

SuperX

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:




WARNING

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

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: <http://www.cannondale.com>.

Contacting Cannondale

Cannondale USA

1 Cannondale Way
Wilton, CT 06897, USA
1-800-726-BIKE (2453)

Cannondale Europe

Geeresteinselaan 57
3931JB Woudenberg
The Netherlands

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.

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 [Cannondale Bicycle Owner’s Manual](#) 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 [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.

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

WARNING

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, 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 www.cannondale.com

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 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.

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.

TECHNICAL INFORMATION

Specifications

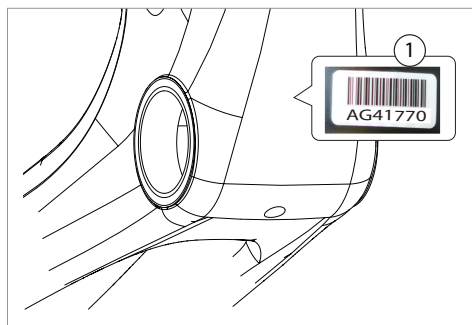
Item	Specification
Head Tube	UPR:1-1/8", LWR: 1-1/2"
Headset	IS42/28.6 top, IS52/40 bottom 36 degree integrated crown race
Bottom Bracket: Type/Width	BSA Threaded/68mm
Chainring Max Size	1X: 44T
NOTICE: Do not exceed	2X: 48/31T (Shimano), 43/30 (Sram)
Front Derailleur	Braze-on
Seat Post: Dia./Binder	C1 27 Aero/Internal Wedge
▲ Min. Seat Post Insert	65mm
Max. Seat Post Insert	46cm/130mm, 51cm/161mm, 54cm/168mm 56cm/173mm, 58cm/174mm 61cm/175mm
Tire Size x Max. Tire Width	700c x 45mm (measured)
Brakes: Mount Type / Min./Max. Rotor Dia.	FT: Flat Mount/160mm/180mm RR: Flat Mount/140mm/160mm
Axles: Type/Length	FT: 100x12, M12x1.0P, 118mm Overall Length RR: 142x12, M12.1.0P, 163mm Overall Length
Fork Offset	55mm
▲ Intended Use	ASTM Condition 2, General Purpose Riding, Cyclocross
▲ Max. Weight Limit: Total (Rider+All Equipment)	330lbs/150kg
Additional Technical Features	Delta Steerer, Top Tube Accessory Mount

Serial Number

Use the 7-digit serial number label (1) located on the bottom bracket to register your bike.

Product Registration

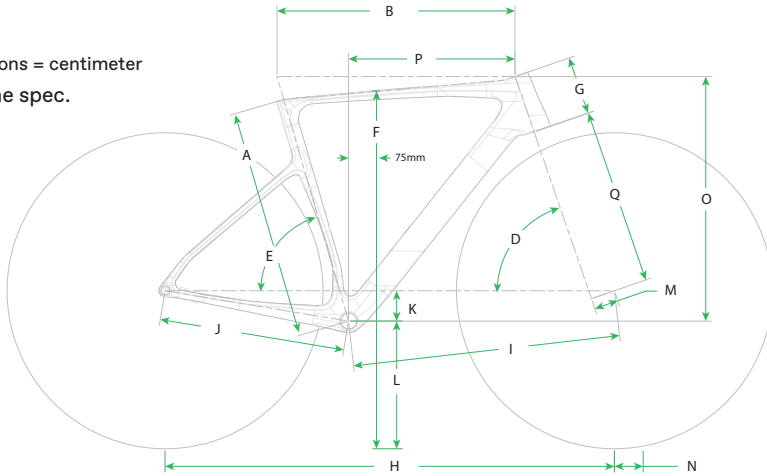
www.cannondale.com



Geometry

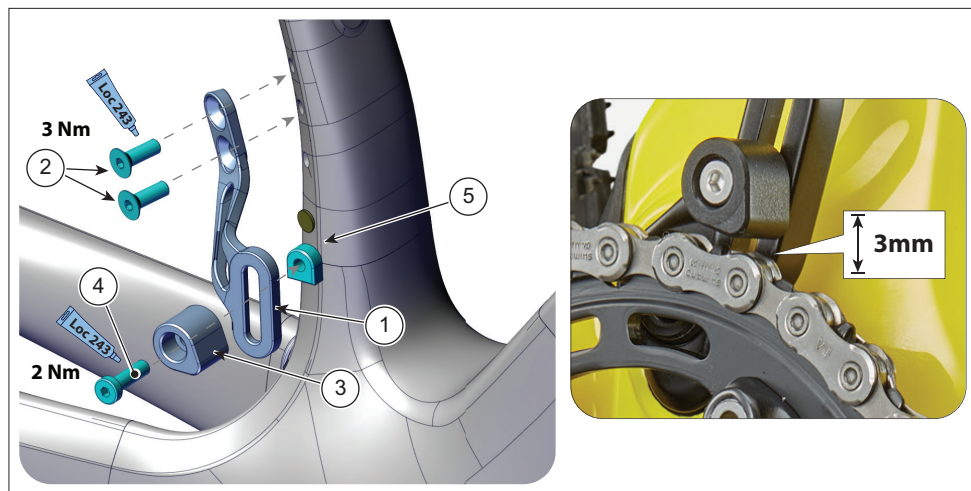
Dimensions = centimeter

* = same spec.



	Size	46	51	54	56	58	61
	Wheel Size	28	28	28	28	28	28
A	Seat Tube Length	44.9	48.8	52.4	54.6	56.6	58.9
B	Top Tube Horizontal	51	52.1	54	55.8	57.5	59.4
C	Top Tube Actual	47	48.4	50.4	52.1	53.8	55.6
D	Head Tube Angle	70°	71°	71°	71°	71°	71°
E	Seat Tube Angle Effective	74.3°	74.3°	73.7°	73.3°	72.9°	72.3°
F	Standover	74.6	78.2	81.2	83.2	83.6	84.9
G	Head Tube Length	8.6	10.8	13.2	15.3	17.7	19.8
H	Wheelbase	99.8	100.5	102	103.4	104.9	106.2
I	Front Center	58.8	59.3	60.7	62.1	63.6	64.8
J	Chain Stay Length	42.2	42.2	42.2	42.2	42.2	42.2
K	Bottom Bracket Drop	7.7	7.2	6.9	6.9	6.7	6.7
L	Bottom Bracket Height	28.3	28.8	29	29	29.3	29.3
M	Fork Rake	5.5	5.5	5.5	5.5	5.5	5.5
N	Trail	7.2	6.5	6.5	6.5	6.5	6.5
O	Stack	51.5	53.5	55.5	57.5	59.5	61.5
P	Reach	36.5	37.1	37.8	38.5	39.2	39.8
Q	Axle to Crown	40.1	40.1	40.1	40.1	40.1	40.1

Chain Guide (For 1X Chainring)



Identification

- | | |
|------------------------------|------------------------------------|
| 1. Chain Guide Bracket | 4. M4x14 Low Socket Head Cap Screw |
| 2. M4x12 Flat Head Cap Screw | 5. M4 Chain Guide nut |
| 3. Chain Guide | |

The chain guide prevents the chain from disengaging from the chainring in the event of vibration or a shock experienced during riding. The chain guide height above the chain must be positioned properly for it to function correctly.

- If the chain guide is positioned too high, it will not function.
- If the chain guide is set too low, it will rub or cause wear of the chain or guide.

 **WARNING**

Do not remove the chain guide and make sure it is set correctly. Replace it if damaged. If you cannot set the chain guide properly, have it done by a professional bicycle mechanic before you ride.

To set the chain guide height:

1. Place the bike in a work stand with the rear wheel off the ground. Shift into the largest cog on the rear cassette.
2. Loosen the screw (4) so that the guide is free to slide up or down.
4. Align the teardrop shape of the guide (3) forward as shown in previous figure.
5. Set the height of the chain guide 3mm above the chain. To do so, place a flat side of a 3mm key directly below guide on top of the chain. Slide the guide down onto the allen key. Hold the guide downward lightly and tighten the set screw to the specified torque. Remove the allen key.

6. Confirm the chain guide is operating properly by drawing the chain towards the outside of the bike while pedaling (by hand slowly), attempting to derail the chain, while slowly pedaling it forward in the work stand.

The chain should not come off of the guide. If the chain does come off of the guide, slightly lower the guide until it does not.

 **WARNING**

A chainring can have sharp edges and cause injury. Be sure to keep your fingers away from the chain ring or chain.

Seat Post

To remove seat post:

1. Turn the binder screw with a 4mm hex key counter-clockwise to loosen the clamp. When clamp is loose, simply lift the seat post up out of the seat tube.

To install the seat post:

1. Remove the binder clamp, clean it and the frame pocket, then apply fresh grease to the surface that will fit against the frame, as shown on the next page.

Apply grease to the binder bolt threads when re-installing the part into the frame. The application of grease on the threads reduces thread friction and results in better-applied torque.

Reinstall the binder clamp into the frame pocket.

2. Apply fresh carbon friction paste to the inserted section of the seat post and inside the seat tube, including the surface of the binder clamp which contacts the seat post.
3. Insert the seat post into the frame.
4. Set the saddle height, observing the minimum insert and within the limits of the maximum insert for the frame and tighten the clamp screw to 6 Nm.
5. Lower the rubber cover to the frame.

To adjust height:

1. Insert a 4mm hex into the clamp screw.
2. Loosen the binder screw sufficiently to move the seat post up or down in the seat tube.
3. Set the seat post position.
4. Tighten the binder clamp screw to 6 Nm.

To remove binder:

1. Remove the seat post.
2. Using a 4mm hex key, turn the screw clockwise (tightening it) until the binder clamp disengages from the threaded base and can be lifted up out of the seat tube. Take care not to let the binder clamp fall into the seat tube.

Maintenance

Periodically remove the seat post and the binder clamp assembly to clean, to inspect for damage, and to renew the application of grease and of carbon gel.

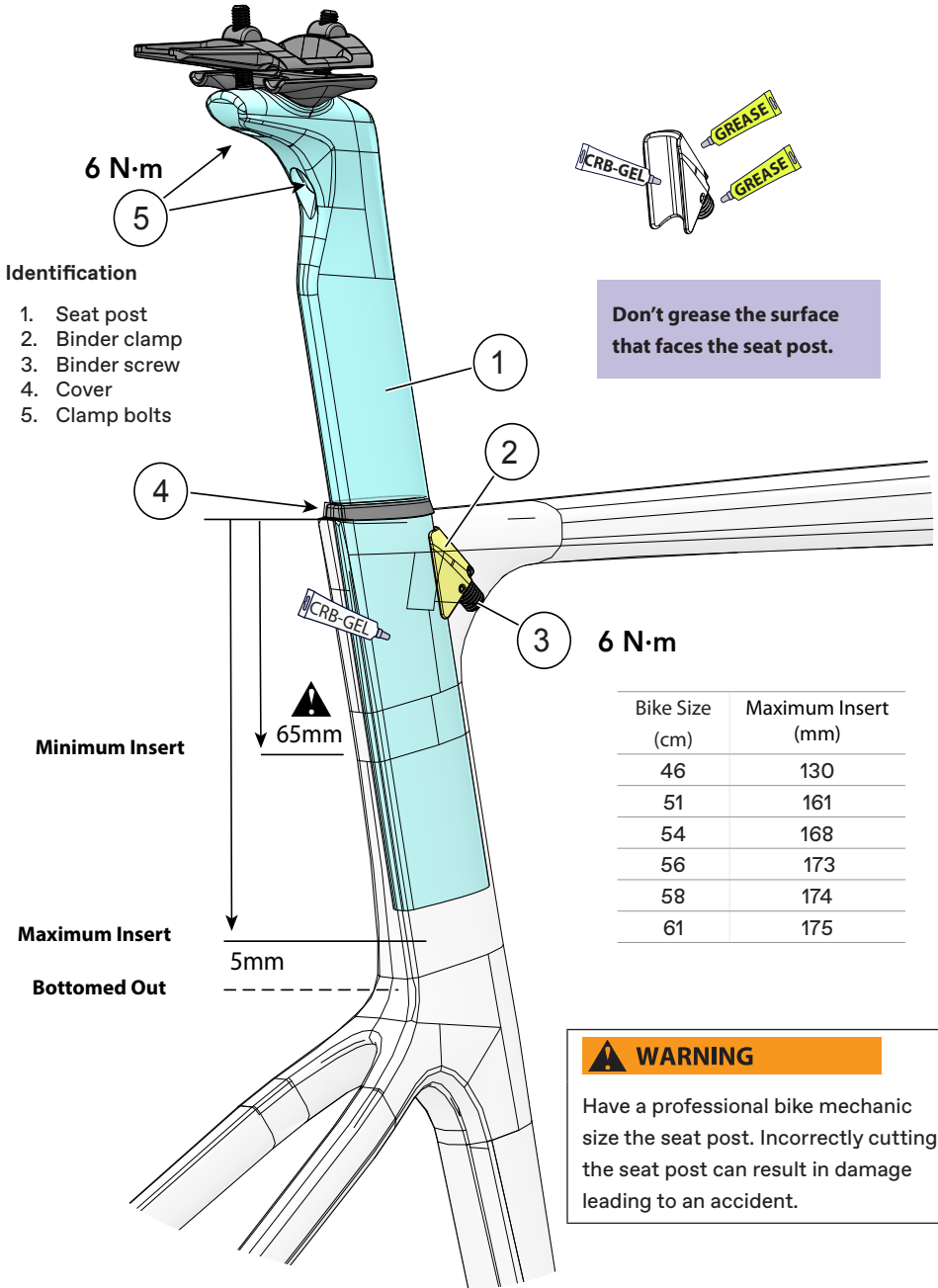
NOTICE

Do not exceed the specified torque.

Do not use any spray cleaners or solvents to clean.

Do not adjust a seat post so it is bottomed out in the frame.

For more information about carbon fiber seat posts, see also "Care and Maintenance of Carbon Fiber Seat Posts" in your Cannondale Bicycle Owner's Manual.



Identification

- 1. Seat post
- 2. Binder clamp
- 3. Binder screw
- 4. Cover
- 5. Clamp bolts

Don't grease the surface that faces the seat post.

Minimum Insert

65mm

Maximum Insert

5mm

Bottomed Out

6 N·m

Bike Size (cm)	Maximum Insert (mm)
46	130
51	161
54	168
56	173
58	174
61	175

WARNING

Have a professional bike mechanic size the seat post. Incorrectly cutting the seat post can result in damage leading to an accident.

Delta Fork Headset Compression Assembly

The SuperX utilizes a delta fork, a fork with a triangular steerer. Only a delta fork headset compression assembly can be used.

Filler Pieces

- The Conceal Stem uses the assembly with fillers that are black in color. Cannondale SystemBar fillers are pink in color.
- The foot of the filler pieces point down and are positioned at the rear as shown in the following example illustrations.

Sizing And Cutting A Delta Fork

The Cannondale Service Instructions: Delta Fork Headset Compression Assembly define the correct method for cutting and preparing the delta fork.

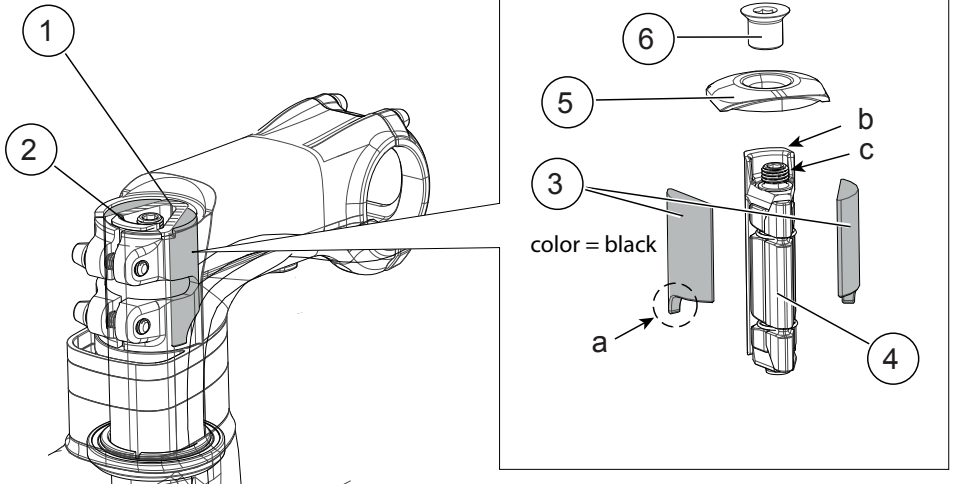
 **WARNING**

The headset, stem, handlebar spacers, and compression assembly of your bike are parts of a system designed to work together. It is important to your safety that you do not alter, remove or omit parts, or assemble the system incorrectly.

This manual does not include instructions for servicing. This is why you should have work on the system performed by a professional bicycle mechanic with the experience, tools, and information to complete any needed service.

Part Number	Description
K35051	Conceal Delta Expander Plug
K3507310	Conceal Delta Filler Pieces L+R BLK

C1 Conceal Stem



Maintenance/Inspection Required

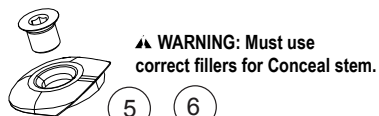
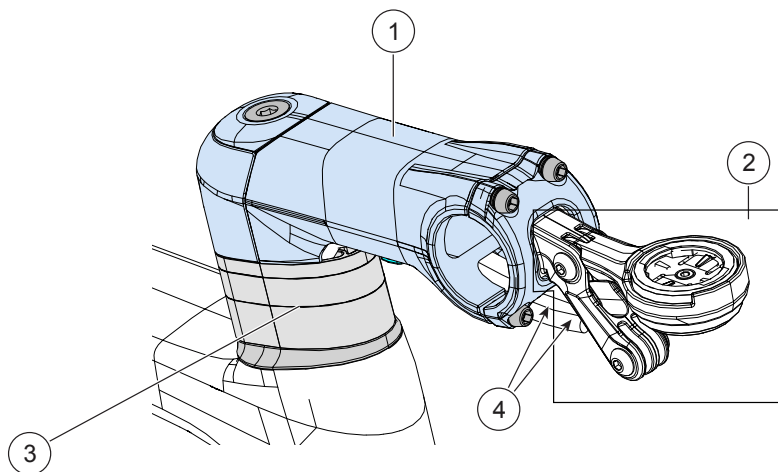
WARNING

This system requires a careful inspection of the internal routing, headset components, and the frame inspection for wear every 6 mos. & for damage after impact or a rotation (spin) of the handlebar. To identify any potential damage, the inspection should be performed by a professional bicycle mechanic under the disassembled condition of the headset and fork.

Identification

- | | | |
|------------------------|---------------------|-------------------------|
| 1. Delta fork steerer | 5. Conceal top cap | b. Expander lip |
| 2. Delta expander | 6. Conceal cap bolt | c. Expander fixing bolt |
| 3. Delta Filler pieces | | |
| 4. Expander bolt | a. Filler foot | |

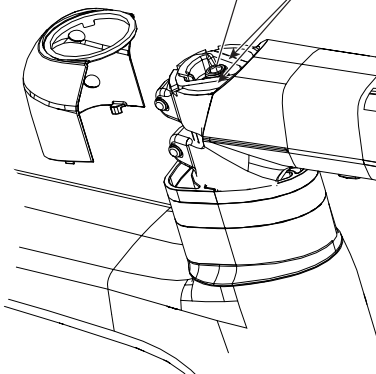
C1 Conceal Stem

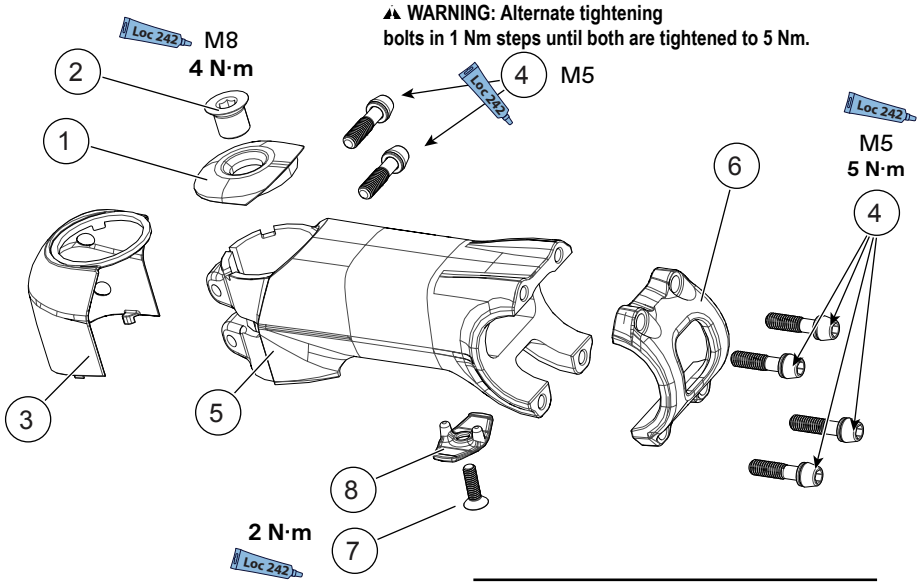


▲ WARNING: Must use correct fillers for Conceal stem.

Identification

1. C1 Conceal stem
2. C1 Conceal accessory mount
3. Spacers
4. Brake hoses
5. Delta fork headset compression assembly
6. Delta filler pieces

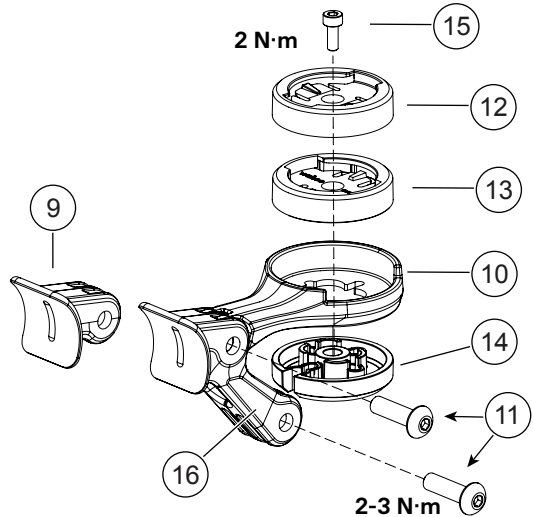




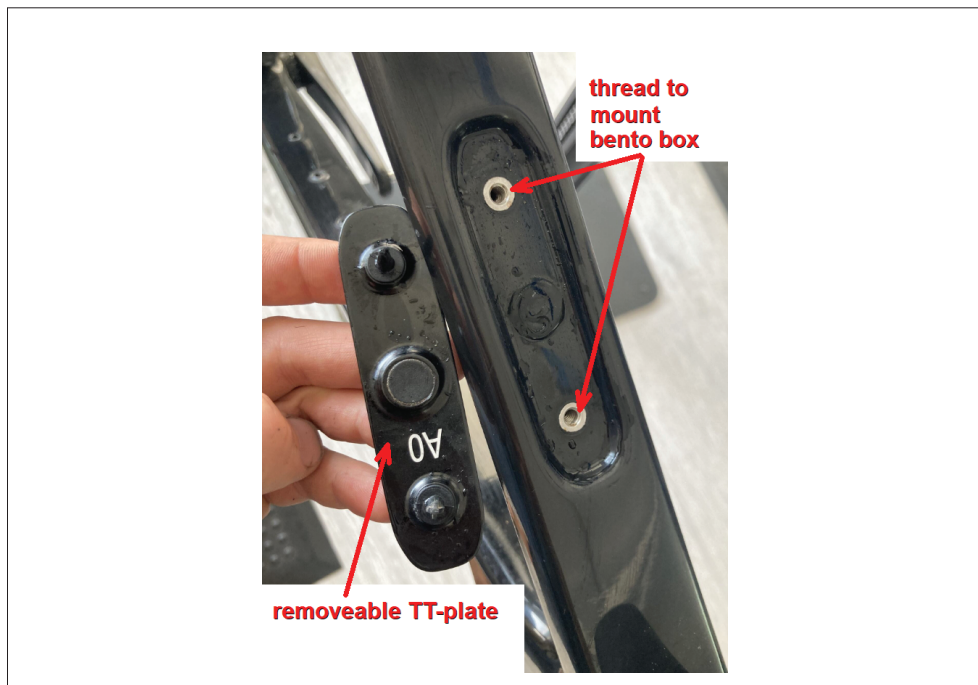
Identification

1. Top cap
2. Compression nut
3. Cover
4. Faceplate/Steerer clam
5. Stem body
6. Face plate
7. Screw M4 × 12
8. Cable clip
9. Friction flange
10. Computer Mount
11. Bolt M5 × 18
12. Quarter turn mount, Garmin - K18013
13. Quarter turn mount, Wahoo - K18063
14. Base puck
15. Screw M3 × 8
16. Light mount

K18053 - C1 Conceal Stem Mount



TopTube Mount



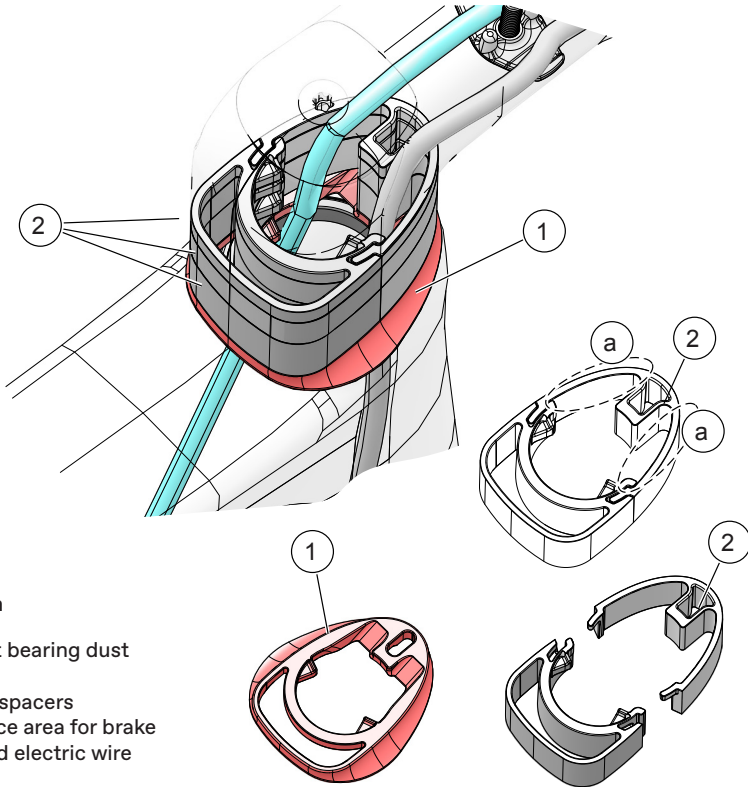
TT-bag:

The CY25 SuperX has a removeable TT-plate that hides a recessed area at the TT into which the threads that can be used to mount a bento-style bag/box.

NOTICE

To prevent abrasion damage, if an accessory is used on the TT in this location, be sure to apply clear adhesive film type frame protection to the areas of the top tube where contact with the accessory occurs.

Routing



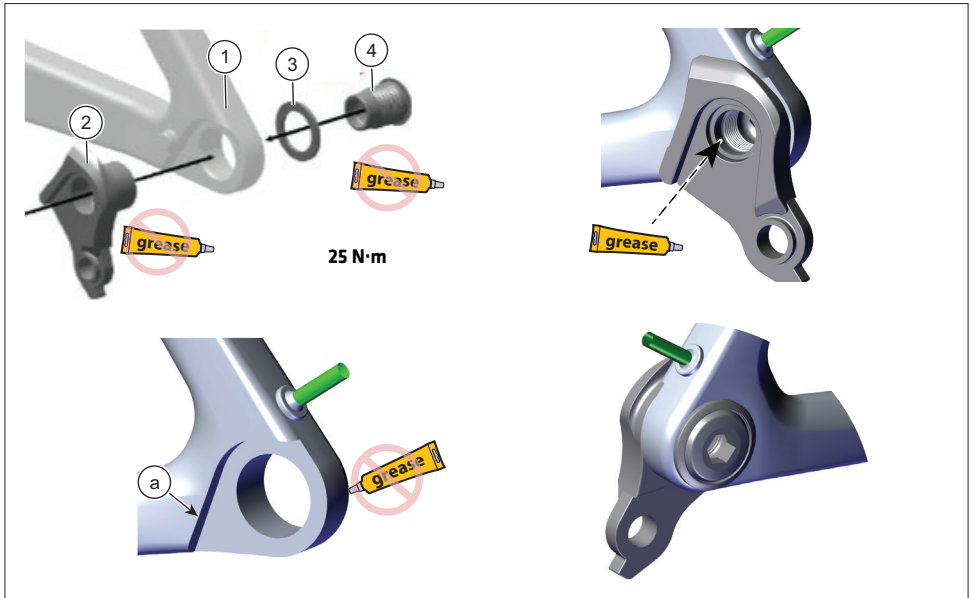
Identification

1. Headset bearing dust cover
2. 2-piece spacers
- a. Clearance area for brake hose and electric wire

NOTICE

Hose lengths must be carefully selected. Avoid both too long and too short. Incorrect lengths can limit steering angle and damage hoses.

Universal Derailleur Hanger (UDH)



Identification

- | | |
|-------------------|------------------|
| 1. Right, dropout | 4. Hanger bolt |
| 2. Hanger | a. rotation stop |
| 3. Hanger washer | |

Replacement

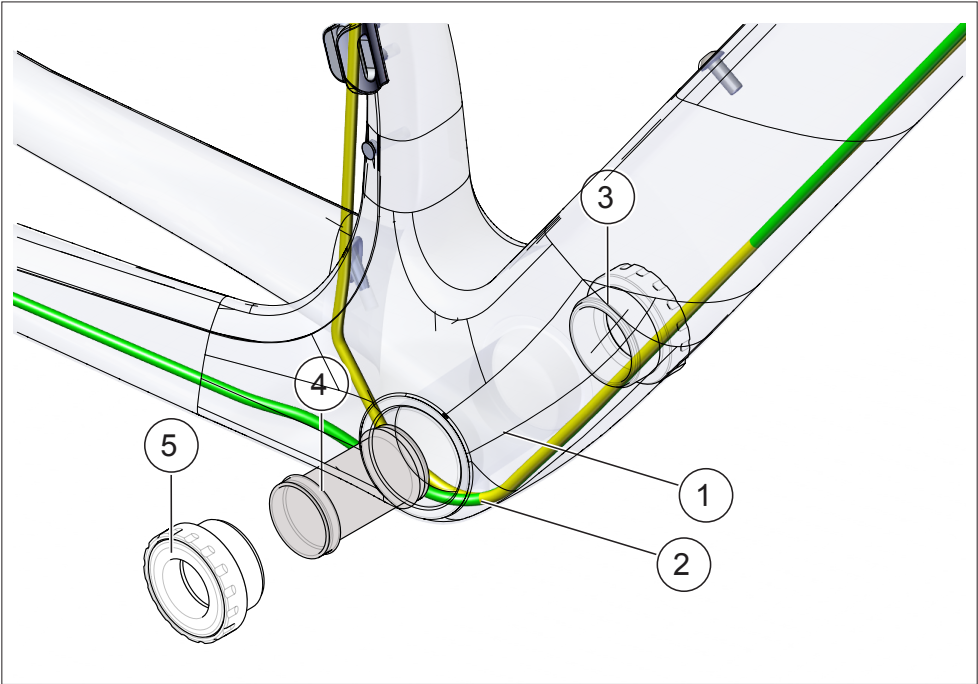
Before installing a new /replacement hanger, be sure to clean any dirt or debris on the dropout with a nylon brush (old toothbrush). Inspect the area for any damage, especially after a crash or impact. Take corrective action when required. Use a good-quality torque wrench and tighten to the specified torque.

NOTICE

Follow the manufacturer instructions when mounting the universal derailleur hanger to the frame.

SRAM - <https://www.sram.com/en/sram/models/ac-drhg-mtb-a1>

Bottom Bracket Sleeve Requirement



Identification

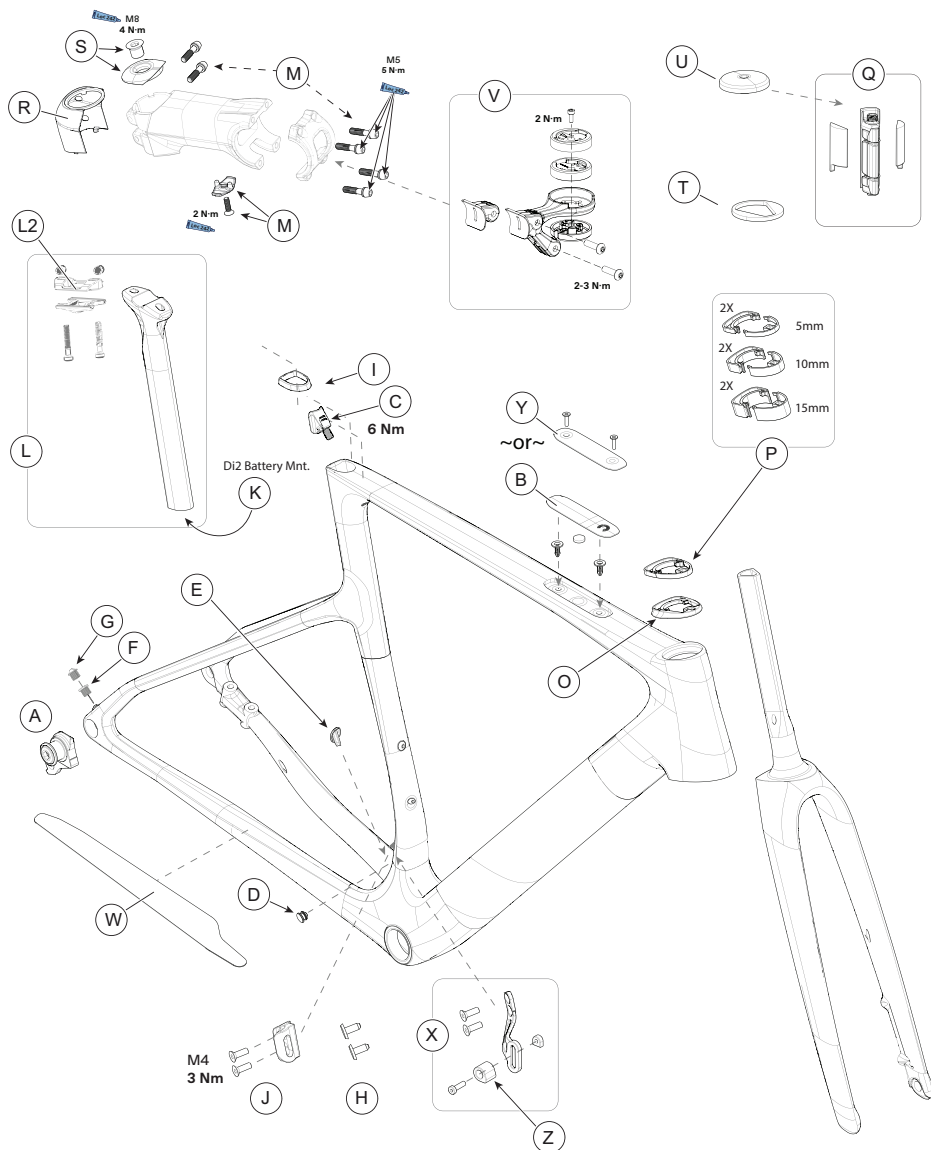
- 1. Bottom bracket shell
- 2. Internal routing
- 3. Non-drive side bearing cup
- 4. Sleeve
- 5. Drive-side bearing cup

WARNING

This frame requires a bottom bracket with integrated sleeve to prevent spindle contact with internal wiring or hoses! Do not remove or omit the sleeve during assembly or service.

REPLACEMENT PARTS

C1 Conceal Stem



ID	Part Number	Description
A	Univ. Der. Hgr.	SRAM P/N: 00.7918.093.000
B	K34154	Top Tube Accessory Mount Cover Plate
C	K26025	Road Internal Seatbinder v3 Sandblasted
D	K32094	4mm Blind Grommet Qty10
E	K32104	4.5mm Blind Grommet Qty10
F	K32048	Shift And Brake Grommets
G	K32074	Di2/Cable Plug Grommet Qty10
H	K32114	M4 FD Plug Grommets Qty10
I	K26070	Silicone Seatpost Grommet D Shape
J	K33014	SuperX FD Mount
K	K32180	KNOT 27 Di2 Battery Mount
L	K2600400	C1 Aero 27 Smart Crb S-post 330 0 O/set
	K2600415	C1 Aero 27 Smart Crb S-post 330 15 O/Set
L2	K26050	27 Aero Rail Clamps and Hardware
M	K28072	C1 Conceal Cable Clamp
N	K28082	C1 Stem Bolts Qty6
O	K28052	Conceal Bearing Cap
P	K28062	Conceal Spacer Kit
Q	K35051	Conceal Delta Expander Plug
R	K28142	C1 Conceal Cover
S	K35042	Conceal Top Cap+Compression Bolt
T	K28042	Delta Preload Stem Spacer Kit
U	K35003	Delta Round Top Cap
V	K18053	C1 Conceal Accessory Mount
--	K35061	S6 Delta 1-1/8-1.5 Int Hdset
--	K8300410	Syntace TA 100x12 118mm M12x1.0P SL RAW
--	K8301410	Syntace TA 142x12 163mm M12x1.0P SL RAW
--	K8302410	Syntace TA 100x12 118mm M12x1.0P BLK
--	K8303410	Syntace TA 142x12 163mm M12x1.0P BLK
W	K34405	Road/Cross CS Protector
Z	K11021	Chainguide Top
X	K11205	SuperX Chainguide Complete
Y	K34385	Top Tube Accessory Mount Bolt-On Plate

“--” - Item not pictured

NOTES

Use NOTES pages to write /record important information about your bike : (e.g. maintenance history, dealer contact information, settings, etc.)

Cannondale Help Center

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



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

Bike Registration

To register your bike:

Go to the Product Registration section of our website at www.cannondale.com



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