



READ THIS MANUAL CAREFULLY!  
It contains important safety information.  
Keep it for future reference.

# **GEMINI**

## **Owner's Manual Supplement**

### **120016.PDF**

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Please note that the specifications and information in this manual are subject to change for product improvement. For the latest product information, go to <http://www.cannondale.com/tech/>.

## ABOUT THIS SUPPLEMENT

Cannondale Owner's Manual Supplements provide important model specific safety, maintenance, and technical information. They are not replacements for your *Cannondale Bicycle Owner's Manual*.

This supplement may be one of several for your bike. Be sure to obtain and read all of them.

If you need a manual or supplement, or have a question about your bike, please contact your Cannondale Dealer immediately, or call us at one of the telephone numbers listed on the back cover of this manual.

You can download Adobe Acrobat PDF versions of any Cannondale Owner's Manuals or Supplements from our website: <http://www.cannondale.com/bikes/tech>.

- This manual is not a comprehensive safety or service manual for your bike.
- This manual does not include assembly instructions for your bike.
- All Cannondale bikes must be completely assembled and inspected for proper operation by a Cannondale Dealer before delivery to the owner.

### **WARNING**

**This document may include procedures beyond the scope of general mechanical aptitude.**

Special tools, skills, and knowledge may be required. Improper mechanical work increases the risk of an accident. Any bicycle accident has risk of serious injury, paralysis or death. To minimize risk we strongly recommend that owners always have mechanical work done by an authorized Cannondale retailer.

## SAFETY MESSAGES

In this manual, information which affects your safety is emphasized in the following ways:

### **WARNING**

A **WARNING** indicates a potentially hazardous situation which, if not avoided, can result in serious injury or death.

### **CAUTION**

A **CAUTION** Indicates a potentially hazardous situation which, if not avoided, can result in serious damage to the product. The matters described under **CAUTION** may, if not avoided, lead to personal injury, or results depending on the situation and degree of damage. Important matters are described in **CAUTION** (as well as **WARNING**), so be sure to observe them.

*A **NOTE** provides helpful information or tips intended to make the information presented clearer.*

## INTENDED USE

### **Gravity, Freeride, Downhill**

**INTENDED** for riding that includes the most difficult terrain that only very skilled riders should attempt.

Gravity, Freeride, and Downhill are terms which describe hardcore mountain, north shore, dirt jumping, slopestyle, hucking etc. This is “extreme” riding and the terms describing it are constantly evolving.

Gravity, Freeride, and Downhill bikes are heavier and have more suspension travel than All-Mountain bikes, allowing them to be ridden in more difficult terrain, over larger obstacles and larger jumps. Gravity, Freeride, and Downhill bikes are bikes that are the longest in suspension travel and use components that fit heavy duty intended use. While all that is true, there is no guarantee that some extreme riding will not break a Freeride bike.

The terrain and type of riding that Freeride bikes are designed for is inherently dangerous. Appropriate equipment, such as a Freeride bike, does not change this reality. In this kind of riding, bad judgment, bad luck, or riding beyond your capabilities can easily result in an accident, where you could be seriously injured, paralyzed or killed.

**NOT INTENDED** to be an excuse to try anything!  
Read our “[Freeride & Downhill](#)” warning on pages 4 and 5.

**TRADE OFF** Freeride bikes are more rugged than All-Mountain bikes, for riding more difficult terrain. Freeride bikes are heavier and harder to ride uphill than All-Mountain bikes.

## BUILDING UP A FRAMESET

Before building up a frameset, consult with your Cannondale Dealer and the component manufacturers, and discuss your riding style, ability, weight, and interest in and patience for maintenance.

Make sure the components chosen are compatible with your bike and intended for your weight and riding style.

Generally speaking, lighter weight components have shorter lives. In selecting lightweight components, you are making a trade-off, favoring the higher performance that comes with less weight over longevity. If you choose more lightweight components, you must inspect them more frequently. If you are a heavier rider or have a rough, abusive or “go for it” riding style, buy heavy duty components.

Read and follow the component manufacturers warnings and instructions.



### **WARNING**

**USING YOUR BICYCLE IMPROPERLY IS HAZARDOUS.**

## **ABOUT FREERIDING & DOWNHILL**

 **WARNING**

**FREERIDING AND OTHER FORMS OF “EXTREME RIDING” ARE EXTREMELY DANGEROUS. YOU CAN BE SEVERELY INJURED OR KILLED IN A SERIOUS ACCIDENT.**

Freeriding, jumping, hucking, dirt jumping, mountaincross, downhill, slalom, slopestyle, urban or street riding or other evolving forms of extreme or hard core mountain biking are inherently dangerous and can lead to serious accidents. Wear all safety gear and be sure your bike is in excellent condition. Follow all the instructions and warnings below. These steps will reduce, but not eliminate, the inherent risks. Even with state of the art protective safety gear you could be seriously injured, paralyzed or killed. If you do not want to take these risks, do not engage in this type of riding.

### **Fundamental Risk**

Freeriding, jumping, hucking, dirt jumping, mountaincross, downhill, slalom, slope-style, urban or street riding. It seems that everywhere you look, from Mountain Dew® commercials to the X-Games® to the Red Bull® Rampage, riders are grabbing big air and sticking sick drops. And it sure looks fun.

But what the videos and bike magazines and ads don't always tell you is that extreme riding takes an amazing amount of skill. Some of the riders you see are well-paid pros who have gradually built up their skills through endless hours of practice, and who have also had their share of stitches, concussions and busted bones (and bikes). Others are daredevils who have chosen to accept or ignore the risks. Would you allow anyone to say that you are so weak in the head, and have such poor judgment that you copy those you see in the media without thought of the serious risks?

The stakes are high if you screw up. Realize too late that you aren't up to the challenge, and you run the risk of major injury or even – say it aloud – death, paralysis. In short, extreme riding carries a high degree of fundamental risk, and you bear the ultimate responsibility for how you ride and what you attempt to pull off. Do you want to avoid these significant risks? Then do not ride this way.

continued on next page . . . .

**Product Limitations**

Problems of pilot error aside, hard-core riding also beats the heck out of your equipment. Although we build and test our bikes to make them tough, there's no way that we can guarantee they'll survive your umpteenth six-foot drop. For starters, there is no industry "jumping" standard. The many circumstances of takeoff, landing, speed, rider technique, etc. are unique. The judgment, lack of judgment or insanity of a rider who may ride a Cannondale bicycle cannot be completely predicted, so it's flat-out impossible to predict how anyone's equipment is going to hold up.

Let's get another thing straight. Buying a Freeride bike does not make you any better. Do not confuse the built-in capabilities of equipment with your own capabilities, which must be learned.

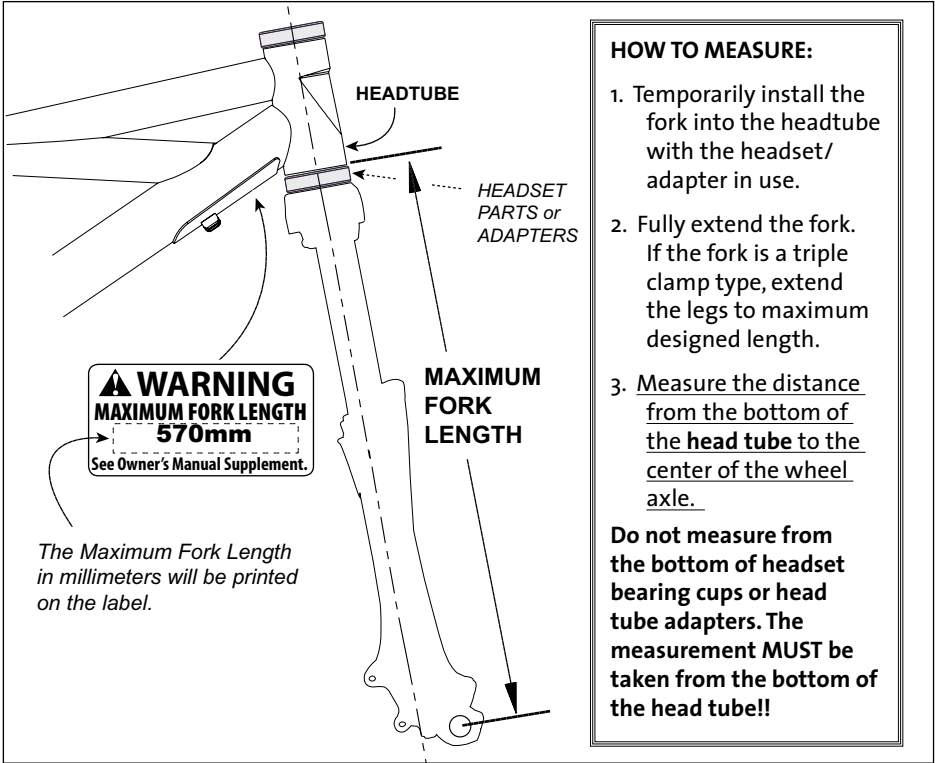
Keeping your bike and all its components in good working order is critical, and it's up to you to maintain and inspect it. Even so, your sweet rig isn't going to last forever. Nothing does, particularly bikes and parts that are built to minimize weight and then are subjected to abuse. Cannondale frames carry a warranty, but that's to cover issues with workmanship and/or materials. (See the Cannondale Warranties section of the Owner's Manual.) The warranty doesn't mean that they're going to last forever. They're not. The warranty certainly doesn't mean that the bicycle can in any way protect you from injury.

**In Conclusion**

If you're going hard-core, be smart about it. Always wear a full face helmet, body armor, full-finger gloves and protective clothing. Choose a bike that's right for you, your riding and terrain, and check it often for signs of fatigue or other trouble. (Your dealer can help you on both fronts.) Read the Mountain Bike Riding section of the Cannondale Bicycle Owner's Manual. And most importantly, know your limitations. Practice. Stay in control, and carefully, gradually expand your limits – but ride within them.

# MAXIMUM FORK LENGTH

Maximum Fork Length is an important frame safety testing specification. You must observe the measurement when installing headset parts, headset adapters, installing and adjusting a fork, and replacement forks. The specification is printed on a warning label indicated in the figure below. In this manual, the number is also listed in the **SPECIFICATIONS** section.



- HOW TO MEASURE:**
1. Temporarily install the fork into the headtube with the headset/ adapter in use.
  2. Fully extend the fork. If the fork is a triple clamp type, extend the legs to maximum designed length.
  3. Measure the distance from the bottom of the head tube to the center of the wheel axle.
- Do not measure from the bottom of headset bearing cups or head tube adapters. The measurement MUST be taken from the bottom of the head tube!!**

**WARNING**

**DO NOT INSTALL HEADSET PARTS OR FORKS RESULTING IN A MAXIMUM FORK LENGTH LONGER THAN THE SPECIFICATION FOR YOUR FRAME. DO NOT ADJUST A TRIPLE CLAMP FORK SO THAT MAXIMUM FORK LENGTH EXCEEDS THE FRAME LIMIT.** Exceeding the MAXIMUM FORK LENGTH limit can overload the frame causing it to fail (break) while riding.

**YOU CAN BE SEVERELY INJURED, PARALYZED OR KILLED IN AN ACCIDENT IF YOU IGNORE THIS WARNING.**

## SELECTING TIRES

Any properly installed and inflated tire must not contact any part of the swingarm, frame, or fork and throughout full suspension travel.

The U.S. Consumer Product Safety Commission (CPSC) requires at least 1/16" (1.6 mm) tire clearance from any part of the bike. Allowing for lateral rim flex and a wheel or rim that is out-of-true will likely mean choosing a rear tire that provides even more clearance than the CPSC recommends.

Also, your choice of replacement tires should be made only after considering the clearance guidelines contained in suspension product owner's manual.

If the manufacturer's manual contains no such guidelines, or if you don't have a manual, consider that Rock Shox requires at least 1/4" (5 mm) clearance between the tire and the fork crown or bridge when the fork is completely compressed.

Be aware that completely compressing the fork may involve removing the spring stack, letting the air out of the fork, or both.



### **SELECT PROPERLY SIZED/ FITTED TIRES FOR YOUR BIKE.**

Mounting the wrong size tires on your bike can increase the chances that you will have an accident where you can be severely injured, paralyzed, or killed. If the tires touch the frame or fork when riding, you can lose control of your bike. If a moving tire is stopped because it touches the frame or fork, you can be thrown off the bike. You can be severely injured or killed.

Do not mount oversized tires, ones that rub or touch the frame, ones that result in too little clearance with the frame, or ones that can touch the frame or fork when the suspension is fully compressed or when riding.

Take care that the tires you select are compatible with your bike's frame design. Also, be sure to follow the manufacturer's recommendations of your front fork and rear shocks.

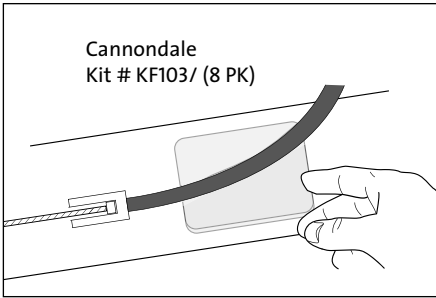
**Ask your Cannondale Dealer for the right tires for your bike and its particular components!**

## LINE AND CABLE FRAME PROTECTION

Normal line and cable movement against the frame can wear away painted finishes and decals. Overtime, cable rubbing can wear into the frame itself causing very serious frame damage.

Check over your bike after your first few rides. Apply a clear adhesive guard material in areas where rubbing is found.

When applied correctly, clear guards are good protection for your bike.



### To apply the guard material (included with your bike):

1. Clean the frame with a mild detergent and wipe dry with a clean towel. Do not use solvents or harsh chemicals to clean the frame. **OPTIONAL:** Trim the adhesive guard material to the shape required.
2. Remove the backing and position the guard under the cable/ line.
3. Rub the guard firmly against the frame with your fingers to fix it in place.
4. Periodically, recheck the guards and other areas of the frame as you continue to ride. Replace the guards if they wear out.

### PLEASE NOTE:

*Damage to your bike caused by cable rubbing is not a condition covered under your warranty. Also, adhesive frame guards are not a fix for incorrectly installed or routed cables or lines. If you find that applied guards are wearing out very quickly, consult with your Cannondale Dealer about the routing on your bike.*



**PHOTO ABOVE SHOWS A TYPICAL LOCATION FOR THE GUARD. IN THIS CASE, ITS THE AREA IN FRONT OF THE SWINGARM ON THE DOWNTUBE.**

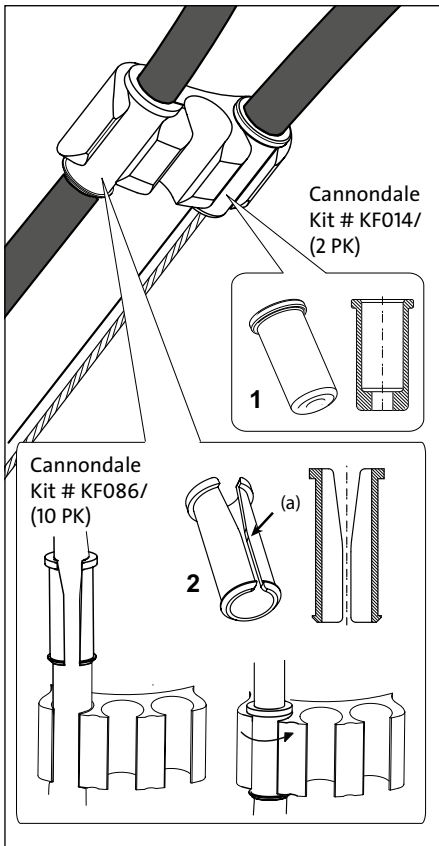


## HOUSING GUIDES AND CABLE STOPS

Lines and cables on your bike are routed through frame guides using cable stops (1) and /or cable thru guides (2).

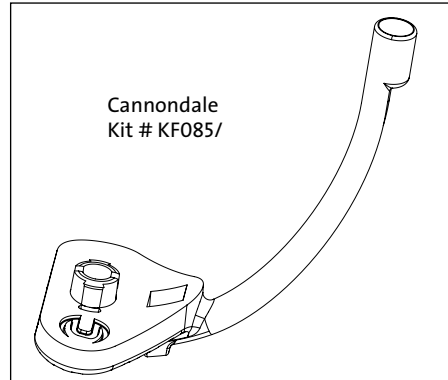
Periodically, you should check to make sure the stops and guides are in good condition and seated properly in the frame guides.

For stops, make sure the stop is seated securely in the frame guide and the housing is fixed within the stop.



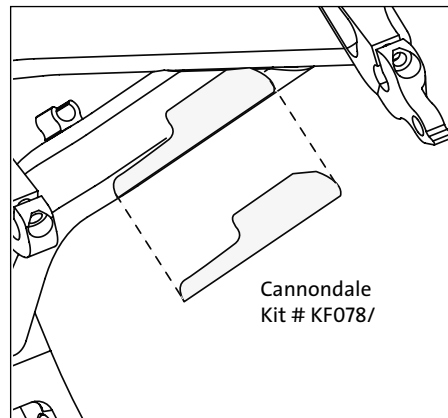
## BOTTOM BRACKET FRONT DERAILLEUR CABLE GUIDE

This snap in front derailleur cable guide is mounted on the lower bottom bracket shell.



## CHAINSTAY PROTECTOR

An adhesive chainstay protector is located on the underside of the right chainstay. This guard protects the chainstay from damage caused by the chain. Check the condition of the right chainstay protector periodically and replace it when it is worn or missing.




# MAINTENANCE

The following table includes supplemental maintenance items for your bike. Please consult your *Cannondale Bicycle Owner's Manual* for more information on basic bike maintenance. And, so you may create a complete maintenance program best suited to you and your riding style, please talk to your Cannondale Dealer. Also, remember to follow the maintenance recommendations given by the component manufacturers for the various non-Cannondale parts of your bike.

## Schedule

WHAT TO DO	HOW OFTEN	You/ Professional
Check lines/ cables for rubbing, install guard material.	Before and After 1st Rides	YOU
Clean and visually inspect entire bike frame/ swingarm for cracks or damage	Before and After Each Ride	YOU
<b>SWINGARM PIVOT ASSEMBLY:</b> (Disassemble, Clean, Inspect, Re-grease As Needed) See SWINGARM FIELD CHECK on page 14	Every 25 hours	YOU or Professional
<b>SWINGARM CHAINSTAY PROTECTOR:</b> <b>Replace if necessary</b>	As needed	YOU
Check condition/ attachment of cable stops and housing guides.	Every 10 hours	YOU
<b>TIGHTENING TORQUES</b> In addition to other component specific tightening torques for your bike, check the tightness of the items listed in "Tightening Torques" in this manual.	Every 10 hours	YOU


**WARNING**

**ANY PART OF A POORLY MAINTAINED BIKE CAN BREAK OR MALFUNCTION. AND, THAT CAN LEAD TO AN ACCIDENT WHERE YOU CAN BE KILLED, SEVERELY INJURED OR PARALYZED.**

Please ask your Cannondale Dealer to help you develop a complete maintenance program, a program which includes a list of the parts on your bike for YOU to check regularly.

Frequent checks are necessary to identify the problems that can lead to an accident.

## About Cleaning

When cleaning your bike:

**USE ONLY A MILD SOAP AND WATER SOLUTION.** Clean water and a common dish washing liquid will work best.

**COVER SENSITIVE AREAS WITH A CLEAN PLASTIC BAG.** Secured temporarily with a rubber band or masking tape, a bag can prevent water damage to various bike components (bearings, seals, fork / shock adjustment features).

**SPRAY OFF BEFORE WIPING.** To preserve the appearance of paint, finish, and decals, use a low pressure water hose to first spray off heavy soils and dirt.

### CAUTION

DO NOT power wash or spray water under high pressure to clean. Power washing will force contaminants into parts where they will promote corrosion, immediately damage, or result in accelerated wear.

DO NOT use compressed air to dry.

DO NOT use abrasive or harsh chemical cleaner/solvents which can damage the finish or attack and destroy both the outside and internal parts.

When rinsing, avoid directing the spray directly at shock/fork adjusters or bearings.

## Tightening Torques

Component-specific values (for crank bolts, rotor bolts, do not appear below because they will vary based on the spec-level of the bike; please consult the manufacturer of the component in question for the correct torque value.

Item	Loctite #	N•m	In•Lbs
Swingarm Pivot Bolt	242	12	106
Front/Rear Shock Mounting Bolts	242	5	44
Axle Bolt	262	12	106
Axle Pinch Bolts	242	5	44
Rear Derailleur Hanger Bolt	242	5	44

## SWINGARM

The pivot axle, bearings, and bearing shields are subject to wear depending on use, conditions, and maintenance. Periodic disassembly, cleaning, and regreasing will extend time between necessary renewal.

### Pivot Axle & Pivot Nut

The pivot must always be installed with the head on the drive side (right) of the frame. The pivot can not be removed without removing the crankset. When the pivot nut is removed the pivot will slide out easily. However, before it is removed the weight of the swingarm should be supported to prevent it dropping suddenly causing injury or damage.

### To check the bearings:

With the pivot out, rotate the inner bearing race with your finger tip to confirm smooth rotation. Replace bearings if the rotation feels rough or gritty. When necessary, replace bearings as a new set. Drive out the old bearings carefully and install new ones using proper bearing installation tools.

### Cartridge Bearings

The two sealed cartridge bearings require no lubrication, however, grease applied to the faces will help repel damaging moisture. With the pivot bolt removed the inner bearing races can be turned to detect wear or damage. They should rotate smoothly without a gritty or rough feel. If replacements are necessary, they can be driven out without a punch and replaced. Both bearings should fit tightly in the swingarm.

### Spacers

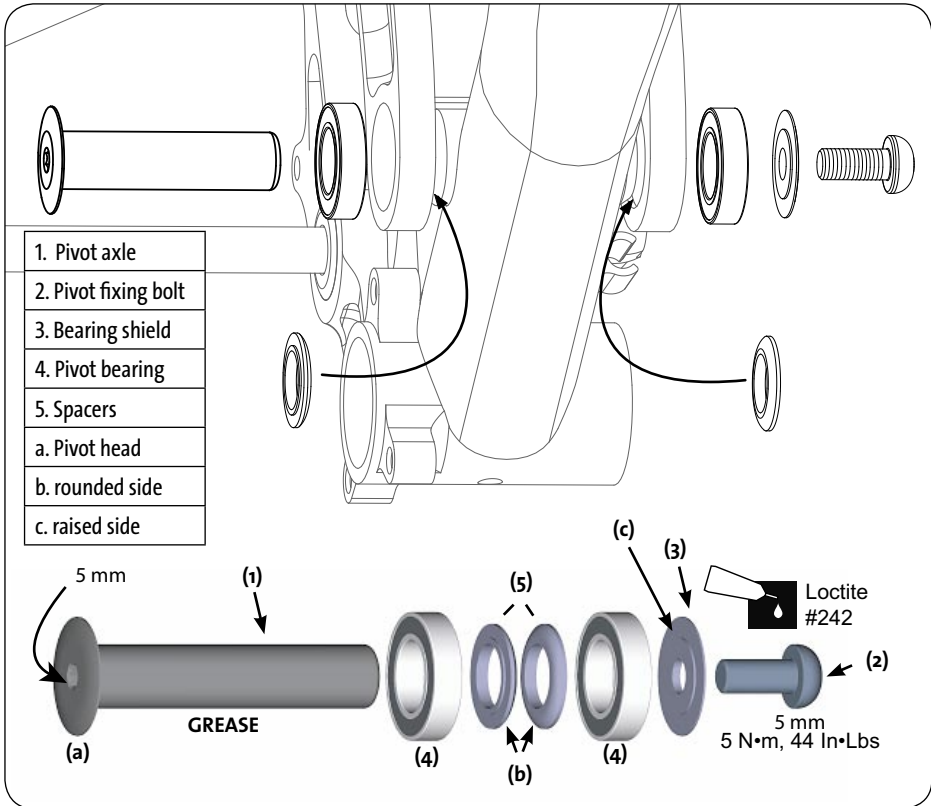
The spacers are located between the bearings and frame. The smooth rounded side of the spacer faces the frame while the flatter side of the spacer fits against the bearing.

To check the spacers, remove them and look for any uncharacteristic wear, deep grooves, cracks or other damage. Be sure to check the frame bore surfaces as well. A rough surface can accelerate wear. If the spacers are in good shape, clean and regrease them before reinstallation. Make sure they go back in the right way.

#### **CAUTION**

##### **KEEP YOUR FINGERS OUT OF PINCH POINTS**

- Support the **weight of the tire/swingarm** so it does not drop against the seat tube or shift unexpectedly when the pivot axle is removed.



Replace damage or worn parts with new ones)

Always clean and lubricate the pivot axle and frame pivot bore with a high-quality bike grease.

- Insert the pivot axle into the drive-side of the swingarm through the frame.
- Install the bearing shield (3) with the small end (c) facing toward the pivot bolt.
- Apply Loctite #242 to the threads and tighten the fixing bolt (2) to 12 N•m (44 In•Lbs).

## CAUTION

LOCATE HEAD (A) OF PIVOT AXLE ON DRIVE SIDE TO MAINTAIN CHAINRING CLEARANCE.  
**Reversed installation can cause severe damage.**

## **SWINGARM FIELD CHECK**

1. Place the bike in a work stand and remove the rear wheel.
2. Remove the rear shock.
3. Stand behind the bike holding the swingarm by the dropouts.

Lift it up and down. The pivot should move smoothly without sticking allowing the swingarm to fall under its own weight. Be careful, don't let the swingarm slam against the frame.

Next, still holding the dropouts, try to detect any excessive play side-to-side. Excessive side-to-side play can be caused by a loose pivot nut or damage to the bearings or other pivot parts.

If you find the swingarm movement rough or gritty or detect excessive side-to-side play, the pivot assembly should be inspected. An inspection will require, disassembly, cleaning and parts inspection. Replacement of worn part may be necessary. Have this service performed by your Cannondale dealer.

# REAR SHOCK

## SELECTING REAR SHOCKS

### **WARNING**

**SELECT ONLY COMPATIBLE SHOCKS AND FORKS FOR YOUR BIKE. DO NOT MODIFY YOUR BIKE IN ANY WAY TO MOUNT ONE. HAVE YOUR SHOCK OR FORK INSTALLED BY A PROFESSIONAL BIKE MECHANIC**

- Riding with the wrong rear shock can damage the frame. You could have a serious accident. Make sure the total travel, eye-to-eye length, and stroke length of the rear shock you select meet the specifications listed in this manual.
- When selecting different shocks or forks for your bike, make sure that the shock or fork you select is compatible with your bike's design and how you will use your bike.

## SAG

Sag is the distance the bike suspension compresses with a rider (wearing all appropriate gear) mounted in a normal riding position (seated, hands on handlebar and feet on the pedals) on flat ground.

The recommended sag for your bike is intended to maximize the bike's suspension travel and it is usually specified as a percentage (%) of the fork or shock's total travel.

Maintaining the recommended sag in both the front and rear suspension helps assure that the fork and shock operate normally without excessive top-out or bottom-out that can lead to difficult handling or damage.

### **CAUTION**

Please read the fork and rear shock manufacturer's owner's manual and instructions provided before attempting any set-up or adjustment.

Small adjustments to sag are performed by adjusting preload of the shock or fork. This is done by adding or removing spring shims, adjusting the installed length of the spring with a preload adjusting ring, or with air springs, changing air pressure settings.

Larger adjustments to sag may require changing the installed springs in the fork or shock. Changing the spring may be a simple task or very complex depending on the design of the fork or shock. In general: increasing preload decreases sag, decreasing preload increases sag.

Finding a suitable sag setting within the suspension fork or rear shock range is a matter of personal preference taking body weight and how you ride into consideration.

## Changing Suspension Travel

You have two choices in total swingarm travel: 150mm with the shock at the upper hole, or 170mm at the lower position.

To change the travel,

1. Put the bike in a work stand. Place a towel or other soft material (cardboard shown) to act as a buffer between the swingarm and seat tube to protect the frame finish. Remove the rear wheel (to reduce weight).
2. Disconnect the rear shock at the swingarm and reposition to a different hole.  
**READ THE CAUTION BELOW NOW!!!**  
Retighten the shock bolt and apply medium thread locking agent to the threads. Do not apply grease to the bolt,; it will attract grit and wear out the shock bushings prematurely.
4. Tighten to 5N•m, 44 In•Lbs.

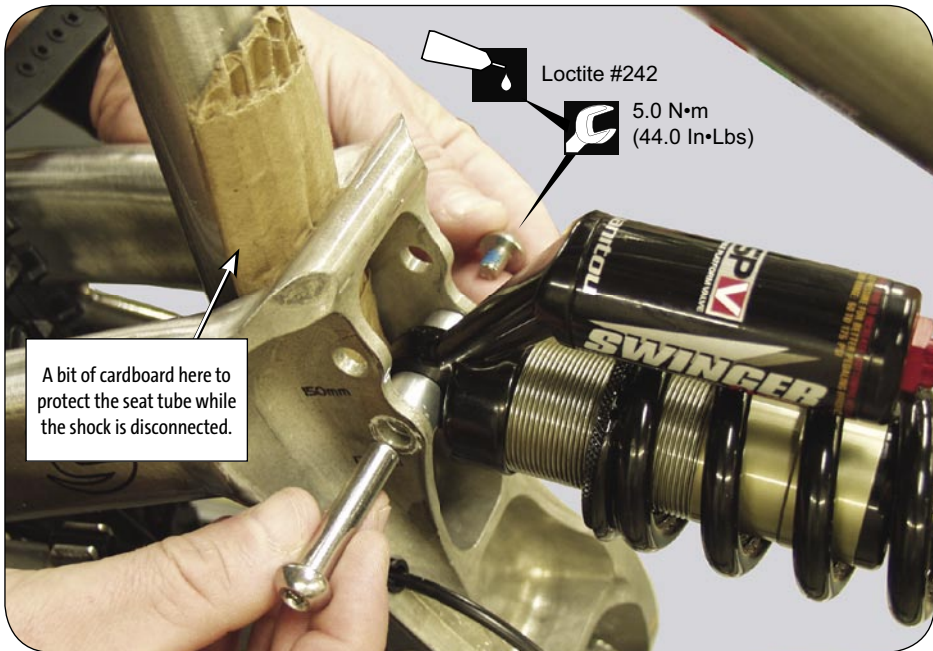
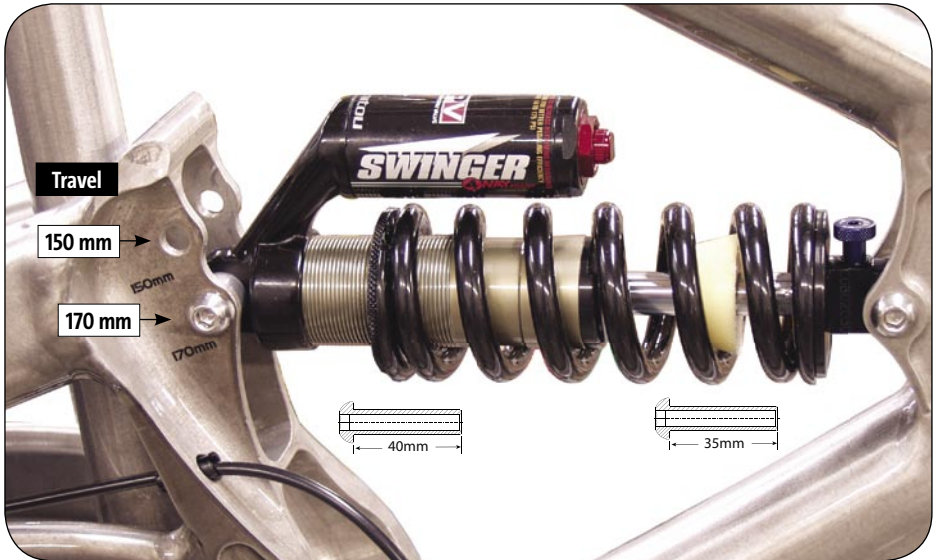
**WARNING**

**KEEP YOUR HANDS AND FINGERS OUT OF PINCH POINTS.** Your fingers or hands can be pinched or crushed if they are caught between the heavy swingarm, linkage, tire, or frame when the rear shock is released.

**CAUTION****TO PREVENT SERIOUS FRAME (OR SHOCK) DAMAGE:**

1. Make sure the rear shock is compatible with your frame. Ensure that the shock eyelet-to-eyelet length stroke length match the information in the **SPECIFICATIONS** section of this manual.
2. Make sure the physical shape of the rear shock (including all reservoir and adjustments features) will not cause interference with or contact the frame, frame mounting points, or the swingarm at any point in the full suspension travel. See our website TECH CENTER (<http://www.cannondale.com/bikes/tech/>) for more on how to mount the OEM shocks for your bike.
3. Do not alter or modify the frame/swingarm in an attempt to mount a rear shock.

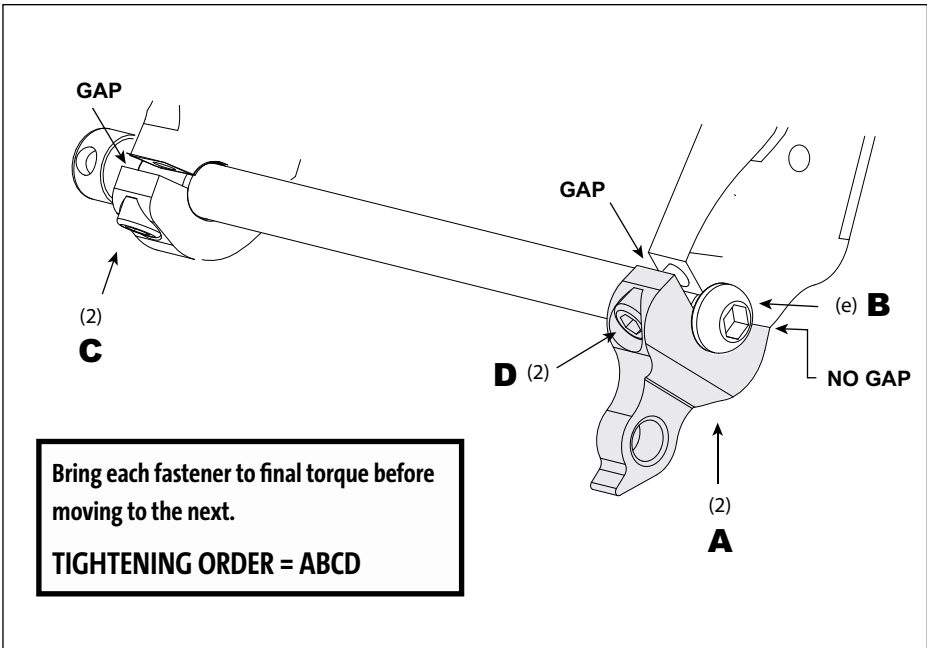
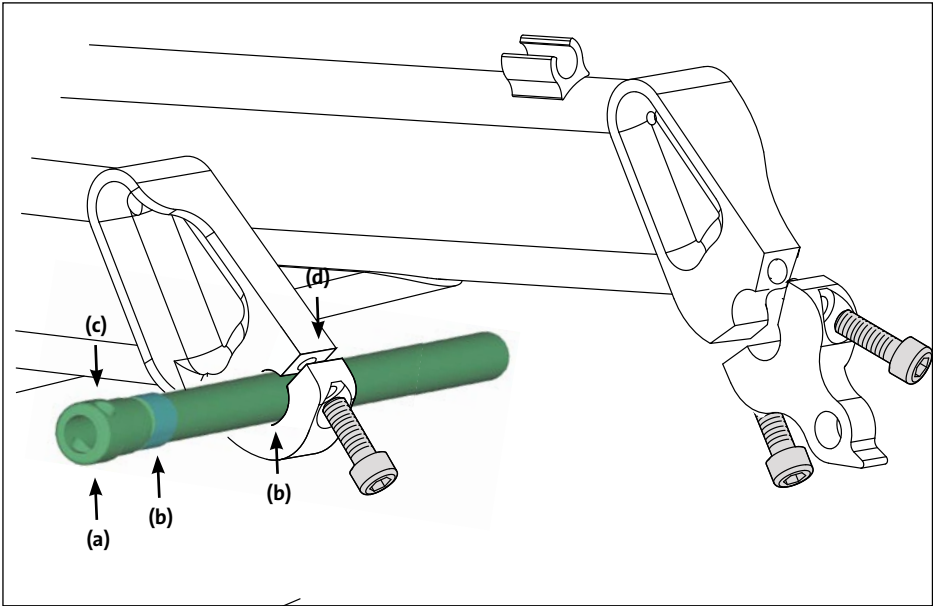




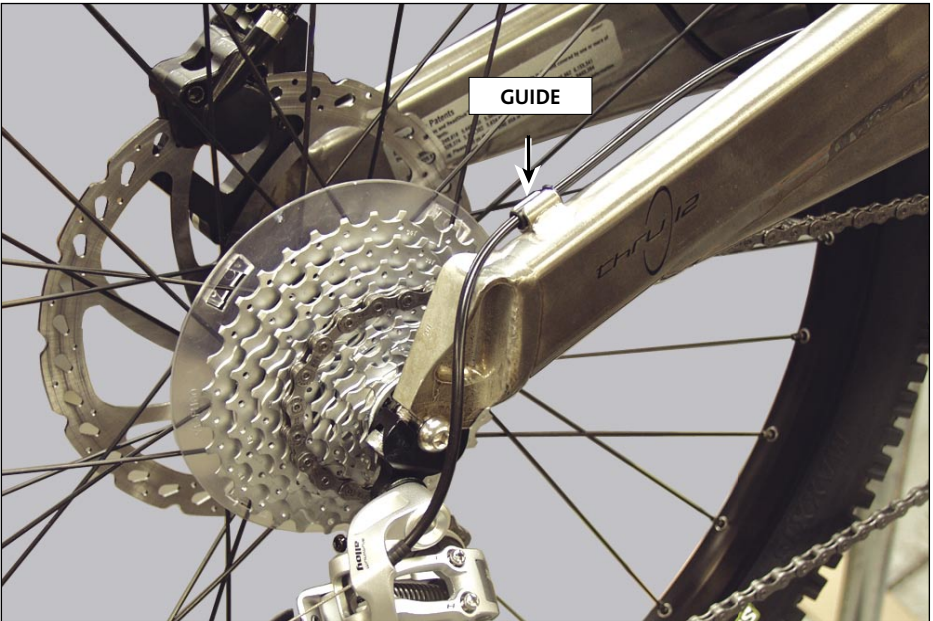
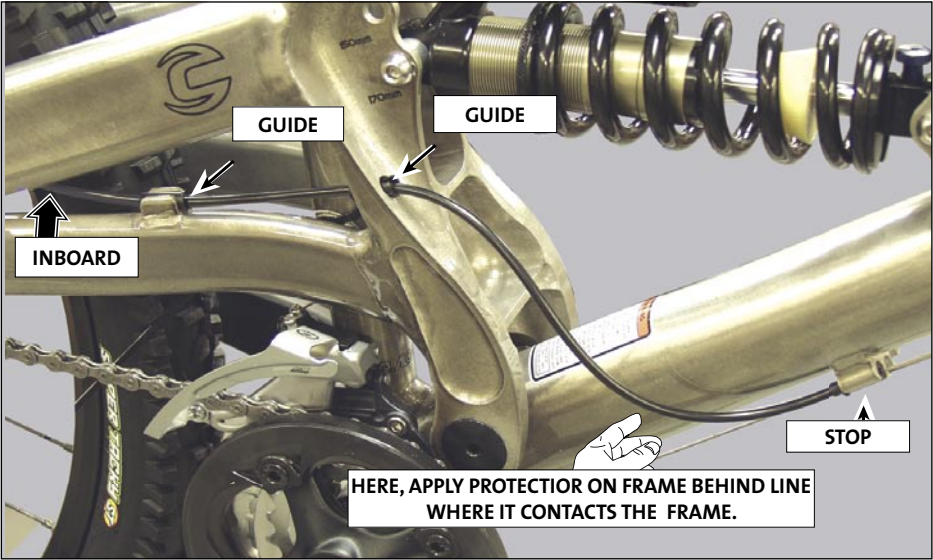
## Rear Wheel Axle

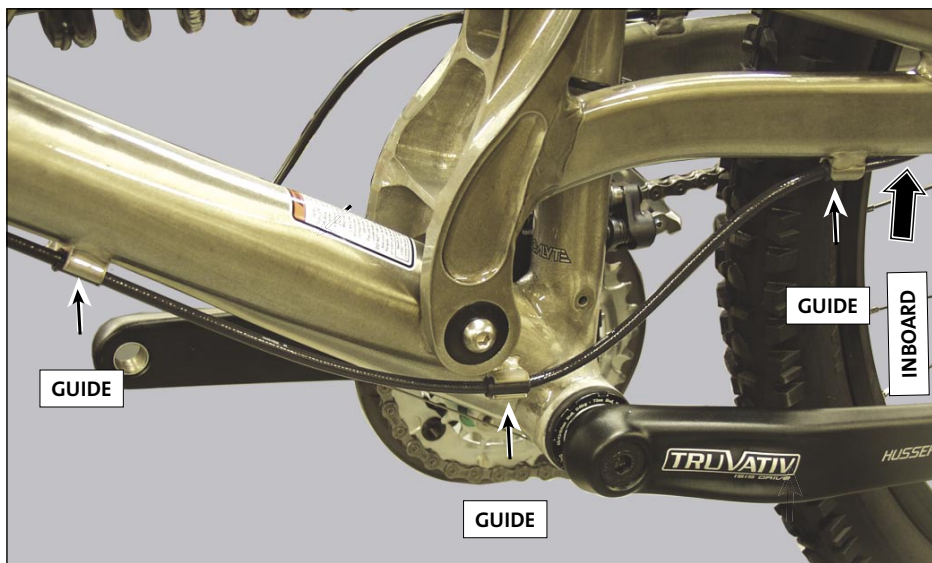
### When removing or installing the wheel"

- Clean and inspect the axle and dropouts and the derailleur hanger.
- Apply a thin film of grease to all mating surfaces and reapply fresh Loctite 242 (blue) to bolt threads.
- Align the ovalized head (b) of the axle with that of the dropout hole (b). Notice that the axle hole (c) aligns with the dropout gap (d) when the matching shapes are aligned. Also, as you slide the axle through the hub, make sure the drive side end of the axle fits with the drive side dropout relief. If it contacts the inner face of the drive side drop out, it will prevent the axle from sliding in fully and the oval features of the axle and non-drive side drop out will not fit together.
- Tighten according to the sequence.
- Slip a hex wrench through the axle hole (c) hole to hold it from rotating when you install and tighten the axle bolt B.



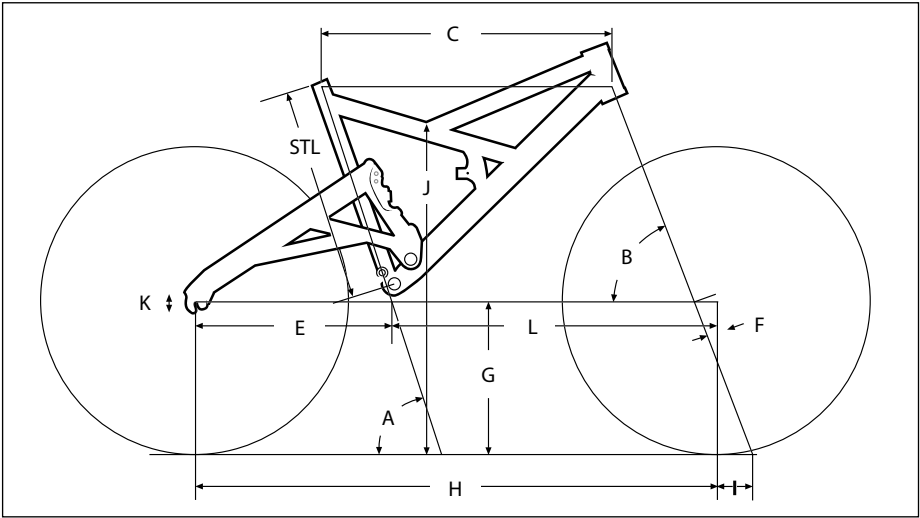
# ROUTING







# GEOMETRY



## GEMINI

### Gemini

		SIZE	SMALL	MEDIUM	LARGE	X-LARGE
Seat Tube Length (cm/in)	STL		40.5/15.9	43.0/16.9	48.0/18.9	53.0/20.9
Seat Tube Angle (degree)	A		71.0	70.5	70.5	70.0
Head Tube Angle (degree)	B		67.0	★	★	★
Top Tube Horizontal (cm/in)	C		57.5/22.6	60.0/23.6	62.5/24.6	65.0/25.6
Chainstay Length (cm/in)	E		43.2/17.0	★	★	★
Fork Rake (cm/in)	F		4.6/1.8	★	★	★
Bottom Bracket Height (cm/in)	G		36.3/14.3	★	★	★
Wheel Base (cm/in)	H		9.2/43.0	115.5/43.9	114.5/45.1	116.8/46.0
Fork Trail (cm/in)	I		9.6/3.8	★	★	★
Standover TT Midpoint (in/cm)	J		72.4/28.5	73.0/28.7	73.3/28.9	75.4/29.7
Bottom Bracket Drop (cm/in)	K		-2.0/-0.8	★	★	★
Front Center Distance (cm/in)	L		66.4/26.1	68.7/27.0	71.5/28.1	73.8/29.1
Rear Travel (in/cm)	15.0-17.0/5.9-6.7		★	★	★	★
Shock Eye-to-Eye (in/cm)	20.0/7.875		★	★	★	★
Shock Stroke (in/cm)	5.7/2.25		★	★	★	★
Recommended Sag	30%		★	★	★	★

All dimensions are given with suspension fully extended. ★= same spec

## SPECIFICATIONS

ITEM	SPECIFICATION
Frame Material	6061-T6, Tig welded, Aluminum Alloy
Recommended Sag	30%
Maximum Tire Width	76.2 (3.0)
Head Tube	Headshok, OnePointFive
Head Tube Height	114 (4.5)
Maximum Fork Length	570 (22.4)
Seat Post Diameter	27.2 (1.07)
Rear Shock Mounting Bolt Diameter	8.5 ± 0.05 mm
Rear Shock Front Bushing Width	27.4 ± 0.1 mm
Rear Shock Rear Bushing Width	32.4 ± 0.1 mm
Rear Shock Eyelet-to-eyelet Length	200 (7.9)
Rear Wheel Travel	150 (5.9), 170 (6.7)
Rear Shock Stroke Length	57.0 (2.25)
Rear Shock Leverage Ratio	2.6:1@150mm / 3.0:1@170mm
Swingarm Main Pivot	Sealed cartridge bearing , SKF #6902 - (I.D.15 mm, O.D. 28 mm, W 7 mm)
Front Derailleur	E-Type
Bottom Bracket Shell Width	68 mm
Bottom Bracket Shell Thread Type	English
Chain Line	50
Dropout Spacing	135 mm
Rear Hub Spacing	135 mm
Rear Hub Axle	Thru 12
Rear Brake Mount	International Standard, 6" or -8" rotor compatible
Chain Retention System	International Standard Chain Guide (ISCG)

\*\* The bottom bracket design is compatible with chain retention devices conforming to the International Standard Chain Guide 05 (ISCG 05). However, due to variances in design within the ISCG 05 standard and component quality, some "compatible" devices may fit and work better than others. For that reason, we recommend that you run the rear suspension through its complete range of travel when checking the device for interference. As always, it's a great idea to consult with your Cannondale Dealer about compatibility before deciding on any component for your bike.

## REPLACEMENT PARTS (KITS)

ORDER	KIT DESCRIPTION
KF078/	Kit, Gemini chainstay underside prot.
QHDST/EBO	Kit, Headset, 2 cups + 1 bear
KF077/	Kit, Gemini Tru 12 der. Hanger
KF076/	Kit, Gemini Tru 12 axle
KB61902/	Kit, Bearing-LeftyOut, Gemini
KF054/	Kit, Hardware-Pivot - Gemini
KF085/	bottom bracket cable guide, rear der
109447	Bearing,Pivot,61903-2RS
KF052/	Kit, Hardware-Shock Mnt, Gemin
KF077/	Kit,Der Hanger;Single Sided 2
KF079/	Kit, Gemini DH truing axle

For an up to date list of kits available for your bike, please visit our Tech Center at : <http://www.cannondale.com/tech/>