English



# Grade

# Owner's Manual Supplement

### **WARNING**

READ THIS SUPPLEMENT AND YOUR GT BICYCLE OWNER'S MANUAL.

Both contain important safety information. Keep both for future reference.

# **Safety Messages**

In this supplement, particularly important information is presented in the following ways:

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Indicates a hazardous situation which, if not avoided, may result in death or serious injury.

#### NOTICE

Indicates special precautions that must be taken to avoid damage.

# Symbols:

Symbol	Name	Description
ACRB GILL	Carbon gel	Apply carbon gel (friction paste) KF115/
A NGLIS I	NGLI-2 synthetic grease	Apply NGLI-2 synthetic grease.
Locasa	Medium-strength removable thread lock	Apply Loctite® 242 (blue) or equivalent.

# **GT Support**

Our online SUPPORT contains helpful resources to consult about our bikes.



# **Illustrations:**

Throughout this manual, all product images, graphics, and figures shown are for illustration purposes only and may not be an exact representation of the product.

### **GT Supplements**

This manual is a "supplement" to your <u>GT</u> <u>Bicycle Owner's Manual</u>.

This supplement provides additional and important model-specific safety, maintenance, and technical information. It may be one of several important manuals/ supplements for your bike; obtain and read all of them.

Please contact your Authorized GT Dealer immediately if you need a manual or supplement or have a question about your bike. You may also contact us using the appropriate country/region/location information.

You can download Adobe PDF versions of any manual/supplement from our website: http://www.gtbicycles.com.

### **Contacting GT**

#### GT USA

Cycling Sports Group, Inc. 1 Cannondale Way, Wilton ,CT 06897 USA 1-800-726-BIKE (2453)

#### Cycling Sports Group Europe B.V

CSG Europe (Woudenberg) Cycling Sports Group Europe B.V. Geeresteinselaan 57 3931JB Woudenberg The Netherlands PH: 00.31.541.200374

#### International Distributors

Consult our website to identify the appropriate GT Dealer for your region.

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### Your GT Dealer

To make sure your bike is serviced and maintained correctly and that you protect applicable warranties, please coordinate all service and maintenance through your Authorized GT Dealer.

### NOTICE

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

# **SAFETY INFORMATION**

# Important Composites Message

### WARNING

Your bike (frame and components) 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 (e.g., frame, stem, fork, handlebar, seat post, etc.). Ask your GT Dealer for help.

We urge you to read PART II, Section D. "Inspect For Safety" in your <u>GT</u> <u>Bicycle Owner's Manual</u> BEFORE you ride.

You can be severely injured, paralyzed, or killed in an accident if you ignore this warning.

# Inspection & Crash Damage Of Carbon Frames/Forks

### WARNING

#### After A Crash Or Impact:

Inspect frame carefully for damage (See PART II, Section D. Inspect For Safety in your <u>GT Bicycle Owner's</u> Manual.)

Do not ride your bike if you see any signs 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, or a white / 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.

# **Intended Use**



The intended use of all models is ASTM CONDITION 2, General Purpose Riding.

### WARNING

Understand your bike and its intended use. Using your bike the wrong way is dangerous.

Please read your <u>GT Bicycle Owner's</u> <u>Manual</u> for more information about Intended Use and Conditions 1-5.

# Servicing

### 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 GT Dealer.

# Disc Brakes on Road Bikes

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Relative to conventional rim brakes, disc brakes are less affected by water, do not wear or heat the rims, and therefore are more consistent. Disc brakes also may be more powerful.

#### To minimize risk of injury or accidents:

- Understand that road bikes have a relatively small tire contact patch (part of the tire that touches the road). In order to apply the brakes safely and effectively, you may need more or less braking force in different situations. You need to take into account various road and weather conditions that can affect traction.
- Disc brakes are excellent but not some kind of magic. Take some time riding your new disc brake road bike in lower risk circumstances to get used to the feel and performance of the disc brakes and tires.

You can be severely injured, paralyzed, or killed in an accident if you ignore this message.

# **Using a Trainer**

Follow the trainer manufacturer instructions for the use of any required adapters.

Be particularly cautious with a carbon frame or fork. Carbon is relatively soft and not abrasion resistant. If there is any relative movement, carbon will wear quickly.

If you ride a trainer a lot, consider using an old bike: Corrosion from sweat will take its toll. Weight is irrelevant. Save wear on your expensive components.

Ask your dealer for help with trainers, the right one, and the correct way to use it.

# NOTICE

TRAINERS - Improperly mounting a bike in a trainer or using one that is not compatible with your particular bike frame can cause serious damage.

This kind of damage is not covered by the GT Limited Warranty.

# **Water Bottles**

Side impacts to a water bottle or cage can result in damage to threaded inserts due to the leverage on a very small area. In a crash, certainly the last thing you should be worried about is saving the threaded inserts in your frame. However, when you are storing or transporting your bike, take steps to prevent situations where a water bottle may be hit or bumped by a strong force that would cause damage. Remove the bottle and cage when you are packing your bike for travel.

Periodically check the attachment of the bottle cage; tighten the cage bolts if necessary. Don't ride with a loose bottle cage.

A loose cage will damage the insert and possibly lead to the inserts pulling out.

It may be possible to repair a loose insert or to install another insert only if the frame is undamaged. Replacement requires the use of a special tool. If you notice damage to the threaded insert, please ask your Cannondale Dealer for help.

# NOTICE

An impact, crash, or loose bottle cage can result in damage to your frame. This kind of damage is not covered by the GT Limited Warranty.

# **Building Up A Frameset**

Before building up a frameset, consult with your GT 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 lighterweight 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.

# **Tightening Torques**

Correct tightening torque for the fasteners (e.g., bolts, screws, nuts, etc.) on your bicycle is very important to your safety. Correct tightening torque for the fasteners is also important for the durability and performance of your bicycle. We urge you to have your dealer correctly torque all fasteners using a torque wrench. If you decide to torque fasteners yourself, always use a torque wrench.

#### Find Tightening Torque Information :

The wide range of bicycle models and components used means that a listing of tightening torques would be out of date by the time it was published. Many fasteners should be installed with a thread locking adhesive such as Loctite®.

To determine correct tightening torque and any adhesive application for a fastener, we ask you to check for the following:

1. On-product marking Many components are marked. On-product marking is becoming common.

2. Torque specs in the component manufacturers instructions shipped with your bicycle.

3. Torque specs listed on the websites of component manufacturers.

4. With your dealer. Dealers have access to current data and have experience with correct torques for most fasteners.

# **TECHNICAL INFORMATION**

# **Specifications**

Grade Carbon				
Item	Specification			
Head Tube	UPR: 1-1/8", LWR: 1-1/2"			
Headset	FSA No.42 Integrated 1-1/8"-1/1/2" IS42 top IS52 Bottom 45/36 ACB			
Bottom Bracket: Type/Width	BSA Threaded/68mm			
Chainline	Wide chainline only, Minimum chainline 47mm			
Maximum Chainring Size	1X drive trains - 42T			
	2X driv etrain 48/32T			
Front Derailleur	Braze-On			
Seat Post: Dia./Binder	27.2mm/31.8mm			
▲ Min. Seat Post Insert	65mm			
Tire Size x Max. Tire Width	700c x 45mm (measured) Fenders: 700c x 40mm (measured)			
Brakes: Mount Type / Min./Max. Rotor Dia.	RR: Flat Mount/160mm/160mm FT: Flat Mount/160mm/180mm"			
Axles: Type/Length	RR: Syntace TA/142x12x1.0P/160mm Overall Length FT: Maxle TA/100x12x1.5P/125mm Overall Length (Rigid Fork)			
Fork Offset	55mm			
A Max. Fork Length	456.7mm			
A Intended Use	ASTM CONDITION 2: General Purpose Riding			
A Max. Weight Limit: Total (Rider+All Equipment)	305lbs/138kg			

All Specifications subject to change without notice.

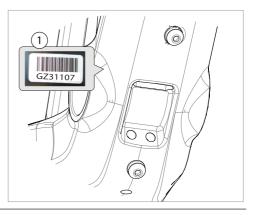
Grade Alloy			
Item	Specification		
Head Tube	UPR: 1-1/8", LWR: 1-1/2"		
Headset	FSA No.42 Integrated 1-1/8""-1/1/2" IS42 top IS52 Bottom 45/36 ACB"		
Bottom Bracket: Type/Width	BSA Threaded/68mm		
Front Derailleur	31.8mm Clamp		
Seat Post: Dia./Binder	27.2mm/31.8mm		
A Min. Seat Post Insert	65mm		
Tire Size x Max. Tire Width	700c x 45mm (measured)		
Brakes: Mount Type / Min./Max. Rotor Dia.	RR: Flat Mount/160mm/160mm FT: Flat Mount/160mm/180mm		
Axles: Type/Length	RR: Syntace TA/142x12x1.0P/160mm Overall Length FT: Maxle TA/100x12x1.5P/ 125mm Overall Length		
Fork Offset	55mm		
▲ Intended Use	ASTM CONDITION 2: General Purpose Riding		
▲ Max. Weight Limit: Total (Rider+All Equipment)	305lbs/138kg		

# **Serial Number**

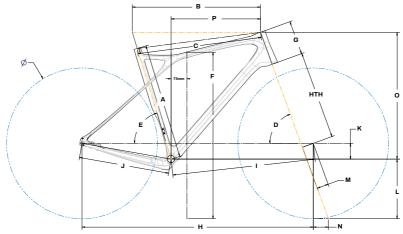
The 7-digit serial number lablel (1) is located on the bottom bracket. Use this serial number to register your bike.

To register, go to www.gtbicycles.com





# **Geometry - Grade Carbon**

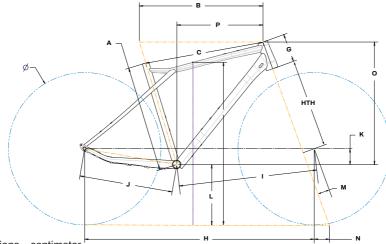


#### Dimensions = centimeter

Item	Size	S	Μ	L	XL
	Wheel Size	700c	700c	700c	700c
А	Seat Tube Length	45.0	50.0	55.0	60.0
В	Top Tube Horizontal	55.3	58.1	60.9	63.8
С	Top Tube Actual	53.0	56.0	59.1	62.3
D	Head Tube Angle	70.0	*	*	*
Е	Seat Tube Angle Effective	73.0	*	*	*
F	Standover	73.0	75.3	79.2	81.6
G	Head Tube Length	10.6	13.4	16.2	19.1
Н	Wheelbase	104.0	106.9	109.9	112.9
I	Front Center	62.1	65.0	68.0	71.0
J	Chain Stay Length	43.0	*	*	*
ĸ	Bottom Bracket Drop	7.5	*	*	*
L	Bottom Bracket Height	28.4	*	*	*
М	Fork Rake	5.5	*	*	*
Ν	Trail	7.2	*	*	*
0	Stack	55.0	57.7	60.3	63.0
Р	Reach	38.5	40.5	42.5	44.5
HTH Head Tube Height		42.0	*	*	*

\* - Same spec

### **Geometry - Grade Alloy**



#### Dimensions = centimeter

Item	Size	XS	S	М	L	XL
	Wheel Size	700c	700c	700c	700c	700c
А	Seat Tube Length	40.0	45.0	50.0	55.0	60.0
В	Top Tube Horizontal	52.9	55.3	58.1	60.9	63.8
С	Top Tube Actual	50.6	53.0	56.0	59.1	62.3
D	Head Tube Angle	69.0	70.0	*	*	*
Е	Seat Tube Angle Effective	73.0	*	*	*	*
F	Standover	69.2	72.7	76.5	80.5	83.7
G	Head Tube Length	9.4	10.6	13.4	16.2	19.1
Н	Wheelbase	103.4	105.0	108.0	110.9	113.9
I	Front Center	60.5	62.1	65.1	68.0	70.9
J	Chain Stay Length	44.0	*	*	*	*
К	Bottom Bracket Drop	7.5	*	*	*	*
L	Bottom Bracket Height	28.4	*	*	*	*
М	Fork Rake	5.5	*	*	*	*
Ν	Trail	7.9	*	*	*	*
0	Stack	57.7	60.3	57.7	60.3	63.0
Р	Reach	40.5	42.5	40.5	42.5	44.5
HTH	HTH Head Tube Height		*	*	*	*
Specificat * - Same s	ions subject to change without notion pec	ce.				

# Seat Post

### Removal

- 1. Insert a 4mm hex key into the binder bolt and turn counter-clockwise to loosen.
- 2. When bolt is loose simply lift the seat post up out of the seat tube.

### Installation & Adjustment

- Before inserting the seat post into the seat tube, use a clean shop towel to wipe off the seat post and any residual carbon gel paste from the inside of the seat tube. Do not use any spray cleaners or solvents.
- Apply fresh carbon friction paste (Topstone Carbon) or assembly grease (Topstone Alloy) to the seat post and place a little bit inside the seat tube.
- 3. Clean the surface of the seat tube under the binder and apply light grease to the threads.
- 4. Set the saddle height and tighten the clamp bolt to the specified torque with a torque wrench.

### Maintenance

Periodically remove the seat post and the seat post binder to clean, to inspect for damage, and to renew the application of grease and/or carbon paste.

# Minimum Insert (A)

Minimum insert is the length of a seat post that must be inserted within the seat tube at all times (65mm, all frame sizes).

### Maximum Insert (B)

Maximum insert is the length (B) of a seat post that may be inserted

#### NOTICE

Use the correct seat post length according to the frame size.

Do not force or bottom-out (c) the seat post inside the frame.

### **Sizing a Seat Post**

If the seat post must be cut, use the appropriate saw blade for the seat post material (aluminum or carbon). Lightly sand the edges of the cut seat tube with light sandpaper. Re-mark the minimum insert line on the post.

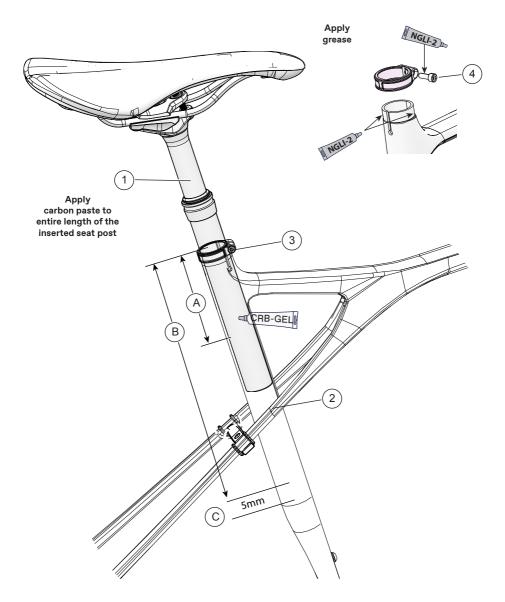
Be sure to remove any installed battery or routed wiring before cutting a seat post.

### 

The seat post must only be cut by a professional bike mechanic. Incorrectly cutting the seat post can result in damage leading to an accident.

### WARNING

For more information about seat posts your <u>GT Bicycle Owner's Manual</u>.

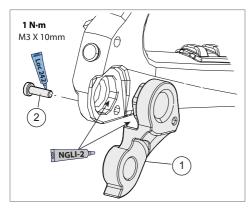


#### Identification

- 1. Seat post
- 2. Seat tube
- 3. Seat binder

- 4. Binder Bolt
- A. Minimum insert 65 mm
- B. Maximum insert
- C. Bottom out

### **Rear Derailleur Mount**



- 1. RD Hanger
- 2. Screw

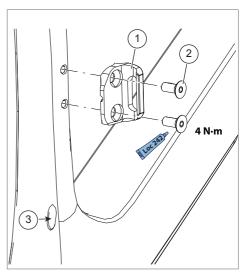
#### To replace:

- 1. Remove the rear axle.
- 2. Remove the screw (2).
- 3. Remove the hanger (1).
- Clean the area around the dropout and inspect the frame carefully for any cracks or damage. If you find damage, have the frame inspected by your Cannondale Dealer.

Apply a light film of grease between the frame and hanger. to help minimize any noise or "creaking."

- 5. Install the new hanger .
- Apply Loctite® 242 (or medium strength thread lock) to the screw threads and tighten to the specified torque. Do not over-tighten.

# **Front Derailleur Mount**



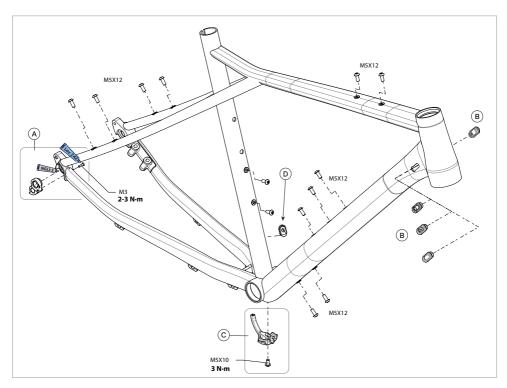
- 1. FD mount
- 3. Cable frame exit
- 2. Screws (2X)

#### Key points:

- Always clean screw threads, and apply the specified thread lock to the screw threads and tighten screws to the specified torque. Do not over-tighten.
- Install covers and plugs as to reduce the intrusion of water or debris into the frame when openings are not in use.
- Check the mount periodically for any damage. Replace with a new one if damage is found.

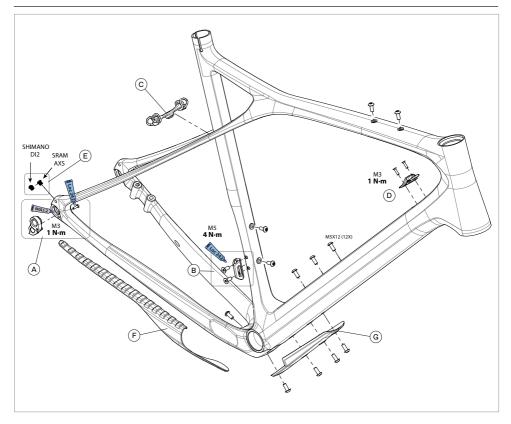
# **REPLACEMENT PARTS**

The following service and replacement parts are available through an Authorized GT Dealer:



# **Grade Alloy**

ID	Part Number	Description	
А	K33049	Derailleur Hanger TA ST SS 073	
В	K32000	Shift/Brake Keyhole Grommets	
С	K32220	GT BB Cable Guide E206909	
D	KP312/	Open Oval Grommet x10	
	K83048	Adjustable Lever Maxle 100x12 125mm	
	K83051	Adjustable Lever Syntace 142x12 160mm	



# **Grade Carbon**

ID	Part Number	Description
А	K33040	Derailleur Hanger TA ST SS 076
В	K33020	Grade Crb Front Derailleur Hanger
С	K11010	Grade Crb Fender Bridge
D	K32171	DT Cable Switch Plate
E	K32048	Shift And Brake Grommets
F	K34682	Grade Crb CS Protector
G	K34692	Grade Crb DT Protector
	K83048	Adjustable Lever Maxle 100x12 125mm
	K83051	Adjustable Lever Syntace 142x12 160mm

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### **GT USA**

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