



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

# **SLICE CARBON**

## Owner's Manual Supplement

### 120849.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/>.

# **SAFETY INFORMATION**

## **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 supplement 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.

### **WARNING**

#### **IMPORTANT COMPOSITES MESSAGE**

Your bike is made from composite materials also known as “carbon fiber.”

All riders must understand a fundamental reality of composites. Composite materials constructed of carbon fibers are strong and light, but when crashed or overloaded, carbon fibers do not bend, they break.

For your safety, as you own and use the bike, you must follow proper service, maintenance, and inspection of all the composites (frame, stem, fork, handlebar, seat post, etc.) Ask your Cannondale Dealer for help.

We urge you to read PART II, Section D. “Inspect For Safety” in your *Cannondale Bicycle Owner’s Manual* BEFORE you ride.

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

## Intended Use

The intended use of your bike or frameset is  
CONDITION 1 / HIGH PERFORMANCE ROAD.



CONDITION 1 / HIGH-PERFORMANCE ROAD bikes and framesets are designed for riding on a paved surface where the tires do not lose ground contact. They are not intended to be ridden off-road, cyclocross, or touring with racks or panniers.

Material use is optimized to deliver both light weight and specific performance. You must understand that (1) these types of bikes are intended to give an aggressive racer or competitive cyclist a performance advantage over a relatively short product life, (2) a less aggressive rider will enjoy longer frame life, (3) you are choosing light weight (shorter frame life) over more frame weight and a longer frame life, (4) you are choosing light weight over more dent resistant or rugged frames that weigh more. All frames that are very light need frequent inspection for cracks that would indicate that the frame is worn out from fatigue. These frames are likely to be damaged or broken in a crash. They are not designed to take abuse or be a rugged workhorse.

## WARNING

**UNDERSTAND YOUR BIKE AND ITS INTENDED USE. CHOOSING THE WRONG BICYCLE FOR YOUR PURPOSE CAN BE HAZARDOUS. USING YOUR BIKE THE WRONG WAY IS DANGEROUS.**

Industry usage Conditions 1 - 5 are generalized and evolving. Consult your Cannondale Dealer about how you intend to use your bike.

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

## Maximum Weight Limit

RIDER lbs / kg	LUGGAGE * lbs / kg	TOTAL lbs / kg
275 / 125	10 / 4.5	285 / 129

\* Seat Bag /Handlebar Bag Only

## 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.

## Protect From Extreme Temperatures

- Protect your carbon bike from extreme temperatures when storing or transporting it.
- Allow your bike to cool off or warm up before you ride
- Do not store your bike in places where the temperature will exceed 66.5C° (150°F). For example, do not leave your bike lying flat in a black pickup truck bed in the desert sun or under the glass of a hatchback auto.

## Bike Stands

The clamping jaws of ordinary bike stand can generate a crushing force strong enough to seriously damage and ruin your bike frame.

### CAUTION

#### SERIOUS FRAME DAMAGE:

DO NOT USE STANDS THAT CLAMP TO THE FRAME OR SEAT POST.

USE A STAND THAT RELIES ON SUPPORTING THE BOTTOM BRACKET AND DROPOUTS. (Park Tool, PRS-20 shown)



## Inspection & Crash Damage of Carbon Frames

### WARNING

#### **AFTER A CRASH OR IMPACT:**

Inspect frame carefully for damage (See PART II, Section D. Inspect For Safety in your Cannondale Bicycle Owner's Manual.)

Do not ride your bike if you see any sign of damage, such as broken, splintered, or delaminated carbon fiber.

#### **ANY OF THE FOLLOWING MAY INDICATE A DELAMINATION OR DAMAGE:**

An unusual or strange feel to the frame

Carbon which has a soft feel or altered shape

Creaking or other unexplained noises,

Visible cracks, a white or milky color present in carbon fiber section

**Continuing to ride a damaged frame increases the chances of frame failure, with the possibility of injury or death of the rider.**

## Repainting Or Refinishing

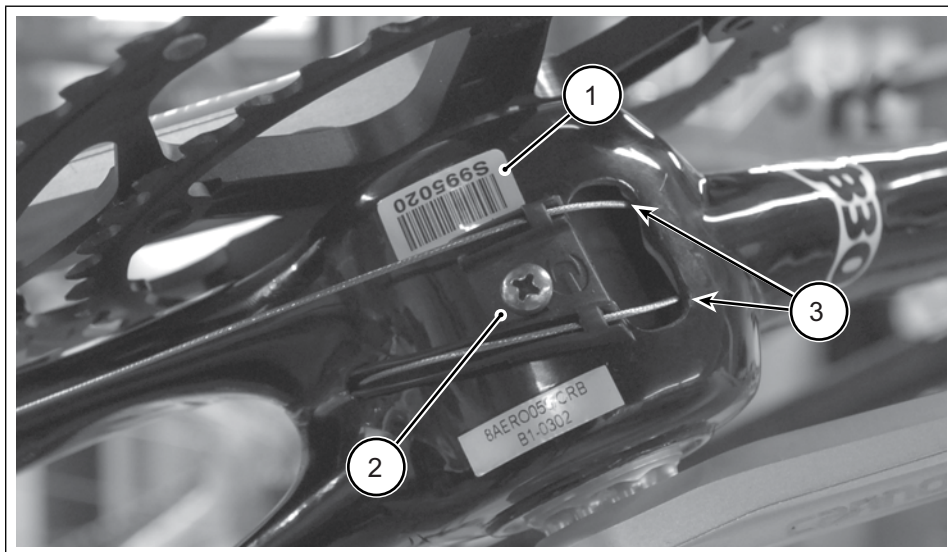
You should not paint over the existing finish, refinish or repaint your bike. The carbon fiber composites making up the frame are held together by some extremely strong bonding chemicals. However, these bonds can be attacked or weakened by paint stripping or refinishing chemicals.

### WARNING

Repainting, painting over, retouching, or refinishing your frame or fork can result in severe damage leading to an accident. You can be severely injured, paralyzed or killed.

Refinishing chemicals : Solvents, and strippers can attack, weaken, or destroy the important composite chemical bonds holding your frame together.

Using abrasives or sanding the frame/fork structure, original paint, decals, or coatings through the use of mechanical actions such as plastic or glass bead blasting or other abrasive methods such as sanding or scraping can remove frame material or weaken it.



## SERIAL NUMBER

The serial number (1) printed and permanently affixed barcode label. Use this serial number for warranty registration and theft recovery. See your *Cannondale Bicycle Owner's Manual* for more information on warranty registration.

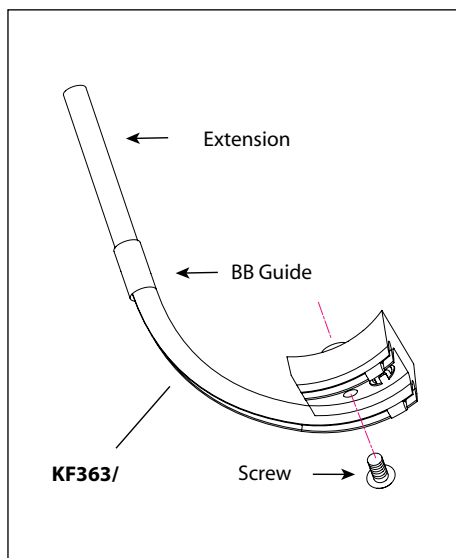
## CABLE ROUTING

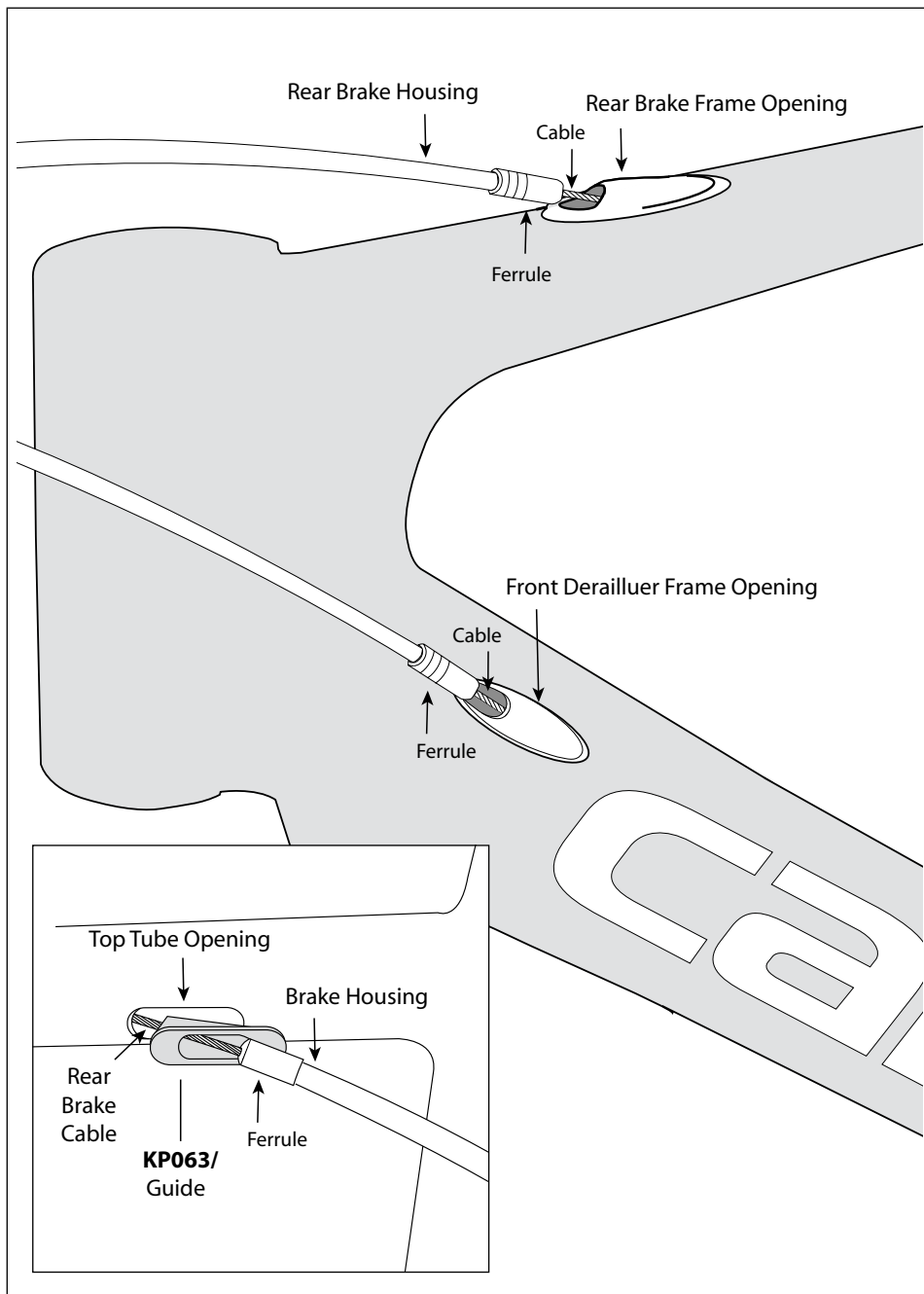
The rear and front derailleur cables exiting the down tube (2) are routed through the bottom bracket cable guide (3).

The top tube guide is removable so that brake cable may be routed inside the tube. The guide is secured in the tube opening by the installed brake cable tension. Make sure the guide is seated properly in the top tube opening when installing and connecting the rear brake.

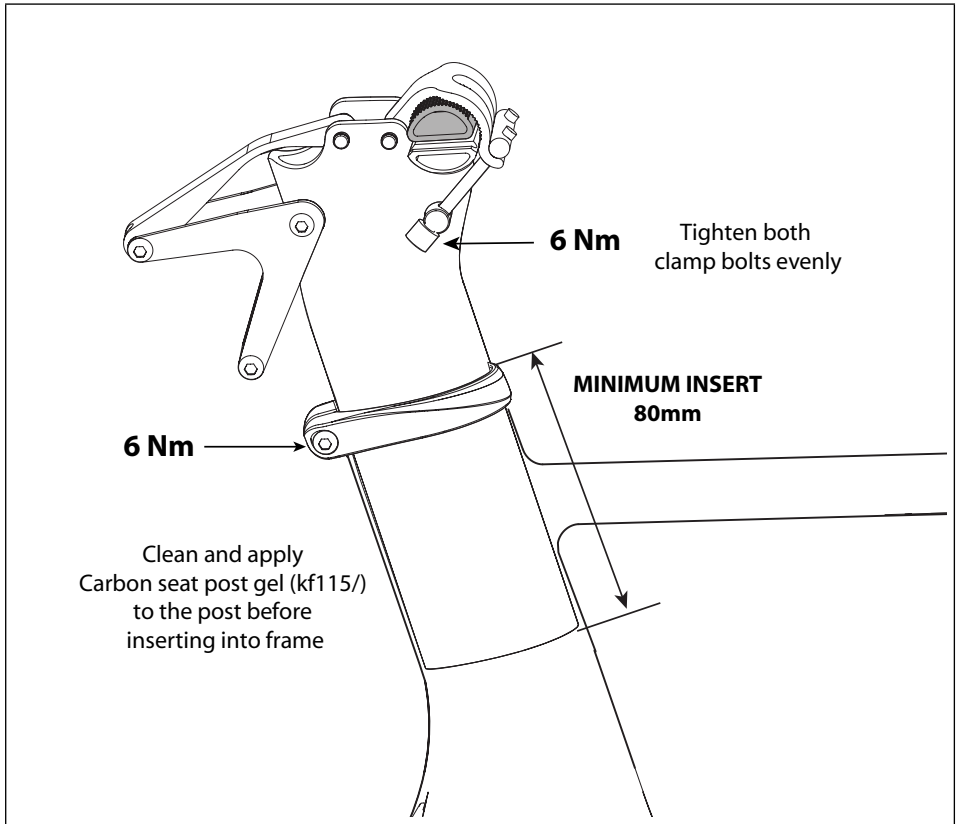
Be sure to use a ferrules on housing ends.

When installing cables, make sure ferrule is seated inside frame opening correctly.





## SEAT POST



### Saddle Position and Angle

The seat post can be configured to place the saddle in a TRIATHLON or TIME TRIAL position. Please see "Changing Saddle Position" on pages 9 and 10. The water bottle cage bracket parts can only be used with saddle in the TRIATHLON position (shown above). Two water bottle cages may be mounted on the sides of the seat post, or a single cage can be mounted on the back.

Saddle angle can be adjusted by rotating the upper saddle clamp 180°. The change is 3° per groove. If the upper saddle clamp orientation is reversed 180°, saddle adjustment range will change  $\pm 1.5^\circ$  in relation to 0°, again with 3° of change per groove. Ask a professional bike mechanic to show you how this works.



## 80mm Minimum Insert

The minimum insert depth that the seat post must be inserted into the frame is 80mm. Seat posts are permanently marked with 'MINIMUM INSERT' line 80mm up from the bottom of an un-cut seat post.

## Cutting the Seat Post

In some frames (especially smaller sizes), a seat post will only be able to be inserted into a seat tube to a maximum depth of 100 mm. Below a depth of 100mm carbon material can interfere with the seat post. The material can not be removed.

The full length of the seat post can be cut down to have sufficient adjustment range. The minimum insertion depth requirement of 80mm does not change. 80mm should be marked from the bottom of a cut seat post. The seat post may be cut (shortened). A new "MINIMUM INSERT" line 80mm from the bottom of the post must be marked or indicated without scoring, scratching or otherwise damaging the surface of the seat post. Use a thin decal (automotive pin striping) or permanent marker.

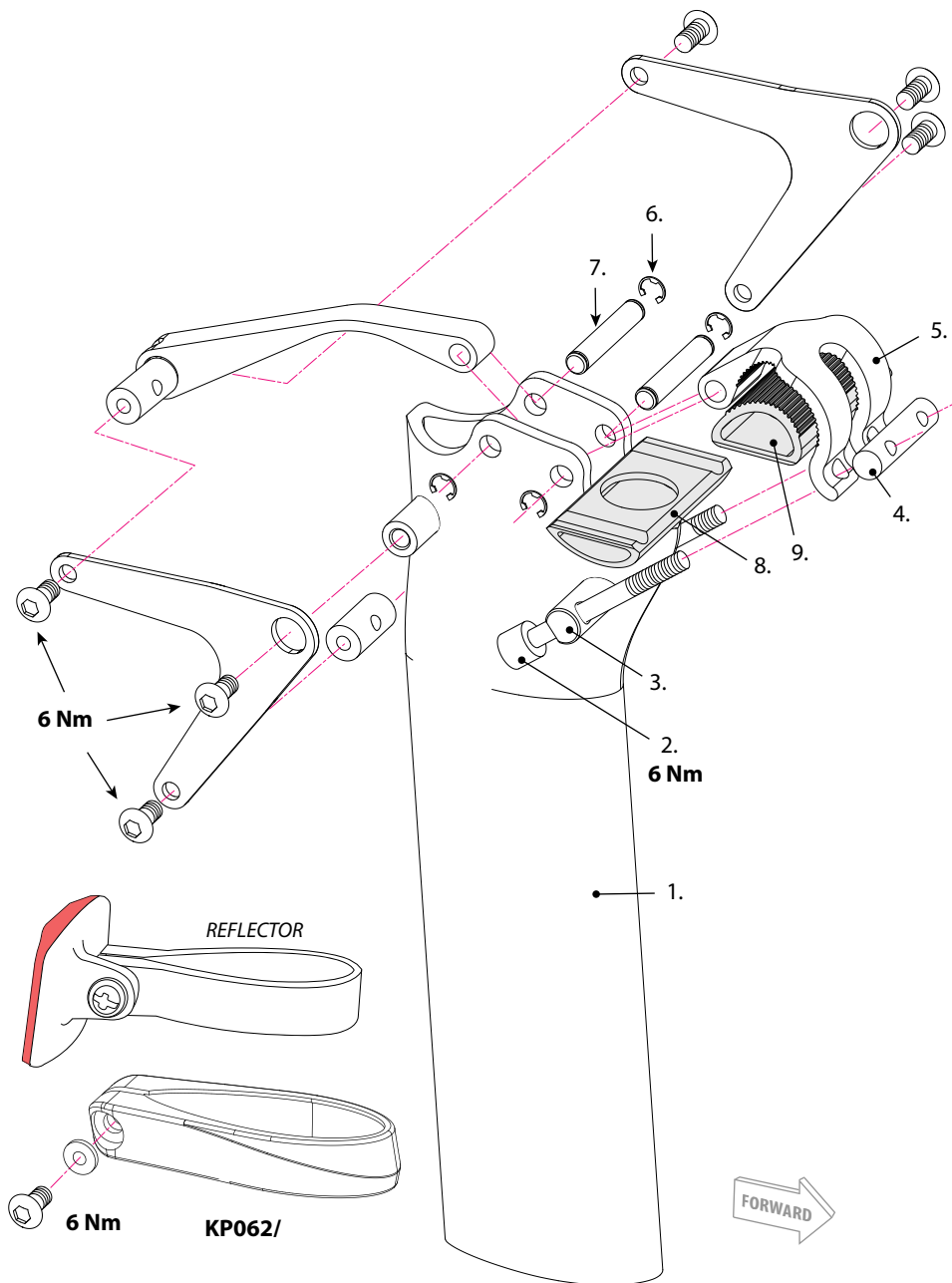


### WARNINGS

#### TO AVOID SERIOUS SEAT POST OR FRAME DAMAGE:

1. After any crash, fall, or impact, remove and inspect the seat post for damage (e.g., cracks, scratches, scrapes, gouges, splintering). If damage is found, do not ride it; discard it. Replace the seat post with a new one.
2. Do not use solvents, or chemical spray cleaners to clean.
3. Never force a seat post into the seat tube.
4. Use a good torque wrench to tighten fasteners to the specified torque. Correct tightening torque of the seat post clamp and the bolts that hold the saddle to the seat post is also very important to your safety. Always tighten seat post to saddle clamp bolts to the correct torque. Bolts that are too tight can stretch and deform. Bolts that are too loose can move, fatigue and fracture. Either mistake can lead to a sudden failure of these bolts. Such a failure may lead to an accident, with risk of serious injury, paralysis or death.
5. If the seat post requires cutting, have it done by a professional bike mechanic with experience cutting high-performance carbon components.

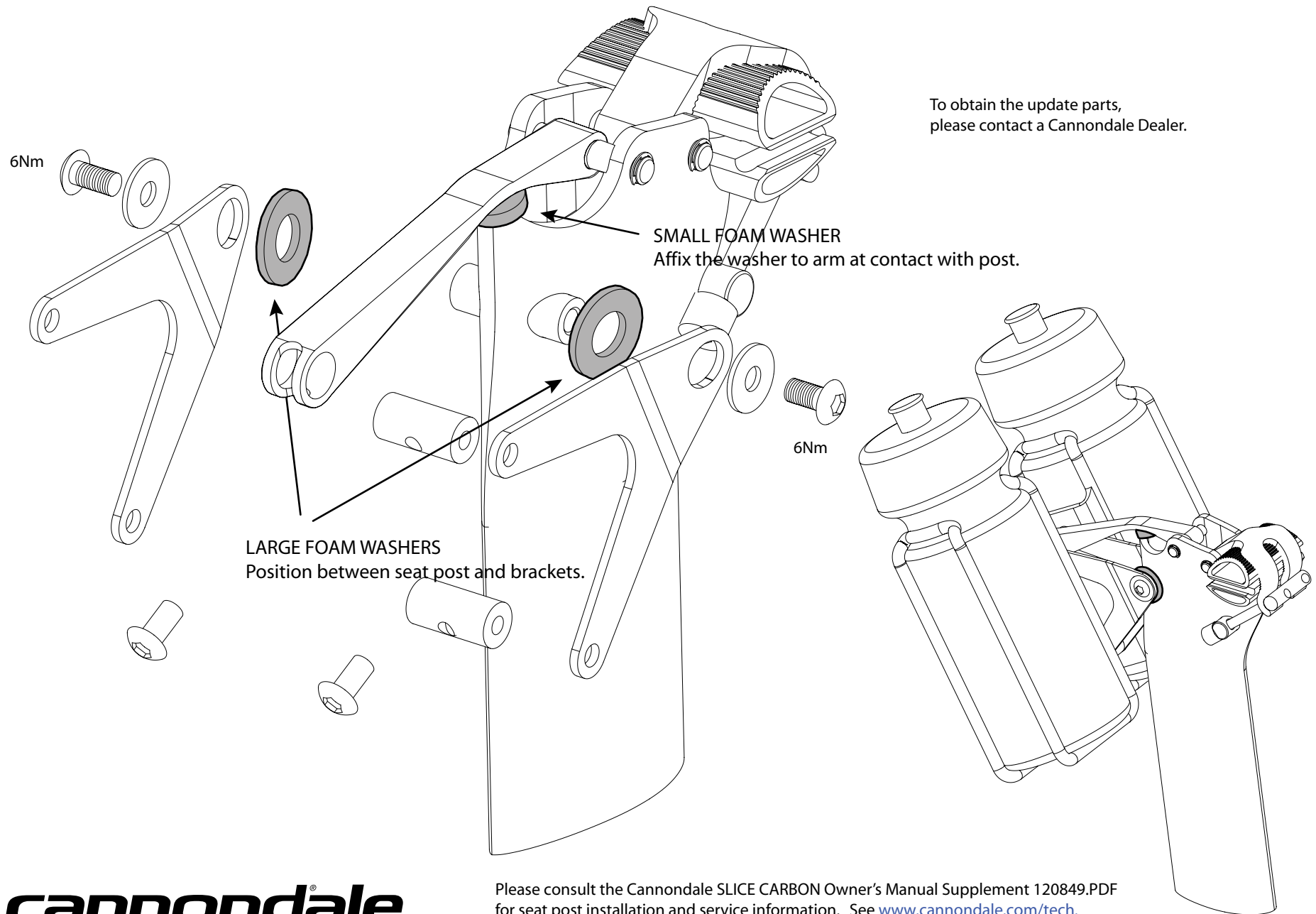
**YOU CAN BE SEVERELY INJURED, PARALYZED OR KILLED IF YOUR IGNORE THESE WARNINGS.**



# 2008 SLICE MULTISPORT SEATPOST

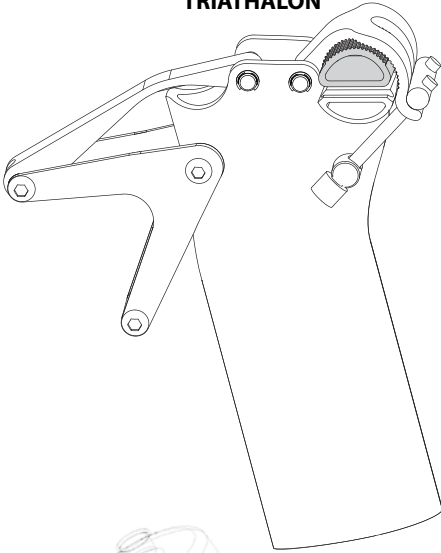
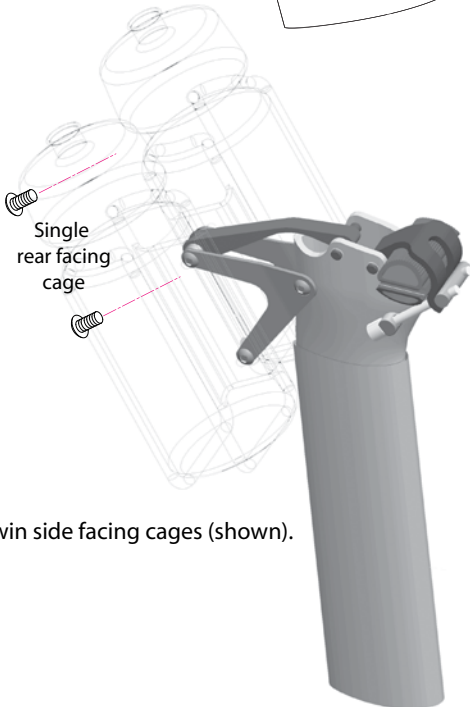
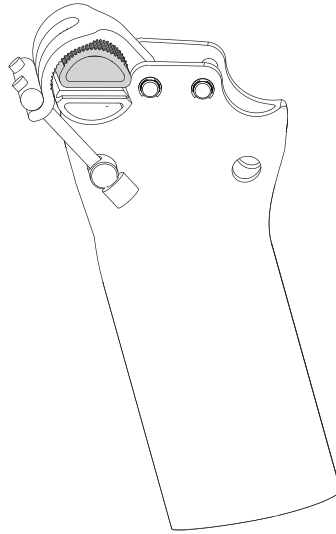
## Water Bottle Bracket Assembly Update Parts

To obtain the update parts,  
please contact a Cannondale Dealer.



**cannondale**

Please consult the Cannondale SLICE CARBON Owner's Manual Supplement 120849.PDF for seat post installation and service information. See [www.cannondale.com/tech](http://www.cannondale.com/tech).

**TRIATHALON****TIME TRIAL**

Twin side facing cages (shown).

**Changing Saddle Position**

1. Remove the saddle clamp bolts (2) and remove clamp barrel (3), upper clamp (9), lower clamp (8), and barrel (4).
3. Remove the circlips (6).
4. Reposition clamp over (5) and use other pin (7) and reinstall pin and all four circlips (6). Make sure all four circlip are seated in the pin grooves.
5. Reinstall the saddle, clamp bolts, and tighten the clamp bolts evenly to the specified torque.

## SI BOTTOM BRACKET

### Compatibility

The BB shell is compatible with the BB30 Standard. See <http://www.bb30standard.com/> For information see *SI Cranksets Owner's Manual Supplement*. See <http://www.cannondale.com/tech/>.

### Bearings

Shell bearings are sealed cartridge type and do not require lubrication. Inspect bearing condition annually (at a minimum) and anytime the crankset assembly is disassembled or serviced. The bearings are a press fit within the shell. Old bearings should not be reinstalled if removed. Replace both bearings at the same time.

Replacements circlips (QC616/) are available if the circlips become damaged. The circlips can be lifted from the BB groove (inset) by lifting the hooked end with a thin blade screwdriver.

#### CAUTION

**DO NOT FACE, MILL OR MACHINE THE BOTTOM BRACKET SHELL FOR ANY REASON.**  
Doing so can result in serious damage and possibly a ruined bike frame.

### SI Tools

KT011/ is a bearing removal tool.

KT010/ is a set of bearing installation tools to be used with a standard headset press.

KT013/ a two piece tool set required for removing the crankarms SI Hollowgram alloy cranksets.

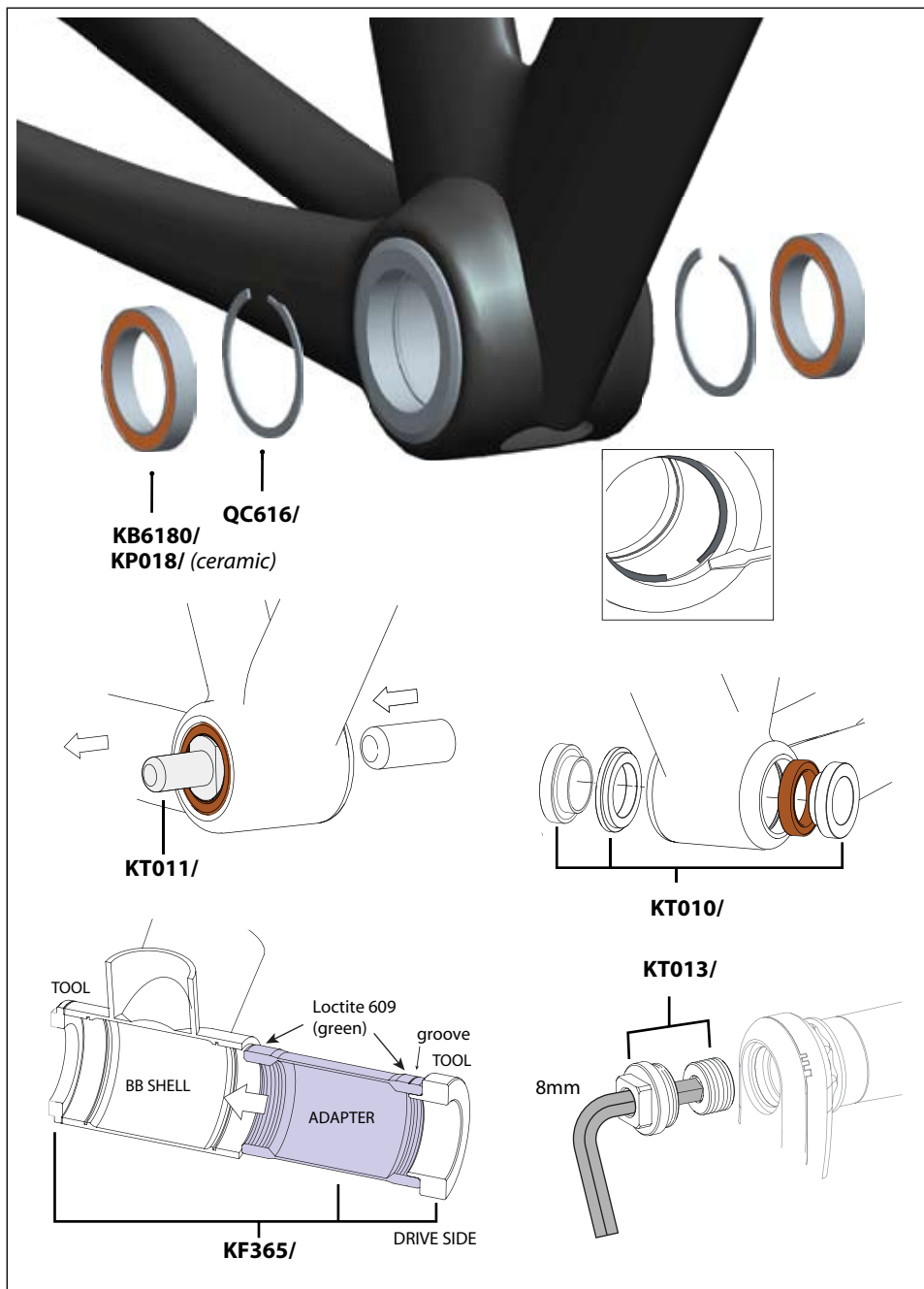
For information see *SI Cranksets Owner's Manual Supplement*. See <http://www.cannondale.com/tech/>.

### SI BB30-to-68mm Standard Adapter

The adapter (Cannondale kit KF365/) converts the BB30 bottom bracket cranksets for use with 68mm bottom brackets. The adapter IS NOT a repair part and will only work in undamaged frames in good condition. Improper installation or removal can result in damage and void applicable frame warranty.

#### CAUTION

**SERIOUS FRAME DAMAGE :** Once installed, the SI-to-Standard adapter is a non-removable/permanent frame part. Do not remove it. Adapters must be installed by a professional bike mechanic.



## SI COMPRESSION ASSEMBLY

The cylindrical shape of the TOP CAP fits snugly within the carbon steering tube inside diameter (I.D.), supporting the steerer from the clamping force of the stem. It must fit snugly inside the I.D. of the steerer.

### How to install the assembly

1. Assemble the fork, headset, spacers, and stem. Make sure that the stem bolts are loose.
2. Set up the compression assembly. "READY TO INSERT" above. The length should be about 48mm as shown above. You can do this by unthreading the top cap from the expander and then threading it back on about 6-7 turns. The expanding parts should not be expanded.
3. Insert the SI compression assembly into the fork steerer. It should slide in snugly; the TOP CAP closely fitting the steerer inside diameter.
4. Insert a 5mm Allen key through the access hole in the TOP CAP and into the EXPANDER BOLT. Tighten the expander by turning clockwise to 6.8Nm, 5 ftLbs.
5. To set bearing preload, insert a 6mm allen key into the hex shape in the TOP CAP itself. Turn the entire TOP CAP clockwise to increase preload. Turn counter-clockwise to decrease preload.
6. When the headset preload is correct, align handlebar and tighten the stem fork clamp bolts to the torque specified for the stem. Consult the stem since torque values are often marked on the stem, or consult the manufacturer's instructions.



### WARNINGS

**USE ONLY ORIGINAL EQUIPMENT CANNONDALE SI COMPRESSION ASSEMBLY.** Do not replace it with a star nut or use any other compression or expanding wedge assembly.

**DO NOT INSTALL HEADSET SPACERS ON TOP OF THE STEM.** Installing spacers above the stem will raise the TOP CAP inside the steerer removing necessary support for the steerer tube wall. When stem bolts are tightened, the steerer tube can be damaged.

**PLACE HEADSET SPACERS ONLY BETWEEN THE HEADTUBE AND THE BOTTOM OF THE STEM.**

**YOU CAN BE SEVERELY INJURED, PARALYZED OR KILLED IF YOUR IGNORE THESE WARNINGS.**

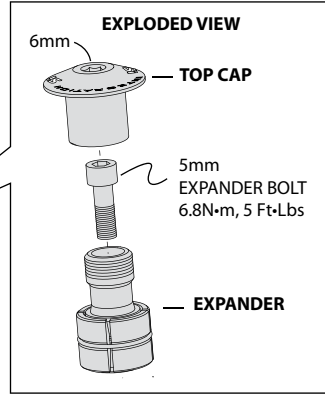


KP017/

"READY TO INSERT"

48mm

Do not grease.



Cut the steerer tube  
2 - 3mm below the top  
of the installed stem.

CARBON  
STEERER  
TUBE

STEM

Thread on TOP CAP.  
Set EXPANDER BOLT  
so that the the expanding parts are n  
expanded and not loose.

HEADSET SPACERS

55mm

**MAXIMUM STACK HEIGHT**

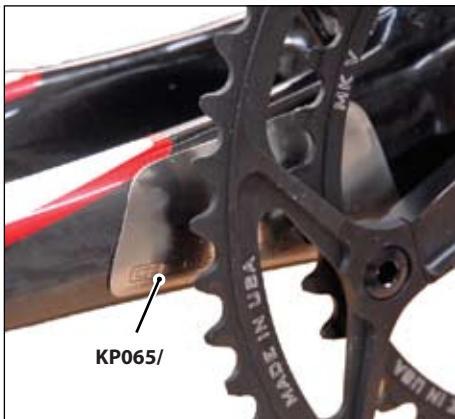
Measure from the top edge of the head  
to the bottom edge of the stem.

HEADSET TOP CAP

HEADTUBE

For more information on Cannondale Carbon Road Forks, please see your Carbon Road Fork Owner's Manual Supplement 120860.pdf included with your bike or download it from our website [http://www.cannondale.com/tech\\_center/](http://www.cannondale.com/tech_center/)





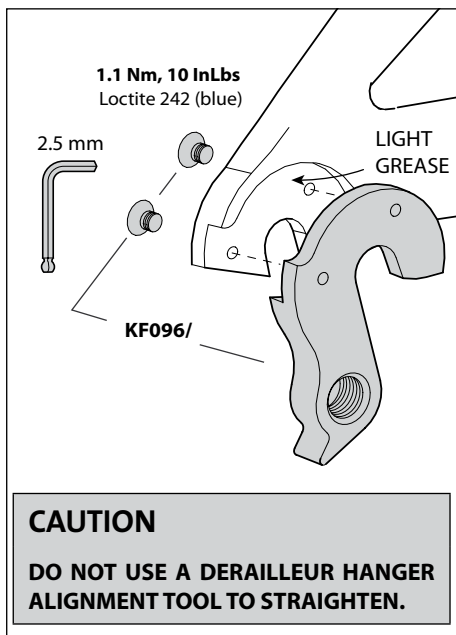
## CHAINSTAY PROTECTION

The chainstay plate (KP065/) located on the right chainstay just behind the chain rings, protects the chainstay from damage in the event the chain is dropped from the chain ring. Contact your Cannondale Dealer for a replacement if it becomes missing or damaged. The clear chainstay protector (above right) provides limited protection against frame or finish damage caused by the chain. Replacement protectors are available through a Cannondale Dealer.

## REAR DERAILLEUR HANGER

Before re- installing (same or new): Clean dropout and inspect carefully for any cracks or damage. Clean surfaces and apply a light film of bike grease to the dropout to minimize any noise or “creaking” that might result from very slight movement between the dropout and hanger during movement of the derailleur. Apply grease and Loctite carefully. Do not contaminate the male or female bolt threads with grease which would cause the Loctite to be ineffective.

Check derailleur adjustment after replacement. Readjust wheel quick release so it is very tight. See PART I Section 4. A in your Cannondale Bicycle Owner’s Manual.



## REAR BRAKE MOUNT ADAPTER

### To install a rear brake:

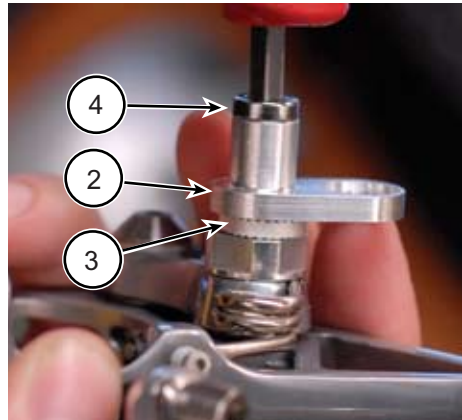
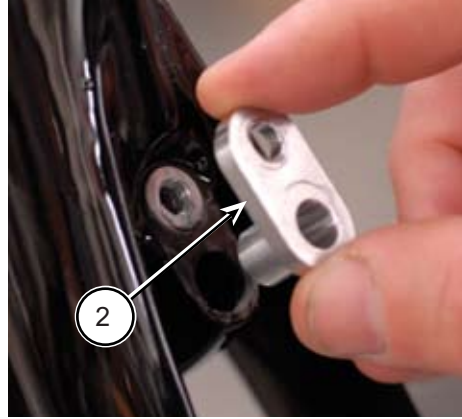
1. Remove the adapter bolt (1) with a 4mm Allen wrench.
2. Lift the brake mount adapter (2) from the frame.
3. Install a serrated washer (3) onto the brake bolt and mount the brake onto the adapter.

Tighten the brake recessed nut (4) to the brake manufacturer's recommended torque.

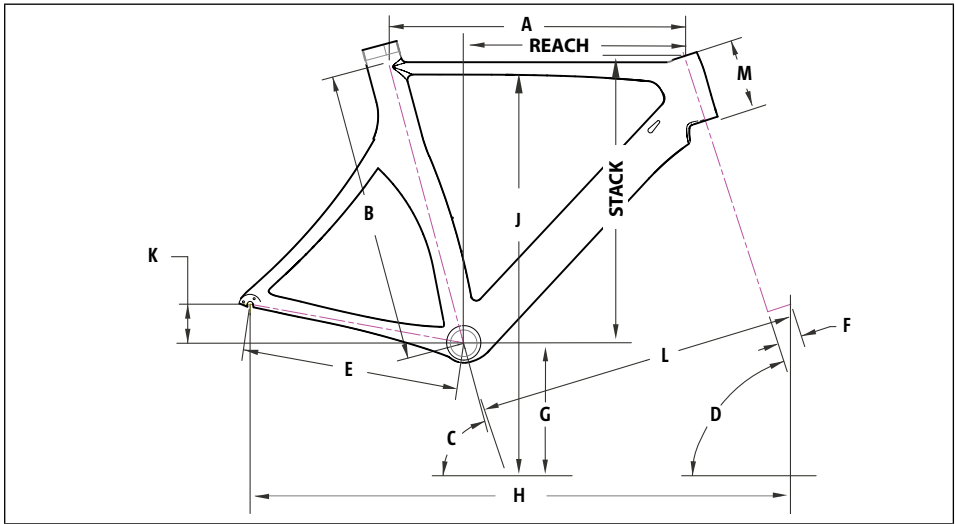
4. Apply grease to adapter bolt threads and install adapter and brake into frame.

Tighten adapter bolt to 7 Nm.

### Replacement brake mount kit - KP064/



# GEOMETRY/SPECIFICATION



ITEM		51	54	56	56	60
Wheel Size		700c	700c	700c	700c	700c
Horizontal Top Tube Length (cm)**	A	50.5	53.5	55.0	56.5	58.0
Measured Size (cm)	B	50	51.5	53.5	55.5	57.5
Seat Tube Angle*	C	75°	75°	75°	75°	75°
Head Tube Angle	D	71.5°	71.5°	72°	72°	72°
Chainstay Length	E	40	40	40	40	40
Fork Rake	F	4.5	4.5	4.5	4.5	4.5
Bottom Bracket Height (cm)	G	26.5	26.5	26.5	26.5	26.5
Wheelbase (cm)	H	95.4	98.5	99.7	101.3	102.6
Trail (cm)	I	6.5	6.5	6.2	6.2	6.2
Standover @ Top Tube Midpoint	J	74.9	76.4	78.3	80.2	82.2
Bottom Bracket Drop (cm)	K	72	72	72	72	72
Front Center Distance (cm)	L	56.5	59.6	60.7	62.3	63.9
Head Tube Length (cm)	M	9.0	10.5	12.5	14.5	17
STACK (cm)***		49.4	50.9	52.9	54.8	57.2
REACH (cm)***		37.1	39.8	40.7	41.7	42.5
Headset Compression	Cannondale SI Compression Assembly - KP017/					
Seatpost Minimum Insert Depth.	80mm					
Seat Binder	KP062/			MAXIMUM TORQUE 6Nm		
Rear Brake Mount Adapter Bolt	7Nm					
Dropout Spacing	Rear 130mm, Front 100mm					

\* The Slice seat post has two positions for mounting the saddle. A full range of angles from 73° to 78° is achievable depending on rider's preference and/or the event.

\*\* This is the actual measurement of the top tube. The distance from the saddle to the bars will vary based on the choice of seat post position.

\*\*\* STACK and REACH - STACK is measured vertically from the center of the BB to the top of the head tube; REACH is measured horizontally from the center of the BB to the top of the head tube.

If you ride a 56 road frame, you should choose a size 56 Slice frame.

# REPLACEMENT PARTS

ORDER	FRAME	
KF363/	BB CABLE GUIDE w/fixing bolt	
KF055/	INLINE ADJUSTER (QTY 2)	
KP061/	SEAT POST SLICE AERO	
KP062/	SEAT BINDER SLICE AERO	
KP060/	SEAT POST HARDWARE SLICE AERO	
KF115/	SEAT POST GEL	
KP065/	CHAINSTAY PROTECT-AERO SLICE	
KF096/	REAR DERAILLUER HANGER	
KP064/	BRAKE GUIDE SLICE AERO	
ORDER	HEADSET & FORK PARTS	
KB002/	KIT,HEADSET,SI CRB W/15 TC	
QC778/	BRAKE BOLT(35mm)	
KP017	SI COMPRESSION ASSY	
ORDER	SI BB30	
<b>BOTTOM BRACKET</b>		
QC616/	SI CIRCLIPS (QTY 2)	
KB6810/	SI BEARINGS (QTY 2)	
KP018/	SI CERAMIC BEARINGS (QTY 2)	
QC615/	SI BEARING SHIELD (QTY 2)	
KP023/	SI BEARING SHIELD SL (QTY 2)	
QC612/	SPINDLE-SI ROAD	
QC617/	SI SHIMS (QTY 5)	
QC618/	SI WAVE WASHER	
<b>TOOLS</b>		
KT010/	SI BEARING PRESS TOOL(USED WITH HEADSET PRESS)	
KT011/	SI BEARING REMOVAL TOOL	
KT012/	SI LOCKRING TOOL	
KT013/	SI HOLLOWGRAM CRANKARM EXTRACTION TOOL	
KF365/	SIBB/68 ADP.INSTALL	
QC787/	EXTRACT CAP TOOL FOR SI CARBON CRANKSETS	
KP009/	ADAPTER,SIBB TO 68MM TAP	

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

ORDER	SI HOLLOWGRAM	
<b>SI HOLLOWGRAM CRANKSETS</b>		
KA014/170SLV	CRANKSET,SL,ROAD 39/53,170	
KA014/172SLV	CRANKSET,SL,ROAD 39/53,172	
KA014/175SLV	CRANKSET,SL,ROAD 39/53,175	
KA015/170SLV	CRANKSET,SL,ROAD 34/50,170	
KA015/172SLV	CRANKSET,SL,ROAD 34/50,172	
KA015/175SLV	CRANKSET,SL,ROAD 34/50,175	
KP019/170L	CRANKARM-SL SLV,170 LFT	
KP019/172L	CRANKARM-SL SLV,172 LFT	
KP019/175L	CRANKARM-SL SLV,175 LFT	
KP019/170R	CRANKARM-SL SLV,170 RHT	
KP019/172R	CRANKARM-SL SLV,172 RHT	
KP019/175R	CRANKARM-SL SLV,175 RHT	
QC690/	BB,CDALE Si,68X104mm Rd	
QC850/	B,CDALE Si,68X104mm Rd-SRM	
KA019/	BB,CDALE Si,68X104 CERAMIC	
ORDER	SI CARBON	
QC781/	CRANKSET,CRB 2PC,39/53,170	
QC782/	CRANKSET,CRB 2PC,39/53,172	
QC783/	CRANKSET,CRB 2PC,39/53,175	
QC784/	CRANKSET,CRB 2PC,34/50,170	
QC785/	CRANKSET,CRB 2PC,34/50,172	
QC786/	CRANKSET,CRB 2PC,34/50,175	
KF361/	BOLTS, SI CARBON CRANK (QTY 2)	
QC787/	TOOL-EXTRACT. CAP.SI CRB	
ORDER	SI CHAINRINGS/SPIDER	
QC694/	Spider,H-GRAM SI,130MM BCD	
QC693/	Spider,H-GRAM SI,110mm BCD	
QC603/	Pin,Chain Catch-SI	
KP024/	CHAINRING,MK5-53T/130BCD	
KP025/	CHAINRING,MK5-39T/130BCD	
KP026/	CHAINRING,MK5-50T/110BCD	
KP027/	CHAINRING,MK5-34T/110BCD	
KP021/	LOCKRING-SL --REQUIRES KT012/	
QC789/	CHAINRING,SI,39T/130BCD	
QC790/	CHAINRING,SI,53T/130BCD	
QC791/	CHAINRING,SI,34T/110BCD	
QC792/	CHAINRING,SI,50T/110BCD-34Tspecific	
QC788/	BB,CDALE SI,2PC	