English

# **CY22** Topstone

## **Owner's Manual Supplement**

🛕 WARNING

READ THIS SUPPLEMENT AND YOUR CANNONDALE 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:



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
RAB CELL	Carbon gel	Apply carbon gel (friction paste) KF115/
NGIIZI	NGLI-2 synthetic grease	Apply NGLI-2 synthetic grease.
Loczan	Medium-strength removable thread lock	Apply Loctite® 242 (blue) or equivalent.

### **Cannondale Help Center**

Our online Help Center contains helpful resources to consult about our bikes.



https://cannondale.zendesk.com/hc/en-us

#### **Cannondale Supplements**

This manual is a "supplement" to your Cannondale Bicycle Owner's Manual.

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

#### **Contacting Cannondale**

#### **Cannondale USA**

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

#### 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 Cannondale Dealer for your region.

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### Your Cannondale 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 Cannondale Dealer.

### NOTICE

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

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## 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 (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 <u>Cannondale</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

### 

#### After A Crash Or Impact:

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

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 or 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.

## Intended Use



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

### WARNING

Please read your Cannondale Bicycle Owner's Manual 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 Cannondale Dealer.

## **Disc Brakes on Road Bikes**

#### 

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 Cannondale Limited Warranty.

See "2-in-1 Trainer Thru Axle Installation Instructions 138252.pdf" at <u>www.cannondale.com</u>

## 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 Cannondale Limited Warranty.

## **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 lighter-weight 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 torques for the fasteners on your bicycle (e.g., bolts, screws, and nuts) are important for your safety and to maintain 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 the correct tightening torque and any adhesive application for a fastener, we ask you to check the following:

- On-product torque markings.
- Torque specs in the component manufacturer's instructions shipped with your bicycle.
- Torque specs listed on the websites of component manufacturers.
- With your dealer. Dealers have access to current data and have experience with correct torques for most fasteners.

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## **TECHNICAL INFORMATION**

### **Specifications**

Topstone Carbon	
Item	Specification
Head Tube	UPR: 1-1/8 in.
	LWR: 1-1/2 in.
Headset	Integrated 1-1/8 in1.5 in.
	IS42 Top IS52 Bottom 45/36°
Bottom Bracket: Type/Width	BSA Threaded/68mm
Front Derailleur	Braze-on
Seat Post: Dia./Binder	27.2mm/31.8mm
▲ Min. Seat Post Insert	65mm
Max. Seat Post Insert	XS: 135mm, S-XL: 183mm
Tire Size x Max. Tire Width	700×45mm (measured)
	27.5×2.1" (measured)
Brakes: Mount Type / Min./Max. Rotor Dia.	RR: Flat Mount/160mm/180mm
	FT: Flat Mount/160mm/180mm
Axles: Type/Length	RR:Syntace M12×142×1.0P, 160mm overall
	length
	FT:Maxle M12×100×1.5P, 125mm overall length
Fork Offset	55mm
▲ Intended Use	ASTM CONDITION 2: General Purpose Riding
A Max. Weight Limit: Total	305lbs/138kg
(Rider+All Equipment)	
Additional Technical Features	Kingpin Rear Suspension Bushings K36162

All Specifications subject to change without notice.

Topstone Alloy				
Item	Specification			
Headtube	UPR: 1-1/8 in.			
	LWR: 1-1/2 in.			
Headset	Integrated, 1-1/8 in 1-1/2 in. 45/45° ACB			
	IS42 Top IS52 Bottom			
Bottom Bracket	BSA Threaded/68 mm			
Front Derailleur	31.8 mm clamp, Down-Swing			
Seatpost Dia. / Binder	27.2 mm / 31.8 mm			
A Min. Seatpost Insert	65mm			
Tire Size x Max. Width	700c x 42 mm measured			
Brake Mount: Type / Min./Max. Rotor Dia.	RR: Flat Mount / 140 mm/160 mm			
	FR: Flat Mount / 140mm /160mm			
Axle: Type / Length	RR: Syntace, 142 × 12 mm x 1.0P, 160mm Length			
	FT: Maxle/ 100 × 12mm x 15P, 125mm length			
Fork Offset	55mm			
▲ Intended Use	ASTM Condition 2, General Purpose Riding			
<ul> <li>Max. Weight Limit: Total</li> <li>(Rider+All Equipment)</li> </ul>	330 lbs. / 150 kg			

## **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 the **Product Registration** section of our website at <u>www.cannondale.com</u>



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Topsto	one Carbon - Oliver 700c					
-	Size	XS	S	М	L	XL
Ø	Wheel Size (in)	700c	700c	700c	700c	700c
А	Seat Tube Length	41.0	45.8	50.5	55.3	59.0
В	Top Tube Horizontal	53.2	54.3	55.6	57.1	58.6
С	Top Tube Actual	50.3	51.6	53.2	55.0	56.7
D	Head Tube Angle	69.3	70.3	70.5	70.5	70.5
Е	Seat Tube Angle Effective	72.4	72.4	72.4	72.4	72.4
E'	Seat Tube Angle Actual	70.7	70.9	71.1	71.2	71.4
F	Standover	71.0	75.1	79.1	82.9	86.4
G	Head Tube Length	10.5	12.3	15.0	17.7	20.5
н	Wheelbase	101.2	101.6	103.0	104.6	106.2
I	Front Center	60.1	60.5	61.7	63.3	64.9
J	Chain Stay Length	42.0	42.0	42.0	42.0	42.0
к	Bottom Bracket Drop	6.9	6.4	6.1	6.1	5.9
L	Bottom Bracket Height	28.3	28.8	29.0	29.0	29.3
М	Fork Rake	5.5	5.5	5.5	5.5	5.5
Ν	Trail	7.4	6.7	6.6	6.6	6.6
0	Stack	53.9	55.5	57.9	60.5	62.9
Р	Reach	36.1	36.7	37.3	37.9	38.6
	Head Tube Height	41.9	41.9	41.9	41.9	41.9

Topstone Carbon - Oliver 650b						
	Size	XS	S	М	L	XL
ø	Wheel Size (in)	650b	650b	650b	650b	650b
А	Seat Tube Length	41.0	45.8	50.5	55.3	59.0
В	Top Tube Horizontal	53.2	54.3	55.6	57.1	58.6
С	Top Tube Actual	50.3	51.6	53.2	55.0	56.7
D	Head Tube Angle	69.3	70.3	70.5	70.5	70.5
E	Seat Tube Angle Effective	72.4	72.4	72.4	72.4	72.4
E'	Seat Tube Angle Actual	70.7	70.9	71.1	71.2	71.4
F	Standover	70.5	74.6	78.6	82.4	85.7
G	Head Tube Length	10.5	12.3	15.0	17.7	20.5
н	Wheelbase	101.2	101.6	103.0	104.6	106.2
I	Front Center	60.1	60.5	61.7	63.3	64.9
J	Chain Stay Length	42.0	42.0	42.0	42.0	42.0
к	Bottom Bracket Drop	6.9	6.4	6.1	6.1	5.9
L	Bottom Bracket Height	27.5	28.0	28.3	28.3	28.5
М	Fork Rake	5.5	5.5	5.5	5.5	5.5
N	Trail	7.1	6.5	6.3	6.3	6.3
0	Stack	53.9	55.5	57.9	60.5	62.9
Р	Reach	36.1	36.7	37.3	37.9	38.6
	Head Tube Height	41.9	41.9	41.9	41.9	41.9

Topstone	Carbon -	· Rigid	700c

	Size	XS	S	М	L	XL
Ø	Wheel Size (in)	700c	700c	700c	700c	700c
Α	Seat Tube Length	41.0	45.8	50.5	55.3	59.0
В	Top Tube Horizontal	53.3	54.4	55.7	57.2	58.7
С	Top Tube Actual	50.3	51.6	53.2	55.0	56.7
D	Head Tube Angle	70.0	71.2	71.2	71.2	71.2
Е	Seat Tube Angle Effective	73.1	73.1	73.1	73.1	73.1
E'	Seat Tube Angle Actual	71.4	71.6	71.8	71.9	72.1
F	Standover	70.4	74.5	78.5	82.3	85.7
G	Head Tube Length	10.5	12.3	15.0	17.7	20.5
Н	Wheelbase	101.0	101.3	102.9	104.4	106.1
I	Front Center	60.1	60.3	61.7	63.3	64.9
J	Chain Stay Length	42.0	42.0	42.0	42.0	42.0
K	Bottom Bracket Drop	7.4	6.9	6.7	6.7	6.4
L	Bottom Bracket Height	27.8	28.3	28.5	28.5	28.8
М	Fork Rake	5.5	5.5	5.5	5.5	5.5
N	Trail	6.9	6.2	6.2	6.2	6.2
0	Stack	53.4	55.1	57.4	60.0	62.4
Р	Reach	37.1	37.7	38.3	39.0	39.7
	Head Tube Height	40.5	40.5	40.5	40.5	40.5

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	Size	XS	S	М	L	XL
Ø	Wheel Size (in)	650b	650b	650b	650b	650b
Α	Seat Tube Length	41.0	45.8	50.5	55.3	59.0
В	Top Tube Horizontal	53.3	54.4	55.7	57.2	58.7
С	Top Tube Actual	50.3	51.6	53.2	55.0	56.7
D	Head Tube Angle	70.0	71.2	71.2	71.2	71.2
E	Seat Tube Angle Effective	73.1	73.1	73.1	73.1	73.1
E'	Seat Tube Angle Actual	71.4	71.6	71.8	71.9	72.1
F	Standover	69.7	73.8	77.8	81.6	85.0
G	Head Tube Length	10.5	12.3	15.0	17.7	20.5
н	Wheelbase	101.0	101.3	102.9	104.4	106.1
I	Front Center	60.1	60.3	61.7	63.3	64.9
J	Chain Stay Length	42.0	42.0	42.0	42.0	42.0
К	Bottom Bracket Drop	7.4	6.9	6.7	6.7	6.4
L	Bottom Bracket Height	27.0	27.5	27.8	27.8	28.0
М	Fork Rake	5.5	5.5	5.5	5.5	5.5
N	Trail	6.7	5.9	5.9	5.9	5.9
0	Stack	53.4	55.1	57.4	60.0	62.4
Р	Reach	37.1	37.7	38.3	39.0	39.7
	Head Tube Height	40.5	40.5	40.5	40.5	40.5



Topstone Alloy						
	Size	XS	SM	MD	LG	XL
Ø	Wheel Size (in)	700c	700c	700c	700c	700c
А	Seat Tube Length	41.0	45.8	50.5	55.3	60.0
В	Top Tube Horizontal	52.5	54.4	56.1	57.9	59.6
С	Top Tube Actual					
D	Head Tube Angle	70.0	71.0	71.0	71.0	71.0
E	Seat Tube Angle Effective	73.1	73.1	73.1	73.1	73.1
E'	Seat Tube Angle Actual	71.8	71.8	71.8	71.8	71.8
F	Standover	70.3	74.4	78.4	82.4	86.4
G	Head Tube Length	8.6	11.5	14.7	18.0	21.2
Н	Wheelbase	101.6	102.7	104.5	106.5	108.3
I	Front Center	59.3	60.3	62.1	64.1	65.9
J	Chain Stay Length	43.5	43.5	43.5	43.5	43.5
К	Bottom Bracket Drop	7.5	7.5	7.5	7.5	7.5
L	Bottom Bracket Height	28.4	28.4	28.4	28.4	28.4
М	Fork Rake	5.5	5.5	5.5	5.5	5.5
N	Trail	7.2	6.5	6.5	6.5	6.5
0	Stack	51.8	54.9	57.9	61.0	64.0
Р	Reach	36.8	37.7	38.5	39.4	40.2
	Head Tube Height	40.5	40.5	40.5	40.5	40.5

## Rear Derailleur Mount (RD)



- 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.

If the frame is not damaged, apply a light film of grease between the frame and hanger. This will help minimize any noise or "creaking" that might result from slight movement between the frame and hanger during movement of the derailleur.

- 5. Slide the new hanger onto the frame.
- 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 (FD)



- 1. FD mount
- 4. Di2 Plug
- 2. Screws (2X)
- a. Wire exit hole
- FD mount cover (for 1x only)
- b. Wire relief

#### **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.

## **Rear Fender Support**



Please Note: (1) Check tire clearance with the tire fully inflated. (2) Mounting a tire with a smaller profile, one smaller than the maximum tire size for the frame, or currently on the wheel may be required to fit a compatible fender. (3) Any fender must be secured by the support and should not be loose. (4) Do not modify any parts or the frame in order to install a fender.

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## **Downtube Routing**



### **Bottom Bracket Routing**



## StrapRack



#### Identification

1. Base

2. Cinch strap

- 3. Strap buckle
- The StrapRack frame accessory is shown here on the Topstone Carbon downtube. The StrapRack can also be located on the seat tube at water bottle mounting points.
- When attaching items to the StrapRack, make sure all items are held securely by the adjustable rubber cinch strap. Tension cinch straps carefully, Excessive stretching or pulling could damage the Straprack mount or frame boss inserts.
- In the photo above, an tire tube, tire levers, and inflation CO2 are shown.
- Before and during your rides, check to make sure that the items, attached to the rack securely and cannot fall off.
- Make sure the StrapRack itself is always attached to the frame correctly and that the adjustable strap parts are undamaged. Replace any damaged parts with new ones.

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## 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.
- 2. 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**

Minimum insert is the length of a seat post that must be inserted within the seat tube at all times. The minimum insert for all frame sizes is 65mm.

#### 

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

#### Maximum Insert

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

Frame Size	Maximum Insert
XS	135mm
S-XL	183mm

#### 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.

### WARNING

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.



#### Identification

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

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

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## LockR

#### To remove the LockR from the frame:

- 1. Loosen the screw 4-6 turns using a T25 Torx key.
- 2. Tap head of screw with a rubber mallet to un-seat the wedge bolt located on the opposite side.
- 3. Remove the screw and wedge bolt from the still-installed axle.
- 4. If the wedge did not come out with the screw, insert a 5 mm hex key and turn to free and remove it. If wedge still sticks, insert a wooden or plastic dowel into the drive side and drive it out.
- 5. To remove the axle itself, insert a 6 mm hex key into the axle on the non-drive side and turn counter-clockwise until it can be removed.

#### To install the LockR on the frame:

1. Disassemble and clean all parts of the LockR axle. Do not install it assembled.

Inspect the parts for damage (e.g., burrs, scratches, deformity, wear). Replace the entire LockR assembly if any damage is found.

- 2. Apply a light coating of a high-quality bicycle bearing grease to all parts. No grease on axle surfaces that mate with the IGUS bearings (bushings)
- 3. Align the linkage and bearing and insert the threaded end of the pivot axle (1) in from the nondrive side.
- 4. From the non-drive side, tighten the inserted pivot axle to 1 Nm using a 6mm hex key fitted to a torque wrench.
- 5. Insert the wedge bolt (2) into the drive side of the axle and insert the small end of the wedge (3) into the non-drive side axle head.
- 6. Thread the screw (4) into the wedge bolt with a wrench and tighten to 5.0 Nm.

#### NOTICE

Use a calibrated torque wrench. Exceeding 1  $N\cdot m$  will result in permanent damage to the LockR pivot system.

#### **Bushings:**

The pivot axle should slide and rotate smoothly in the bushings. Remove bushings (5) only if damaged or when excessive axle play is detected. Always install bushings as a new set following removal. Do not re-use bushings. Remove and install bushing using the bushing tool. See Replacement Parts.

#### Technical Information LockR



- Do not install assembled.
- No grease on axle surfaces that mate with the IGUS bearings (bushings)





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## SmartSense

As an option, this frame supports installation of a Cannondale SmartSense system, an intelligent communication network and power source. This manual describes only the technical details specific to the frame such as component locations, installation, and related service information.

### What is SmartSense?

SmartSense is a system of interconnected or networked powered accessories. Each networked accessory shares the same data communication and same rechargeable battery. The behavior of each accessory can be programmed and controlled independently or coordinated with any other component.

### SmartSense System Components

A SmartSense system can consist of variety of components. For example:

- Garmin Varia Core cradle
- Garmin Varia Core battery
- Garmin Varia Radar sensing unit
- Garmin Varia Radar Display Unit
- Garmin Cycling Computers
- Cannondale Foresite e350 front light
- Cannondale Hindsite Array rear light
- Internally routed communication/power cables

#### SmartSense Owner's Manual

https://www.cannondale.com/-/media/ files/manual-uploads/cy22/138691-rev1cd-cy22-smartsense-ownersmanual-020922.ashx



The SmartSense Owner's Manual contains important safety information and information regarding how to identify, to set up, and to operate any installed/attached SmartSense-compatible components.

## SmartSense Cradle



#### Identification

- Smartsense Cradle
   Cover screws
- 3. Cable, 500mm 4. Cable, 700mm
- 5. StrapRack mount
- The lower DT mounting supports the SmartSense Cradle or the StrapRack accessory stowage part.
- The SmartSense Cradle or StrapRack mount installed in this location effectively closes the downtube opening. Either part should remain in place to prevent dirt, dust, or water from entering the inside of the frame.
- Remove the SmartSense cradle from the frame in order to connect or to disconnect the internal extension cables. It is not possible to service these cables with the cradle in place.

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## SmartSense & Cable Routing



- Align both connector arrows and press together firmly.
- Cable inter-connections (13) are to be housed inside frame.

#### Identification

- 1. SmartSense cradle
- 2. SmartSense battery
- 3. Downtube cable port
- 4. Front light
- 5. Radar display unit
- 6. Rear light
- 7. Radar unit
- 8. Rear brake hose
- 9. Front brake hose
- 10. Rear Derailleur cable
- Cable, 700mm
   Cable, 500mm
   Cable inter-connection

## SmartSense Cradle/ Battery

#### Identification

- 1. SmartSense battery
- 2. SmartSense cradle
- 3. SmartSense cradle latch

#### To install the battery:

- 1. Open the cradle latch (3).
- 2. Lower right battery edge into right side of cradle; lower the left edge of battery into the cradle.
- 3. Close the cradle latch. Press firmly to confirm that it is closed.

#### To remove battery:

- 1. Open the cradle latch (3).
- 2. Tilt up the left edge and then pull to the left and lift out the battery.
- 3. Close the cradle latch.



#### 

Always close the cradle latch securely to prevent battery damage, disconnection or loss, component power loss, or cradle damage.

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## **REPLACEMENT PARTS**

## **Topstone Carbon**

ID	Part Number	Description	
А	K33049	Derailleur Hanger TA ST SS 073	
В	K91000	LockR Pivot Hardware 65mm	
С	K36162	Topstone Crb ST Bushings Qty2	
D	K76092	Topstone Crb Rear Fender Mount v2	
E	K33032	Topstone Crb FD Hanger v2	
F	K83051	Adjustable Lever Syntace 142×12 160mm	
G	K83048	Adjustable Lever Maxle 100×12 125mm	
Н	K33042	Topstone Crb FD 1x Cover v2	
I	K91010	Kingpin Bearing Install Removal Tool	
	K35010	1-1/8-1.5 Int Hdset w/ 36 Deg CR 25/5 TC	
	K32300	Di2 Plugs 6mm Sliced and 6mm Blank	
	K32079	Blank Frame Plugs Qty 3	
	KP449/	Rubber Brake Housing Grommets	
	K32280	Dropout Di2 and Wireless Plugs 5.5mm	
N	K32192	Di2 BB Plug Grommet	
0	K34252	Topstone Crb CS Clear Frame Protection	
Р	QC844/BBQ	Seatbinder 31.8mm	
Q	K76641	Hindsight Array Radar Connection Bracket	
R	K76661	Radar Display and Center Light Mount	
S	K35058	SL Compression Plug With 5mm Cap	
Т	CP2502U10OS	SmartSense Wire Kit 500/700mm	
U	K26032	SAVE Seatpost Friction Flange Mount	
V	K26022	SAVE Seatpost Rail Clamp w/Hardware	
W	CP1202U10OS	Light Centered Round Bar Mount	
Х	CP1212U10OS	Radar Display Round Bar Mount	
Y	CP1512U10OS	Garmin Varia eRVR315 WW Radar	
Z	CP1522U10OS	Garmin Varia eRDU WW	
AA	CP1532U10OS	Garmin Varia Core Cradle	
BB	CP1552U10OS	Garmin Varia Core Battery	
сс	CP1662U10OS	Foresite E350 SmartSense Light	
	CP1642U10OS	Foresite E350 SmartSense STVZO Light (German safety standard	
		compliant)	
	CP1672U10OS	Hindsite Array E85 SmartSense Light	
DD	CP1652U10OS	Hindsite Array E25 SmartSense STVZO Light (German safety standard	
		compliant)	
EE	CP1102U10OS	StrapRack	



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## **Topstone Alloy**



ID	Part Number	Description
А	K33049	Derailleur Hanger TA ST SS 073
В	K83051	Adjustable Lever Syntace 142×12 160mm
С	K83048	Adjustable Lever Maxle 100×12 125mm
D	K32059	BB Cable Guide YF 007 3
E	K32162	BB Cable Guide YF-014
F	K32048	Shift And Brake Grommets
G	K35009	SL Compression Plug With Top Cap
Н	QC844/BBQ	Seatbinder Bolt Type 31.8 BLK
	CK3317U00OS	Seatstay Fender Mount
I	K32172	10×17 DT Grommet
J	CP1302U10OS	SmartSense Mount BK

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CANNONDALE USA Cycling Sports Group, Inc.

1 Cannondale Way, Wilton CT, 06897, USA 1-800-726-BIKE (2453) www.cannondale.com

#### CSG EUROPE

Cycling Sports Group Europe B.V. Geeresteinselaan 57 3931JB Woudenberg The Netherlands service@cyclingsportsgroup.com CSG UK Cycling Sports Group Vantage Way, The Fulcrum, Poole, Dorset, BH12 4NU +44 (0)1202732288 sales@cyclingsportsgroup.co.uk