

Headshok D50 Suspension Fork


About this Manual

This owner's manual provides important model safety, use, and maintenance information. This is not a service manual and does not contain any installation, removal, or disassembly information for the product.

Proper use, and installation, and service of the fork is important to your safety. You should consult with a qualified professional bicycle mechanic about installing a fork and other bicycle components for compatibility such as the stem, handlebar, fenders or racks, braking systems, headsets, lighting, and reflectors.

You can download Adobe Acrobat PDF versions of any Cannondale manual/supplement from our website: <http://www.cannondale.com>.

Fork Specifications

Intended Use	 <p>ASTM Condition 2, General Purpose Riding. See Important Safety Information on page 4.</p>
Headset	1.8" tapered, 1.5" tapered
Compression assembly type	1-1/8" star nut only
External adjustment	None
Suspension mechanism	Internal spring with damping cartridge
Travel	55mm
Axle-to-crown length	490mm
Axle-to-crown length (compressed)	440mm
Brake mount type	Post Mount
Brake Rotor	Direct: 160mm Maximum: 203mm
Hub width	110mm
Thru axle	Cannondale p/n K83012 only
Wheel sizes	700C, 650B
Wheel-to-fender clearance	6 mm, minimum
▲ Tire Size x Max. Tire Width	700C: 749 X 56.5mm 650B: 711 X 56.5
Rim bead width limit	25mm

NOTICE: Observe maximum bolts lengths shown in Figure 1.

NOTICE: Upper guide item 10 intended only for unavailable product options. Keep grommet shown in place. Do not route standard brake line out of this outlet.

Product Identification

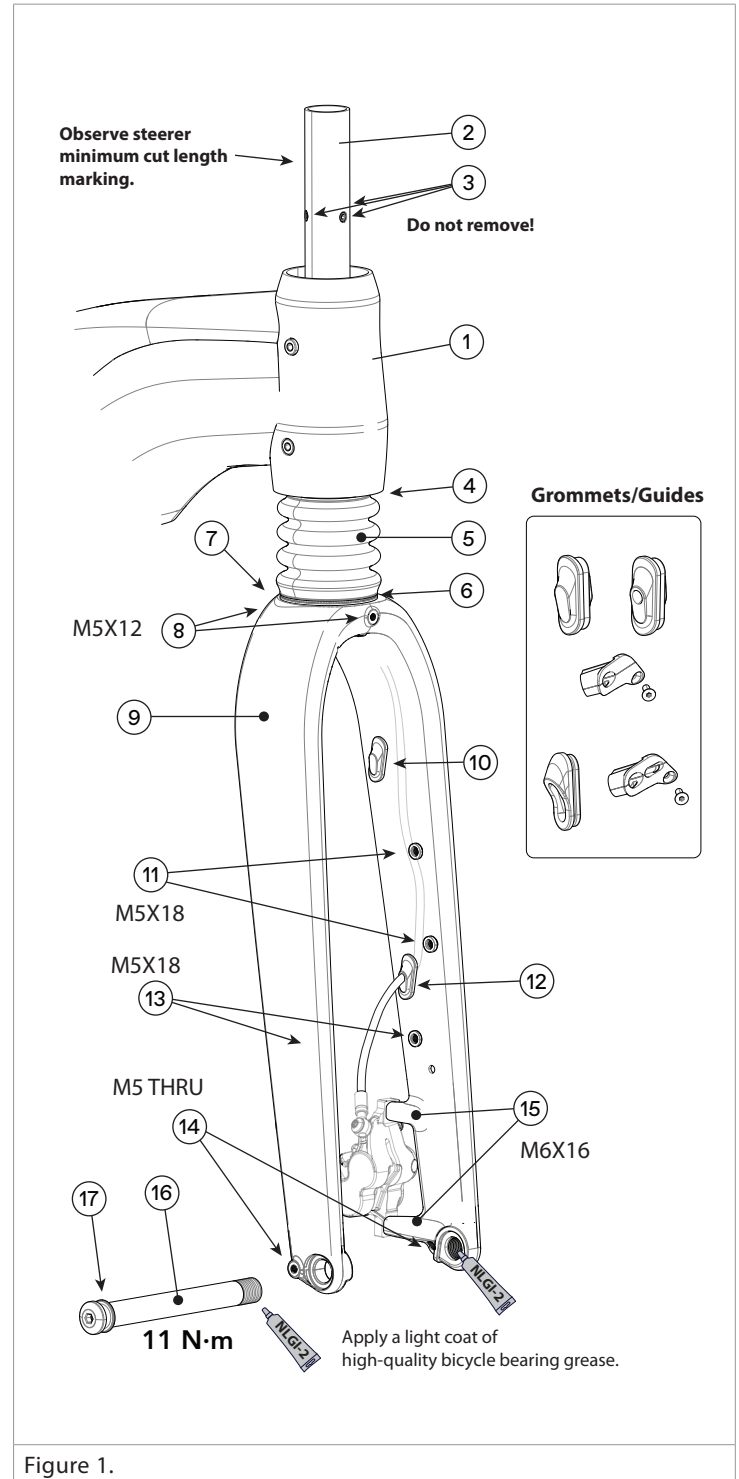


Figure 1.

- | | |
|---------------------------|---------------------------|
| 1. Frame Headtube | 11. Threaded mount |
| 2. Steerer | 12. Routing, guide, lower |
| 3. Locking screws | 13. Threaded mount |
| 4. Garter spring | 14. Threaded mount, |
| 5. Boot | 15. Brake Post Mounts |
| 6. Garter spring | 16. Thru-Axle |
| 7. Brake guide, crown | 17. Axle washer, serrated |
| 8. Threaded mount | |
| 9. Fork Legs | |
| 10. Routing, guide, upper | |

Wheel Removal

1. Secure the bike upright in a bike stand with the front wheel off the ground.
2. Insert the tool into the right side of the axle. Turn the wrench counter-clockwise to unthread the axle and it is free to slide out.

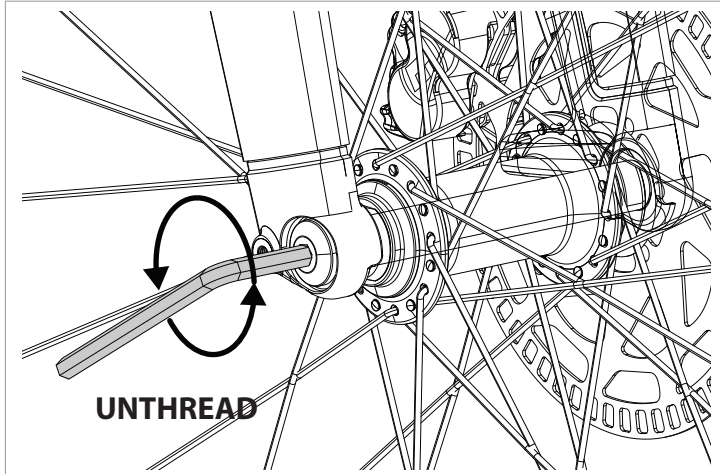


Figure 2. - Loosening the thru-axle.

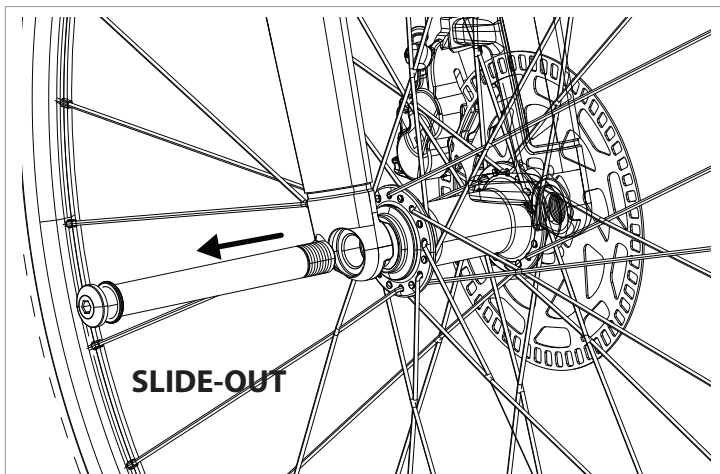


Figure 3. - Sliding out the thru-axle

3. Remove the wheel from the dropouts. You may need to tap the top of the wheel with the palm of your hand to release the wheel from the front fork.

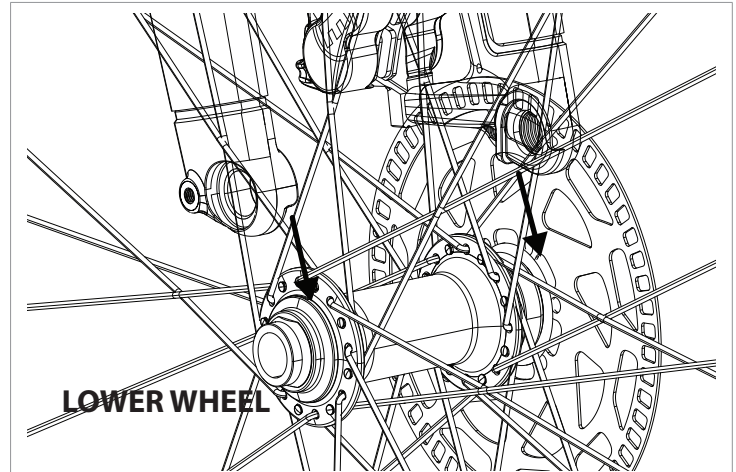


Figure 4. - Wheel removed

Wheel Installation

1. Secure the bike upright in a bike stand with the fork off the ground.
2. Use a clean shop towel to wipe clean the thru-axle and ends of the fork dropouts.
3. Install the wheel into the dropouts and align the hub with the fork dropouts.

Make sure the brake disc locates between the brake pads in the caliper as you insert the wheel between the dropouts.

4. Apply light bicycle grease to the thru-axle threads and around the bolt head. Make sure the serrated washer is on the thru-axle with the serration facing the fork. Then insert the thru-axle into the right side fork dropout and through the wheel hub.

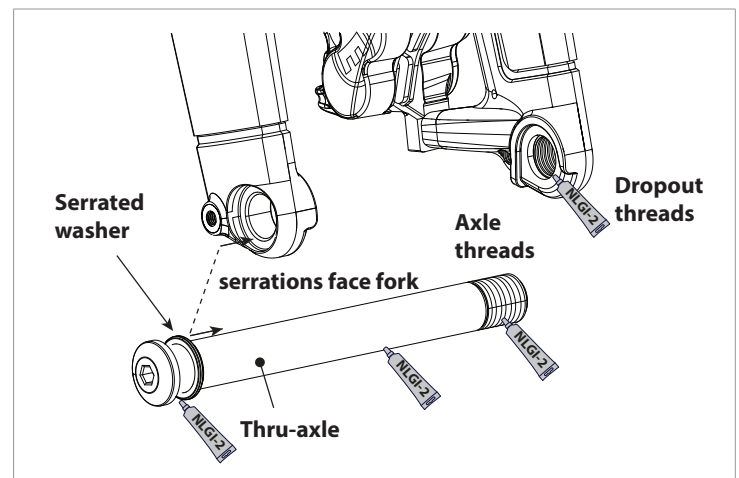


Figure 5. -Preparation

5. Insert the tool into the axle head and turn the axle clockwise to thread the axle into the left side fork dropout.

Tighten to the specified torque.

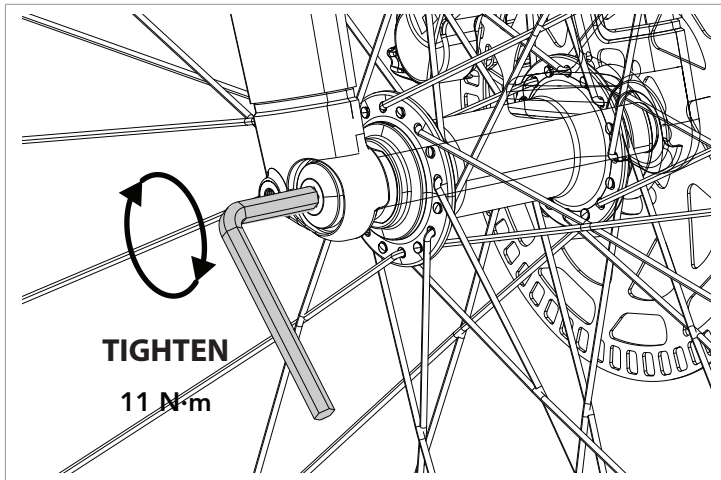


Figure 7. - Tightening the axle

Maintenance

Maintenance of your fork is important to your safety and to the useful life of the fork. Frequent inspection by you and regular professional service by your Cannondale Dealer can help ensure years of safe/trouble-free operation.

YOUR RESPONSIBILITY:

Before riding and after each ride

1. Clean and inspect entire fork for cracks or damage. Things that can indicate a serious problem:

- (1) Unusual “klunking”, knocking, or creaking noises;
- (2) changes in travel;
- (3) Over-extended or compressed boot;
- (4) Changes in the way the fork has been working;
- (5) Loss of adjustments features; and
- (6). Leaking fluid.

2. Check the fork boot for damage, cracking, splits, or tears. Be sure to check in the folds of the boot. Check for any cables or lines rubbing the boot. Check the attachment of the boot at the top and bottom. The upper and lower boot lips should be fitted over the lower collar and fork lip. Replace the garter springs as required. Always tighten securely. Replacement parts are available through a Cannondale Dealer.

If you find boot damage, the area under the fork should be inspected for damage. And the damaged boot must be replaced with a new one. Do not try to fix it.

3. Check the front wheel attachment. Follow the wheel attachment instructions in this manual.

4. Check to make sure the brakes, steering, and all controls are functioning normally.

5. If there are racks or fenders attached to the fork, make sure they are secure and in good condition. If there are objects attached to the fender or rack, make sure these items are secure and cannot fall out or interfere with the steering or wheel. Follow manufacturer instructions when mounting accessories. Maintain all indicated clearances between any accessories, brakes, fenders, fork, frame, other attachments and wheel.

DO NOT RIDE THE BICYCLE UNTIL ALL PROBLEMS FOUND HAVE BEEN CORRECTED.

ITEMS THAT SHOULD BE CHECKED REGULARLY BY A PROFESSIONAL MECHANIC

RE-GREASE TELESCOPE	Every 25 Hours
BOOT REPLACEMENT	As Needed (Annual recommended)
DISASSEMBLY, INSPECTION, REBUILD	NORMAL: Every 200 Hrs
Inspect and disassembly of telescope and races, bearings, main telescope parts, damper cartridge, fluids, seals, etc.	

WARNING

Make sure the axle bolt is torqued correctly with a torque wrench. Do not ride the bike if the bolt is not torqued correctly.

6. Make sure the wheel spins freely.
7. Check to make sure the brakes work correctly.

WARNING

Failure to install the wheel correctly can result in a loss of control or the wheel coming off while riding. You can be seriously injured or killed in an accident if the wheel is not attached correctly.

Cleaning

When cleaning, use clean tap water and a mild dish detergent soap. Avoid spraying water on any attached electronic accessories. Consider covering items with a clean plastic bag. Use a rubber band or masking tape to hold the bag in place temporarily.

NOTICE

Do not power wash or dry with compressed air. This will force contaminants into the fork where they will promote corrosion, immediately damage the fork, or result in accelerated wear.

Do not use abrasive or harsh chemical cleaners /solvents which can damage the finish or attack and destroy both the outside and internal fork parts.

Replacement Parts

Part Number	Description
K83012	HeadShok TA Bolt 110x15 137mm M15x1.5P
K53052	HeadShok Boot+Garter Springs 1.5
K53022	HeadShok Boot+Garter Springs 1.8
K54012	HeadShok Cable Grommets Guides
K52002	HeadShok Damper

Warranty Information

Different elements of this product are subject to the terms of the Cannondale Limited Warranty. For more information, go to the support area at www.cannondale.com.

NOTICE

Unauthorized service, maintenance, or repair parts can result in serious damage and void your warranty.

Contacting Cannondale

Go to www.cannondale.com for contact information for your region.

Important Safety Information

WARNING

INTENDED USE: ASTM Condition 2, General Purpose Riding. Bikes designed for riding Condition 1, plus smooth gravel roads and improved trails with moderate grades where the tires do not lose ground contact. For paved roads, gravel or dirt roads that are in good condition, and bike paths.

Please read your Cannondale Bicycle Owner's Manual for more information about Intended Use and Conditions 1-5.

NOT INTENDED: This fork is not for used for aggressive riding, jumping or stunt riding. This fork must not be used on any tandem bicycles or on electric or engine-driven motorcycles.

DO NOT MODIFY THE FORK. Do not attempt to alter or to modify (e.g., drill, cut, weld, sand, or repaint).

HAVE ALL WORK PERFORMED BY A QUALIFIED PROFESSIONAL BICYCLE MECHANIC. Do not attempt to service or to repair the fork yourself. This owner's manual does not include information needed to install, to remove, or to disassemble/reassemble the fork. This manual only contains information for using the fork when mounted on the bicycle.

PERIODIC INSPECTION REQUIRED: The fork must be periodically inspected for damage as part of your routine bicycle maintenance. Consult with a qualified professional bicycle mechanic to help you develop a complete maintenance program. Frequent checks are necessary to identify the problems that can lead to an accident.

DO NOT RIDE ON A DAMAGED FORK. Stop riding a damaged fork immediately. Follow the fork maintenance schedule of this supplement.

MAKE SURE ALL REQUIRED BICYCLE LIGHTING AND REFLECTORS ARE PRESENT AND IN WORKING CONDITION.

RACKS AND OTHER MOUNTED ACCESSORIES

This fork has mounting locations to support compatible accessories. It is your responsibility to make sure any proposed accessory attached to the fork is safely compatible with the fork and with the bicycle. You assume all risk for the use and safety of any attached accessories.

USE A TORQUE WRENCH: Apply thread lock and grease as directed. Do not exceed the torque specified for any component including handlebar, steerer, or any adjusting hardware.

YOU CAN BE SEVERELY INJURED, PARALYZED OR KILLED IN AN ACCIDENT IF YOU IGNORE THESE WARNINGS.