse also places rider in danger of physical injury or death.*

*The HeadShok Silk Road fork must be ridden with a front caliper brake installed through the fork crown. Riding this fork without a front brake will void the fork's warranty. Such misuse places the rider in danger of physical injury or death.*

*If the fork ever begins to make “knocking” or “klunking” noises, or if it ever shows an unexplained increase in travel, or looks like it is extended farther than it was originally, or if the fork loses its ability to lock out, stop riding the bike and bring it to a HeadShok dealer for inspection. Possible indications of a problem are:*



- *An increase in the fork’s extension or travel.*
- *A stretched-out fork boot (See above.)*
- *A stretched or strained front brake cable.*
- *“Knocking” or “klunking” noises coming from the fork.*
- *A sudden loss of lock-out ability.*

*If any of the above symptoms are ignored, the result could be a separation of the fork from the bicycle frame, leading to an accident with risk of serious injury or death to the rider.*

## **STEM SELECTION**

All HeadShok equipped bicycles come with a CODA® Suspension Stem that is designed to work specifically with the unique head tube arrangement of the HeadShok front suspension system. These stems are supplied in sizes proportional to the different bicycle frame sizes. There are eight different stem sizes for drop type handlebars (26.0 mm clamp), each of which can also be inverted for 16 possible unique rider positions. This allows anyone to customize the fit of his or her bicycle. See your Authorized Cannondale Retailer for replacement CODA stems. Framesets and aftermarket forks do not include a stem.

## **REQUIRED MAINTENANCE**

It is recommended that you take your Silk Road fork to your Authorized HeadShok Service Center for a regular tune up every three months or 60 hours of riding. Your fork is a high performance suspension system and needs regular inspection, lubrication, and maintenance. Your mechanic will check the following items and service the fork as necessary. Between these tune ups, you should also occasionally check the top bearing seal and boot as outlined below.

### **HEADSET BEARINGS:**

Every few rides, or every time that the bicycle is exposed to water (rain, mud, or washing) a few drops of lightweight oil should be applied to the upper headset bearing seal (located just below the stem.) This seal must be kept lubricated, as it protects the headset cartridge bearings from contamination by water and dirt. Failure to keep the headset bearing seal lubricated will result in premature bearing wear.

## SUSPENSION FORK BOOT:

Frequently inspect the rubber boot at the base of the headtube for tears or cuts which could allow contamination. If the boot is damaged in any way, it must be replaced immediately. Since boot replacement requires the suspension fork be removed from the frame, this job should be performed only by an experienced bicycle mechanic at an Authorized HeadShok Service Center. Damage to the HeadShok due to contamination by water or dirt will not be covered under warranty.

## HYDRAULIC CARTRIDGE OIL OR SEAL REPLACEMENT:

The oil in the HeadShok hydraulic DD15 hydraulic cartridge should be replaced every 80 hours of riding, or at least once a year. The seals in the cartridge require less frequent attention, and should be replaced every two years or as needed. These procedures require unique tools and substantial expertise and training with hydraulic suspension systems. Therefore, they should be performed only by an experienced mechanic at an Authorized HeadShok Service Center.

## NEEDLE BEARING LUBRICATION:

The needle bearings which provide the smooth travel of the suspension in the HeadShok fork should be lubricated every three months or 60 hours of riding. This procedure requires partial disassembly of the suspension fork, and therefore must be performed only by an experienced bicycle mechanic at an Authorized HeadShok Service Center.

## PRELOAD ADJUSTMENT

Before the bike is ridden, spring preload must be adjusted to suit the weight and preference of the rider. Preload should be adjusted when the bike is new, and then readjusted for each individual who rides the bike.

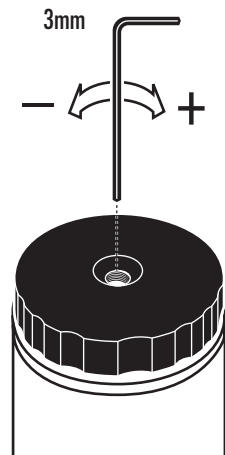
1. Make sure the Damping Dial is in the “Open” position by turning it to the left (counter-clockwise.)

2. Remove the small bolt from the center of the Damping Dial.

3. With rider off the bike, measure from floor to center of one end of the handlebar with the bicycle standing perfectly upright. Then position the rider on the bike in a seated, natural riding position. With only the rear brake applied, again measure the distance from the floor to the center of one end of the handlebar.

4. The difference in these two measurements is the preload sag. Most riders find the best suspension performance with about 1/16” sag compression. To change the amount of sag, insert a 3mm Allen wrench into the hole in the top of the fork. Turn the preload adjustment screw clock-wise for greater preload (less sag compression) or counter-clockwise for less preload (more sag compression.) See Fig.2.

**Fig.2** ▼



5. When desired preload is set, replace the Damping Dial bolt.

*NOTE: This procedure is to be used as a guideline only. We encourage riders to experiment with preload adjustment. Some prefer a stiffer suspension, some a softer, more compliant suspension.*

## DAMPING ADJUSTMENT

Damping controls the speed at which the suspension moves. Compression and rebound damping of the Silk Road fork can be adjusted by changing the viscosity of the hydraulic oil within the cartridge. Since this procedure requires several unique tools and expertise with hydraulic suspension systems, it should only be performed by an experienced bicycle mechanic at an Authorized HeadShok Service Center. See your dealer for more information regarding the fine tuning of your HeadShok fork.

## **HEADSHOK WARRANTY**

All HeadShok forks and their internal assemblies are warrantied against manufacturing defects in materials and/or workmanship for a period of one year from the date of original retail purchase.

Not covered under warranty is damage resulting from improper adjustment or maintenance, lack of maintenance, crashes, or use judged by HeadShok to be excessive or abusive.

Please note that this manual is meant to supplement, not replace, your bicycle owner's manual. The bicycle owner's manual contains valuable information regarding safe operation, adjustment, and maintenance of your bicycle, as well as more complete warranty information. Please read the bicycle owner's manual thoroughly before riding your bicycle, and keep it and this booklet for future reference.

## **GETTING IN TOUCH WITH HEADSHOK**

For warranty related questions or for more information on this or any HeadShok product, please feel free to contact us.

USA and Canada:	(888) HEAD-SHK
Europe (EC):	(31) 5415-89898
Japan:	(81) 722-99-9399
Australia:	(612) 9979-5851

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